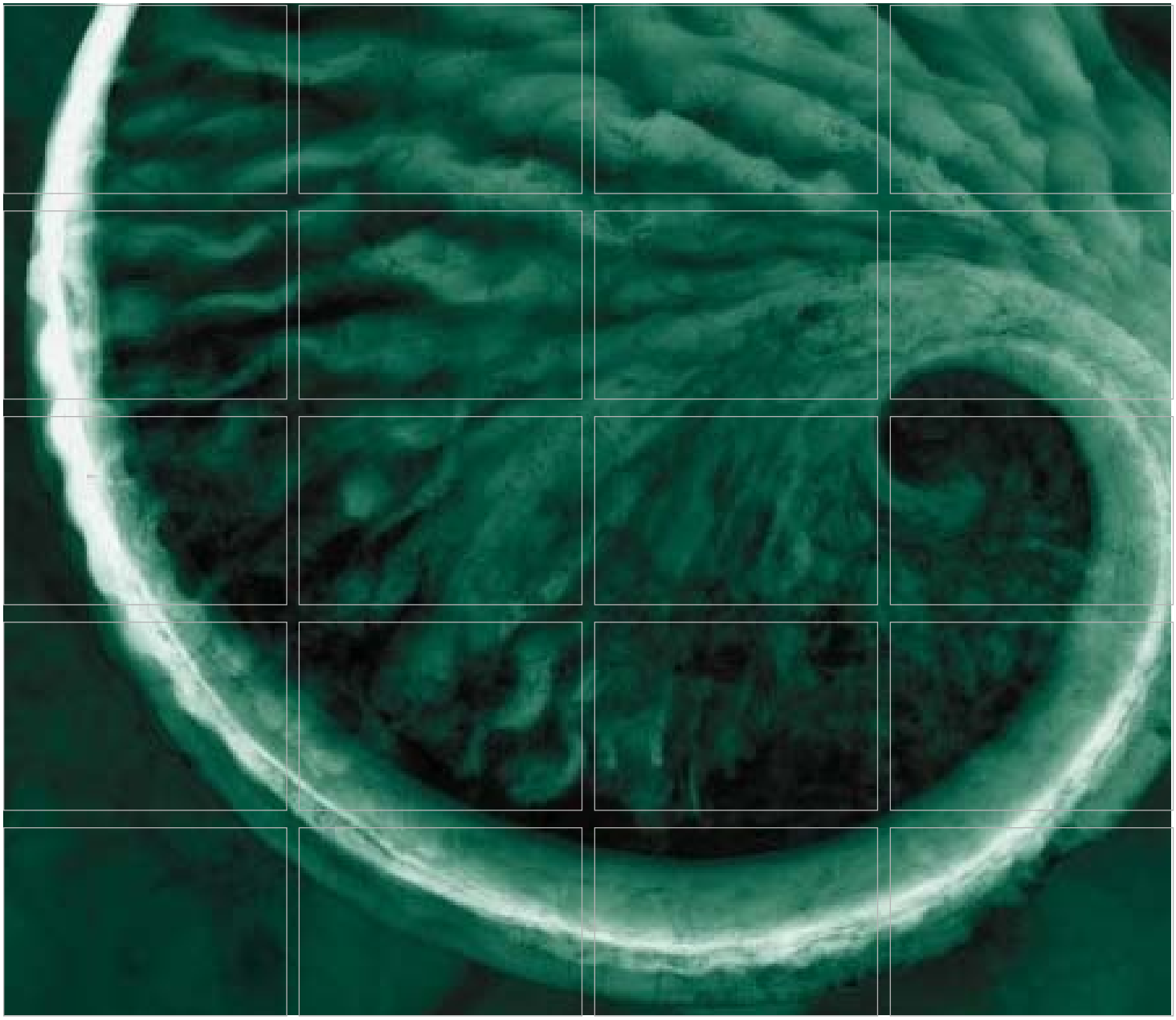

Volume II: Final Human Health and Ecological Risk Assessment for the Boundary Operable Unit (OU-6)

Aerojet Superfund Site
Sacramento County, California

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TABLE OF CONTENTS

LIST OF FIGURES *xv*

LIST OF TABLES *xxviii*

LIST OF ACRONYMS *liii*

1.0 INTRODUCTION *1-1*

1.1 BACKGROUND *1-2*

1.2 PURPOSE OF THE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT *1-2*

1.3 DOCUMENT ORGANIZATION *1-3*

2.0 BOUNDARY OPERABLE UNIT BACKGROUND *2-1*

2.1 SITE HISTORY *2-1*

2.2 PHYSICAL SETTING *2-1*

2.2.1 Topography *2-1*

2.2.2 Climate *2-2*

2.2.3 Geology and Soils *2-2*

2.2.4 Hydrogeology *2-3*

2.3 BIOLOGICAL SETTING *2-5*

2.4 CURRENT AND FUTURE LAND USE *2-6*

3.0 SUMMARY OF REMEDIAL INVESTIGATIONS – BOUNDARY OPERABLE UNIT *3-1*

3.1 SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS – ADMINISTRATION AREA *3-1*

3.1.1 Environmental Setting – Administration Area *3-1*

3.1.1.1 Topography *3-1*

3.1.1.2 Geology *3-2*

3.1.1.3 Soils *3-2*

3.1.1.4 Surface Water Hydrology *3-3*

3.1.1.5 Local Hydrogeology 3-4
3.1.1.6 Ecological Habitat 3-6
3.1.2 Summary of Scope and Results of Remedial Investigations – Administration Area East 3-7
3.1.2.1 Summary of Scope and Results of Remedial Investigations – Buildings 20002/20004 Area 3-7
3.1.2.2 Summary of Scope and Results of Remedial Investigations – Building 20022 Area 3-15
3.1.3 Summary of Scope and Results of Remedial Investigations - Administration Area West 3-22
3.1.3.1 Summary of Scope and Results of Remedial Investigations – Administration Area West Open Ditch System 3-22
3.1.3.2 Summary of Scope and Results of Remedial Investigations – Building 20009 Area 3-30
3.1.3.3 Summary and Results of Remedial Investigations – Former Sewage Treatment Plant Area 3-36
3.1.4 Summary of Scope and Results for Surface Water Remedial Investigation – Administration Area 3-41
3.1.5 Summary of Groundwater Remedial Investigation – Administration Area 3-45

3.2 SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS - WESTLAKES, LINE 02, LINE 05 NORTH, BUFFALO CREEK, AND OPEN SPACE AREAS 5, 6, AND 7 3-46
3.2.1 Summary of Environmental Setting and Remedial Investigations – Line 02 3-47
3.2.1.1 Environmental Setting – Line 02 Region 3-47
3.2.1.2 Summary of Scope and Results of Remedial Investigations – Line 02 Region 3-52
3.2.2 Summary of Environmental Setting and Remedial Investigations – Line 05 North 3-66
3.2.2.1 Environmental Setting – Line 05 North Area 3-66
3.2.2.2 Summary of Scope and Results of Remedial Investigations - Line 05 North Area 3-69
3.2.3 Summary of Environmental Setting and Remedial Investigations – Westlakes Storm Water Detention Basins 3-74
3.2.3.1 Environmental Setting – Westlakes 3-76
3.2.3.2 Summary of Scope and Results of Remedial Investigations – Westlakes Storm Water Detention Basins 3-79

3.2.4 Summary of Environmental Setting and Remedial Investigations – Western Administration Area Ditch and Buffalo Creek 3-83
3.2.4.1 Environmental Setting – Western Administration Area Ditch and Buffalo Creek 3-84
3.2.4.2 Summary of Scope and Results of Remedial Investigations – Western Administration Area Ditch and Buffalo Creek 3-87
3.2.5 Summary of Environmental Setting and Remedial Investigations – Open Space Areas 5, 6, and 7 3-92
3.2.5.1 Environmental Setting – Open Space Areas 5 and 7 3-92
3.2.5.2 Summary of Scope and Results of Remedial Investigations – Open Space Areas 5, 6, and 7 3-96
3.2.5.3 Summary of Scope and Results for Surface Water Remedial Investigation – Central Portion of the Boundary Operable Unit 3-98
3.2.5.4 Summary of Groundwater Remedial Investigation – WLLO Area of the Boundary Operable Unit 3-101

3.3 SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS – CHEMICAL PLANT 2 REGION 3-102
3.3.1 Summary of Environmental Setting and Scope and Results of Remedial Investigations – Chemical Plant 2 North and South 3-103
3.3.1.1 Environmental Setting – Chemical Plant 2 North and South 3-103
3.3.1.2 Summary of Scope and Results of Remedial Investigations – Chemical Plant 2 Area North 3-109
3.3.1.3 Summary of Scope and Results of Remedial Investigations – Chemical Plant 2 Area South 3-118
3.3.2 Summary of Environmental Setting and Remedial Investigations – Magazine Area 3-123
3.3.2.1 Environmental Setting – Magazine Area 3-124
3.3.2.2 Summary of Scope and Results of Remedial Investigations – Magazine Area 3-127
3.3.3 Summary of Environmental Setting and Remedial Investigations – Dredge Pit and Eastern Basin 3-130
3.3.3.1 Environmental Setting – Dredge Pit and Eastern Basin 3-131
3.3.3.2 Summary of Scope and Results of Remedial Investigations – Dredge Pit and Eastern Basin 3-134
3.3.4 Summary of Environmental Setting and Remedial Investigations – Open Space Areas 1, 2, and 4 3-138

3.3.4.1 Environmental Setting – Open Space Areas 1, 2, and 4 *3-138*
3.3.4.2 Summary of Scope and Results of Remedial Investigations – Open Space Areas 1, 2, and 4 *3-144*
3.3.5 Summary of Scope and Results of Surface Water Remedial Investigations – Chemical Plant 2 Region *3-146*
3.3.6 Summary of Groundwater Remedial Investigation – Chemical Plant 2 Region *3-148*

3.4 SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS – AREA 39 ***3-148***
3.4.1 Environmental Setting – Area 39 *3-149*
3.4.1.1 Topography *3-149*
3.4.1.2 Geology *3-149*
3.4.1.3 Soils *3-150*
3.4.1.4 Surface Water Hydrology *3-151*
3.4.1.5 Local Hydrogeology *3-152*
3.4.1.6 Ecological Habitat *3-153*
3.4.2 Summary of Scope and Results of Remedial Investigations – Area 39 *3-153*
3.4.3 Summary of Scope and Results for Surface Water Remedial Investigation – Area 39 *3-159*
3.4.4 Summary of Groundwater Remedial Investigation – Area 39 *3-160*

4.0 DATA EVALUATION ***4-1***

4.1 DATA IDENTIFICATION AND ACQUISITION ***4-2***

4.2 DATA USABILITY EVALUATION ***4-2***
4.2.1 Criterion I – Availability of Information Associated with Site Data *4-3*
4.2.2 Criterion II – Documentation Review *4-3*
4.2.3 Criterion III – Data Sources *4-4*
4.2.4 Criterion IV – Analytical Methods and Detection Limits *4-4*
4.2.5 Criterion V – Data Review *4-4*
4.2.6 Criterion VI – Data Quality Indicators *4-4*
4.2.6.1 Precision *4-5*
4.2.6.2 Accuracy *4-5*
4.2.6.3 Representativeness *4-5*
4.2.6.4 Completeness *4-6*
4.2.6.5 Comparability *4-6*

4.3 CHEMICALS OF POTENTIAL CONCERN 4-6
4.3.1 Essential Nutrient Evaluation 4-7
4.3.2 Concentration-Toxicity Evaluation 4-7
4.3.3 Background Evaluation 4-8
4.3.4 Frequency of Detection Evaluation 4-9

5.0 HUMAN HEALTH RISK ASSESSMENT 5-1

5.1 OVERVIEW OF HUMAN HEALTH RISK ASSESSMENT 5-2
5.1.1 Conceptual Site Model 5-2
5.1.1.1 Assessed Environmental Media 5-3
5.1.1.2 Inter-Media Transfers 5-3
5.1.1.3 Identification of Potential Receptors 5-4
5.1.1.4 Identification of Potential Exposure Pathways 5-4
5.1.2 Exposure Assessment 5-6
5.1.2.1 Estimation of Exposure Point Concentrations 5-6
5.1.2.2 Quantification of Exposure 5-10
5.1.2.3 Total Petroleum Hydrocarbons 5-13
5.1.3 Toxicity Assessment 5-14
5.1.3.1 Non-Carcinogenic Health Effects 5-15
5.1.3.2 Carcinogenic Health Effects 5-16
5.1.3.3 Lead-Specific Considerations 5-16
5.1.4 Risk Characterization 5-17
5.1.5 Application of the "Unit Risk" and "Unit Hazard" 5-18

5.2 ADMINISTRATION AREA 5-20
5.2.1 Receptors of Concern 5-20
5.2.2 Constituents of Potential Concern 5-20
5.2.2.1 Administration Area 5-20
5.2.2.2 Administration Area East 5-22
5.2.2.3 Administration Area West 5-23
5.2.3 Exposure Scenarios 5-25
5.2.3.1 Administration Area 5-25
5.2.3.2 Administration Areas East and West 5-26
5.2.4 Fate and Transport Results 5-26
5.2.5 Risk Summary 5-26
5.2.5.1 Administration Area 5-27
5.2.5.2 Administration Area East 5-33
5.2.5.3 Administration Area West 5-37

5.3 LINE 02 5-41
5.3.1 Receptors of Concern 5-41
5.3.2 Constituents of Potential Concern 5-41

		5.3.2.1 Soil Vapor	*5-41*
		5.3.2.2 Soil	*5-42*
	5.3.3	*Exposure Scenarios*	*5-43*
	5.3.4	*Fate and Transport Results*	*5-44*
	5.3.5	*Risk Summary*	*5-44*
		5.3.5.1 Residential Scenario	*5-44*
		5.3.5.2 Construction Worker	*5-46*
		5.3.5.3 Commercial/Industrial Worker	*5-46*
5.4	***LINE 05 NORTH***		***5-48***
	5.4.1	*Receptors of Concern*	*5-48*
	5.4.2	*Constituents of Potential Concern*	*5-48*
		5.4.2.1 Soil Vapor	*5-48*
		5.4.2.2 Soil	*5-48*
	5.4.3	*Exposure Scenarios*	*5-49*
	5.4.4	*Fate and Transport Results*	*5-49*
	5.4.5	*Risk Summary*	*5-50*
		5.4.5.1 Residential Scenario	*5-50*
		5.4.5.2 Construction Worker	*5-51*
		5.4.5.3 Commercial/Industrial Worker	*5-52*
5.5	***WESTLAKES***		***5-53***
	5.5.1	*Receptors of Concern*	*5-53*
	5.5.2	*Constituents of Potential Concern*	*5-53*
		5.5.2.1 Soil	*5-53*
	5.5.3	*Exposure Scenarios*	*5-54*
	5.5.4	*Fate and Transport Results*	*5-54*
	5.5.5	*Risk Summary*	*5-54*
		5.5.5.1 Residential Scenario	*5-54*
		5.5.5.2 Construction Worker	*5-55*
		5.5.5.3 Commercial/Industrial Worker	*5-55*
5.6	***CHEMICAL PLANT 2***		***5-56***
	5.6.1	*Receptors of Concern*	*5-56*
	5.6.2	*Constituents of Potential Concern*	*5-56*
		5.6.2.1 Soil Vapor	*5-57*
		5.6.2.2 Soil	*5-57*
	5.6.3	*Exposure Scenarios*	*5-60*
	5.6.4	*Fate and Transport Results*	*5-60*
	5.6.5	*Risk Summary*	*5-60*
		5.6.5.1 Residential Scenario	*5-60*
		5.6.5.2 Construction Worker	*5-62*
		5.6.5.3 Commercial/Industrial Worker	*5-63*

5.7	***MAGAZINE AREA***		***5-64***
	5.7.1	*Receptors of Concern*	*5-65*
	5.7.2	*Constituents of Potential Concern*	*5-65*
		5.7.2.1 Soil Vapor	*5-65*
		5.7.2.2 Soil	*5-65*
	5.7.3	*Exposure Scenarios*	*5-66*
	5.7.4	*Fate and Transport Results*	*5-66*
	5.7.5	*Risk Summary*	*5-66*
		5.7.5.1 Residential Scenario	*5-67*
		5.7.5.2 Construction Worker	*5-68*
		5.7.5.3 Commercial/Industrial Worker	*5-68*
5.8	***OPEN SPACE AREAS 1, 2, 3, AND 4***		***5-69***
	5.8.1	*Receptors of Concern*	*5-69*
	5.8.2	*Constituents of Potential Concern*	*5-70*
	5.8.2.1	*Soil Vapor*	*5-70*
	5.8.2.2	*Soil*	*5-70*
	5.8.3	*Exposure Scenarios*	*5-71*
	5.8.4	*Fate and Transport Results*	*5-71*
	5.8.5	*Risk Summary*	*5-71*
		5.8.5.1 Residential Scenario	*5-71*
		5.8.5.2 Construction Worker	*5-72*
		5.8.5.3 Commercial/Industrial Worker	*5-73*
5.9	***OPEN SPACE AREAS 5 AND 7***		***5-74***
	5.9.1	*Receptors of Concern*	*5-74*
	5.9.2	*Constituents of Potential Concern*	*5-74*
	5.9.2.1	*Soil Vapor*	*5-74*
	5.9.2.2	*Soil*	*5-74*
	5.9.3	*Exposure Scenarios*	*5-75*
	5.9.4	*Fate and Transport Results*	*5-75*
	5.9.5	*Risk Summary*	*5-75*
		5.9.5.1 Residential Scenario	*5-76*
		5.9.5.2 Construction Worker	*5-76*
		5.9.5.3 Commercial/Industrial Worker	*5-77*
5.10	***AREA 39***		***5-78***
	5.10.1	*Receptors of Concern*	*5-78*
	5.10.2	*Constituents of Potential Concern*	*5-78*
		5.10.2.1 Soil Vapor	*5-78*
		5.10.2.2 Soil	*5-79*
		5.10.2.3 Groundwater	*5-81*
		5.10.2.4 Surface Water	*5-81*

5.10.3 Exposure Scenarios 5-82
5.10.4 Fate and Transport Results 5-83
5.10.5 Risk Summary 5-83
5.10.5.1 Residential Scenario 5-83
5.10.5.2 Construction Worker 5-87
5.10.5.3 Commercial/Industrial Worker 5-88
5.10.5.4 Recreational Scenario 5-89

5.11 BUFFALO CREEK 5-91
5.11.1 Receptors of Concern 5-91
5.11.2 Constituents of Potential Concern 5-91
5.11.2.1 Soil 5-91
5.11.2.2 Sediment 5-92
5.11.3 Exposure Scenarios 5-93
5.11.4 Fate and Transport Results 5-93
5.11.5 Risk Summary 5-93
5.11.5.1 Residential Scenario 5-93
5.11.5.2 Construction Worker 5-94
5.11.5.3 Commercial/Industrial Worker 5-95
5.11.5.4 Recreator Scenario 5-95

5.12 WESTLAKES, LINE 02, LINE 05 NORTH AREA SURFACE WATER AND GROUNDWATER 5-97
5.12.1 Receptors of Concern 5-97
5.12.2 Constituents of Potential Concern 5-97
5.12.2.1 Groundwater 5-97
5.12.2.2 Surface Water 5-98
5.12.3 Exposure Scenarios 5-98
5.12.4 Fate and Transport Results 5-99
5.12.5 Risk Summary 5-99
5.12.5.1 Residential Scenario 5-99
5.12.5.2 Commercial Scenario 5-102

5.13 CHEMICAL PLANT 2 REGION SURFACE WATER AND GROUNDWATER 5-102
5.13.1 Receptors of Concern 5-103
5.13.2 Constituents of Potential Concern 5-103
5.13.2.1 Groundwater 5-103
5.13.2.2 Surface Water 5-104
5.13.3 Exposure Scenarios 5-104
5.13.4 Fate and Transport Results 5-105
5.13.5 Risk Summary 5-105
5.13.5.1 Residential Scenario 5-105

5.13.5.2 Commercial Scenario 5-110

6.0 SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT 6-1

6.1 OVERVIEW OF THE SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT PROCESS 6-2

6.1.1 Screening Level Ecological Risk Assessment Problem Formulation 6-2
6.1.1.1 Environmental Setting 6-3
6.1.1.2 Identification of Potentially Exposed Ecological Receptors 6-5
6.1.1.3 Constituents of Potential Ecological Concern 6-6
6.1.1.4 Potentially Complete Exposure Pathways and Conceptual Site Model 6-10
6.1.1.5 Ecological Endpoints 6-17
6.1.2 Screening Level Ecological Risk Assessment Effects Assessment 6-19
6.1.2.1 Aluminum 6-21
6.1.2.2 Perchlorate 6-22
6.1.2.3 Soil Vapor Ecological Screening Levels 6-23
6.1.3 Screening Level Ecological Risk Assessment Exposure Assessment 6-24
6.1.4 Screening Level Ecological Risk Assessment Risk Characterization 6-24
6.1.4.1 Risk Characterization Screen 6-25
6.1.4.2 Additional Screen for Metal COPECs in Soils 6-25
6.1.4.3 Vertical Profile 6-26
6.1.4.4 Hazard Quotients 6-26
6.1.4.5 Other Factors Discussed in the SLERA 6-27

6.2 ADMINISTRATION AREA 6-31

6.2.1 Administration Area East 6-32
6.2.1.1 Habitat and Receptors of Potential Concern 6-32
6.2.1.2 Constituents of Potential Ecological Concern 6-32
6.2.1.3 SLERA Exposure Estimates 6-34
6.2.1.4 Risk Characterization Summary 6-37
6.2.2 Administration Area West 6-38
6.2.2.1 Habitat and Receptors of Potential Concern 6-38
6.2.2.2 Constituents of Potential Ecological Concern 6-39
6.2.2.3 SLERA Exposure Estimates 6-40
6.2.2.4 Risk Characterization Summary 6-44

6.3 LINE 02 ***6-45***
6.3.1 Habitat and Receptors of Potential Concern *6-45*
6.3.2 Constituents of Potential Ecological Concern *6-46*
6.3.3 SLERA Exposure Estimates *6-47*
6.3.4 Risk Characterization Summary *6-49*

6.4 LINE 05 NORTH ***6-50***
6.4.1 Habitat and Receptors of Potential Concern *6-51*
6.4.2 Constituents of Potential Ecological Concern *6-51*
6.4.3 SLERA Exposure Estimates *6-52*
6.4.4 Risk Characterization Summary *6-53*

6.5 WESTLAKES ***6-53***
6.5.1 Habitat and Receptors of Potential Concern *6-54*
6.5.2 Constituents of Potential Ecological Concern *6-54*
6.5.3 SLERA Exposure Estimates *6-57*
6.5.4 Risk Characterization Summary *6-60*

6.6 BUFFALO CREEK ***6-63***
6.6.1 Habitat and Receptors of Potential Concern *6-63*
6.6.2 Constituents of Potential Ecological Concern *6-65*
6.6.3 SLERA Exposure Estimates *6-67*
6.6.4 Risk Characterization Summary *6-70*

6.7 OPEN SPACE AREAS 5 AND 7 ***6-72***
6.7.1 Habitat and Receptors of Potential Concern *6-72*
6.7.2 Constituents of Potential Ecological Concern *6-73*
6.7.3 SLERA Exposure Estimates *6-73*
6.7.4 Risk Characterization Summary *6-74*

6.8 CHEMICAL PLANT 2 ***6-75***
6.8.1 Chemical Plant 2 *6-75*
6.8.1.1 Habitat and Receptors of Potential Concern *6-75*
6.8.1.2 Constituents of Potential Ecological Concern *6-76*
6.8.1.3 SLERA Exposure Estimates *6-78*
6.8.1.4 Risk Characterization Summary *6-82*
6.8.2 Dredge Pit and Eastern Basin *6-84*
6.8.2.1 Habitat and Receptors of Potential Concern *6-84*
6.8.2.2 Constituents of Potential Ecological Concern *6-84*
6.8.2.3 SLERA Exposure Estimates *6-85*
6.8.2.4 Risk Characterization Summary *6-88*

6.9 MAGAZINE AREA 6-89

6.9.1 Habitat and Receptors of Potential Concern 6-89
6.9.2 Constituents of Potential Ecological Concern 6-90
6.9.3 Screening Level Ecological Risk Assessment Exposure Estimates 6-91
6.9.4 Risk Characterization Summary 6-91

6.10 OPEN SPACE AREAS 1, 2, AND 4 6-92

6.10.1 Habitat and Receptors of Potential Concern 6-92
6.10.2 Constituents of Potential Ecological Concern 6-93
6.10.3 SLERA Exposure Estimates 6-93
6.10.4 Risk Characterization Summary 6-94

6.11 AREA 39 6-95

6.11.1 Habitat and Receptors of Potential Concern 6-95
6.11.2 Constituents of Potential Ecological Concern 6-96
6.11.3 SLERA Exposure Estimates 6-97
6.11.4 Risk Characterization Summary 6-99

6.12 SLERA SUMMARY 6-101

7.0 UNCERTAINTY ANALYSIS 7-1

7.1 UNCERTAINTIES COMMON TO BOTH THE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENTS 7-1

7.1.1 Environmental Sampling and Analysis 7-2
7.1.1.1 1,3-Butadiene 7-2
7.1.1.2 Arsenic 7-2
7.1.1.3 Thallium 7-2
7.1.2 Chemical of Potential Concern Selection-Background Comparison 7-3
7.1.3 Chemical of Potential Concern Selection-Concentration-Toxicity Evaluation 7-3
7.1.4 Exposure Point Concentrations 7-4
7.1.5 Toxicity Assessment 7-4

7.2 UNCERTAINTIES ASSOCIATED WITH THE HUMAN HEALTH RISK ASSESSMENT 7-4

7.2.1 Chemicals of Potential Concern Selection 7-4
7.2.2 Fate and Transport Modeling 7-5
7.2.3 Exposure Assessment 7-5
7.2.3.1 Types of Exposures Examined 7-6
7.2.3.2 Points of Human Exposure 7-6
7.2.3.3 Intake Assumptions Used 7-7

7.2.4 Toxicity Assessment 7-9
7.2.4.1 Toxicological Data and Dose Response Extrapolations 7-9
7.2.4.2 Uncertainties in Animal and Human Studies 7-9
7.2.4.3 Non-Carcinogenic Toxicity Criteria 7-10
7.2.4.4 Carcinogenic Toxicity Criteria 7-10
7.2.4.5 Constituents without Toxicity Data 7-13
7.2.4.6 Trichloroethene 7-13
7.2.4.7 Iron 7-14
7.2.4.8 Aluminum 7-14
7.2.4.9 Lead 7-15
7.2.4.10 Total Petroleum Hydrocarbons 7-15
7.2.5 Management Area Uncertainties 7-16
7.2.5.1 Administration Area 7-16
7.2.5.2 Administration Area East 7-18
7.2.5.3 Administration West 7-20
7.2.5.4 Area 39 7-23
7.2.5.5 Buffalo Creek 7-26
7.2.5.6 Chemical Plant 2 7-27
7.2.5.7 Line 02 7-29
7.2.5.8 Line 05 7-30
7.2.5.9 Magazine Area and Open Space 3 7-31
7.2.5.10 Open Space Areas 1, 2, and 4 7-32
7.2.5.11 Open Space Areas 5 and 7 7-33
7.2.5.12 Westlakes 7-34
7.2.5.13 WLLO Area Surface Water and Groundwater 7-35
7.2.5.14 Chemical Plant 2 Region Surface Water and Groundwater 7-36

7.3 UNCERTAINTIES ASSOCIATED WITH THE SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT 7-38
7.3.1 Exposure Assessment 7-38
7.3.2 Effects Assessment 7-40
7.3.3 Chemicals Without ESLs 7-46
7.3.4 Hardness Based Surface Water Screening Levels 7-47

7.4 COMBINATIONS OF SOURCES OF UNCERTAINTY 7-50

8.0 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER POSED BY CONSTITUENTS IN SOIL VAPOR AND SOIL 8-1

8.1 EVALUATION METHODS 8-2
8.1.1 Potential Risk to Surface Water Evaluation Methods 8-2

8.1.2 Potential Risk to Groundwater Evaluation Methods 8-2
8.1.2.1 Volatile Organic Compounds 8-2
8.1.2.2 Non-Volatile Organic Compounds 8-4

8.2 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER - ADMINISTRATION AREA EAST 8-7
8.2.1 Potential Risk to Surface Water – Administration Area East 8-8
8.2.2 Potential Risk to Groundwater – Administration Area East 8-9
8.2.2.1 Non-Volatile Organic Compounds 8-9
8.2.2.2 Volatile Organic Compounds 8-12

8.3 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER - ADMINISTRATION AREA WEST 8-14
8.3.1 Potential Risk to Surface Water – Administration Area West 8-15
8.3.2 Potential Risk to Groundwater – Administration Area West 8-16
8.3.2.1 Non-Volatile Organic Compounds 8-16
8.3.2.2 Volatile Organic Compounds 8-20

8.4 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER – WLLO AREA 8-22
8.4.1 Potential Risk to Surface Water – WLLO Area 8-22
8.4.2 Potential Risk to Groundwater – WLLO Area 8-24
8.4.2.1 Non-Volatile Organic Compounds 8-24
8.4.2.2 Volatile Organic Compounds 8-29

8.5 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER - CHEMICAL PLANT 2 REGION 8-31
8.5.1 Potential Risk to Surface Water – Chemical Plant 2 Region 8-31
8.5.2 Potential Risk to Groundwater – Chemical Plant 2 Region 8-33
8.5.2.1 Non-Volatile Organic Compounds 8-33
8.5.2.2 Volatile Organic Compounds 8-37

8.6 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER – AREA 39 8-39
8.6.1 Potential Risk to Surface Water – Area 39 8-39
8.6.2 Potential Risk to Groundwater – Area 39 8-39
8.6.2.1 Non-Volatile Organic Compounds 8-39
8.6.2.2 Volatile Organic Compounds 8-41

9.0 GRAPHICAL SUMMARY OF HUMAN HEALTH, ECOLOGICAL, AND PROTECTION OF GROUNDWATER RISK ASSESSMENTS 9-1

10.0 REFERENCES 10-1

APPENDIX A — RISK ASSESSMENT WHITE PAPERS

APPENDIX B — DATA USED IN THE RISK ASSESSMENT

APPENDIX C — STATISTICAL EVALUATION OF BACKGROUND METALS DATASET AND COMPARISON OF BACKGROUND METALS TO SITE METALS DATA

APPENDIX D — FATE AND TRANSPORT MODELING CALCULATIONS

APPENDIX E — USEPA RAGS TABLE D

APPENDIX F — UNIT RISK CALCULATIONS AND CHILD AND ADULT BLOOD LEAD CALCULATIONS

APPENDIX G — MAY 2006 SITE VISIT PHOTOGRAPHS

APPENDIX H — SLERA FATE MECHANISMS

APPENDIX I — BUILDINGS 20002 AND 20004 SPECIFIC HUMAN HEALTH RISK ASSESSMENT

APPENDIX J — REVIEW OF DETECTION LIMITS GREATER THAN ECOLOGICAL SCREENING LEVELS (ESLS)

APPENDIX K — SCREENING LEVEL VAPOR TRANSPORT MODELING FOR PROTECTION OF GROUNDWATER EVALUATION

APPENDIX L —COPY OF BIOLOGICAL RESOURCES ASSESSMENT FOR AEROJET BOU (ECORP, 2005), INCLUDING SPECIES LISTS

LIST OF FIGURES

(Figures immediately follow the text)

1.0-1 *Potential Source Area Operable Units, Boundary Operable Unit*

ADMINISTRATION AREA

3.1-1 *Site Features Map, Administration Area*

3.1-2 *Site Features Map, Administration Area East*

3.1-3 *BOU Soil Vapor Sample Locations, Administration Area East*

3.1-4 *BOU Surface Soil Sample Locations, Administration Area East*

3.1-5 *BOU Subsurface Soil Sample Locations, Administration Area East*

3.1-6 *Site Features Map, Administration Area West*

3.1-7 *BOU Soil Vapor Sample Locations, Administration Area West*

3.1-8 *BOU Surface Soil Sample Locations, Administration Area West*

3.1-9 *BOU Subsurface Soil Sample Locations, Administration Area West*

3.1-10 *BOU Surface Water Sample Locations, Administration Area*

3.1-11 *Perched Groundwater – VOC Iso-concentration Contours, Administration Area*

3.1-12 *First Water-Bearing Zone – TCE Iso-concentration Contours, Administration Area*

3.1-13 *First Water-Bearing Zone – Perchlorate Iso-concentration Contours, Administration Area*

WILLO AREA

3.2-1 *Site Features Map, Line 02*

3.2-2 *BOU Soil Vapor Sample Locations, Line 02*

3.2-3 *BOU Surface Soil Sample Locations, Line 02*

3.2-4 *BOU Subsurface Soil Sample Locations, Line 02*

3.2-5 *Site Features Map, Line 5 North*

3.2-6 *BOU Soil Vapor Sample Locations, Line 5 North*

3.2-7 *BOU Surface Soil Sample Locations, Line 5 North*

3.2-8 *BOU Subsurface Soil Sample Locations, Line 5 North*

3.2-9 *Site Features Map, Westlakes and Open Space Area 6*

3.2-10 *BOU Surface Soil Sample Locations, Westlakes*

3.2-11 *BOU Subsurface Soil Sample Locations, Westlakes*

3.2-12 *Site Features Map, Buffalo Creek*

3.2-13 *BOU Soil Sample Locations, Buffalo Creek*

3.2-14 *Site Features Map, Open Space Areas 5, 6, and 7*

3.2-15 *BOU Soil Vapor Sample Locations, Open Space Area 5*

3.2-16 *BOU Soil Sample Locations, Open Space Area 5*

3.2-17 *BOU Surface Water Sample Locations, Line 02 and Line 5 North and Buffalo Creek Areas*

3.2-18 *BOU Surface Water Sample Locations, Westlakes*

3.2-19 *Perched Groundwater – TCE Iso-Concentration Contours, Westlakes Area*

3.2-20 *First Water-Bearing Zone – TCE Iso-Concentration Contours, Westlakes Area*

3.2-21 *First Water-Bearing Zone – Perchlorate Iso-Concentration Contours, Westlakes Area*

CHEMICAL PLANT 2 REGION

3.3-1 *Site Features Map, Chemical Plant 2 Area*

3.3-2 *BOU Soil Vapor Sample Locations, Chemical Plant 2 Area*

3.3-3 *BOU Surface Soil Sample Locations, Chemical Plant 2 Area*

3.3-4 *BOU Subsurface Soil Sample Locations, Chemical Plant 2 Area*

3.3-5 *Site Features Map, Magazine and Open Space Area 3*

3.3-6 *BOU Soil Vapor Sample Locations, Magazine and Open Space Area 3*

3.3-7 *BOU Surface Soil Sample Locations, Magazine and Open Space Area 3*

3.3-8 *BOU Subsurface Soil Sample Locations, Magazine and Open Space Area 3*

3.3-9 *Site Features Map, Dredge Pit and Eastern Basin*

3.3-10 *BOU Surface Soil Sample Locations, Dredge Pit and Eastern Basin*

3.3-11 *BOU Subsurface Soil Sample Locations, Dredge Pit and Eastern Basin*

3.3-12 *BOU Soil Vapor Sample Locations, Open Space Area 2*

3.3-13 *First Water-Bearing Zone – TCE Iso-Concentration Contours, October 2005 to October 2006, Chemical Plant 2 Region*

3.3-14 *First Water-Bearing Zone – 1,2-DCA Iso-Concentration Contours, October 2005 to October 2006, Chemical Plant 2 Region*

3.3-15 *First Water-Bearing Zone – Perchlorate Iso-Concentration Contours, October 2005 to October 2006, Chemical Plant 2 Region*

AREA 39

3.4-1 *Site Features Map, Area 39*

3.4-2 *BOU Soil Vapor Sample Locations, Area 39*

3.4-3 *BOU Surface Soil Sample Locations, Area 39*

3.4-4 *BOU Subsurface Soil Sample Locations, Area 39*

3.4-5 *BOU Surface Water Sample Locations, Area 39*

3.4-6 *Perched Groundwater, TCE Iso-Concentration Contours, October 2005 to June 2008, Area 39*

3.4-7 *First Water-Bearing Zone, TCE Iso-Concentration Contours, October 2005 to June 2008, Area 39*

HUMAN HEALTH RISK ASSESSMENT

OVERVIEW OF HUMAN HEALTH RISK ASSESSMENT

5.1-1a *Human Health Conceptual Site Model for Soil*

5.1-1b *Human Health Conceptual Site Model for Groundwater*

ADMINISTRATION AREA

5.2-1 *Residential Non-Cancer Effects - All Media, Administration Area East*

5.2-2 *Residential Cancer Risks - All Media, Administration Area East*

5.2-3 *Construction Worker Non-Cancer Effects - All Media, Administration Area East*

5.2-4 *Construction Worker Cancer Risks - All Media, Administration Area East*

5.2-5 *Commercial/Industrial Worker Non-Cancer Effects - All Media, Administration Area East*

5.2-6 *Commercial/Industrial Worker Cancer Risks - All Media, Administration Area East*

5.2-7 *Residential Non-Cancer Effects - All Media, Administration Area West*

5.2-8 *Residential Cancer Risks - All Media, Administration Area West*

5.2-9 *Construction Worker Non-Cancer Effects - All Media, Administration Area West*

5.2-10 *Construction Worker Cancer Risks - All Media, Administration Area West*

5.2-11 *Commercial/Industrial Worker Non-Cancer Effects - All Media, Administration Area West*

5.2-12 *Commercial/Industrial Worker Cancer Risks - All Media, Administration Area West*

LINE 02 AREA

5.3-1 *Residential Non-Cancer Effects - All Media, Line 02*

5.3-2 *Residential Cancer Risks - All Media, Line 02*

5.3-3 *Construction Worker Non-Cancer Effects - All Media, Line 02*

5.3-4 *Construction Worker Cancer Risks - All Media, Line 02*

5.3-5 *Commercial/Industrial Worker Non-Cancer Effects - All Media, Line 02*

5.3-6 *Commercial/Industrial Worker Cancer Risks - All Media, Line 02*

LINE 5 NORTH

5.4-1 *Residential Non-Cancer Effects - All Media, Line 5 North*

5.4-2 *Residential Cancer Risks - All Media, Line 5 North*

5.4-3 *Construction Worker Non-Cancer Effects - All Media, Line 5 North*

5.4-4 *Construction Worker Cancer Risks - All Media, Line 5 North*

5.4-5 *Commercial/Industrial Worker Non-Cancer Effects - All Media, Line 5 North*

5.4-6 *Commercial/Industrial Worker Cancer Risks - All Media, Line 5 North*

WESTLAKES AREA

5.5-1 *Residential Non-Cancer Effects - All Media, Westlakes*

5.5-2 *Residential Cancer Risks - All Media, Westlakes*

5.5-3 *Construction Worker Non-Cancer Effects - All Media, Westlakes*

5.5-4 *Construction Worker Cancer Risks - All Media, Westlakes*

5.5-5 *Commercial/Industrial Worker Non-Cancer Effects - All Media, Westlakes*

5.5-6 *Commercial/Industrial Worker Cancer Risks - All Media, Westlakes*

CHEMICAL PLANT 2 REGION

5.6-1 *Residential Non-Cancer Effects - All Media, Chemical Plant 2*

5.6-2 *Residential Cancer Risks - All Media, Chemical Plant 2*

5.6-3 *Construction Worker Non-Cancer Effects - All Media, Chemical Plant 2*

5.6-4 *Construction Worker Cancer Risks - All Media, Chemical Plant 2*

5.6-5 *Commercial/Industrial Worker Non-Cancer Effects - All Media, Chemical Plant 2*

5.6-6 *Commercial/Industrial Worker Cancer Risks - All Media, Chemical Plant 2*

MAGAZINE AREA

5.7-1 *Residential Non-Cancer Effects - All Media, Magazine Area*

5.7-2 *Residential Cancer Risks - All Media, Magazine Area*

5.7-3 *Construction Worker Non-Cancer Effects - All Media, Magazine Area*

5.7-4 *Construction Worker Cancer Risks - All Media, Magazine Area*

5.7-5 *Commercial/Industrial Worker Non-Cancer Effects - All Media, Magazine Area*

5.7-6 Commercial/Industrial Worker Cancer Risks - All Media, Magazine Area

OPEN SPACE AREAS 1, 2, 3, AND 4

5.8-1 Residential Non-Cancer Effects - All Media, Open Space 1, 2, 3 and 4

5.8-2 Residential Cancer Risks - All Media, Open Space 1, 2, 3 and 4

5.8-3 Construction Worker Non-Cancer Effects - All Media, Open Space 1, 2, 3 and 4

5.8-4 Construction Worker Cancer Risks - All Media, Open Space 1, 2, 3 and 4

5.8-5 Commercial/Industrial Worker Non-Cancer Effects - All Media, Open Space 1, 2, 3 and 4

5.8-6 Commercial/Industrial Worker Cancer Risks - All Media, Open Space 1, 2, 3 and 4

OPEN SPACE AREAS 5 AND 7

5.9-1 Residential Non-Cancer Effects - All Media, Open Space 5 and 7

5.9-2 Residential Cancer Risks - All Media, Open Space 5 and 7

5.9-3 Construction Worker Non-Cancer Effects - All Media, Open Space 5 and 7

5.9-4 Construction Worker Cancer Risks - All Media, Open Space 5 and 7

5.9-5 Commercial/Industrial Worker Non-Cancer Effects - All Media, Open Space 5 and 7

5.9-6 Commercial/Industrial Worker Cancer Risks - All Media, Open Space 5 and 7

AREA 39

5.10-1 Residential Non-Cancer Effects - All Media, Area 39

5.10-2 Residential Cancer Risks - All Media, Area 39

5.10-3 Construction Worker Non-Cancer Effects - All Media, Area 39

5.10-4 Construction Worker Cancer Risks - All Media, Area 39

5.10-5 Commercial/Industrial Worker Non-Cancer Effects - All Media, Area 39

5.10-6 Commercial/Industrial Worker Cancer Risks - All Media, Area 39

5.10-7 Recreator Scenario Non-Cancer Effects - All Media, Area 39

5.10-8 Recreator Scenario Cancer Risks - All Media, Area 39

BUFFALO CREEK

5.11-1 Residential Non-Cancer Effects - All Media, Buffalo Creek

5.11-2 Residential Cancer Risks - All Media, Buffalo Creek

5.11-3 Construction Worker Non-Cancer Effects - All Media, Buffalo Creek

5.11-4 Construction Worker Cancer Risks - All Media, Buffalo Creek

5.11-5 Commercial/Industrial Worker Non-Cancer Effects - All Media, Buffalo Creek

5.11-6 Commercial/Industrial Worker Cancer Risks - All Media, Buffalo Creek

5.11-7 Recreator Scenario Non-Cancer Effects – All Media, Buffalo Creek

5.11-8 Recreator Scenario Cancer Risks – All Media, Buffalo Creek

WILLO SURFACE AND GROUNDWATER

5.12-1 Residential Non-Cancer Effects - All Media, WLLO Surface Water and Groundwater

5.12-2 Residential Cancer Risks - All Media, WLLO Surface Water and Groundwater

5.12-3 Commercial/Industrial Worker Non-Cancer Effects - All Media, WLLO Surface Water and Groundwater

5.12-4 Commercial/Industrial Worker Cancer Risks - All Media, WLLO Surface Water and Groundwater

SOUTHWEST BOU SURFACE AND GROUNDWATER

5.13-1 Residential Non-Cancer Effects - All Media, Southwest BOU Groundwater and Surface Water

5.13-2 Residential Cancer Risks - All Media, Southwest BOU Groundwater and Surface Water

5.13-3 Commercial/Industrial Worker Non-Cancer Effects - All Media, Southwest BOU Groundwater and Surface Water

5.13-4 *Commercial/Industrial Worker Cancer Risks - All Media, Southwest BOU Groundwater and Surface Water*

ECOLOGICAL RISK ASSESSMENT

OVERVIEW OF ECOLOGICAL RISK ASSESSMENT

6.1-1a *Conceptual Site Model for the Boundary Operable Unit Soil Exposure Pathways for Ecological Receptors*

6.1-1b *Conceptual Site Model for the Boundary Operable Unit Groundwater and Surface Water for Ecological Receptors*

ADMINISTRATION AREA

6.2-1 *Administration Area East – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil Samples*

6.2-2 *Administration Area East – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil Samples*

6.2-3 *Administration Area East – Exceedances of Risk Characterization, Ditch Samples*

6.2-4 *Administration Area West – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil Samples*

6.2-5 *Administration Area West – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil Samples*

6.2-6 *Administration Area West – Exceedances of Risk Characterization, Ditch Samples*

LINE 02 AREA

6.3-1 *Line 2 Area – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil Samples*

6.3-2 *Line 2 Area – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil Samples*

6.3-3 *Line 2 Area – Exceedances of Risk Characterization, Habitat Soil Vapor Samples (Shallowest Sample Depth)*

LINE 5 NORTH AREA

6.4-1 *Line 5 Area – Exceedances of Risk Characterization, Habitat Surface and Subsurface (0-6') Soil Samples*

WESTLAKES AREA

6.5-1 *Westlakes Area – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil and Sediment Samples*

6.5-2 *Westlakes Area – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil Samples*

6.5-3 *Westlakes Area – Exceedances of Risk Characterization, WLLO Surface Water Samples*

BUFFALO CREEK AREA

6.6-1 *Buffalo Creek – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil and Sediment Samples*

6.6-2 *Buffalo Creek – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil Samples*

6.6-3 *Buffalo Creek – Exceedances of Risk Characterization, WLLO Surface Water Samples*

OPEN SPACE 5 AND 7

6.7-1 *Open Space 5 and 7 – Exceedances of Risk Characterization, Habitat Surface (0-1′) Soil Samples*

CHEMICAL PLANT 2 AND DREDGE PIT AREAS

6.8-1 *Chem Plant Area – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil and Sediment Samples*

6.8-2 *Chem Plant Area – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil and Sediment Samples*

6.8-3 *Dredge Pit Area – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil and Sediment Samples*

6.8-4 *Dredge Pit Area – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil and Sediment Samples*

MAGAZINE AREA AND OPEN SPACES 3 AND 4

6.9-1 *Magazine Area and Open Spaces 3 and 4 – Exceedances of Risk Characterization, Habitat Surface (0-1′) Soil Samples*

6.9-2 *Magazine Area and Open Spaces 3 and 4 – Exceedances of Risk Characterization, Habitat Subsurface (1-6′) Soil Samples*

OPEN SPACES 1 AND 2

6.10-1 *Open Spaces 1 and 2 – Exceedances of Risk Characterization, Habitat Surface (0-1′) Soil Samples*

6.10-2 *Open Spaces 1 and 2 – Exceedances of Risk Characterization, Habitat Subsurface (1-6′) Soil Samples*

AREA 39

6.11-1 *Area 39 – Exceedances of Risk Characterization, Habitat Surface (0-1') Soil and Sediment Samples*

6.11-2 *Area 39 – Exceedances of Risk Characterization, Habitat Subsurface (1-6') Soil and Sediment Samples*

6.11-3 *Area 39 – Exceedances of Risk Characterization, Habitat Soil Vapor Samples (Shallowest Sample Depth)*

EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER

ADMINISTRATION AREA EAST

8.2-1 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Administration Area East*

8.2-2 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Administration Area East*

8.2-3 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Administration Area East*

8.2-4 *Potential Risk to Groundwater – Volatile Organic Compounds, Administration Area East*

ADMINISTRATION AREA WEST

8.3-1 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Administration Area West*

8.3-2 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Administration Area West*

8.3-3 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Administration Area West*

8.3-4 *Potential Risk to Groundwater – Volatile Organic Compounds, Administration Area West*

WESTLAKES, LINE 02, LINE 05 NORTH, BUFFALO CREEK, OPEN SPACE AREAS 5 AND 7 (WLLO AREA)

8.4-1 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Line 02*

8.4-2 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Line 05 North*

8.4-3 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Westlakes*

8.4-4 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Buffalo Creek*

8.4-5 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Line 02*

8.4-6 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Line 05 North*

8.4-7 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Westlakes*

8.4-8 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Buffalo Creek*

8.4-9 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Line 02*

8.4-10 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Line 05 North*

8.4-11 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Westlakes*

8.4-12 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Buffalo Creek*

8.4-13 *Potential Risk to Groundwater – Volatile Organic Compounds, Line 02*

8.4-14 *Potential Risk to Groundwater – Volatile Organic Compounds, Line 05 North*

CHEMICAL PLANT 2 REGION

8.5-1 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Chemical Plant 2 Area*

8.5-2 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Magazine Area*

8.5-3 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Dredge Pit and Eastern Basin*

8.5-4 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Chemical Plant 2 Area*

8.5-5 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Magazine Area*

8.5-6 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Dredge Pit and Eastern Basin*

8.5-7 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Chemical Plant 2 Area*

8.5-8 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Magazine Area*

8.5-9 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Dredge Pit and Eastern Basin*

AREA 39

8.6-1 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Shallow Soil, Area 39*

8.6-2 *Potential Risk to Groundwater – Non-Volatile Organic Compounds in Deep Soil, Area 39*

8.6-3 *Potential Risk to Groundwater Contours – Non-Volatile Organic Compounds in Shallow and Deep Soil, Area 39*

8.6-4 Potential Risk to Groundwater – Volatile Organic Compounds, Area 39

GRAPHICAL SUMMARY OF HUMAN HEALTH, ECOLOGICAL, AND PROTECTION OF GROUNDWATER RISK ASSESSMENTS

9.0-1 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments - Administration Area East

9.0-2 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments - Administration Area West

9.0-3 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments – Line 02

9.0-4 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments – Line 05 North

9.0-5 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments – Buffalo Creek

9.0-6 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments – Chemical Plant 2

9.0-7 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments – Magazine Area and Open Space 4

9.0-8 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments – Dredge Pit and Eastern Basin

9.0-9 Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments – Area 39

LIST OF TABLES

(Tables immediately follow the figures)

4.3-1	*Soil Vapor and Air Human Health COPC Screening Levels*
4.3-2	*Soil Human Health COPC Screening Levels*
4.3-3	*Groundwater and Surface Water Human Health COPC Screening Levels*
4.3-4	*Soil Vapor COPEC Screening Values*
4.3-5	*Organic Soil COPEC Screening Values*
4.3-6	*Inorganic Soil COPEC Screening Values*
4.3-7	*Surface Water COPEC Screening Values*
4.3-8	*Sediment COPEC Screening Values*
5.1-1	*Indoor Air Model Input Parameters - Soil Vapor and Groundwater*
5.1-2	*Resident Exposure Parameters*
5.1-3	*Construction Worker Exposure Parameters*
5.1-4	*Commercial Worker Exposure Parameters*
5.1-5	*Recreator Exposure Parameters – Off Road*
5.1-6	*Recreator Exposure Parameters – Wading*
5.1-7	*Noncancer Toxicity Criteria*
5.1-8	*Carcinogenic Toxicity Criteria*
5.1-9	*Cross-Reference Table for Remedial Investigation, Human Health Risk Assessment, and Screening Level Ecological Risk Assessment Sections*
5.2-1	*Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Groundwater - Administration Area Management Area*
5.2-2	*Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water - Administration Area Management Area*
5.2-3	*Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor – Administration Area East Management Area*
5.2-4	*Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Administration Area East Management Area*

5.2-5 *Chemical of Potential Concern Summary – Administration Area East Management Area*

5.2-6 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor – Administration Area West Management Area*

5.2-7 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Administration Area West Management Area*

5.2-8 *Chemical of Potential Concern Summary – Administration Area West Management Area*

5.2-9 *Outdoor Air Exposure Point Concentration Results – Administration Area East Management Area*

5.2-10 *Outdoor Air Exposure Point Concentration Results – Administration Area West Management Area*

5.2-11 *Residential Soil Vapor to Indoor Air Attenuation Factors – Administration Area East Management Area*

5.2-12 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Administration Area East Management Area*

5.2-13 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Administration Area East Management Area*

5.2-14 *Residential Soil Vapor to Indoor Air Attenuation Factors – Administration Area West Management Area*

5.2-15 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Administration Area West Management Area*

5.2-16 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Administration Area West Management Area*

5.2-17 *Residential Groundwater to Indoor Air Attenuation Factors - Administration Area Management Area*

5.2-18 *Commercial Groundwater to Indoor Air Attenuation Factors - Administration Area Management Area*

5.2-19 *Surface Water Unit Hazard and Unit Cancer Risk Results – Resident - Administration Area Management Area*

5.2-20 *Surface Water Location-Specific Risk Assessment Results – Resident - Administration Area Management Area*

5.2-21 *All Receptors Hazard Index and Cancer Risk Results for Surface Water - Administration Area Management Area*

5.2-22 *Groundwater Unit Hazard and Unit Cancer Risk Results – Resident - Administration Area Management Area*

5.2-23 *Groundwater Inhalation Hazard and Unit Cancer Risk Results – Resident - Administration Area Management Area*

5.2-24 *Groundwater Inhalation Hazard and Unit Cancer Risk Results – Commercial Worker - Administration Area Management Area*

5.2-25a *Groundwater Location-Specific Risk Assessment Results for Organics – Resident – Administration Area Management Area*

5.2-25b *Groundwater Location-Specific Risk Assessment Results for Inorganics – Resident – Administration Area Management Area*

5.2-26 *Groundwater Location-Specific Indoor Air Risk Assessment Results – Resident – Administration Area Management Area*

5.2-27 *Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker – Administration Area Management Area*

5.2-28 *All Receptors Hazard Index and Cancer Risk Results for Groundwater – Administration Area Management Area*

5.2-29 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Administration Area East Management Area*

5.2-30 *Inhalation Unit Hazard and Unit Cancer Risk Results – Resident – Administration Area East Management Area*

5.2-31 *Location-Specific Soil Risk Assessment Results – Resident – Administration Area East Management Area*

5.2-32 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Resident – Administration Area East Management Area*

5.2-33 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident – Administration Area East Management Area*

5.2-34 *Unit Soil Hazard and Unit Cancer Risk Results – Construction Worker – Administration Area East Management Area*

5.2-35 *Inhalation Unit Hazard and Unit Cancer Risk Results – Construction Worker – Administration Area East Management Area*

5.2-36 *Location-Specific Soil Risk Assessment Results – Construction Workers – Administration Area East Management Area*

5.2-37 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Construction Worker – Administration Area East Management Area*

5.2-38 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Administration Area East Management Area*

5.2-39 *Inhalation Unit Hazard and Unit Cancer Risk Results – Commercial Worker – Administration Area East Management Area*

5.2-40 *Location-Specific Soil Risk Assessment Results – Commercial Workers – Administration Area Management Area*

5.2-41 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Commercial Worker – Administration Area East Management Area*

5.2-42 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Administration Area East Management Area*

5.2-43 *All Receptors Hazard Index and Cancer Risk Results – Soil – Administration Area East Management Area*

5.2-44 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Administration Area East Management Area*

5.2-45 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Administration Area West Management Area*

5.2-46 *Inhalation Hazard and Unit Cancer Risk Results – Resident – Administration Area West Management Area*

5.2-47 *Location-Specific Soil Risk Assessment Results – Resident – Administration Area West Management Area*

5.2-48 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Resident – Administration Area West Management Area*

5.2-49 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Resident – Administration Area West Management Area*

5.2-50 *Unit Hazard and Unit Cancer Risk Results – Construction Worker – Administration Area West Management Area*

5.2-51 *Inhalation Hazard and Unit Cancer Risk Results – Construction Worker – Administration Area West Management Area*

5.2-52 *Location-Specific Soil Risk Assessment Results – Construction Worker – Administration Area West Management Area*

5.2-53 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Construction Worker – Administration Area West Management Area*

5.2-54 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Administration Area West Management Area*

5.2-55 *Inhalation Hazard and Unit Cancer Risk Results – Commercial Worker – Administration Area West Management Area*

5.2-56 *Location-Specific Soil Risk Assessment Results – Commercial Worker – Administration Area West Management Area*

5.2-57 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Commercial Worker – Administration Area West Management Area*

5.2-58 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Administration Area West Management Area*

5.2-59 *All Receptors Hazard Index and Cancer Risk Results – Soil – Administration Area West Management Area*

5.2-60 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Administration Area West Management Area*

5.3-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil Vapor – Line 02 Management Area*

5.3-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil - Line 02 Management Area*

5.3-3 *Chemical of Potential Concern Summary – Line 02 Management Area*

5.3-4 *Outdoor Air Exposure Point Concentration Results – Line 02 Management Area*

5.3-5 *Residential Soil Vapor to Indoor Air Attenuation Factors – Line 02 Management Area*

5.3-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Line 02 Management Area*

5.3-7 *Source Partitioning Coefficients and Attenuation Factors for Outdoor Air – Line 02 Management Area*

5.3-8 *Resident Soil Unit Hazard and Unit Cancer Risk Results – Line 02 Management Area*

5.3-9 *Resident Inhalation Hazard and Unit Cancer Risk Results – Line 02 Management Area*

5.3-10 *Location-Specific Soil Risk Assessment Results - Resident – Line 02 Management Area*

5.3-11 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Resident - Line 02 Management Area*

5.3-12 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Resident - Line 02 Management Area*

5.3-13 *Construction Worker Unit Soil Hazard and Unit Cancer Risk Results – Line 02 Management Area*

5.3-14 *Construction Worker Inhalation Hazard and Unit Cancer Risk Results – Line 02 Management Area*

5.3-15 *Location-Specific Soil Risk Assessment Results – Construction Workers – Line 02 Management Area*

5.3-16 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Construction Worker – Line 02 Management Area*

5.3-17 *Outdoor Commercial Worker Unit Hazard and Unit Cancer Risk Results – Line 02 Management Area*

5.3-18 *Commercial Worker Inhalation Hazard and Unit Cancer Risk Results – Line 02 Management Area*

5.3-19 *Location-Specific Soil Risk Assessment Results – Commercial Workers – Line 02 Management Area*

5.3-20 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Commercial Worker – Line 02 Management Area*

5.3-21 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Line 02 Management Area*

5.3-22 *Receptors Soil Hazard Index and Cancer Risk Results – Line 02 Management Area*

5.3-23 *Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Line 02 Management Area*

5.4-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil Vapor – Line 05 North Management Area*

5.4-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Line 05 North Management Area*

5.4-3 *Chemical of Potential Concern Summary – Line 05 North Management Area*

5.4-4 *Outdoor Air Exposure Point Concentration Results – Line 05 North Management Area*

5.4-5 *Residential Soil Vapor to Indoor Air Attenuation Factors – Line 05 North Management Area*

5.4-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Line 05 North Management Area*

5.4-7 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Line 05 North Management Area*

5.4-8 *Soil Unit Hazard and Unit Cancer Risk Results – Resident - Line 05 North Management Area*

5.4-9 *Inhalation Unit Hazard and Unit Cancer Risk Results – Resident – Line 05 North Management Area*

5.4-10 *Location-Specific Soil Risk Assessment Results – Resident – Line 05 North Management Area*

5.4-11 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Resident - Line 05 North Management Area*

5.4-12 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Resident - Line 05 North Management Area*

5.4-13 *Soil Unit Hazard and Unit Cancer Risk Results – Construction Worker – Line 05 North Management Area*

5.4-14 *Inhalation Hazard and Unit Cancer Risk Results – Construction Worker – Line 05 North Management Area*

5.4-15 *Location-Specific Soil Risk Assessment Results – Construction Workers - Line 05 North Management Area*

5.4-16 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Construction Worker – Line 05 North Management Area*

5.4-17 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Line 05 North Management Area*

5.4-18 *Inhalation Hazard and Unit Cancer Risk Results – Commercial Worker - Line 05 North Management Area*

5.4-19 *Location-Specific Soil Risk Assessment Results - Commercial Workers - Line 05 North Management Area*

5.4-20 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Commercial Worker - Line 5 North Management Area*

5.4-21 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Line 05 North Management Area*

5.4-22 *All Receptors Hazard Index and Cancer Risk Results – Soil – Line 05 North Management Area*

5.4-23 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor - Line 05 North Management Area*

5.5-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Westlakes Management Area*

5.5-2 *Outdoor Air Exposure Point Concentration Results – Westlakes Management Area*

5.5-3 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Westlakes Management Area*

5.5-4 *Location-Specific Soil Risk Assessment Results – Resident – Westlakes Management Area*

5.5-5 *Soil Unit Hazard and Unit Cancer Risk Results – Construction Worker – Westlakes Management Area*

5.5-6 *Location-Specific Soil Risk Assessment Results – Construction Workers – Westlakes Management Area*

5.5-7 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Westlakes Management Area*

5.5-8 *Location-Specific Soil Risk Assessment Results – Commercial Worker – Westlakes Management Area*

5.5-9 *All Receptors Hazard Index and Cancer Risk Results – Soil – Westlakes Management Area*

5.6-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil Vapor – Chemical Plant 2 Management Area*

5.6-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Chemical Plant 2 Management Area*

5.6-3 *Chemical of Potential Concern Summary – Chemical Plant 2 Management Area*

5.6-4 *Outdoor Air Exposure Point Concentration Results – Chemical Plant 2 Management Area*

5.6-5 *Residential Soil Vapor to Indoor Air Attenuation Factors – Chemical Plant 2 Management Area*

5.6-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Chemical Plant 2 Management Area*

5.6-7 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Chemical Plant 2 Management Area*

5.6-8 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Chemical Plant 2 Management Area*

5.6-9 *Inhalation Unit Hazard and Unit Cancer Risk Results – Resident – Chemical Plant 2 Management Area*

5.6-10 *Location-Specific Soil Risk Assessment Results – Resident – Chemical Plant 2 Management Area*

5.6-11 *Location-Specific Soil Vapor Risk Assessment Results – Resident - Chemical Plant 2 Management Area*

5.6-12 *Location-Specific Outdoor Air Risk Assessment Results – Resident - Chemical Plant 2 Management Area*

5.6-13 *Unit Soil Hazard and Unit Cancer Risk Results – Construction Worker – Chemical Plant 2 Management Area*

5.6-14 *Inhalation Unit Hazard and Unit Cancer Risk Results – Construction Worker – Chemical Plant 2 Management Area*

5.6-15 *Location-Specific Soil Risk Assessment Results – Construction Workers – Chemical Plant 2 Management Area*

5.6-16 *Location-Specific Soil Risk Assessment Results – Construction Worker – Chemical Plant 2 Management Area*

5.6-17 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Chemical Plant 2 Management Area*

5.6-18 *Inhalation Unit Hazard and Unit Cancer Risk Results – Commercial Worker – Chemical Plant 2 Management Area*

5.6-19 *Location-Specific Soil Risk Assessment Results – Commercial Workers – Chemical Plant 2 Management Area*

5.6-20 *Location-Specific Indoor Air Risk Assessment Results – Commercial Worker – Chemical Plant 2 Management Area*

5.6-21 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Chemical Plant 2 Management Area*

5.6-22 *All Receptors Hazard Index and Cancer Risk Results – Soil – Chemical Plant 2 Management Area*

5.6-23 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Chemical Plant 2 Management Area*

5.7-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil Vapor – Magazine Area Management Area*

5.7-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Magazine Area Management Area*

5.7-3 *Chemical of Potential Concern Summary – Magazine Area Management Area*

5.7-4 *Outdoor Air Exposure Point Concentration Results – Magazine Area Management Area*

5.7-5 *Residential Soil Vapor to Indoor Air Attenuation Factors – Magazine Area Management Area*

5.7-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Magazine Area Management Area*

5.7-7 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Magazine Area Management Area*

5.7-8 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Magazine Area Management Area*

5.7-9 *Inhalation Unit Hazard and Unit Cancer Risk Results – Resident – Magazine Area Management Area*

5.7-10 *Location-Specific Soil Risk Assessment Results - Resident - Magazine Area Management Area*

5.7-11 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Resident - Magazine Area Management Area*

5.7-12 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Resident - Magazine Area Management Area*

5.7-13 *Unit Soil Hazard and Unit Cancer Risk Results – Construction Worker – Magazine Area Management Area*

5.7-14 *Inhalation Unit Hazard and Unit Cancer Risk Results – Construction Worker – Magazine Area Management Area*

5.7-15 *Location-Specific Soil Risk Assessment Results – Construction Workers – Magazine Area Management Area*

5.7-16 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Construction Worker – Magazine Area Management Area*

5.7-17 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Magazine Area Management Area*

5.7-18 *Inhalation Unit Hazard and Unit Cancer Risk Results – Commercial Worker – Magazine Area Management Area*

5.7-19 *Location-Specific Soil Risk Assessment Results – Commercial Workers – Magazine Area Management Area*

5.7-20 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Commercial Worker – Magazine Area Management Area*

5.7-21 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Magazine Area Management Area*

5.7-22 *All Receptors Hazard Index and Cancer Risk Results – Soil – Magazine Area Management Area*

5.7-23 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Magazine Area Management Area*

5.8-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil Vapor – Open Space 1, 2, 3, 4 Management Area*

5.8-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil - Open Space 1, 2, 3, 4 Management Area*

5.8-3 *Chemical of Potential Concern Summary – Open Space 1, 2, 3, 4 Management Area*

5.8-4 *Outdoor Air Exposure Point Concentration Results – Open Space 1, 2, 3, 4 Management Area*

5.8-5 *Residential Soil Vapor to Indoor Air Attenuation Factors – Open Space 1, 2, 3, 4 Management Area*

5.8-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors - Open Space 1, 2, 3, 4 Management Area*

5.8-7 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Open Space 1, 2, 3, 4 Management Area*

5.8-8 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Open Space 1, 2, 3, 4 Management Area*

5.8-9 *Inhalation Unit Hazard and Unit Cancer Risk Results – Resident – Open Space 1, 2, 3, 4 Management Area*

5.8-10 *Location-Specific Soil Risk Assessment Results – Resident – Open Space 1, 2, 3, 4 Management Area*

5.8-11 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Resident – Open Space 1, 2, 3, 4 Management Area*

5.8-12 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Resident - Open Space 1, 2, 3, 4 Management Area*

5.8-13 *Unit Soil Hazard and Unit Cancer Risk Results – Construction Worker – Open Space 1, 2, 3, 4 Management Area*

5.8-14 *Inhalation Unit Hazard and Unit Cancer Risk Results – Construction Worker – Open Space 1, 2, 3, 4 Management Area*

5.8-15 *Location-Specific Soil Risk Assessment Results – Construction Workers – Open Space 1, 2, 3, 4 Management Area*

5.8-16 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Construction Worker – Open Space 1, 2, 3, 4 Management Area*

5.8-17 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Open Space 1, 2, 3, 4 Management Area*

5.8-18 *Inhalation Unit Hazard and Unit Cancer Risk Results – Commercial Worker – Open Space 1, 2, 3, 4 Management Area*

5.8-19 *Location-Specific Soil Risk Assessment Results – Commercial Workers – Open Space 1, 2, 3, 4 Management Area*

5.8-20 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Commercial Worker – Open Space 1, 2, 3, 4 Management Area*

5.8-21 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Open Space 1, 2, 3, 4 Management Area*

5.8-22 *All Receptors Hazard Index and Cancer Risk Results – Soil – Open Space 1, 2, 3, 4 Management Area*

5.8-23 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Open Space 1, 2, 3, 4 Management Area*

5.9-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil Vapor – Open Space 5 and 7 Management Area*

5.9-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Open Space 5 and 7 Management Area*

5.9-3 *Chemical of Potential Concern Summary – Open Space 5 and 7 Management Area*

5.9-4 *Outdoor Air Exposure Point Concentration Results – Open Space 5 and 7 Management Area*

5.9-5 *Residential Soil Vapor to Indoor Air Attenuation Factors – Open Space 5 and 7 Management Area*

5.9-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Open Space 5 and 7 Management Area*

5.9-7 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Open Space 5 and 7 Management Area*

5.9-8 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Open Space 5 and 7 Management Area*

5.9-9 *Inhalation Unit Hazard and Unit Cancer Risk Results – Resident – Open Space 5 and 7 Management Area*

5.9-10 *Location-Specific Soil Risk Assessment Results – Resident – Open Space 5 and 7 Management Area*

5.9-11 *Location-Specific Soil Vapor Assessment Results – Resident - Open Space 5 and 7 Management Area*

5.9-12 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Resident – Open Space 5 and 7 Management Area*

5.9-13 *Unit Soil Hazard and Unit Cancer Risk Results – Construction Worker – Open Space 5 and 7 Management Area*

5.9-14 *Inhalation Unit Hazard and Unit Cancer Risk Results – Construction Worker – Open Space 5 and 7 Management Area*

5.9-15 *Location-Specific Soil Risk Assessment Results – Construction Workers – Open Space 5 and 7 Management Area*

5.9-16 *Location-Specific Soil Risk Assessment Results – Construction Worker – Open Space 5 and 7 Management Area*

5.9-17 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Open Space 5 and 7 Management Area*

5.9-18 *Inhalation Unit Hazard and Unit Cancer Risk Results – Commercial Worker – Open Space 5 and 7 Management Area*

5.9-19 *Location-Specific Soil Risk Assessment Results – Commercial Workers – Open Space 5 and 7 Management Area*

5.9-20 *Location-Specific Indoor Air Risk Assessment Results – Commercial Worker – Open Space 5 and 7 Management Area*

5.9-21 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Open Space 5 and 7 Management Area*

5.9-22 *All Receptors Hazard Index and Cancer Risk Results – Soil – Open Space 5 and 7 Management Area*

5.9-23 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Open Space 5 and 7 Management Area*

5.10-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil Vapor – Area 39 Management Area*

5.10-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Area 39 Management Area*

5.10-3 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Groundwater - Area 39 Management Area*

5.10-4 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Surface Water – Area 39 Management Area*

5.10-5 *Chemical of Potential Concern Summary – Area 39 Management Area*

5.10-6 *Outdoor Air Exposure Point Concentration Results – Area 39 Management Area*

5.10-7 *Residential Soil Vapor to Indoor Air Attenuation Factors – Area 39 Management Area*

5.10-8 *Commercial Soil Vapor to Indoor Air Attenuation Factors – Area 39 Management Area*

5.10-9 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air – Area 39 Management Area*

5.10-10 *Residential Groundwater to Indoor Air Attenuation Factors – Area 39 Management Area*

5.10-11 *Commercial Groundwater to Indoor Air Attenuation Factors – Area 39 Management Area*

5.10-12 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Area 39 Management Area*

5.10-13 *Inhalation Unit Hazard and Unit Cancer Risk Results – Resident – Area 39 Management Area*

5.10-14 *Location-Specific Soil Risk Assessment Results - Resident – Area 39 Management Area*

5.10-15 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Resident – Area 39 Management Area*

5.10-16 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Resident – Area 39 Management Area*

5.10-17 *Surface Water Unit Hazard and Unit Cancer Risk Results – Resident – Area 39 Management Area*

5.10-18 *Surface Water Location-Specific Risk Assessment Results – Resident – Area 39 Management Area*

5.10-19 *All Receptors Hazard Index and Cancer Risk Results for Surface Water – Area 39 Management Area*

5.10-20 *Groundwater Unit Hazard and Unit Cancer Risk Results-Resident – Area 39 Management Area*

5.10-21 *Groundwater Inhalation Hazard and Unit Cancer Risk Results –Resident – Area 39 Management Area*

5.10-22 *Groundwater Location-Specific Risk Assessment Results – Resident – Area 39 Management Area*

5.10-23 *Groundwater Location-Specific Indoor Air Risk Assessment Results – Resident – Area 39 Management Area*

5.10-24 *Unit Soil Hazard and Unit Cancer Risk Results – Construction Worker – Area 39 Management Area*

5.10-25 *Inhalation Unit Hazard and Unit Cancer Risk Results – Construction Worker – Area 39 Management Area*

5.10-26 *Location-Specific Soil Risk Assessment Results – Construction Workers – Area 39 Management Area*

5.10-27 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Construction Worker – Area 39 Management Area*

5.10-28 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Area 39 Management Area*

5.10-29 *Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker – Area 39 Management Area*

5.10-30 *Location-Specific Soil Risk Assessment Results – Commercial Workers – Area 39 Management Area*

5.10-31 *Location-Specific Soil Vapor to Indoor Air Risk Assessment Results – Commercial Worker – Area 39 Management Area*

5.10-32 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Commercial Worker – Area 39 Management Area*

5.10-33 *Groundwater Inhalation Hazard and Unit Cancer Risk Results – Commercial Worker – Area 39 Management Area*

5.10-34 *Groundwater Location-Specific Indoor Air Risk Assessment Results – Commercial Worker – Area 39 Management Area*

5.10-35 *Soil Unit Hazard and Unit Cancer Risk Results – Recreator – Off Road Vehicle Area – Area 39 Management Area*

5.10-36 *Inhalation Unit Hazard and Unit Cancer Risk Results – Recreator - Off Road Vehicle Area – Area 39 Management Area*

5.10-37 *Location-Specific Soil Risk Assessment Results – Recreator - Off Road Vehicle Area – Area 39 Management Area*

5.10-38 *Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results – Recreator - Off Road Vehicle Area – Area 39 Management Area*

5.10-39 *All Receptors Hazard Index and Cancer Risk Results – Soil – Area 39 Management Area*

5.10-40 *All Receptors Hazard Index and Cancer Risk Results – Soil Vapor – Area 39 Management Area*

5.10-41 *All Receptors Hazard Index and Cancer Risk Results for Groundwater – Area 39 Management Area*

5.11-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Soil – Buffalo Creek Management Area*

5.11-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Sediment - Buffalo Creek Management Area*

5.11-3 *Chemical of Potential Concern Summary – Buffalo Creek Management Area*

5.11-4 *Outdoor Air Exposure Point Concentration Results – Buffalo Creek Management Area*

5.11-5 *Soil Unit Hazard and Unit Cancer Risk Results – Resident – Buffalo Creek Management Area*

5.11-6 *Location-Specific Risk Assessment Results – Resident – Buffalo Creek Management Area*

5.11-7 *Unit Hazard and Unit Cancer Risk Results – Construction Worker – Buffalo Creek Management Area*

5.11-8 *Location-Specific Risk Assessment Results – Construction Workers – Buffalo Creek Management Area*

5.11-9 *Unit Hazard and Unit Cancer Risk Results – Outdoor Commercial Worker – Buffalo Creek Management Area*

5.11-10 *Location-Specific Risk Assessment Results – Commercial Worker – Buffalo Creek Management Area*

5.11-11 *Sediment Unit Hazard and Unit Cancer Risk Results – Recreator – Buffalo Creek Management Area*

5.11-12 *Location-Specific Risk Assessment Results – Recreator - Buffalo Creek Management Area*

5.11-13 *All Receptors Hazard Index and Cancer Risk Results – Soil and Sediment – Buffalo Creek Management Area*

5.12-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Groundwater – WLLO Management Area*

5.12-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Surface Water – WLLO Management Area*

5.12-3 *Chemical of Potential Concern Summary – WLLO Management Area*

5.12-4 *Residential Groundwater to Indoor Air Attenuation Factors – WLLO Management Area*

5.12-5 *Commercial Groundwater to Indoor Air Attenuation Factors – WLLO Management Area*

5.12-6 *Surface Water Unit Hazard and Unit Cancer Risk Results – Resident – WLLO Management Area*

5.12-7 *Surface Water Location-Specific Risk Assessment Results – Resident - WLLO Management Area*

5.12-8 *All Receptors Hazard Index and Cancer Risk Results for Surface Water – WLLO Management Area*

5.12-9 *Groundwater Unit Hazard and Unit Cancer Risk Results – Resident - WLLO Management Area*

5.12-10 *Groundwater Inhalation Hazard and Unit Cancer Risk Results - Resident - WLLO Management Area*

5.12-11 *Groundwater Location-Specific Risk Assessment Results – Resident – WLLO Management Area*

5.12-12 *Groundwater Location-Specific Indoor Air Risk Assessment Results – Resident - WLLO Management Area*

5.12-13 *Groundwater Inhalation Hazard and Unit Cancer Risk Results – Commercial Worker – WLLO Management Area*

5.12-14 *Groundwater Location-Specific Indoor Air Risk Assessment Results – Commercial Worker – WLLO Management Area*

5.12-15 *All Receptors Hazard Index and Cancer Risk Results for Groundwater – WLLO Management Area*

5.13-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Groundwater - Southwest BOU Management Area*

5.13-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Concern – Surface Water - Southwest BOU Management Area*

5.13-3 *Chemical of Potential Concern Summary - Southwest BOU Management Area*

5.13-4 *Residential Groundwater to Indoor Air Attenuation Factors – Southwest BOU Management Area*

5.13-5 *Commercial Groundwater to Indoor Air Attenuation Factors – Southwest BOU Management Area*

5.13-6 *Surface Water Unit Hazard and Unit Cancer Risk Results – Resident - Southwest BOU Management Area*

5.13-7 *Surface Water Location-Specific Risk Assessment Results – Resident - Southwest BOU Management Area*

5.13-8 *All Receptors Hazard Index and Cancer Risk Results for Surface Water – Southwest BOU Management Area*

5.13-9 *Groundwater Unit Hazard and Unit Cancer Risk Results – Resident - Southwest BOU Management Area*

5.13-10 *Groundwater Inhalation Hazard and Unit Cancer Risk Results - Resident – Southwest BOU Management Area*

5.13-11 *Groundwater Location-Specific Risk Assessment Results – Resident - Southwest BOU Management Area*

5.13-12 *Groundwater Location-Specific Indoor Air Risk Assessment Results – Resident - Southwest BOU Management Area*

5.13-13 *Groundwater Inhalation Hazard and Unit Cancer Risk Results – Commercial Worker - Southwest BOU Management Area*

5.13-14 *Groundwater Location-Specific Indoor Air Risk Assessment Results – Commercial Worker – Southwest BOU Management Area*

5.13-15 *All Receptors Hazard Index and Cancer Risk Results for Groundwater – Southwest BOU Management Area*

6.1-1 *Summary of Inorganic Soil Screening Levels*

6.1-2 *Summary of Organic Soil Screening Levels*

6.1-3 *Summary of Soil Vapor Screening Levels*

6.1-4 *Summary of Surface Water Screening Levels*

6.1-5 *Summary of Sediment Screening Levels*

6.1-6 *Cross-Reference Table for Remedial Investigation, Human Health Risk Assessment, and Screening Level Ecological Risk Assessment Sections*

6.2-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Administration Area East Management Area*

6.2-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Administration Area East Management Area*

6.2-3 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Surface Water – Administration Area East and West Management Areas*

6.2-4 *Risk Characterization Summary Table – Soil 0 to 1 foot – Administration Area East Management Area*

6.2-5 *Risk Characterization Summary Table – Soil 1 to 6 feet – Administration Area East Management Area*

6.2-6 *Risk Characterization Summary Table – Soil Ditch 0 to 1 foot – Administration Area East Management Area*

6.2-7 *Risk Characterization Summary Table – Soil Vapor Top Depth – Administration Area East Management Area*

6.2-8 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Administration Area West Management Area*

6.2-9 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Administration Area West Management Area*

6.2-10 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Administration Area West Management Area*

6.2-11 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Administration Area West Management Area*

6.2-12 *Risk Characterization Summary Table – Soil Ditch 0 to 1 foot – Administration Area West Management Area*

6.2-13 *Risk Characterization Summary Table – Soil Vapor Top Depth – Administration Area West Management Area*

6.3-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Line 02 Management Area*

6.3-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Line 02 Management Area*

6.3-3 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Line 02 Management Area*

6.3-4 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Line 02 Management Area*

6.3-5 *Risk Characterization Summary Table – Soil Vapor Top Depth – Line 02 Management Area*

6.4-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Line 5 Management Area*

6.4-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Line 5 Management Area*

6.4-3 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Line 5 North Management Area*

6.4-4 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Line 5 North Management Area*

6.4-5 *Risk Characterization Summary Table – Soil Vapor Top Depth – Line 5 North Management Area*

6.5-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Westlakes Management Area*

6.5-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Surface Water – Westlakes Management Area*

6.5-3 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Sediment – Westlakes Management Area*

6.5-4 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Westlakes Management Area*

6.5-5 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Westlakes Management Area*

6.5-6 *Risk Characterization Summary Table – Surface Water – Westlakes Management Area*

6.5-7 *Risk Characterization Summary Table – Sediment 0 to 1 foot – Westlakes Management Area*

6.6-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Buffalo Creek Management Area*

6.6-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Sediment – Buffalo Creek Management Area*

6.6-3 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Buffalo Creek Management Area*

6.6-4 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Buffalo Creek Management Area*

6.6-5 *Risk Characterization Summary Table – Surface Water – Buffalo Creek Management Area*

6.6-6 *Risk Characterization Summary Table – Sediment 0 to 1 foot – Buffalo Creek Management Area*

6.7-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Open Space 5 and 7 Management Area*

6.7-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Open Space 5 and 7 Management Area*

6.7-3 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Open Space 5 and 7 Management Area*

6.7-4 *Risk Characterization Summary Table – Soil Vapor Habitat – Top Depth – Open Space 5 and 7 Management Area*

6.8-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Chemical Plant 2 Management Area*

6.8-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Surface Water – Chemical Plant 2 Management Area*

6.8-3 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Sediment – Chemical Plant 2 Management Area*

6.8-4 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Chemical Plant 2 Management Area*

6.8-5 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Chemical Plant 2 Management Area*

6.8-6 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Chemical Plant 2 Management Area*

6.8-7 *Risk Characterization Summary Table – Surface Water – Chemical Plant 2 Management Area*

6.8-8 *Risk Characterization Summary Table – Sediment Habitat 0 to 1 foot – Chemical Plant 2 Management Area*

6.8-9 *Risk Characterization Summary Table – Soil Vapor Habitat – Top Depth – Chemical Plant 2 Management Area*

6.8-10 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Dredge Pit*

6.8-11 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Dredge Pit*

6.8-12 *Risk Characterization Summary Table – Surface Water – Dredge Pit*

6.8-13 *Risk Characterization Summary Table – Sediment 0 to 1 foot – Dredge Pit*

6.8-14 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Eastern Basin*

6.8-15 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Eastern Basin*

6.8-16 *Risk Characterization Summary Table – Surface Water – Eastern Basin*

6.8-17 *Risk Characterization Summary Table – Sediment 0 to 1 foot – Eastern Basin*

6.9-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Magazine Area Management Area*

6.9-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Magazine Area Management Area*

6.9-3 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Magazine Area Management Area*

6.9-4 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Magazine Area Management Area*

6.9-5 *Risk Characterization Summary Table – Soil Vapor – Top Depth – Magazine Area Management Area*

6.10-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Open Space 1, 2, and 4 Management Area*

6.10-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Open Space 1, 2, 3, and 4 Management Area*

6.10-3 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Open Space 1, 2, 3, and 4 Management Area*

6.10-4 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Open Space 1, 2, 3, and 4 Management Area*

6.10-5 *Risk Characterization Summary Table – Soil Vapor Habitat – Top Depth – Open Space 1, 2, and 4 Management Area*

6.11-1 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil – Area 39 Management Area*

6.11-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Surface Water – Area 39 Management Area*

6.11-3 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Sediment – Area 39 Management Area*

6.11-4 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern – Soil Vapor – Area 39 Management Area*

6.11-5 *Risk Characterization Summary Table – Soil Habitat 0 to 1 foot – Area 39 Management Area*

6.11-6 *Risk Characterization Summary Table – Soil Habitat 1 to 6 feet – Area 39 Management Area*

6.11-7 *Risk Characterization Summary Table – Surface Water – Area 39 Management Area*

6.11-8 *Risk Characterization Summary Table – Sediment 0 to 1 foot – Area 39 Management Area*

6.11-9 *Risk Characterization Summary Table – Soil Vapor – Top Depth – Area 39 Management Area*

6.12-1 *SLERA Summary Table*

7.3-1 *Detected Constituents Lacking Ecological Screening Levels – Administration Area East Management Area*

7.3-2 *Detected Constituents Lacking Ecological Screening Levels – Administration Area West Management Area*

7.3-3 *Detected Constituents Lacking Ecological Screening Levels – Line 02 Management Area*

7.3-4 *Detected Constituents Lacking Ecological Screening Levels – Line 5 North Management Area*

7.3-5 *Detected Constituents Lacking Ecological Screening Levels – Westlakes Management Area*

7.3-6 *Detected Constituents Lacking Ecological Screening Levels – Buffalo Creek Management Area*

7.3-7 *Detected Constituents Lacking Ecological Screening Levels – Open Space 5 and 7 Management Area*

7.3-8 *Detected Constituents Lacking Ecological Screening Levels – Chemical Plant 2 Management Area*

7.3-9 *Detected Constituents Lacking Ecological Screening Levels – Dredge Pit*

7.3-10 *Detected Constituents Lacking Ecological Screening Levels – Eastern Basin*

7.3-11 *Detected Constituents Lacking Ecological Screening Levels – Magazine Area Management Area*

7.3-12 *Detected Constituents Lacking Ecological Screening Levels – Open Space 1, 2, 3, and 4 Management Area*

7.3-13 *Detected Constituents Lacking Ecological Screening Levels – Area 39 Management Area*

7.3-14 *Summary of Relevant Features for Identified Inhalation Toxicity Sources*

7.3-15 *Summary of Soil Vapor Exceedances – Comparison of Maximum Soil Vapor Concentrations to Edwards AFB Benchmarks*

7.3-16 *COPECs Without ESLs with Low FOD, Below Background, or Not Spatially Collocated*

7.3-17 *Summary of COPECs Initially Without ESLs, and Recommended ESLs Used in Refined Evaluation*

8.2-1 *Results of Protection of Groundwater Evaluation for Constituents in Soil – Administration Area East*

8.2-2 *Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor – Administration Area East*

8.3-1 *Results of Protection of Groundwater Evaluation for Constituents in Soil – Administration Area West*

8.3-2 *Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor – Administration Area West*

8.4-1 *Results of Protection of Groundwater Evaluation for Constituents in Soil – WLLO Area*

8.4-2 *Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor – WLLO Area*

8.5-1 *Results of Protection of Groundwater Evaluation for Constituents in Soil – Chemical Plant 2*

8.6-1 *Results of Protection of Groundwater Evaluation for Constituents in Soil – Area 39*

8.6-2 *Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor – Area 39*

LIST OF ACRONYMS

°F	Degrees Fahrenheit
µg/dL	Micrograms per deciliter
µg/kg	Micrograms per kilogram
µg/L	Micrograms per liter
µg/m^3	Micrograms per cubic meter
1,1,1-TCA	1,1,1-Trichloroethane
1,1,2,2-PCA	1,1,2,2-Tetrachloroethane
1,1,2-TCA	1,1,2-Trichloroethane
1,1-DCA	1,1-Dichloroethane
1,1-DCE	1,1-Dichloroethene
1,2,4-TMB	1,2,4-Trimethylbenzene
1,2-DCA	1,2-Dichloroethane
1,2-DCE	1,2-Dichloroethene
1,3,5-TMB	1,3,5-Trimethylbenzene
1,4-DCB	1,4-Dichlorobenzene
2,2,4-TMP	2,2,4-Trimethylpentane
4-M-2-P	4-Methyl-2-pentanone
ADD	Average daily dose
Administration	Administration
AF	Attenuation factor
AFB	Air Force Base
ARAR	Applicable or Relevant and Appropriate Requirement
ATSDR	Agency for Toxic Substances and Disease Registry
B(2-EH)P	bis(2-ethylhexyl)phthalate
B(a)A	Benzo(a)anthracene
B(a)P	Benzo(a)pyrene
B(b)F	Benzo(b)fluoranthene
B(b&k)F	Benzo(b&k)fluoranthene

B(ghi)P	Benzo(g,h,i)perylene
B(k)F	Benzo(k)fluoranthene
BDCM	Bromodichloromethane
bgs	Below ground surface
BLERA	Baseline Ecological Risk Assessment
BLRA	Baseline Risk Assessment
BOU	Boundary Operable Unit
BTAG	Biological Technical Advisory Group
BTV	Background threshold value
Cal-EPA	California Environmental Protection Agency
CCL	Carbon tetrachloride
CEC	Cation exchange capacity
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHHSL	California Human Health Screening Level
cis-1,2-DCE	cis-1,2-Dichloroethene
cm^2	Squared centimeter
COPC	Chemical of potential concern
COPEC	Chemical of Potential Ecological Concern
CSF	Cancer slope factor
CSM	Conceptual site model
CVRWQCB	Central Valley Regional Water Quality Control Board
D(a,h)A	Dibenz(a,h)anthracene
DBCM	Dibromochloromethane
DCE	Dichloroethene
DI-WET	Waste extraction test using deionized water
DQI	Data quality indicator
DFG	California Department of Fish and Game
DLM	Designated Level Methodology
DOC	Dissolved organic carbon
DSA	Drum Storage Area

DTSC	California Department of Toxic Substances Control
ECORP	ECORP Consulting, Inc.
Eco-SSL	Ecological Soil Screening Level
ERA	Ecological Risk Assessment
ERM	ERM-West, Inc.
ESL	Ecological screening level
FOD	Frequency of detection
FP	Fully Protected species
FS	Feasibility study
FSP	Field Sampling Plan
FSTP	Former Sewage Treatment Plant
ft/ft	Feet per foot
FWBZ	First water-bearing zone
GET	Groundwater extraction and treatment
HEAST	Health Effects Assessment Summary Tables
HH	Human health
HHRA	Human Health Risk Assessment
HHERA	Human Health and Ecological Risk Assessment
HI	Hazard index
HQ	Hazard quotient
I(1,2,3-cd)P	Indeno(1,2,3-cd)pyrene
ILCR	Incremental lifetime cancer risk
IRIS	Integrated Risk Information System
LADD	Lifetime average daily dose
LMS	Linearized multi-stage
LOAEL	Lowest-observed-adverse-effect-level
m^3	Cubic meter
m^3/kg	Cubic meters per kilogram
MA	Management Area
MCL	Maximum contaminant level
MEK	Methyl ethyl ketone

meq/K	Milliequivalents per kilogram
mg/cm^2	Milligrams per squared centimeter
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
mg/m^3	Milligrams per cubic meter
ml/day	Milliliters per day
MLE	Maximum likelihood estimate
NAP	Naphthalene
NAPL	Nonaqueous-phase liquid
NCEA	National Center for Environmental Assessment
NDMA	N-nitrosodimethylamine
NOAA	National Oceanic and Atmospheric
NOAEL	No-observable-adverse-effect-level
NPDES	National Pollution Discharge Elimination System
NSDWR	National Secondary Drinking Water Regulations
OBPA	10,10'-Oxybis-10H-Phenoxarsine
OEHHA	Office of Environmental Health Hazard Assessment
ORNL	Oak Ridge National Laboratory
OS	Open Space
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene
PGOU	Perimeter Groundwater Operable Unit
PGW	Protection of groundwater
PHG	Public health goal
PQL	Practical quantitation limit
PRG	Preliminary Remediation Goal
RCRA	Resource, Conservation, and Recovery Act
RCRB	Redding Corning-Red Bluff
RfC	Reference concentration
RfD	Reference dose

RI	Remedial investigation
RISL	Remedial investigation screening levels
RPD	Relative percent difference
RSL	Regional Screening Level
RWQCB	Regional Water Quality Control Board
SLERA	Screening Level Ecological Risk Assessment
SMDP	Scientific/Management Decision Point
SPCC	Spill Prevention, Control, and Countermeasures
SSC	Species of Special Concern
SSL	Soil screening level
SVOC	Semivolatile organic compound
SVRA	State Vehicular Recreation Area
SVSL	Soil vapor screening level
SWSL	Surface water screening level
TCA	Trichloroethane
TCE	Trichloroethene
TEQ	Toxic equivalency quotient
THF	Tetrahydrofuran
TIC	Tentatively identified compound
TOC	Total organic carbon
TPH	Total petroleum hydrocarbons
TPH-D	Total petroleum hydrocarbons as diesel
TPH-Mo	Total petroleum hydrocarbons as motor oil
trans-1,2-DCE	trans-1,2-Dichloroethene
TRV	Toxicity reference value
TWA	Time-weighted average
USEPA	United States Environmental Protection Agency
VELB	Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)
VOC	Volatile organic compound
WL	Watch List species

Executive Summary

Human Health Risk Assessment. The Human Health Risk Assessment (HHRA) presents an evaluation of the potential exposure of receptros to soil, sediment, surface water, and soil vapor at the eight Management Areas (MA) and Open Space Areas encompassed by the Boundary Operable Unit (BOU) at the Aerojet Superfund Site in Sacramento County, California. This evaluation included the use of untreated groundwater for residential supply and the potential for migration of volatile organic compounds (VOC) from groundwater into indoor and ambient air, under both current and future land-use scenarios.

The following is a summary of chemicals of potential concern (by media) determined through the HHRA by Management Area/Open Space Area:

Area	Groundwater	Soil Vapor	Soil
Administration Area East Administration Area West	X	PCE TCE Vinyl Chloride Benzene 2-propanol	PCB Metals PAH 1,1,2,2-PCA
Line 2 Region/OS5	X	TCE	Metals PAH
Line 5 N/OS7	X	PCE TCE	--
Buffalo Creek	X	--	Metals
Westlakes/OS6	--	--	--
Magazine Area/OS3	--	X	--
Chemical Plant 2 OS1/OS2/OS4 Dredge Pit and Eastern Basin	X	1,2-DCA Vinyl Chloride	PCB PCP PAH Metals Prowl
Area 39	--	PCE TCE 1,1-DCE	Metals Dioxin

1,1-DCE = 1,1-Dichloroethene
1,2-DCA = 1,2-Dichloroethane
PAH = Polycyclic Aeromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
PCE = Perchloroethylene
TCE = Trichloroethylene

Risk management decisions may consider no further action, further investigation, and/or implementing risk management action(s). However, to make risk management decisions specific to each of these MAs is beyond the scope of the HHRA, and will require a Scientific/Management Decision Point (SMDP) discussion among risk managers at the Agencies and Aerojet. Appropriate actions at each MA for these COPCs will be further evaluated in the FS.

Screening Level Ecological Risk Assessment. The SLERA evaluated the potential ecological risks due to exposures to constituents in soil, soil vapor, sediment, and surface water at MAs within the BOU. For each MA, the following were characterized:

- Potentially exposed aquatic and terrestrial habitat and receptors (biota) of concern;
- Potentially harmful, site-related constituents (COPECs);
- Potentially complete exposure pathways through which receptors of concern may be exposed to COPECs;
- Findings of comparisons of MA-specific COPEC concentrations to ESLs that are protective of receptors of concern; and
- Potential ecological risks based on consideration of relevant MA-specific conditions (e.g., distribution of COPECs) and multiple pertinent land use planning, ecological, and ecotoxicological factors.

Though elderberry bushes, an obligatory plant for the threatened VELB, were observed at Line 2, Westlakes, Buffalo Creek, Chemical Plant 2, Magazine Area, Open Space Areas 1,2,4, and Area 39 MAs, no threatened or endangered species or designated critical habitat were observed at any MA within the BOU.

The results of the SLERA for each of these MAs are summarized on Table 6.12-1. No/negligible ecological risks were identified at five of the MAs, for the following reasons:

- No COPECs exceeding ESLs were identified in habitat areas at two of the MAs (Line 05 North, and Open Space Areas 5 and 7); and
- The COPECs and their exceedances of ESLs identified in habitat areas were considered to be limited in magnitude, number, and areal extent at three of the MAs (Line 02, Magazine Area, and Open Space Areas 1, 2, and 4).

For the remaining MAs, the following conclusions were reached:

- For the Administration Area (Administration Area East and Administration Area West), no significant ecological risk within the MA was identified under current or future land use due to the presence of poor quality habitat. However, COPECs were identified in drainage ditches leading from these MAs with the potential for migration to downgradient habitats.
- For the Westlakes MA, potential ecological risks under current conditions were identified based on multiple COPECs occurring within habitat areas. However, these areas may undergo residential development in the future, which is expected to mitigate or eliminate ecological risk as a result of removal of existing habitat.
- For the remaining MAs (Buffalo Creek, Chemical Plant 2, Dredge Pit and Eastern Basin, and Area 39), potential ecological risks under current conditions were identified based on multiple COPECs occurring within habitat areas, and future development is unplanned or unknown.

Risk management decisions may consider no further action, further investigation, and/or implementing risk management action(s). MAs where soil vapor poses an unacceptable risk to ecological receptors likely also pose an unacceptable risk to human health and will be further evaluated in the FS. However, to make risk management decisions specific to each of these MAs is beyond the scope of the SLERA, and will require a SMDP discussion among risk managers at the Agencies and Aerojet. Appropriate actions at each MA will be further evaluated in the FS.

Protection of Groundwater. Protection of groundwater (PGW) screening levels were developed as part of the BOU RI to identify chemical concentrations in soil that could potentially migrate into and degrade surface water and groundwater. Although a comparison of site analytical data to the PGW screening levels provides the means to evaluate where a chemical had been sufficiently characterized, a chemical concentration above its PGW screening level does not necessarily signify a risk. Volume II, Part E, Section 8 provides further evaluation to identify the chemicals of potential concern to groundwater and surface water.

The following is a summary of chemicals of potential concern (by media) determined through the PGW assessment by Management Area/Open Space Area:

Area	Soil Vapor	Soil	
Administration Area East Administration Area West	PCE TCE Vinyl Chloride Benzene 2-propanol	PCB Metals PAH	Perchlorate TPH-D TPH-MO
Line 2 Region/OS5	TCE	Metals PAH Perchlorate	NDMA TPH-D TPH-MO
Line 5 N/OS7	PCE TCE	Metals PAH Perchlorate	TPH-D TPH-MO
Buffalo Creek	--	PCB	
Westlakes/OS6	--	PCB PAH	Perchlorate
Magazine Area/OS3	X	Metals	Perchlorate
Chemical Plant 2 OS1/OS2/OS4 Dredge Pit and Eastern Basin	1,2-DCA Vinyl Chloride	PCB PCP PAH Metals	Perchlorate Pesticides Prowl
Area 39	PCE TCE 1,1-DCE	Metals Perchlorate	

1,1-DCE = 1,1-Dichloroethene
1,2-DCA = 1,2-Dichloroethane
NDMA = N-nitrosodimethylamine
PAH = Polycyclic Aeromatic Hydrocarbon
PCB = Polychlorinated Biphenyl
PCE = Perchloroethylene
TCE = Trichloroethylene
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil

Risk management decisions may consider no further action, further investigation, and/or implementing risk management action(s). However, to make risk management decisions specific to each of these MAs is beyond the scope of the PGW evaulation, and will require a Scientific/Management Decision Point (SMDP) discussion among risk managers at the Agencies and Aerojet. Appropriate actions at each MA for these COPCs will be further evaluated in the FS.

1.0 INTRODUCTION

On behalf of Aerojet-General Corporation (Aerojet), ERM-West, Inc. (ERM) presents this *Human Health and Ecological Risk Assessment* (HHERA) for the Boundary Operable Unit (OU-6) at the Aerojet Superfund Site (site) in Sacramento County, California. The areas within the Aerojet facility included in the Boundary Operable Unit (BOU) are shown in Figure 1.0-1. This HHERA has been prepared as part of a remedial investigation (RI)/feasibility study (FS), in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986 and Exhibit II of the Partial Consent Decree.

The CERCLA Information System Identification Number for the Aerojet site is CAD 980358832. Government oversight for the Aerojet Superfund Site is shared by the United States Environmental Protection Agency – Region 9 (USEPA); and the California Environmental Protection Agency (Cal-EPA), through the Central Valley Regional Water Quality Control Board (CVRWQCB) and the Department of Toxic Substances Control (DTSC), hereafter referred to as "the Agencies."

This HHERA is provided under separate cover as Volume II of the BOU RI/FS Report. The Human Health Risk Assessment (HHRA), Section 5.0 of this document, presents an evaluation of the potential exposure of receptors to soil, sediment, surface water, and soil vapor at the site, as well as the use of untreated groundwater for residential supply and the potential for migration of volatile organic compounds (VOCs) from groundwater into indoor and ambient air, under both current and future land-use scenarios. The Screening Level Ecological Risk Assessment (SLERA), Section 6.0 of this document, provides a preliminary characterization of potential risks to ecological receptors that may be exposed to chemicals in soil, sediment, and surface water under both current and future land-use scenarios. The Evaluation of Potential Impacts to Groundwater by Chemicals in Soil, Section 8 of this document, provides an evaluation of the potential for chemicals identified in soil to adversely impact groundwater quality.

This HHERA incorporates comments from the USEPA, DTSC, and CVRWQCB on the Draft HHERA (ERM 2008) and Final HHERA (ERM, 2010). Comments from the Agencies and responses to those comments prepared by ERM, Shaw Environmental and Infrastructure (Shaw) and Aerojet are presented in Appendix N of Volume I (RI).

1.1 BACKGROUND

The main Aerojet Facility consists of approximately 8,500 acres located in eastern Sacramento County, California, about 15 miles east of Sacramento, California. Approximately 5,800 of the 8,500 acres within the main facility are included in the Aerojet Superfund Site, which has been used to develop rocket propulsion systems in support of national defense, space exploration, and satellite deployment since the 1950s. Industrial activities that supported, and continue to support, this work include solid rocket motor manufacturing, testing, and rehabilitation; liquid rocket engine manufacturing and testing; and chemical manufacturing. During the development of rocket propulsion systems, a variety of chemicals were manufactured and/or used at the Aerojet Superfund Site, including solvents, propellants, fuels, oxidizers, plasticizers, lubricants, and metals (ICF Technology, Inc., 1989). Other chemicals manufactured at the two Aerojet chemical plants included various herbicides, pesticides, and pharmaceutical-related compounds.

Historical operations at the Aerojet Superfund Site have resulted in the discharge of some of these chemicals to the vadose zone and percolation into the underlying groundwater. Although numerous chemicals were used on the Aerojet Superfund Site, trichloroethene (TCE), tetrachloroethene (PCE), perchlorate, and N-nitrosodimethylamine (NDMA) are the most prevalent chemicals encountered. Since 1979, Aerojet has investigated the site to determine the nature and extent of the chemicals present, and to identify and implement mitigation measures to protect public health and the environment.

1.2 PURPOSE OF THE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENT

The purpose of this HHERA is to systematically evaluate and organize data, assumptions, and uncertainties to help understand and evaluate potential risks to human and ecological populations who may be exposed to chemicals present in environmental media at the following eight Management Areas (MAs) and Open Space Areas, encompassed by the BOU at the Aerojet Superfund Site in Sacramento County, California.

- Administration (Administration) Area:
  - Administration Area East: Source Areas 3D, 4D, 11D, 50D, and 51D, and associated septic systems;

- Building 20022 Area, Building 20034 and Resource, Conservation, and Recovery Act (RCRA) Units B, C, X, and Y; and
- Administration Area West: Source Areas 5D, 6D, 8D, 9D, 12D, 52D, D(b), D(c), and D(d) and associated septic systems.

- Line 02 Region: Source Areas Drum Storage Area (DSA), 28E, 29E, 59E, E(d), E(e), E(m), and E(n) and associated septic systems and Open Space Area 5.
- Line 05 North: Source Areas 51E, 52E, and E(l) and Open Space Area 7.
- Westlakes Area: Westlakes and Open Space Area 6.
- Buffalo Creek: Southern portion of Buffalo Creek downstream of Line 02.
- Chemical Plant 2 Area: Source Areas 25F (Dredge Pit and Eastern Basin), 59F, 60F, 61F, 62F, CP2, and F(c) and associated septic systems and Open Space Areas 1, 2, and 4.
- Magazine Area (Area 48): Septic systems and Open Space Area 3. (Open Space Area 3 and Magazine Area are the same)
- Area 39: Source Areas 29B, 30B, 31B, 32B, 33B, 34B, and 35B.

The locations of the eight MAs and open spaces are shown in Figure 1.0-1. As shown, the sites border or are surrounded by lands removed from the boundary of the Aerojet Superfund Site in 2000. The results of the HHERA will provide risk managers an understanding of the potential human health and ecological risks associated with past site activities.

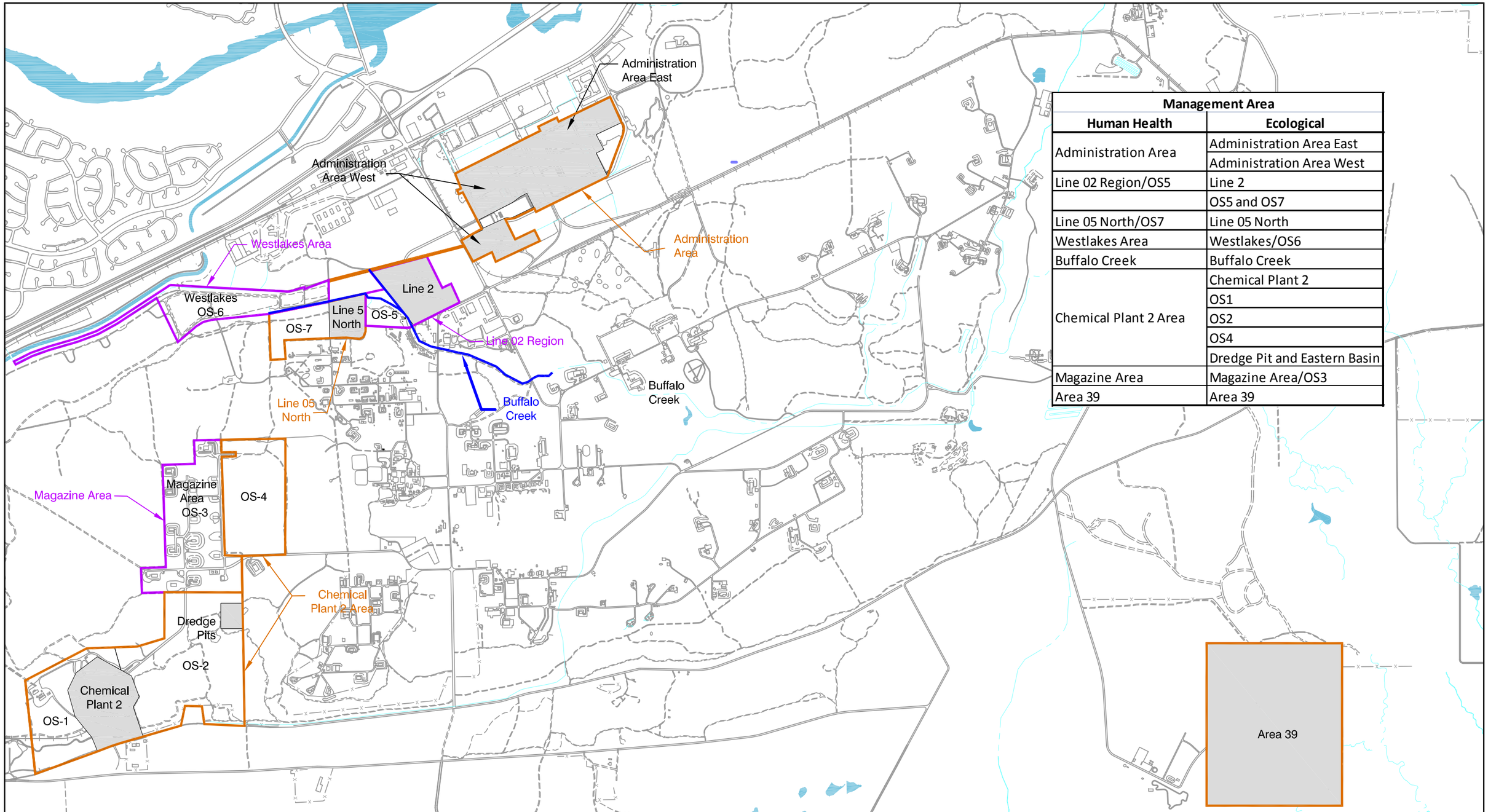
1.3 DOCUMENT ORGANIZATION

The HHERA is composed of nine sections as outlined below:

- Section 1.0 Introduces the HHERA and presents the purpose of the HHERA;
- Section 2.0 presents background on the site, describes the environmental setting, and identifies areas of potential concern;
- Section 3.0 provides a summary of RIs;
- Section 4.0 presents the data evaluation procedures used, including determination of background concentrations, and the methods utilized for selection of chemicals of potential concern (COPCs);

- Section 5.0 presents the HHRA;
- Section 6.0 presents the SLERA;
- Section 7.0 discusses the uncertainties associated with the HHERA as a result of the limitations of the exposure and toxicity information, the modeling approaches, and the data used to conduct the evaluation;
- Section 8.0 presents an evaluation of the potential threat to groundwater posed by chemicals detected in soil at concentrations above their protection of groundwater soil screening levels (PGW SSLs);
- Section 9.0 presents a summary of the results of the HHRA, SLERA, and risk to groundwater evaluation; and
- Section 10.0 provides a list of references.

Figures, tables, and appendices immediately follow the text.



Management Area	
Human Health	**Ecological**
Administration Area	Administration Area East
	Administration Area West
Line 02 Region/OS5	Line 2
	OS5 and OS7
Line 05 North/OS7	Line 05 North
Westlakes Area	Westlakes/OS6
Buffalo Creek	Buffalo Creek
Chemical Plant 2 Area	Chemical Plant 2
	OS1
	OS2
	OS4
	Dredge Pit and Eastern Basin
Magazine Area	Magazine Area/OS3
Area 39	Area 39

Gray shading = Management Area with identified source area

N

Scale: 1" = 2000'

0 1000 2000

AEROJET
Environmental Remediation

FIGURE 1.0-1

Management Areas
Boundary Operable Unit

6/30/11 pr SR10131603

2.0 BOUNDARY OPERABLE UNIT BACKGROUND

This section summarizes the Aerojet site history, land use, topography, BOU geology and soils, and BOU hydrology, as presented in the *Final Remedial Investigation Report for the Boundary Operable Unit* (Volume 1). A more thorough discussion on these site characteristics is provided in the BOU RI Report.

The Aerojet site is located near Rancho Cordova in Sacramento County, California. With the exception of Chemical Plant 2 and Area 39, the sites addressed in the BOU RI/FS are generally 0.5 to 1 mile of the American River or Lake Natomas. The Aerojet site is situated at the western end of the Sierra Nevada foothills between the Central Sierra Nevada and the Central Valley geomorphic provinces and is characterized as having a Mediterranean climate.

2.1 SITE HISTORY

Since the 1950s, the 8,500-acre Aerojet facility in Sacramento has primarily been used for the design, development, and testing of solid and liquid fuel rocket propulsion systems. Industrial activities conducted in support of this work included solid rocket motor manufacturing, testing, and rehabilitation; liquid rocket engine manufacturing and testing; and chemical development and manufacturing. Chemicals used at the site included solvents, propellants, fuels, lubricants, oxidizers, and metals.

2.2 PHYSICAL SETTING

The physical setting of the Aerojet site, including topography, climate, geology, and hydrogeology, are summarized below. Details concerning the physical setting of each of the MAs are presented in the BOU RI Report.

2.2.1 Topography

The Aerojet site is characterized by a relatively flat topographic surface gently sloping to the west. Most of the on-site topography is dominated by rows of dredge tailings left from gold mining operations that began in the early 1900s. The dredge tailings consist of alternating rows of cobble

piles separated by low areas filled with silt and clay ("slickens"). The depth of dredging ranged from approximately 10 to 90 feet below ground surface (bgs). The difference in surface elevation between the top of the cobble piles to the bottom of the "slickens" areas varies from a few feet to over 40 feet, depending on the depth of dredging.

2.2.2 *Climate*

The Sacramento area has a mild, subtropical climate with abundant sunshine most of the year. Climatic information for the area was originally obtained from *Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1951-1980, California* (National Oceanic and Atmospheric Administration [NOAA], 1982), and *Local Climatological Data 1992, Annual/Monthly Summary* (NOAA, 1993), but has been updated based on data obtained from the Western Regional Climate Center (www.wrcc.dri.edu).

The mean annual temperature in Sacramento is a relatively mild 62.2 degrees Fahrenheit (°F). Maximum average temperatures during the summer range from 87.1 to 93.1°F. Temperatures may occasionally exceed 100°F during hot spells. Winter temperature maximums vary from 54.5 to 60.6°F. Average lows in the winter are 40.2 to 43.7°F. Temperatures in the winter rarely drop below freezing.

Average annual precipitation is 18.33 inches, with about 80 percent of the total rainfall occurring from November through March. The highest rainfall generally occurs in January, which averages 3.8 inches of precipitation. The driest month is August, averaging only 0.03 inch of rain.

2.2.3 *Geology and Soils*

As previously discussed, roughly 80 percent of the Aerojet site has been dredged for gold, with the depth of dredging ranging from 10 to 90 feet bgs. Additionally, the cobble piles may be as much as 20 to 30 feet above ground surface. With the exception of some portions of the Administration Area, Line 02, Chemical Plant 2, and Area 39, the majority of the lands within the BOU have been dredged to depths ranging from 20 feet to approximately 100 feet bgs. The dredge tailings consist of furrows of cobble piles separated by low lying "slickens valleys." The cobble piles consist primarily of cobbles in a matrix of sand, silts, and clays. The "slickens valleys" are comprised primarily of silts, fine sands, and clays with some cobbles. Typically, the slickens are underlain by cobbles or native undredged materials.

Soils within the BOU are generally classified as either Xerorthents or Redding-Corning-Red Bluff. These soil types are described below.

- **Xerorthents –** Excessively drained and somewhat excessively drained soils. These soil types are found in areas of dredge tailings near the American River. The soils formed in material that has a high content of gravels and cobbles derived from mixed rock sources. The material was deposited as tailings during mining activities with slopes ranging from 0 to 50 percent. Xerorthents are very deep. These soils are extremely gravelly and in some areas have strata of loose gravels or cobbles. Xerorthents underlie the majority of the BOU investigation area, which includes Chemical Plant 2, Magazine Area, Line 05, Westlakes Area, and the Open Spaces.
- **Redding-Corning-Red Bluff –** Moderately well-drained soils that are moderately deep over a cemented hard pan. This soil unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. The Redding soils are typically a surface layer of gravelly loam with a subsoil comprising a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam. The Redding-Corning-Red Bluff soil unit underlies a small portion of the eastern Administration Area (Area 20) and Chemical Plant 2, large portions of Line 02, and the western portion of Area 39.

2.2.4 *Hydrogeology*

As a consequence of the historic dredge mining activities, the Aerojet site has become a significant groundwater recharge zone for the underlying groundwater bearing zones. The Laguna and Mehrten Formations contain the most productive aquifers underlying the Aerojet site and serve as the principal source of water for private and public water supply wells in the area. Six individual aquifer layers (Layers A through F) have been defined beneath the Aerojet site, with Layer A being the shallowest (unconfined) and Layer F being the deepest. The six hydrostratigraphic layers were deformed based on similar lithology, relative depths and thicknesses, electrical conductivity, water levels, and aquifer testing. Descriptions of the six hydrostratigraphic layers are provided below.

Hydrostratigraphic Layer – Layer A is the shallowest layer and is composed of deposits from the ancestral American River. Within the BOU, Layer A generally contains perched groundwater.

Hydrostratigraphic Layer B – Layer B underlies Layer A and is generally not a significant water-bearing unit.

Hydrostratigraphic Layer C – Layer C is the upper portion of the Tertiary Mehrten Formation and is the first regionally extensive water-bearing unit. Layer C generally consists of sand, gravel, silty sand, and some partially consolidated sand. However, lay C also contains lower permeability units which may account for two-thirds of its thickness locally. Towards the west, Layer C is separated from Layer B by an aquitard ranging in thickness from approximately 15 to 50 feet. Layer C is generally 35- to 60-feet thick and encountered at depths between 40 and 45 feet bgs.

Hydrostratigraphic Layer D – Layer D is generally the lower portion of the Mehrten Formation and is comprised of two groups of permeable sediments, often separated by a low permeability silty or clay that can be up to 50 feet thick. In general, Layer D consists of loose and partially consolidated sand with some grave and inter-bedded fine-trained sand, silt, and clay lenses. The top of Layer D is present at depths as shallow as 65 feet on the east side of the Aerojet facility and as deep as 235 feet bgs on the west side. Layer D thickens from approximately 10 to 20 feet in the east to as much as 80 feet in the west.

Hydrostratigraphic Layer E – Layer E generally corresponds to the upper portion of the Tertiary Valley Springs Formation. Layer E is composed of quartz-rich sandy clay and clayey sands. Mafic sands are also present in portions of Layer E. In some areas, Layer E is comprised almost entirely of dense clays with very few permeable lenses. Layer E is encountered at depths as shallow as 88 feet bgs in the Administration Area and as deep as 380 feet in the Chemical Plant 2 Area.

Hydrostratigraphic Layer F – Layer F refers to water-bearing sediments below Layer E and is generally below the depths of groundwater containing chemicals. Layer F is separated from Layer E by a dense clay aquitard ranging from 10 to greater than 60 feet thick. Within the Administration Area, Layer F is 40- to 85-feet thick and encountered at depths ranging from 230 to 255 feet bgs.

The directional trend of regional groundwater flow generally mimics topography. Groundwater flows in a westerly direction towards the center of the Sacramento Valley due to a decrease in topographical elevation of several hundred feet. Unconfined Aquifer A is present at a depth of about 50 feet at the eastern portion of the Aerojet facility and is

found at a depth of 120 feet at Aerojet's western boundary, a distance of 6 miles.

Discontinuous lenses of shallow perched groundwater are commonly found across the Aerojet site. Perched groundwater is most often encountered within dredge tailings at depths ranging from 10 to 30 feet. Perched groundwater is affected by seasonal recharge and periods of drought and commonly disappears during long drought periods and rebounds quickly when normal rainfall patterns return.

During the BOU RI, perched groundwater and the first-water bearing zone (FWBZ) were subdivided from the more regional hydrostratigraphic layer designations because chemicals present in those units are potentially indicative of a source within the vadose zone and to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S. For the purposes of the RI, the FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the area of investigation.

2.3 BIOLOGICAL SETTING

The general ecology (habitat and biota) of the Aerojet site and vicinity has been described in several previous reports. Surveys have been conducted to identify important biological resources that may occur on the site or in surrounding areas. These surveys were described and summarized in *Biological Resource Assessment for Aerojet Superfund Site, Sacramento County, California* (ECORP Consulting, Inc. [ECORP], 2005) and other reports related to the assessment of biological resources at the Aerojet site. In particular, common plant and wildlife species were described, along with aquatic resources and the potential occurrence of special-status species. Additional field observations were made at each of the sites in May 2006 to support the development of the SLERA.

Information from these surveys indicates that the majority of the operational areas within the BOU are covered by pavement, buildings/structures, landscaped ornamental vegetation, or ruderal vegetation. It was noted during the May 2006 site survey that abandoned buildings may provide shelter for avian wildlife. There are also several source areas within the BOU that are inactive and are reverting to habitat that may be used by ecological receptors. Aquatic and terrestrial habitats

are observed adjacent to operational areas within the BOU. Potentially affected habitats are identified in MA-specific sections (Sections 6.2 through 6.11).

2.4 *CURRENT AND FUTURE LAND USE*

The Aerojet site is zoned for industrial use. The facilities that support industrial operations are grouped into manufacturing areas comprising multiple buildings. Large areas of undeveloped land lie within the manufacturing areas, as well as between most manufacturing areas and the property boundaries. The majority of land along the perimeter of the site serves as "buffer space" between operations and neighboring properties. Large areas of the buffer space along the western and northern property boundary were removed from the Superfund Site and may be subject to future development.

Land use surrounding the Aerojet site includes residential, commercial, industrial, agricultural, and recreational, as well as undeveloped areas. The greatest amount of development exists north and northwest of the site in the communities of Rancho Cordova and Gold River. These communities have a combined population of approximately 60,000. The southern and eastern areas around the site boundaries are primarily undeveloped. The State Vehicle Recreation Area (SVRA), which encompasses Aerojet Area 39, is mainly undeveloped and used for off-road recreation. Aggregate mining is conducted northeast of the SVRA, south of the former Ehnisz property and on privately owned property, and on the Inactive Rancho Cordova Test Site owned by Aerojet. Portions of the lands south of White Rock Road are used for cattle grazing and small farming operations and there are a few ranchettes and houses, including the Clark Cattle Company.

Anticipated redevelopment of the property includes a mixture of residential and commercial land use with final determination dependent upon the results of risk assessment using the data obtained during this RI. Proposed development plans filed by Aerojet for lands removed from the Superfund Site and outside boundaries of the Superfund Site can be accessed through the following websites maintained by the County of Sacramento, City of Rancho Cordova, and City of Folsom:

www.saccounty.net/Easton/: Departments; Environmental Review and Assessments; Major Project; Easton Gen Plan Amend.

www.cityofrancho.org/: Departments; Planning; Environmental Review; Environmental Documents; Rio and Westborough.

www.folsom.ca.us/about/whats_new/sphere.asp.

3.0 SUMMARY OF REMEDIAL INVESTIGATIONS – BOUNDARY OPERABLE UNIT

This section describes the environmental setting and summarizes the results of previous (prior to 2005) and recent (2005 to 2007) RIs and remedial actions performed at the eight MAs and Open Space Areas encompassed by the BOU. The eight MAs are listed in Section 1.2. Details concerning the activities and results of previous and recent RIs of the MAs are presented in Volume 1 (RI Report) of this document.

3.1 SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS – ADMINISTRATION AREA

The Administration Area is the historical liquid rocket manufacturing area and historical and current Administration Area at the Aerojet propulsion facility (Figure 3.1-1). Potential source areas within the Administration Area are associated with liquid rocket manufacturing and the drainage system extending from the manufacturing buildings within the Administration Area to the Westlakes Area. The primary chemicals associated with liquid rocket manufacturing were chlorinated solvents and metals.

The Administration Area is divided into two investigation units: Administration Area East and Administration Area West. Details concerning the scope and results of the RI for those two areas are presented in Section 4.0 of the RI Report (Volume 1). The environmental setting for the Administration Area (East and West) and the results of the RI are summarized below.

3.1.1 Environmental Setting – Administration Area

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Administration Area are described below.

3.1.1.1 *Topography*

The majority of the Administration Area has been graded and paved, and is relatively flat with a gentle slope towards the north and west. The primary topographic relief is provided by the presence of a northeast-

southwest trending ancestral American River terrace along the southern and southeastern portion of the area.

3.1.1.2 *Geology*

Based on the descriptions from borehole logs for perched and unconfined groundwater wells and borings, the lithologies underlying the Administration Area are comprised of interbedded gravel, sand, silt, and clays. Indurated silt (siltstone), clay (claystone), and sand (sandstone) were encountered in several wells at varying depths.

The surface and near-surface lithologies in the central and northern portions of the Administration Area are primarily comprised of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay to a depth of approximately 30 feet. Historical information indicates that a smaller dredger performed the dredging. In the vicinity of the Administration Area, the soils were dredged to a depth of approximately 30 feet, compared to depths up to 90 feet elsewhere on the site. Much of the Administration Area has been graded and paved; therefore, it is difficult to assess the areal extent of the dredge tailings.

The shallow subsurface lithologies described in the well logs and most of the borehole logs are consistent with those observed in dredged areas elsewhere on site. However, auger refusal has been encountered in several borings drilled in the Administration Area, suggesting the presence of indurated lithologies unlikely to have been dredged. The absence of evidence of dredging, such as remnant windrows of cobbles in areas where grading is not apparent, suggests that the Administration Area was not entirely dredged. A slight change from interbedded layers consisting primarily of silt, clay, and sands to thicker sections of interbedded sands and silty sands was noted at a depth of approximately 40 feet in a few wells in the central portion of the Administration Area. The change in lithology is evidence of the depth at which dredging was accomplished.

3.1.1.3 *Soils*

The Administration Area is urban land consisting of large areas covered by impervious surfaces or structures, such as roads, driveways, sidewalks, buildings, and parking lots. In most places, 90 percent or more of the area is covered by impervious surfaces.

Soils found within the Administration Area include the following units as mapped and described in the 1993 United State Department of Agriculture (USDA) Soil Conservation Service, Soil Survey of Sacramento County:

Xerorthents – Excessively drained and somewhat excessively drained soils. These soil types are found in areas of dredge tailings near the American River. The soils formed in material that has a high content of gravels and cobbles derived from mixed rock sources. The material was deposited as tailings during mining activities with slopes ranging from 0 to 50 percent. Xerorthents are very deep. These soils are extremely gravelly and in some areas have strata of loose gravels or cobbles.

Redding-Corning-Red Bluff – Moderately well-drained soils that are moderately deep over a cemented hard pan. This soil unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. The Redding soils are typically a surface layer of gravelly loam with a subsoil comprised of a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam. The Redding-Corning-Red Bluff soil unit underlies a small portion of the eastern Administration Area (Area 20).

Urban Lands–Americanos–Natomas – This soil unit underlies most of the Administration Area (Area 20) and is found on low stream terraces of the American River and on other low terraces adjacent to the river. These soils formed in alluvium-derived dominantly form mixed rock sources. Slopes range from 0 to 2 percent. Urban land consists of areas covered by impervious surfaces such as asphalt, concrete, and buildings. Americanos soils are found on low stream terraces. They are deep or very deep with a typical surface layer and subsoil composed of silt loam. Sandy loam is also present in some areas and is discontinuously cemented with silica to a depth of 50 to 72 inches. Natomas soils are also found on low terraces. They are very deep and typically the surface layer is loam with subsoil composed of clay loam. The substratum for this soil is typically a sandy loam.

3.1.1.4 *Surface Water Hydrology*

Local surface water features within the Administration Area include the Administration Area Ditch and other man-made ditches, culverts, catch

basins, and storm drains. Most of these features are used to divert and control seasonal storm water runoff from the Aerojet site.

Most storm water runoff originating in the Administration Area of the Aerojet site flows through a series of man-made ditches that empty into the main Administration Ditch, which in turn discharges to the Westlakes Storm Water Retention Ponds. Storm water runoff is staged in the Westlakes Ponds where it is allowed to infiltrate or, when the Westlakes become full, is discharged to Buffalo Creek and ultimately to the American River. Storm water discharges to Buffalo Creek/American River are regulated through the National Pollution Discharge Elimination System (NPDES) (RWQCB, 2002).

3.1.1.5 *Local Hydrogeology*

The first saturated sediments encountered beneath the Administration Area are either part of perched groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the Administration Area. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Administration Area is discussed below. Details regarding the occurrence of groundwater within the Administration Area and the distribution of chemicals in the groundwater are presented in Section 4.5 of the RI Report (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

<u>Perched Groundwater (Layer Y)</u>

Perched groundwater (Layer Y) is the shallowest saturated unit and typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities. Dredging activities disturbed the natural stratigraphy and the resulting spoils were deposited as unconsolidated and somewhat stratified sediments. As a result, the dredged materials are very permeable and are underlain by sediments

that are typically less permeable. The base of perched groundwater often coincides with the interface between dredged and undredged materials.

The highest perched groundwater elevations on record in the Administration Area since the start of monitoring in 1982 were in 1983, following a year of above-average precipitation. The lowest perched groundwater levels generally occurred between 1988 and 1992 during a period of below-average precipitation.

In 1983 and 1984, the FWBZ was present at elevations nearly equal to the perched groundwater elevations. During this period, the perched groundwater was in hydraulic continuity with the FWBZ and it technically did not exist.

During the BOU RI, perched groundwater was commonly encountered in the eastern portion of the Administration Area East near Buildings 20002 and 20004 and in Administration Area West near Building 20009. The perched groundwater in these two areas may be hydraulically connected, based on similar water-level elevations and the relatively uniform hydraulic gradient between the two areas. In April 2006, the depth to perched groundwater within the Administration Area ranged from 7.2 to 25.1 feet bgs and the median depth was 14 feet bgs. The base of perched groundwater ranges from approximately 4 to 13 feet above the top of the FWBZ.

The direction of flow in the perched groundwater in the eastern portion of the Administration Area is variable and has the steepest hydraulic gradient (approximately 0.07 feet per foot [ft/ft]). The direction of flow in the perched groundwater in the western portion of the Administration Area appears to be towards the west-northwest with a hydraulic gradient of approximately 0.01 ft/ft.

<u>First Water-Bearing Zone (Layer S)</u>

The FWBZ (Layer S) occurs in the upper portion of a sand and gravel unit containing variable amounts of silt ranging from approximately 50- to 75-feet thick, and that thins to the east. This sand and gravel unit generally corresponds to Layer C of the *Western Groundwater Operable Unit Groundwater Flow Model* (Aerojet, 2004).

The depth to the top of the FWBZ ranges from 25 to 45 feet bgs, typically increasing in depth from east to west across the Administration Area. The FWBZ is deeper (50 to 75 feet bgs) south of the Administration Area due

to the increased ground surface elevations associated with the ancestral American River terrace described in Section 4.1.1 of Volume 1 (RI Report) of this document.

Since the start of monitoring in 1982, the highest water levels were recorded in 1983. The FWBZ water levels decreased an average of approximately 30 feet between 1983 and 1990, when the lowest water levels were recorded. Between October 2004 and April 2006, the water table elevation increased approximately 6 feet.

Based on data from April 2006, flow direction in the FWBZ across the Administration Area appears to be relatively uniform towards the west-northwest. The average hydraulic gradient for the FWBZ across the Administration Area is approximately 0.01 ft/ft. The gradient is steeper (0.03 ft/ft) in the southeastern portion of the Administration Area and flattens (0.009 ft/ft) to the northwest.

3.1.1.6 *Ecological Habitat*

The Administration Area is mainly comprised of buildings, landscaped areas, ruderal/disturbed habitat, and paved surfaces; which are all highly disturbed vegetation communities. Flora typically includes herbaceous weeds, non-native invasive species, and ornamental landscape species. Fauna species common to the Administration Area are habitat generalists such as the rock pigeon, mourning dove, western fence lizard, European starling, house mouse, and deer mouse; or species that may venture in from adjacent vegetation communities. A *Biological Assessment Report* (ECORP, 2005), including a habitat and vegetation map for the Administration Area, was presented in Appendix B of the *Final Remedial Investigation/Feasibility Study Field Sampling Plan for Boundary Operable Unit* (BOU FSP; Aerojet, 2006b).

Annual grassland habitat is also located within the Administration Area around Source Areas 9D, 8D, 12D, D(c), 5D, and 6D. Non-native, naturalized Mediterranean grasses represent the predominant flora species within this type of habitat. Typical fauna species include western fence lizard, common king snake, white-tailed kite, red-tailed hawk, western harvest mouse, California ground squirrel, and coyote.

Blue elderberry shrubs were observed near Source Area 5D and in the open space near the east side of the Administration Area. Blue elderberry shrubs provide potential habitat for the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB). The VELB is fully protected

under the Endangered Species Act of 1973, as amended (16 United States Code 1531 et seq.).

3.1.2 *Summary of Scope and Results of Remedial Investigations – Administration Area East*

To simplify the discussions and presentation of data, Administration Area East was further divided into two areas that encompass source sites and other investigated features that are related or in proximity to one another. The two investigation areas in Administration Area East are described below and shown in Figure 3.1-2.

- **Buildings 20002/20004 Area:** Includes all of Source Areas 3D, 50D, and 51D; portions of Source Area 4D not addressed in the Perimeter Groundwater Operable Unit (PGOU); and various features such as septic systems, floor drains, collection systems, sumps, storage and holding tanks, and conveyance pipelines associated with the rocket engine manufacturing facilities located in Buildings 20002 and 20004. The Buildings 20002/20004 Area also includes various other features, including septic tanks and leachfields, identified during the previous (pre-2005) and current investigations.
- **Building 20022 Area:** Includes portions of Source Area 11D not addressed in the PGOU; RCRA Units B, C, X and Y; a radiographic facility (Building 20034); a septic system and other features associated with Building 20022; and various chemical handling or storage areas in the eastern portion of the Administration Area.

The scope and results of the RI for the source areas and features within the Buildings 20002/20004 Area and the Building 20022 Area in Administration Area East are summarized below.

3.1.2.1 *Summary of Scope and Results of Remedial Investigations – Buildings 20002/20004 Area*

The scope and results of RIs conducted in the Buildings 20002/20004 Area are summarized below.

<u>Scope of Remedial Investigations</u>

- **1979 to 2003:** Soil samples from 41 soil borings and 86 soil vapor samples were collected in the vicinity of Source Areas 3D, 4D, 50D, and 51D between 1979 and 2003. Soil vapor samples were analyzed for

VOCs and soil samples were analyzed for VOCs, SVOCs, metals, PCBs, and/or NDMA.

- **BOU RI (2005 to 2007):** One hundred and sixty-six primary and 11 duplicate soil vapor samples; 39 primary and 10 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples; and 196 primary and 17 duplicate subsurface (2.6 to 35 feet bgs) soil samples.

  Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), NDMA, PCBs, perchlorate, cyanide, TPH as diesel (TPH-D), TPH as motor oil (TPH-Mo), pH, total organic carbon (TOC), cation exchange capacity (CEC), and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals, total cyanide, NDMA, PCBs, perchlorate, TPH-D, TPH-Mo, pH, TOC, CEC, and/or geotechnical parameters.

Results of Remedial Investigations

Concentrations of VOCs in soil vapor and chemicals in soil were compared to remedial investigation screening levels (RISLs) to evaluate when sufficient sampling had been conducted to characterize the nature and extent of these compounds in the vadose zone. Soil and soil vapor RISLs were developed by taking the lowest available regulatory level (Preliminary Remedial Goal [PRG] or California Human Health Screening Level [CHHSL]), multiplying non-cancer concentrations by 0.1, and finally multiplying all values by a factor of 10. This approach was accepted by the Agencies to guide sampling efforts. As such, the following discussion of remedial investigation results is presented in comparison to the RISLs. RISLs were not used for the selection of COPCs in the risk assessment. Details concerning the development of soil vapor RISLs are presented in Section 3.1.1 of Volume 1 (RI Report) of this document.

The results of the BOU RI of the source areas within the Buildings 20002/ 20004 Area are summarized below. Concentrations of chemicals in soil are compared to their RISLs to assist the reader in understanding the magnitude of the constituents that may potentially be of concern.

BOU RI soil vapor, surface soil, and subsurface soil sampling locations within Administration Area East are shown in Figures 3.1-3, 3.1-4, and 3.1-5, respectively.

Volatile Organic Compounds

As indicated on the table below, 166 primary soil vapor samples were collected at Source Areas 3D, 4D, 50D, and 51D in the Buildings 20002/ 20004 Area and analyzed for VOCs. Additionally, the presence of tentatively identified compound (TICs) was evaluated as part of the VOC analysis.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
3D & 4D	Shallow (0-10)	67	67
	Intermediate (11-20)	60	60
	Deep (21-30)	29	28
50D	Shallow (0-10)	4	4
	Intermediate (11-20)	4	4
	Deep (21-30)	0	0
51D	Shallow (0-10)	1	1
	Intermediate (11-20)	1	1
	Deep (21-30)	0	0

Benzene; chloroform; 1,1-dichloroethane (1,1-DCA); 1,2-dichloroethane (1,2-DCA); 1,1-dichloroethene (1,1-DCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); Freon 12; Freon 113; hexane; PCE; TCE; and vinyl chloride were detected in at least one soil vapor sample collected in the Buildings 20002/20004 Area at concentrations above their soil vapor RISL.

The table below lists detected concentrations above the RISL and the location of the maximum detected concentration for each VOC in the shallow (0 to 10 feet bgs), intermediate (11 to 20 feet bgs), and deep (21 to 30 feet bgs) intervals in the Buildings 20002/20004 Area. If a chemical was detected above the RISL multiple times, a range of concentrations above the RISL is provided. BOU RI soil vapor sampling locations within Administration Area East are shown in Figure 3.1-3.

Depth Interval (ft bgs)	VOC	Range of Detected Concentrations ($\mu g/m^3$)	Soil Vapor RISL ($\mu g/m^3$)	Location of Maximum Concentration
Shallow (0 to 10)	Chloroform	260 - 1,200	83	3D-SP96
	PCE	350 - 30,000,000	320	3D-SP102
	TCE	1,700 - 140,000	961	3D-SP147
	Vinyl Chloride	51 - 1,500	31	3D-SP95
Intermediate (11 to 20)	Benzene	93 – 400	84	3D-SP93
	Chloroform	110 – 1,700	83	A20-ST05-SP01
	1,1-DCA	2,900 – 8,100	1,180	3D-SP122
	1,1-DCE	54,000	20,805	3D-SP109
	cis-1,2-DCE	27,000	3,650	A20-ST05-SP01
	trans-1,2-DCE	15,000	7,300	3D-SP119

Depth Interval (ft bgs)	VOC	Range of Detected Concentrations (µg/m³)	Soil Vapor RISL (µg/m³)	Location of Maximum Concentration
	Freon 113	3,400,000 – 17,000,000	3,128,050	3D-SP109
	Hexane	27,000	20,857	3D-SP135
	PCE	350 – 1,600,000	320	3D-SP104
	TCE	1,700 – 700,000	961	A20-ST05-SP01
	Vinyl Chloride	40 – 25,000	31	3D-SP109
Deep (21 to 30)	Benzene	120 – 2,300	84	3D-SP85
	Chloroform	440 – 1,600	83	A20-ST05-SP01
	1,1-DCA	1,400 – 9,800	1,180	3D-SP106
	1,2-DCA	100	74	A20-ST05-SP01
	1,1-DCE	28,000	20,805	3D-SP122
	cis-1,2-DCE	3,700 – 73,000	3,650	3D-SP85
	Freon 12	30,000	20,857	3D-SP119
	Freon 113	3,400,000 – 64,000,000	3,128,050	3D-SP106
	Hexane	64,000	20,857	3D-SP85
	PCE	710 - 5,900,000	320	3D-SP102
	TCE	1,300 – 250,000	961	3D-SP106
	Vinyl Chloride	40 – 170,000	31	3D-SP85

µg/m³ = Micrograms per cubic meter

Potential sources of PCE and TCE in the Buildings 20002/20004 Area include the following:

- Decontamination and hydrosump areas, southern end of Building 20002;
- Utility corridor between Buildings 20002/20004 and Buildings 20001 and 20002;
- Waste storage tanks and degreasers, south-central portion of Building 20004;
- Septic tank A20-ST05, southeast corner of Building 20004;
- Beneath Building 20004;
- Waste collection tank and trench drains, northwest corner of Building 20004;
- Southwest corner of Baltimore Street and Boston Avenue, south of Building 20001;
- Boston Avenue near northwest corner of Building 20002; and
- Underground chemical laboratory sump near northwest corner of Building 20002.

Metals

A total of 227 primary and 26 duplicate soil samples were collected at Source Areas 3D, 4D, 50D, and 51D in the Buildings 20002/20004 Area and analyzed for metals and/or hexavalent chromium. The number of primary soil samples and sampling locations at Source Areas 3D, 4D, 50D, and 51D are summarized below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
3D & 4D	Metals	35	30	124	62	34	20
	Mercury	35	30	113	62	34	20
	Hex Chrome	35	30	102	62	34	20
50D	Metals	2	2	6	3	1	1
	Mercury	2	2	6	3	1	1
	Hex Chrome	2	2	6	3	0	0
51D	Metals	0	0	13	6	12	6
	Mercury	0	0	12	6	12	6
	Hex Chrome	0	0	12	6	12	6

Cadmium and lead were the only metals detected in soil at the source areas within the Buildings 20002/20004 Area at concentrations above background and their respective soil RISLs. The location and depth of samples containing concentrations of those metals above their RISLs are summarized on the table below. BOU RI surface and subsurface soil sampling locations within Administration Area East are shown in Figures 3.1-4 and 3.1-5, respectively.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
3D-SNS34	0.25	Cadmium	1.7	3.5
51D-SB06	9	Cadmium	1.7	2.2
A20-RB37-SB01	1.0	Lead	150	210

Semivolatile Organic Compounds

A total of 184 primary and 22 duplicate soil samples were collected at Source Areas 3D, 4D, 50D, and 51D in the Buildings 20002/20004 Area and analyzed for SVOCs, including TICs, during the BOU RI. The number of primary soil samples and sampling locations at Source Areas 3D, 4D, 50D, and 51D for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
3D & 4D	SVOCs	24	24	96	62	34	20
50D	SVOCs	2	2	4	3	0	0
51D	SVOCs	0	0	12	6	12	6

Benzo(b&k)fluoranthene [B(b&k)F] and naphthalene (NAP) were the only SVOCs detected in soil at the source areas within the Buildings 20002/ 20004 Area at concentrations above their respective RISLs. The location and depth of samples containing B(b&k)F and NAP above their RISLs are summarized on the table below. BOU RI surface and subsurface soil sampling locations within Administration Area East are shown in Figures 3.1-4 and 3.1-5, respectively.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
3D-SNS34	0.25	Benzo(b&k)fluoranthene	38	88
3D-SB46	5.0	Naphthalene	1,700	1,900
51D-SB09	13	Naphthalene	1,700	1,800
	17	Naphthalene	1,700	5,300
51D-SB10	17	Naphthalene	1,700	2,100

µg/kg = Micrograms per kilogram

Polychlorinated Biphenyls

A total of 203 primary and 23 duplicate soil samples were collected at Source Areas 3D, 4D, 50D, and 51D in the Buildings 20002/20004 Area during the BOU RI and analyzed for PCBs. The number of primary soil samples and sampling locations at Source Areas 3D, 4D, 50D, and 51D for PCBs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
3D & 4D	PCBs	26	26	112	67	40	20
50D	PCBs	0	0	2	1	0	0
51D	PCBs	0	0	11	6	12	6

Aroclors 1248, 1254, and 1260 were the only PCBs detected in soil at the source areas within the Buildings 20002/20004 Area at concentrations

above their respective soil RISLs. The location and depth of samples containing PCBs above their respective RISLs are summarized on the table below. BOU RI surface and subsurface soil sampling locations within Administration Area East are shown in Figures 3.1-4 and 3.1-5, respectively.

Sample Location	Depth (ft bgs)	PCB	RISL (µg/kg)	Concentration (µg/kg)
3D-SNS34	0.25	Aroclor 1254	220	420
		Aroclor 1260	220	1,500
3D-SB20	5.0	Aroclor 1254	220	430
3D-SB22	7.75	Aroclor 1248	220	260
3D-SB33	5.0	Aroclor 1254	220	47,000
3D-SB46	11	Aroclor 1254	220	11,000
3D-SB67	1.0	Aroclor 1254	220	510
	15	Aroclor 1254	220	8,700
3D-SB68	1.0	Aroclor 1254	220	1,700
	10	Aroclor 1254	220	320
3D-SB69	1.0	Aroclor 1254	220	370
	15	Aroclor 1254	220	16,000

The PCBs Aroclor 1248 and Aroclor 1260 were each detected above their soil RISLs in only one soil sample collected at Source Area 3D.

Aroclor 1254 is present in soil above its RISL at the following six areas in the Buildings 20002/20004 Area:

- Intersection of Baltimore Street and Boston Avenue at the southwest corner of Building 20002;
- Former oil tank west of Building 20004;
- Boston Avenue near the northwest corner of Building 20002;
- Boston Avenue near southwest corner of Building 20004;
- Northeast corner of Building 20004; and
- Septic Tank A20-ST01.

Perchlorate

A total of 142 primary and 17 duplicate soil samples were collected at Source Areas 3D, 4D, 50D, and 51D in the Buildings 20002/20004 Area during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at Source Areas 3D, 4D, 50D, and 51D for perchlorate are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
3D & 4D	Perchlorate	15	15	73	49	30	16
50D	Perchlorate	0	0	0	0	0	0
51D	Perchlorate	0	0	12	6	12	6

Perchlorate was not detected above its practical quantitation limit (PQL) or RISL in any of the surface, near-surface, or soil samples collected from the source areas within the Buildings 20002/20004 Area.

Total Petroleum Hydrocarbons

A total of 186 primary and 22 duplicate soil samples were collected at Source Areas 3D, 4D, 50D, and 51D in the Buildings 20002/20004 Area and analyzed for TPH-D and TPH-Mo during the BOU RI. The number of primary soil samples and sampling locations for TPH at Source Areas 3D, 4D, 50D, and 51D are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
3D & 4D	TPH-D & Mo	21	21	101	63	34	20
50D	TPH-D & Mo	2	2	4	3	0	0
51D	TPH-D & Mo	0	0	12	6	11	6

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). The maximum concentrations of TPH-D and TPH-MO detected in soil samples collected from the Buildings 20002/20004 area were 9,100 mg/Kg and 12,000 mg/Kg, respectively. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Analyses

Miscellaneous analyses performed on soil samples collected at the source areas (3D, 4D, 50D, and 51D) within the Buildings 20002/20004 Area included total cyanide, NDMA, and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area for each analysis, and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
3D & 4D	Total Cyanide	16	16	69	46	27	14
	NDMA	14	14	66	45	26	14
	pH	20	20	114	56	31	17
50D	Total Cyanide	0	0	0	0	0	0
	NDMA	0	0	0	0	0	0
	pH	2	2	4	2	0	0
51D	Total Cyanide	0	0	0	0	0	0
	NDMA	0	0	12	6	12	6
	pH	0	0	12	6	12	6

Total cyanide and NDMA were not detected above their PQLs or RISLs in surface, near-surface, or subsurface soil samples collected at the source areas within the Buildings 20002/20004 Area. The pH of the soil was generally within the normal range (5 to 9) for mineral soils (Brady, 1974).

3.1.2.2 *Summary of Scope and Results of Remedial Investigations – Building 20022 Area*

The scope and results of RIs conducted at the source areas and features within the Building 20022 Area are summarized below.

Scope of Remedial Investigations

- **1980 – 2003:** Soil samples from borings and soil vapor samples were collected in the vicinity of Source Area 11D, RCRA Units, Buildings 20022 and 20034, and features within the Building 20022 Area between 1980 and 2003 and analyzed for VOCs, PCBs, and/or metals.
- **BOU RI (2005 – 2007):** Thirty-one primary and 3 duplicate soil vapor samples, 39 primary and 10 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 32 primary and 1 duplicate subsurface (2.6 to 35 feet bgs) soil samples were collected at Source Area 11D and other features in the Building 20022 Area.

  Soil vapor samples were analyzed for VOCs. Surface and subsurface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), NDMA, PCBs, perchlorate, cyanide, TPH-D, TPH-Mo, pH, TOC, CEC, and/or geotechnical parameters.

Results of Remedial Investigations

Concentrations of VOCs in soil vapor and chemicals in soil were compared to RISLs to evaluate when sufficient sampling had been conducted to characterize the nature and extent of these compounds in the vadose zone. Soil and soil vapor RISLs were developed by taking the lowest available regulatory level (PRG or CHHSL), multiplying non-cancer concentrations by 0.1, and finally multiplying all values by a factor of 10. This approach was accepted by the Agencies to guide sampling efforts. As such, the following discussion of remedial investigation results is presented in comparison to the RISLs. RISLs were not used for the selection of COPCs in the risk assessment. Details concerning the development of soil vapor RISLs are presented in Section 3.1.1 of Volume 1 (RI Report) of this document.

The results of the BOU RI of the source areas within the Building 20022 Area are summarized below. Concentrations of chemicals in soil are compared to their RISLs in this section to assist the reader in understanding the magnitude of the constituents that may potentially be of concern.

BOU RI soil vapor, surface soil, and subsurface soil sampling locations within Administration Area East are shown in Figures 3.1-3, 3.1-4, and 3.1-5, respectively.

Volatile Organic Compounds

A total of 31 primary and 3 duplicate soil vapor samples were collected at 31 locations at Source Area 11D and in the vicinity of Building 20034 and analyzed for VOCs, including TICs. The number of primary soil vapor samples and sampling locations are summarized on the table below.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
11D	Shallow (0-10)	11	11
	Intermediate (11-20)	10	10
	Deep (21-30)	3	3
Bldg 20034	Shallow (0-10)	3	3
	Intermediate (11-20)	3	3
	Deep (21-30)	1	1

Chloroform, PCE, and TCE were the only chemicals detected in at least one soil vapor sample above their soil vapor RISLs in the Building 20022

Area. The location and depth of soil vapor samples containing concentrations of those VOCs above their respective RISLs are presented on the table below. BOU RI soil vapor sampling locations within Administration Area East are shown in Figure 3.1-3.

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	Chloroform	A20-RX73-SP01	83	450
	PCE	A20-RB37-SP01	320	55,000
		A20-RB37-SP02		7,000
		A20-B34-SP03		870
	TCE	A20-RB37-SP01	961	5,500
Intermediate (11 to 20)	Chloroform	11D-SP28	83	120
		A20-RX73-SP01		300
	PCE	A20-B34-SP03	320	860
		A20-RB37-SP01		65,000
		A20-RC29-SP01		350
	TCE	A20-RB37-SP01	961	6,500
Deep (21 to 30)	PCE	A20-B34-SP03	320	1,000
		A20-RB37-SP01		3,100
	TCE	A20-RB37-SP01	961	1,500

- The highest concentrations of PCE (greater than 10,000 µg/m³) and TCE (greater than 5,000 µg/m³) were detected in shallow and intermediate soil vapor samples collected at location A20-RB37-SP01. Location A20-RB37-SP01 is adjacent to the ditch near the northwest corner of Building 20037, a chemical storage building. The most likely source of PCE and TCE at this location is from surface releases from activities associated with Building 20037. The location of Building 20037 and surrounding soil vapor sampling locations are shown in Figure 3.1-3.
- PCE was detected above its SVSL in shallow, intermediate, and deep soil vapor samples collected at location A20-B34-SP03, in an open field south of Building 20037.
- PCE was also detected above its SVSL in an intermediate (11 to 20 feet bgs) soil vapor sample collected at one (A20-RC29-SP01) location near RCRA C, a former decontamination area. The detection of PCE in the shallow (0 to 10 feet bgs) layer at a lower concentration indicates that the PCE detected at this location is due to migration from groundwater.

Metals

A total of 71 primary and 16 duplicate surface and/or near-surface soil samples were collected at Source Area 11D and other features in the Building 20022 Area and analyzed for metals and/or hexavalent chromium during the BOU RI. The number of primary soil samples and sampling locations are summarized on the table below.

		Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
Source Area	**Compound**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**
11D	Metals	40	24	15	8	9	2
	Mercury	32	20	15	8	9	2
	Hex Chrome	32	20	16	9	9	2
Bldg 20034	Metals	3	2	4	2	0	0
	Mercury	2	2	4	2	0	0
	Hex Chrome	2	2	4	2	0	0

Cadmium and lead were the only metals detected in soil at Source Area 11D and other features in the Building 20022 Area at concentrations above background and their respective RISLs. The location and depth of samples containing those metals at concentrations above their RISLs are provided on the table below. BOU RI surface and subsurface soil sampling locations within Administration Area East are shown in Figures 3.1-4 and 3.1-5, respectively.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
11D-SNS15	0.5	Cadmium	1.7	2.7
11D-SNS16	0.5	Cadmium	1.7	2.0
	2.5	Cadmium	1.7	2.4
11D-SNS22	0.5	Cadmium	1.7	3.7
A20-RB37-SB01	1.0	Lead	150	210

- Cadmium was detected above its soil RISL in surface and/or near-surface soil samples collected from the open ditch (Source Area 11D).
- Lead above its RISL was were detected in one surface soil sample collected at A20-RB37-SB01 in the drainage ditch north of Building 20037, a chemical storage building. The data indicate that lead is limited to surface/near-surface soil.

Semivolatile Organic Compounds

A total of 64 primary and 18 duplicate soil samples were collected at Source Area 11D and other features in the Building 20022 Area during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations are summarized on the table below.

		Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
Source Area	**Compound**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**
11D	SVOCs	43	31	10	8	9	2
Bldg 20034	SVOCs	2	2	0	0	0	0

Benzo(a)pyrene [B(a)P] and B(b&k)F were the only SVOCs detected in soil at Source Area 11D and other features in the Building 20022 Area at a concentrations above their respective RISLs. As indicated in the table below, B(a)P at 41 µg/kg and B(b&k)F at 64 µg/kg were detected in a soil sample collected at 0.5 foot bgs at location 11D-SNS17. BOU RI surface soil sampling locations within Administration Area East are shown in Figure 3.1-4.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
11D-SNS17	0.5	Benzo(a)pyrene	38	41
		Benzo(b&k)fluoranthene	38	64

Polychlorinated Biphenyls

A total of 59 primary and 19 duplicate soil samples were collected at Source Area 11D and other features in the Building 20022 Area during the BOU RI and analyzed for PCBs. The number of primary soil samples and sampling locations for PCBs are summarized on the table below.

		Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
Source Area	**Compound**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**
11D	PCBs	41	29	14	9	4	1
Bldg 20034	PCBs	0	0	0	0	0	0

PCB Aroclors 1254 and 1260 were detected in soil at Source Area 11D and other features in the Building 20022 Area at concentrations above their

respective RISLs. The location and depth of samples containing PCBs above their RISLs are provided on the table below. BOU RI surface and subsurface soil sampling locations within Administration Area East are shown in Figures 3.1-4 and 3.1-5, respectively.

Sample Location	Depth (ft bgs)	PCB	RISL (µg/kg)	Concentration (µg/kg)
11D-SNS12	0.5 2.5	Aroclor 1260 Aroclor 1260	220 220	330 J 340 J
11D-SNS13	0.5	Aroclor 1260	220	310 J
11D-SNS15	0.5 0.5 D	Aroclor 1254 Aroclor 1254	220 220	220 J 10,000 J
11D-SNS16	0.5 D	Aroclor 1260	220	1,100 J
11D-SNS22	0.5	Aroclor 1260	220	1,300 J
11D-SB06	1.0	Aroclor 1260	220	1,600
A20-RB37-SB01	1.0	Aroclor 1254	220	3,100
A20-RB37-SB02	1.0 D	Aroclor 1254	220	2,000 J

D = Duplicate

- Aroclor 1254 was detected at concentrations above its RISL in surface soil in two sections of the drainage in the Building 20022 Area.
- The most likely source of Aroclor 1254 to the Source Area 11D ditch is a former aboveground waste oil tank near the location of A20-RC29-SB01.
- Aroclor 1260 was detected above its RISL in surface and/or near-surface soil samples collected in the drainage ditch comprising Source Area 11D. The data indicate that PCB Aroclors 1254 and 1260 originated from different sources. The most likely source of Aroclor 1260 to the surface soil in the Source Area 11D drainages is discharges to the ditch from the various buildings or in surface water runoff from storage and handling areas.

Perchlorate

A total of 50 primary and 19 duplicate soil samples were collected at Source Area 11D and other features in the Building 20022 Area during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
11D	Perchlorate	39	27	7	5	4	1
Bldg 20034	Perchlorate	0	0	0	0	0	0

Perchlorate was not detected above its RISL in the surface/near-surface or subsurface soil samples collected at Source Area 11D and other features in the Building 20022 Area.

Total Petroleum Hydrocarbons

A total of 53 primary and 17 duplicate soil samples were collected at Source Area 11D and other features in the Building 20022 Area during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of primary soil samples and sampling locations for TPH-D and TPH-Mo are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
11D	TPH-D & Mo	36	29	11	7	4	1
Bldg 20034	TPH-D & Mo	2	2	0	0	0	0

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). The maximum concentrations of TPH-D and TPH-MO detected in soil samples collected from the Buildings 20022 area were 1,400 mg/Kg and 4,200 mg/Kg, respectively. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected at Source Area 11D and other features in the Building 20022 Area included total cyanide, NDMA, and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area for each analysis and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
11D & Bldg 20034	Total Cyanide	37	25	6	3	4	1
	NDMA	39	27	7	5	4	1
	pH	31	31	23	12	9	2

Total cyanide and NDMA were not detected in soil samples at concentrations above their respective RISLs. The pH of the soil was generally within the normal range (5 to 9) for mineral soils (Brady, 1974).

3.1.3 Summary of Scope and Results of Remedial Investigations - Administration Area West

Administration Area West is divided into three subunits that encompass source sites and other investigated features that are related or in proximity to one another. The three investigation units in Administration Area West are described below and shown in Figure 3.1-6.

- **Administration Area West Open Ditch System –** The Administration Area West Open Ditch System consists of Source Areas 5D, 9D, 12D, D(b) and D(d), as shown in Figure 3.1-6. The Administration Area West Open Ditch System receives surface runoff and discharge from the drainage system, which is comprised of underground pipes and drains and open drains connected to buildings in Administration Area West.

  The Administration Area West Open Ditch System empties into the main Administration Ditch, which discharges to the Westlakes Storm Water Retention Ponds. Storm water runoff is staged in the Westlakes Ponds where it is allowed to infiltrate or, when the Westlakes become full, is discharged to Buffalo Creek and ultimately to the American River. Storm water discharges to Buffalo Creek/American River are regulated through the NPDES (Aerojet and others, 2002).
- **Building 20009 Area –** Two Source Sites (6D and 52D), including a former waste oil tank and treatment basin in and around Building 20009.
- **Former Sewage Treatment Plant (FSTP) Area –** Two Source Sites (8D and D(c)) associated with the Aerojet FSTP.

The results of the RI for the source areas and features within the three investigation units within Administration Area West are summarized below.

3.1.3.1 Summary of Scope and Results of Remedial Investigations – Administration Area West Open Ditch System

The scope and results of RIs of the Administration Area West Open Ditch System are summarized below.

Scope of Remedial Investigations

- **1979–1993:** Soil samples from 44 soil borings and 40 soil vapor samples were collected and analyzed for VOCs, SVOCs, and/or metals.
- **BOU RI (2005-2007):** Ten primary soil vapor samples, 72 primary and 12 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 44 primary and 4 duplicate subsurface (2.6 to 59 feet bgs) soil samples.

  Soil vapor samples were analyzed for VOCs. Surface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), total cyanide, NDMA, PCBs, TPH-D, TPH-Mo, pH, TOC, CEC, and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals, total cyanide, NDMA, PCBs, perchlorate, TPH-D, TPH-Mo, pH, TOC, CEC, and/or geotechnical parameters.

Results of Remedial Investigation

Concentrations of VOCs in soil vapor and chemicals in soil were compared to RISLs to evaluate when sufficient sampling had been conducted to characterize the nature and extent of these compounds in the vadose zone. Soil and soil vapor RISLs were developed by taking the lowest available regulatory level (PRG or CHHSL), multiplying non-cancer concentrations by 0.1, and finally multiplying all values by a factor of 10. This approach was accepted by the Agencies to guide sampling efforts. As such, the following discussion of remedial investigation results is presented in comparison to the RISLs. RISLs were not used for the selection of COPCs in the risk assessment. Details concerning the development of soil vapor RISLs are presented in Section 3.1.1 of Volume 1 (RI Report) of this document.

The results of the BOU RI of the source areas comprising the Administration Area West Open Ditch System are summarized below. Concentrations of chemicals in soil are compared to their RISLs in this section to assist the reader in understanding the magnitude of the constituents that may potentially be of concern.

BOU RI soil vapor, surface soil, and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-7, 3.1-8, and 3.1-9, respectively.

Volatile Organic Compounds

As indicated on the table below, 10 primary soil vapor samples were collected at 10 locations at source areas 5D and D(b) and analyzed for VOCs. The number of primary soil vapor samples analyzed for VOCs and sampling locations at Source Areas 5D, 9D, 12D, D(b), and D(d) are summarized on the table below.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
5D	Shallow (0-10)	0	0
	Intermediate (11-20)	1	1
	Deep (21-30)	0	0
D(b)	Shallow (0-10)	5	5
	Intermediate (11-20)	3	3
	Deep (21-30)	1	1

TCE was the only VOC detected at concentrations above its soil vapor RISL of 961 $\mu g/m^3$. TCE was detected at 1,100 $\mu g/m^3$ in shallow (0 to 10 feet bgs) soil vapor sample D(b)-SP03 (Figure 3.1-7). VOCs were not detected in the intermediate (11 to 20 feet bgs) and deep (21 to 30 feet bgs) soil vapor samples at concentrations above their respective soil vapor RISLs.

Metals

A total of 95 primary and 14 duplicate soil samples were collected at the Source Areas 5D, 9D, 12D, D(b), and D(d) comprising the Administration Area West Open Ditch System during the BOU RI and analyzed for metals. Additionally, 70 of the primary samples and 13 duplicates were analyzed for hexavalent chromium. The number of primary soil samples for metals and sampling locations at Source Areas 5D, 9D, 12D, D(b), and D(d) are summarized on the table below.

		Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
Source Area	Compound	No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
5D	Metals	30	17	18	3	6	2
	Mercury	30	17	18	3	6	2
	Hex Chrome	25	14	12	6	6	2
9D	Metals	6	3	1	1	0	0
	Mercury	6	3	1	1	0	0
	Hex Chrome	6	3	1	1	0	0
12D	Metals	4	2	0	0	0	0
	Mercury	4	2	0	0	0	0

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
	Hex Chrome	4	2	0	0	0	0
D(b)	Metals	8	8	13	7	2	1
	Mercury	8	8	12	3	2	1
	Hex Chrome	7	7	6	7	2	1
D(d)	Metals	3	3	4	2	0	0
	Mercury	3	3	4	2	0	0
	Hex Chrome	1	1	0	0	0	0

Cadmium, chromium, and lead were the only metals detected in soil at the source areas comprising the Administration Area West Open Ditch System at concentrations above background and their respective RISLs. The location and depth of those samples containing concentrations of those metals above their RISLs are provided on the table below. BOU RI surface and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-8 and 3.1-9, respectively.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
5D-SNS10	0.5	Cadmium	1.7	5.8
5D-SNS11	0.5	Cadmium	1.7	3.9
	2.5	Cadmium	1.7	6.4
5D-SNS12	0.5	Cadmium	1.7	42
	2.5	Cadmium	1.7	4.1
		Chromium	211	960
5D-SNS13	0.5	Cadmium	1.7	54
		Chromium	211	1,800
	2.5	Cadmium	1.7	15
		Chromium	211	380
	10	Cadmium	1.7	4.7
5D-SNS14	0.5	Cadmium	1.7	2.5
	2.5	Cadmium	1.7	9.4
		Chromium	211	1,800
	10	Cadmium	1.7	4.7
5D-SNS15	0.5	Cadmium	1.7	16
		Chromium	211	2,300
		Lead	150	260
	2.5	Cadmium	1.7	6.3
	5	Cadmium	1.7	4.0
	10	Cadmium	1.7	6.5
5D-SNS16	0.5	Cadmium	1.7	4.6
	2.5	Cadmium	1.7	3.9

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
	5.0	Cadmium	1.7	2.0
5D-SNS17	0.5	Cadmium Chromium	1.7 211	5.6 460
	2.5	Cadmium	1.7	2.3
5D-SNS18	0.5	Cadmium	1.7	1.7
5D-SNS20	0.5	Cadmium	1.7	1.8
5D-SB02	5	Cadmium Chromium	1.7 211	25 1,100
5D-SB03	1.0	Cadmium Chromium Lead	1.7 211 150	190 5,300 330
5D-SB06	1.0	Cadmium Chromium	1.7 211	9.6 670
5D-SB07	1.0	Cadmium	1.7	2.6
9D-SNS05	0.5	Cadmium	1.7	2.5
D(b)-SD01	0	Cadmium	1.7	9.3

- The majority of the detections of cadmium, chromium, and lead above their RISLs were in surface and/or near-surface (0 to 2.5 feet bgs) soil samples. Cadmium was detected above its RISL in soil samples collected at depths greater than 2.5 feet bgs at only four (5D-SNS13 through 5D-SNS16) locations and at depths greater than 5 feet at only three (5D-SNS13, 5D-SNS14, and 5D-SNS15) locations.
- The most likely source of cadmium, chromium, and lead above their RISL in surface/near-surface soil from the 5D ditch are the drain lines and trenches [Source Area D(b)] originating from Building 20009.

Semivolatile Organic Compounds

A total of 59 primary soil samples and 7 duplicates were collected at the source areas [5D, 9D, 12D, D(b), and D(d)] comprising the Administration Area West Open Ditch System during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations for SVOCs at Source Areas 5D, 9D, 12D, D(b), and D(d) are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
5D	SVOCs	26	14	3	2	6	2
9D	SVOCs	6	3	1	1	0	0
12D	SVOCs	4	2	0	0	0	0
D(b)	SVOCs	6	6	3	2	2	1
D(d)	SVOCs	2	2	0	0	0	0

B(a)P and B(b&k)F were the only SVOCs in soil at the source areas comprising the Administration Area West Open Ditch System at concentrations above their RISLs. The location and depth of samples with B(a)P and B(b&k)F above their RISLs are provided on the table below. BOU RI surface soil sampling locations in Administration Area West are shown in Figure 3.1-8. The most likely source of SVOCs in the Source Area 5D ditch and Source Area D(b) is from discharges associated with historical activities in Building 20009.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (mg/kg)
5D-SNS09	0.5	Benzo (a) pyrene	38	89
5D-SNS13	0.5	Benzo (b&k) fluoranthene	38	97
5D-SNS14	0.5	Benzo (b&k) fluoranthene	38	96
5D-SNS15	0.5	Benzo (a) pyrene Benzo (b&k) fluoranthene	38 38	41 160
5D-SNS16	0.5	Benzo (b&k) fluoranthene	38	260
D(b)-SB04	1.0	Benzo (a) pyrene Benzo (b&k) fluoranthene	38 38	59 120
D(b)-SD01	0.0	Benzo (b&k) fluoranthene	38	75

Polychlorinated Biphenyls

A total of 13 primary and 4 duplicate soil samples were collected from the Administration Area West Open Ditch System during the BOU RI and analyzed for PCBs. The number of primary soil samples and sampling locations for PCBs at Source Areas 5D, 9D, 12D, and D(b) are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
5D	PCBs	5	3	2	1	3	1
9D	PCBs	0	0	0	0	0	0
12D	PCBs	0	0	0	0	0	0
D(b)	PCBs	1	1	0	0	0	0
D(d)	PCBs	2	2	0	0	0	0

Aroclors 1254 and 1260 were the only PCBs detected in soil at the source areas comprising the Administration Area West Open Ditch System at concentrations above their respective RISLs. The location and depth of samples containing concentrations of Aroclors 1254 and 1260 above their RISL of 220 µg/kg are provided on the table below. BOU RI surface and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-8 and 3.1-9, respectively.

Sample Location	Depth (ft bgs)	PCB	RISL (µg/kg	Concentration (µg/kg)
5D-SB06	1.0	Aroclor 1254	220	2,500
5D-SB07	1.0	Aroclor 1260	220	800
5D-SB09	1.0	Aroclor 1254	220	610

The most likely source of Aroclors in soil at location 5D-SB01 is from discharges associated with the former waste oil tank and the lined trenches [Source Area D(b)] associated with Building 20009.

Perchlorate

A total of 34 primary and 6 duplicate soil samples were collected at Source Areas 5D, 9D, 12D, and D(b) comprising the Administration Area West Open Ditch System during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at Source Areas 5D, 9D, 12D, and D(b) for perchlorate are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
5D	Perchlorate	21	11	1	1	3	1
9D	Perchlorate	0	0	0	0	0	0
12D	Perchlorate	0	0	0	0	0	0

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
D(b)	Perchlorate	5	5	0	0	2	1
D(d)	Perchlorate	2	2	0	0	0	0

Perchlorate was not detected in the surface, near-surface, or subsurface soil samples at concentrations exceeding its RISL of 7,800 µg/kg.

Total Petroleum Hydrocarbons

A total of 42 primary and 10 duplicate soil samples for TPH were collected at the source areas comprising the Administration Area West Open Ditch System during the BOU RI. The number of primary soil samples and sampling locations at Source Areas 5D, 9D, 12D, and D(b) for TPH are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
5D	TPH-D	22	12	3	2	6	2
	TPH-Mo	22	12	3	2	6	2
9D	TPH-D	0	0	0	0	0	0
	TPH-Mo	0	0	0	0	0	0
12D	TPH-D	0	0	0	0	0	0
	TPH-Mo	0	0	0	0	0	0
D(b)	TPH-D	6	6	2	1	2	1
	TPH-Mo	6	6	2	1	2	1
D(d)	TPH-D	1	1	0	0	0	0
	TPH-Mo	1	1	0	0	0	0

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). The maximum concentrations of TPH-D and TPH-MO detected in soil samples collected from the Administration Area West Open Ditch System were 250 mg/Kg and 850 mg/Kg, respectively. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected from the Administration Area West Open Ditch System [Source Areas 5D, 9D, 12D, and D(b)] included total cyanide, NDMA, and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
5D	Total Cyanide	21	11	1	1	0	0
	NDMA	1	1	2	1	0	0
	pH	25	13	2	1	3	1
9D	Total Cyanide	0	0	0	0	0	0
	NDMA	0	0	0	0	0	0
	pH	6	3	1	1	0	0
12D	Total Cyanide	0	0	0	0	0	0
	NDMA	0	0	0	0	0	0
	pH	4	2	0	0	0	0
D(b)	Total Cyanide	4	4	0	0	2	1
	NDMA	0	0	0	0	0	0
	pH	9	9	15	8	2	1
D(d)	Total Cyanide	0	0	0	0	0	0
	NDMA	0	0	0	0	0	0
	pH	0	0	0	0	0	0

Total cyanide and NDMA were not detected in soil samples above their respective RISLs. The pH of the soil was within the normal range (5 to 9) expected for mineral soils (Brady, 1974).

3.1.3.2 *Summary of Scope and Results of Remedial Investigations – Building 20009 Area*

The scope and results of RIs of the Building 20009 Area in Administration Area West are summarized below.

Scope of Remedial Investigations

- **1992-2003:** Soil samples from 29 soil borings and 20 soil vapor samples were collected and analyzed for VOCs, SVOCs, metals, and NDMA.
- **BOU RI (2005-2007):** Forty-eight primary and 4 duplicate soil vapor samples, 45 primary and 8 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 71 primary and 4 duplicate subsurface (2.6 to 59 feet bgs) soil samples were collected within the four source areas and associated features in the Building 20009 Area.

  Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), total cyanide, perchlorate, TPH-D, TPH-Mo, pH, TOC, CEC, and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals (including hexavalent

chromium), total cyanide, PCBs, perchlorate, TPH-D, TPH-Mo, pH, TOC, CEC, and/or geotechnical parameters.

Results of Remedial Investigation

Concentrations of VOCs in soil vapor and chemicals in soil were compared to RISLs to evaluate when sufficient sampling had been conducted to characterize the nature and extent of these compounds in the vadose zone. Soil and soil vapor RISLs were developed by taking the lowest available regulatory level (PRG or CHHSL), multiplying non-cancer concentrations by 0.1, and finally multiplying all values by a factor of 10. This approach was accepted by the Agencies to guide sampling efforts. As such, the following discussion of remedial investigation results is presented in comparison to the RISLs. RISLs were not used for the selection of COPCs in the risk assessment. Details concerning the development of soil vapor RISLs are presented in Section 3.1.1 of Volume 1 (RI Report) of this document.

The results of the BOU RI of the source areas within the Building 20009 Area are summarized below. Concentrations of chemicals in soil are compared to their RISLs in this section to assist the reader in understanding the magnitude of the constituents that may potentially be of concern.

BOU RI soil vapor, surface soil, and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-7, 3.1-8, and 3.1-9, respectively.

Volatile Organic Compounds

A total of 48 primary soil vapor samples were collected in the Building 20009 Area and analyzed for VOCs. The number of primary soil vapor samples and sampling locations are summarized on the table below.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
52D	Shallow (0-10)	18	18
	Intermediate (11-20)	16	16
	Deep (21-30)	13	13
	Very Deep (>30)	1	1

Chloroform, TCE, and PCE were the only VOCs detected at concentrations above their respective soil vapor RISLs. The location and depth of soil vapor samples with concentrations of those VOCs above

their RISL are provided on the table below. BOU RI soil vapor sampling locations in Administration Area West are shown in Figure 3.1-7.

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	TCE	52D-SP24	961	1,800
		52D-SP25		1,200
		52D-SP26		1,100
		52D-SP29		2,600
Intermediate (11 to 20)	TCE	52D-SP30	961	1,200
Deep (21 to 30)	Chloroform	52D-SP35	83	190
	PCE	52D-SP42	320	590
	TCE	52D-SP25	961	1,800
		52D-SP42		8,300

Metals

A total of 104 primary and 11 duplicate soil samples were collected at source areas within the Building 20009 Area and analyzed for metals and/or hexavalent chromium. The number of primary soil samples and sampling locations at Source Areas 6D, 52D, 52D FWOT, and 52D in the Building 20009 Area are on the table below.

		Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
Source Area	Compound	No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
6D	Metals	17	11	11	6	7	2
	Mercury	17	11	11	5	7	2
	Hex Chrome	11	8	9	6	7	2
52D	Metals	23	18	25	13	21	9
	Mercury	21	17	24	13	21	9
	Hex Chrome	19	15	19	10	13	6

Cadmium, chromium, and hexavalent chromium were the only metals detected in soil at Source Areas 6D and 62D at concentrations above background and their respective RISLs. The location and depth of samples containing concentrations of those metals above their RISLs are provided on the table below. BOU RI surface and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-8 and 3.1-9, respectively.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
6D-SNS06	0.5	Cadmium	1.7	12
		Chromium	211	19,000
	2.5	Cadmium	1.7	3.0
		Chromium	211	4,500
6D-SNS07	0.5	Cadmium	1.7	33
		Chromium	211	43,000
		Lead	150	640
	2.5	Cadmium	1.7	3.7
		Chromium	211	5,700
6D-SNS08	0.5	Cadmium	1.7	16
		Chromium	211	27,000
		Lead	150	300
	2.5	Chromium	211	1,000
6D-SB02	5.0	Chromium	211	820
		Hex Chromium	30	430
	11	Chromium	211	730
		Hex Chromium	30	630
6D-SB05	1.5	Cadmium	1.7	15
6D-SB06	1.0	Cadmium	1.7	3.3
		Chromium	211	290
52D-SNS01	0.5	Chromium	211	280
52D-SNS02	0.5	Cadmium	1.7	3.6
52D-SB10	11	Chromium	211	550
		Hex Chromium	30	720

- Cadmium, chromium, and hexavalent chromium were all detected in surface and/or near-surface soil samples collected at six locations in the bermed area (Source Area 6D) west of Building 20009. Cadmium above its RISL at Source Area 6D is apparently limited to the upper 2.5 feet of soil. Chromium and hexavalent chromium were detected above its RISL at a depth of 11 feet bgs at one location (6D-SB02).
- Cadmium, chromium, and hexavalent chromium were the only metals detected in soil above their RISLs at Source Area 52D. Cadmium was detected above its RISL in a surface soil sample collected along the west edge of Building 20009. Chromium and hexavalent chromium were detected above their RISLs in a soil sample collected at 11 feet bgs from boring 52D-SB10, beneath the building foundation in the inactive plating area.

Semivolatile Organic Compounds

A total of 80 primary and 6 duplicate soil samples were collected at Source Areas 6D and 52D and the Building 20009 Area during the BOU RI and

analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations at Source Areas 6D and 52D for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
6D	SVOCs	13	7	2	1	4	1
52D	SVOCs	21	17	19	10	21	9

B(a)P and B(b&k)F were the only SVOCs detected in soil at the source areas in the Building 20009 Area at concentrations above their respective RISLs. The location and depth of samples containing those SVOCs above their RISLs are provided on the table below. BOU RI surface and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-8 and 3.1-9, respectively.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
52D-SB07	5.0	Benzo(a)pyrene	38	340
		Benzo(b&k)fluoranthene	380	450

Sampling location 52D-SB07 is near a former paint spray booth and former TCE degreaser inside Building 20009.

Polychlorinated Biphenyls

A total of five primary soil samples were collected at Source Area 52D in Building 20009 Area during the BOU RI and analyzed for PCBs. The number of primary soil samples and sampling locations for PCBs at Source Area 52D are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
52D	PCBs	0	0	0	0	5	1

As indicated on the table, surface and/or near-surface samples collected at Source Area 52D were not analyzed for PCBs. Soils with PCBs originating from a transformer were excavated from the area to a depth of approximately 11 to 15 feet bgs in late 2004 and backfilled with clean material. The location and depths of the sample with Aroclor 1260 above

its RISL of 220 µg/kg are provided on the table below. BOU RI surface and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-8 and 3.1-9, respectively.

Sample Location	Depth (ft bgs)	PCB	RISL (µg/kg)	Concentration (µg/kg)
052D-SB18	16	Aroclor 1260	220	120,000
	21	Aroclor 1260	220	800

Perchlorate

A total of 79 primary and 6 duplicate soil samples were collected at Source Areas 6D and 52D and the Building 20009 Area during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at Source Areas 6D and 52D for perchlorate are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
6D	Perchlorate	13	7	2	1	4	1
52D	Perchlorate	20	16	19	9	21	9

Perchlorate was not detected above its RISL of 7,800 µg/kg in near-surface soil collected at only two locations at Source Area 6D.

Total Petroleum Hydrocarbons

A total of 82 primary and 6 duplicate soil samples were collected at Source Areas 6D, 52D, and the Building 20009 Area during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of primary soil samples and sampling locations for TPH at the source areas in the Building 20009 Area are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
6D	TPH-D	13	7	2	1	4	1
	TPH-Mo	13	7	2	1	4	1
52D	TPH-D	20	16	17	9	26	10
	TPH-Mo	20	16	17	9	26	10

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). The maximum concentrations of TPH-D and TPH-MO detected in soil samples collected from the Building 20009 area were 1,400 mg/Kg and 4,200 mg/Kg, respectively. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected at Source Areas 6D and 52D and the Building 20009 Area included total cyanide, NDMA, and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area and the numbers of locations are summarized on the table below.

		Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
Source Area	**Compound**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**	**No. of Samples**	**No. of Locations**
6D	Total Cyanide	13	7	2	1	4	1
	NDMA	13	7	0	0	0	0
	pH	13	7	2	0	4	1
52D	Total Cyanide	20	16	18	9	19	9
	NDMA	21	17	0	0	0	0
	pH	21	17	27	14	21	9

Total cyanide and NDMA were not detected in surface, near-surface, or subsurface soil samples above their respective RISLs. The pH of the soil was within the normal range (5 to 9) expected for mineral soils (Brady, 1974).

3.1.3.3 *Summary and Results of Remedial Investigations – Former Sewage Treatment Plant Area*

The scope and results of RIs of the source areas and features within the FSTP Area are summarized below.

<u>Scope of Remedial Investigations</u>

- **1986-1992:** Soil samples were collected from 39 soil borings to depths up to 10 feet bgs in the vicinity of Source Areas 8D and D(c) between 1986 and 1992 and analyzed for VOCs, SVOCs, metals, and/or NDMA. Six soil vapor samples were collected between 1991 and 1992 and analyzed for VOCs.
- **BOU RI (2005-2007):** Twenty-three primary and 2 duplicate soil vapor samples, 14 primary and 1 duplicate surface/near-surface (0 to 2.5 feet bgs) soil samples, and 24 primary and 1 duplicate subsurface (2.6 to

35 feet bgs) soil samples were collected at Source Areas 8D and D(c) and associated features in the FSTP Area.

Surface and subsurface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), perchlorate, TPH-D, TPH-Mo, pH, TOC, and/or CEC.

Results of Remedial Investigations

Concentrations of VOCs in soil vapor and chemicals in soil were compared to RISLs to evaluate when sufficient sampling had been conducted to characterize the nature and extent of these compounds in the vadose zone. Soil and soil vapor RISLs were developed by taking the lowest available regulatory level (PRG or CHHSL), multiplying non-cancer concentrations by 0.1, and finally multiplying all values by a factor of 10. This approach was accepted by the Agencies to guide sampling efforts. As such, the following discussion of remedial investigation results is presented in comparison to the RISLs. RISLs were not used for the selection of COPCs in the risk assessment. Details concerning the development of soil vapor RISLs are presented in Section 3.1.1 of Volume 1 (RI Report) of this document.

The results of the BOU RI of the source areas within the FSTP Area are summarized below. Concentrations of chemicals in soil are compared to their RISLs in this section to assist the reader in understanding the magnitude of the constituents that may potentially be of concern.

BOU RI soil vapor, surface soil, and subsurface soil sampling locations in Administration Area West are shown in Figures 3.1-7, 3.1-8, and 3.1-9, respectively.

Volatile Organic Compounds

A total of 23 primary soil vapor samples were collected 23 locations at Source Areas 8D and D(c) in the FSTP Area. The number of primary soil vapor samples and locations are summarized on the table below.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
8D	Shallow (0-10)	4	4
	Intermediate (11-20)	3	3
	Deep (21-30)	0	0
D(c)	Shallow (0-10)	7	7
	Intermediate (11-20)	8	8
	Deep (21-30)	1	1

Chloroform and TCE were the only VOCs detected at concentrations above their soil vapor RISLs. The location and depth of soil vapor samples containing concentrations of those VOCs above their RISLs are provided on the table below. BOU RI soil vapor sampling locations in Administration Area West are shown in Figure 3.1-7.

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	Chloroform	D(c)-SP06	83	560
Intermediate (11 to 20)	Chloroform	D(c)-SP05 D(c)-SP09 D(c)-SP011	83	180 290 290
Deep (21 to 30)	Chloroform	D(c)-SP05	83	710
	TCE	D(c)-SP05	961	1,300

- Concentrations of chloroform in soil vapor samples collected at all, but one, location at the FSTP are attributed to migration from groundwater instead of a surface release.
- Chloroform at location D(c)-SP06 is possibly due to potential releases from the former treatment works.

Metals

A total of 38 primary and 2 duplicate soil samples were collected at Source Areas 8D and D(c) and the FSTP Area during the BOU RI and analyzed for metals and/or hexavalent chromium. The number of primary soil samples and sampling locations at Source Areas 8D and D(c) are summarized on the table below.

		Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
Source Area	Compound	No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
8D	Metals	8	7	11	6	2	1

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
	Mercury	8	7	11	6	2	1
	Hex Chrome	8	7	11	6	3	1
D(c)	Metals	6	5	7	4	2	1
	Mercury	6	5	7	4	2	1
	Hex Chrome	6	5	8	4	2	1

Metals were not detected above their respective RISLs in surface, near-surface, or subsurface soil samples collected at Source Areas 8D and D(c) in the FSTP Area.

Semivolatile Organic Compounds

A total of 25 primary soil samples and 1 duplicate sample were collected at Source Areas 8D and D(c) and the FSTP Area during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations at Source Areas 8D and D(c) for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
8D	SVOCs	8	7	4	2	2	1
D(c)	SVOCs	6	5	3	2	2	1

B(a)P and B(b&k)F were detected above their respective RISLs in one near-surface soil sample collected at Source Area D(c). The detected concentrations of those compounds and sample location is provided in the table below.

Sample Location	Depth (ft bgs)	SVOC	RISL	Concentration (µg/kg)
D(c)-SB05	1.0	Benzo(a)pyrene	38	100
		Benzo(b&k)fluoranthene	38	200

Polychlorinated Biphenyls

A total of 23 primary soil samples and 1 duplicate were collected at Source Areas 8D and D(c) and the FSTP Area during the BOU RI and analyzed

for PCBs. The number of primary soil samples and sampling locations at Source Areas 8D and D(c) for PCBs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
8D	PCBs	8	7	4	2	2	1
D(c)	PCBs	6	5	2	1	1	1

Aroclor 1254 at 270 µg/kg, above its RISL of 220 µg/kg, was detected in only one surface (0.5 foot bgs) soil sample collected at one location (8D-SB02) in the FSTP Area. BOU RI surface soil sampling locations in Administration Area West are shown in Figure 3.1-8. The most likely source of Aroclor 1254 in soil at location 8D-SB02 is from the sludge that was historically placed at that location for drying.

Perchlorate

A total of 30 primary soil samples and 2 duplicates were collected at Source Areas 8D and D(c) and the FSTP Area during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at Source Areas 8D and D(c) for perchlorate are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
8D	Perchlorate	8	7	10	5	2	1
D(c)	Perchlorate	6	5	2	1	2	1

Perchlorate was not detected above its RISL in surface, near-surface, or subsurface soil samples collected at the source areas in the FSTP Area.

Total Petroleum Hydrocarbons

A total of 24 primary soil samples and 1 duplicate were collected at Source Areas 8D and D(c) and the FSTP Area during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of primary soil samples and sampling locations for TPH at Source Areas 8D and D(c) are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
8D	TPH-D	8	7	4	2	2	1
	TPH-Mo	8	7	4	2	2	1
D(c)	TPH-D	6	5	2	1	2	1
	TPH-Mo	6	5	2	1	2	1

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). TPH-D and TPH-MO were not detected above their respective PGW SSLs in soil samples collected from Areas 8D and D(c) and the FSTP Area. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected at Source Areas 8D and D(c) and the FSTP Area included NDMA and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area for each analyte and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
8D	NDMA	8	7	0	0	0	0
	pH	8	7	12	6	2	1
D(c)	NDMA	6	5	0	0	0	0
	pH	6	5	8	4	2	1

NDMA was not detected above the PQL in soil at Source Areas 8D and D(c). The pH of the soil was within the normal range (5 to 9) expected for mineral soils (Brady, 1974).

3.1.4 *Summary of Scope and Results for Surface Water Remedial Investigation – Administration Area*

The Administration Area Drainage System is an interconnected series of open ditches, underground culverts, and catch basins that direct surface water in the Administration Area into the main Administration Ditch and then the Westlakes Storm Water Retention Ponds west of the Administration Area.

The scope and results of the RI of surface water in the Administration Area Drainage System are summarized below.

Scope of Remedial Investigations

- **1980-2004:** Surface water sampling of the Administration Area Drainage System was not conducted during previous RIs.
- **NPDES Sampling:** Surface water samples are collected at one location (Station S-2) along the main Administration Area Ditch, directly below the confluence of Source Area Ditches 5D and 9D (Figures 3.1-8 and 3.1-9). Surface water samples are collected when there is sufficient flow and analyzed for selected constituents in accordance with the *Revised Waste Discharge Requirements for Aerojet-General Corporation and Aerojet Fine Chemicals* (NPDES Permit No. CA0004111) (RWQCB Order No. R5-1999-0016-R01, revised 2002).
- **BOU RI (2005-2007):** Fifteen primary and two duplicate surface water samples were collected from the Administration Area Drainage System at 15 locations and analyzed for VOCs, metals (total and dissolved), SVOCs, total extractable petroleum hydrocarbons, dissolved organic carbon (DOC), anions, and total alkalinity. Additionally, selected samples were also analyzed for cyanide, NDMA, nitrite, phosphate, and orthophosphate.

Results of NPDES Sampling

The results of the analyses of surface water samples collected at Station S-2 during the 4-year period between 1 January 2000 and 31 December 2004 are summarized below.

Volatile Organic Compounds

- Acetone and chloroform were the only VOCs detected in surface water samples collected at Station S-2 during the 4-year period.
- Chloroform was sporadically detected in two surface water samples collected in December 2001 and January 2002, and in six samples collected between April and September 2004.

Semivolatile Organic Compounds

SVOCs at concentrations above their respective PQLs were not detected in the surface water samples.

Dissolved Metals

- Dissolved metals detected in at least one surface water sample collected at Station S-2 were aluminum ranging from less than

0.05 milligrams per liter (mg/L) to just slightly above the PQL at 0.052 mg/L, barium ranging from 0.022 to 0.93 mg/L, boron ranging from 0.02 to 0.053 mg/L, calcium ranging from 1.2 to 13 mg/L, copper ranging from 0.006 to 0.04 mg/L, iron ranging from nondetect (less than 0.075 mg/L) to 0.64 mg/L, manganese ranging from 0.003 to 0.039 mg/L, magnesium ranging from 1.2 to 3.1 mg/L, molybdenum (one detect at 0.042 mg/L), potassium ranging from 1.1 to 45 mg/L, sodium ranging from 1.1 to 17 mg/L, vanadium ranging from 0.0017 to 0.005 mg/L, and zinc ranging from nondetect (less than 0.025 mg/L) to 0.14 mg/L.

- Dissolved concentrations of metals detected in the samples were below their respective surface water screening levels (SWSLs).

Results of Remedial Investigation

The results of the BOU RI surface water investigation of the Administration Area Drainage System are summarized below. BOU RI surface water sampling locations and Station S-2 are shown in Figure 3.1-10.

Volatile Organic Compounds

A total of 15 primary surface water samples and 2 duplicate samples were collected from the Administration Area Drainage System at 15 locations and analyzed for VOCs. The results of the VOC analysis of surface water samples are d summarized below.

- VOCs were detected in surface water samples at concentrations above the PQL at only two locations (3D-SW04 and 11D-SW01).
- VOCs detected in the surface water sample collected at 3D-SW04 were bromodichloromethane (BDCM) at 1.2 micrograms per liter (µg/L), bromoform at 0.92 µg/L, chloroform at 15 µg/L, and dibromochloromethane (DBCM) at 0.25 µg/L. The detected concentrations of BDCM and chloroform are above their respective SWSLs.
- PCE at 0.21 µg/L was the only VOC detected in the surface water sample collected at 11D-SW01. The detected concentration of PCE is above its SWSL.

Semivolatile Organic Compounds

A total of 15 primary surface water samples and two duplicates were collected from the Administration Area Drainage System at 15 locations during the BOU RI and analyzed for SVOCs.

SVOCs were not detected above their respective PQLs in the surface water samples collected from the Administration Area Drainage System.

Metals

A total of 15 primary surface water samples and 2 duplicate samples were collected from the Administration Area Drainage System at 15 locations during the BOU RI and analyzed for total and dissolved metals. The results of the total and dissolved metals analyses of surface water samples are summarized below. Surface water sampling locations are shown in Figure 3.1-10.

Arsenic, vanadium, and zinc were the only metals detected in surface water samples collected from the Administration Area Drainage System at dissolved concentrations above their respective SWSLs.

Polychlorinated Biphenyls

A total of 12 primary surface water samples and one duplicate were collected from the Administration Area Drainage System at 12 locations during the BOU RI and analyzed for PCBs. The results of the PCB analysis of surface water samples are summarized below. Surface water sampling locations are shown in Figure 3.1-10.

PCBs were not detected above their respective PQLs in the surface water samples collected from the Administration Area Drainage System.

Perchlorate

Three primary surface water samples and one duplicate were collected from the Administration Area Drainage System at three locations (5D-SW02, 9D-SW01, and 12D-SW01) during the BOU RI and analyzed for perchlorate.

Perchlorate was not detected above the PQL of 1 µg/L in the three surface water samples collected from the Administration Area Drainage System.

Total Petroleum Hydrocarbons

A total of 15 primary surface water samples and 2 duplicates were collected from the Administration Area Drainage System at 15 locations during the BOU RI and analyzed for TPH. Surface water sampling locations are shown in Figure 3.1-10.

TPH-D and TPH-Mo were detected in surface water samples collected from the Administration Area Drainage System at three locations and five locations, respectively. Concentrations of TPH-D ranged from 36 to 55 µg/L. TPH-Mo concentrations ranged from 130 to 250 µg/L.

Miscellaneous Compounds

Total cyanide was detected in only one of the three surface water samples collected from the Administration Area Drainage System. Total cyanide, at an estimated concentration of 2.8 µg/L, was detected in surface water sample 9D-SW01. The detected concentration is below the SWSL.

NDMA was not detected in the five surface water samples at concentrations above the PQL.

3.1.5 *Summary of Groundwater Remedial Investigation – Administration Area*

The investigation of groundwater within the Administration Area during the BOU RI focused on the shallowest groundwater, including perched groundwater (Layer Y) and the FWBZ (Layer S). The shallowest groundwater was investigated because releases of chemicals to soil would initially impact these units.

The extent of perched groundwater is relatively limited, and downward head potentials suggest that perched groundwater generally percolates downwards into the FWBZ. Hydraulic gradients indicate that the FWBZ generally flows to the northwest towards Groundwater Extraction and Treatment (GET) D extraction wells located in Area 20 and in Area 49. Area 49 is located east of Area 20 and Nimbus Road.

Chemicals detected in shallow groundwater beneath the Administration Area include VOCs, SVOCs, perchlorate, TPH-D, TPH-Mo, and PCBs. The majority of these compounds appear to be related to historical industrial activities conducted in the Administration Area, although some may be attributable to upgradient source(s). Twenty years of groundwater data show that the concentrations and extents of chemicals

have decreased in the Administration Area groundwater. The decreases are the result of biological degradation and mass removal via extraction of groundwater by GET D.

VOCs, predominantly PCE, TCE, and 1,2-DCE, were the most commonly detected constituents in the perched groundwater and FWBZ. VOCs in perched groundwater and TCE concentrations in the FWBZ are shown in Figures 3.1-11 and 3.1-12, respectively. The highest VOC concentrations were reported in samples collected around and between Buildings 20002 and 20004. Data collected from several monitor wells in the 1980s and 1990s suggested the potential presence of nonaqueous-phase liquid (NAPL) PCE and TCE in groundwater beneath this area. Data collected during the current RI suggest that the extent of NAPL, if present, has diminished over the past 20 years.

In addition to VOCs, perchlorate was detected in the FWBZ, primarily in the western portions of the Administration Area (Figure 3.1-13). Perchlorate in this area appears to be from local and upgradient sources (i.e., the Central Disposal Area). PCBs were reported in perched groundwater and FWBZ near where PCBs were detected in the vadose zone, between Buildings 20002 and 20004, and at Building 20009. TPH-D and TPH-Mo were detected in perched groundwater and FWBZ. The highest TPH concentrations were reported in samples collected around and between Buildings 20002 and 20004.

Currently, chemicals reported in perched groundwater and FWBZ beneath the Administration Area have migrated into lower groundwater layers (Layers C and D), but do not appear to extend off site. A combination of naturally occurring biological degradation, source depletion via operation of the GET D system, and dispersion are limiting the magnitude and extent of chemicals in groundwater beneath the Administration Area.

3.2 SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS - WESTLAKES, LINE 02, LINE 05 NORTH, BUFFALO CREEK, AND OPEN SPACE AREAS 5, 6, AND 7

The Westlakes; Line 02; Line 05 North; Buffalo Creek; and Open Space Areas 5, 6, and 7 (referred to hereafter as the WLLO Area) of the BOU encompass the following six MAs:

- **Line 02 Region:** Includes all of Source Areas 28E, 29E, 59E, E(d), E(e), E(m), E(n), and the DSA; RCRA Units T and Z; and various features such as collection systems, floor drains, sumps, storage areas, septic tanks and leach fields, and a cleaning slab.
- **Line 05 North:** Includes all of Source Areas 51E, 52E, and E[l] in proximity to the northernmost building (05085) in Line 05 and various site features that may have contributed chemicals to soil and/or groundwater.
- **Westlakes:** Includes the Westlakes Storm Water Retention Basins (includes Open Space 6).
- **Western Main Administration Area Ditch and Buffalo Creek:** Includes the western main administration area ditch, the upper (upstream of the Westlakes) and lower (downstream of the Westlakes) sections of Buffalo Creek, and the Buffalo Creek Cutoff.
- **Open Spaces 5 and 7:** Includes non-industrial buffer lands between Line 02 and Line 05 North and west of Line 05 North (Figure 1.0-1).

The Line 02 Region is divided into two investigation units: DSA and the Main Line 02 Area (Figure 3.2-1). Division of the Line 02 Region into the two investigation units was based primarily on topography and surface water flow. The DSA and Main Line 02 Area are separated by a paved road that runs north-south between the two areas. Details concerning the scope and results of the RI for those two areas are presented in Section 5.0 of the RI Report (Volume 1). The environmental setting for the Line 02 Region (DSA and Main Line 02 Area) and the scope and results of the RI are summarized below.

3.2.1 Summary of Environmental Setting and Remedial Investigations – Line 02

3.2.1.1 Environmental Setting – Line 02 Region

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Line 02 Region, including the DSA and Main Line 02 Area, are described in the following subsections.

<u>Topography</u>

The topography of the Main Line 02 Area consists of a relatively flat top with a gentle to relatively moderate slope towards the north, northwest,

and northeast. Elevations in the Line 02 Area range from approximately 175 to 150 feet above mean sea level (amsl).

In the DSA, the topography abruptly changes from relatively flat in the south-central portion to gentle to moderate slopes to the north and west towards a former channel of Buffalo Creek. The former channel of Buffalo Creek was isolated as a result of the construction of the Westlakes and is referred to in this report as the Buffalo Creek Cutoff.

Geology

Based on the descriptions from borehole logs for perched and unconfined groundwater wells and borings, the lithologies underlying the Line 02 Area are comprised of native, undisturbed (undredged) interbedded layers of relatively permeable and relatively lower permeability sediments. Relatively permeable layers are made up of silty, poorly and well-graded sands and gravels; and silty and clayey gravels and silts. Relatively lower permeability sediment layers consist of low plasticity clays and silts, and silty and clayey sands. The interbedded sediments of the terrace beneath Line 02 is flanked on the south by an area of dredge tailings that indicates a fairly abrupt change in the geology from finer-grained materials to interbedded gravels, sand, silt, and clays. Reviews of aerial photographs indicate that an east-west trending slickens area at or near the contact between the dredged and undredged areas may have been used in construction of the Main Administration Ditch. .

Soils

Large areas of the Line 02 Area have been graded and covered by impervious surfaces or structures, such as roads, driveways, sidewalks, buildings, and parking lots. The Line 02 Area is situated along an ancestral American River terrace and soils consist primarily of the Redding-Corning-Red Bluff complex. As described in the 1993 United State Department of Agriculture (USDA - Natural Resources Conservation Service [USDA – NRCS], 1993) Soil Conservation Service, Soil Survey of Sacramento County, the Redding-Corning-Red Bluff complex consists of moderately well-drained soils that are moderately deep over a cemented hard pan. This soil unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. The Redding soils are typically a surface layer of gravelly loam with subsoil comprised of a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-

Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam.

Surface Water Hydrology

Local surface water features within or adjacent to the Line 02 Area are the Main Administration Area Ditch and the Buffalo Creek Cutoff. Storm water runoff originating in the DSA flows west into the Buffalo Creek Cutoff or accumulates in a low-lying area to the south within the Buffalo Creek drainage area. Storm water runoff originating in the Main Line 02 Area either flows towards the north where it accumulates in a low area immediately south of the Main Administration Area Ditch or into a man-made ditch that discharges into the Main Administration Area Ditch. Water in the Buffalo Creek Cutoff and the Main Administration Area Ditch are directed into the Westlakes where it is allowed to infiltrate or, when the Westlakes become full, is discharged to Lower Buffalo Creek and ultimately discharged to the American River. Storm water discharges to Buffalo Creek/American River are regulated through the NPDES (California Regional Water Quality Control Board [RWQCB], 2002).

Local Hydrogeology

The first saturated sediments encountered beneath the Line 02 Region are either part of Perched Groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the Westlakes/Line 02 Region.

Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Line 02 Region is discussed below. Details regarding the occurrence of groundwater within the Line 02 Region and the distribution of chemicals in the groundwater are presented in Section 5.7 of the RI Report (Volume 1). Note that an evaluation of the potential discharge of groundwater to surface water within the BOU was performed and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

Perched Groundwater is the shallowest saturated unit and was encountered in the Line 02 Area during the BOU RI at depths of 43 to 45 feet bgs (123 to 129 feet amsl) in the undredged sediments beneath the western portion of Line 02. Perched Groundwater beneath the Line 02 Area and throughout the Westlakes/Line 02 Area is discontinuous and lateral hydraulic gradients were not evaluated.

First Water-Bearing Zone (Layer S)

The FWBZ occurs within sands and gravels (with variable amounts of silt) ranging from approximately 20- to 60-feet thick. These sands and gravels comprise the upper portion of Layer C of the Sitewide Hydrostratigraphic Model.

The depth to the top of the FWBZ increases from east to west across the Westlakes/Line 02 Area. The FWBZ is shallowest (34 feet bgs) to the east of Line 02, increasing to approximately 76 feet bgs in the Line 05 North Area.

The highest water levels in the FWBZ were recorded when measurements began in 1983. Since that time, the water level elevations in most FWBZ wells have declined by up to approximately 30 feet. The highest rates of decline (approximately 5 feet per year) were observed from 1983 through 1989. Water level elevations were relatively stable in most wells from 1991 through 2006, with typical water level elevation increases and decreases of approximately 5 feet. Seasonal water level elevation fluctuations of up to 42 feet were observed, although seasonal fluctuations of 5 to 10 feet were more common. Wells located near the Westlakes storm water retention cells exhibited the highest seasonal fluctuations.

The hydraulic gradient for the FWBZ was evaluated based on a single water level data set collected in April 2006. This data set available was selected because it included water level measurements from the new monitor wells installed during the BOU RI, as well as from existing monitoring wells.

The overall direction of the hydraulic gradient for the FWBZ is from east to west. The gradient deviates beneath Line 02 where the hydraulic gradient trends more to the northwest. This apparent deviation is nearly coincident with the contact between the dredged and non-dredged areas. Downgradient of Line 02 and throughout the Line 05 and Westlakes areas,

the direction of the hydraulic gradient is west. The magnitude of the hydraulic gradient across the Line 02/Westlakes Area averages approximately 0.01 feet per foot (ft/ft).

Potential vertical hydraulic gradients between Perched Groundwater and the FWBZ have not been calculated, but Perched Groundwater ranges from approximately 20 to 50 feet higher in elevation than the FWBZ, suggesting a strong potential for downward vertical migration of Perched Groundwater to the FWBZ.

Ecological Habitat

The Line 02 Area is primarily comprised of paved and ruderal/disturbed habitats with buildings. Vegetation communities west of the disturbed area of Line 02 consist mainly of annual grassland with areas of oak woodland, Fremont cottonwood-oak woodland along the current and former Buffalo Creek drainage area, and some patches of coyote brush scrub and willow scrub. Vegetation communities north of Line 02/ Area 00 consist of annual grassland changing to oak woodland and valley foothill riparian along Buffalo Creek.

Typical flora in the Main Line 02 Region includes herbaceous weeds, non-native naturalized Mediterranean grasses, trees including oaks and cottonwood, woody shrubs, and various riparian plants. Typical fauna in the vegetation communities includes various raptors, wild turkey, northern flicker, yellow-rumped warbler, Bullock's oriole, savannah sparrow, western meadowlark, song sparrow, black-headed grosbeak, Acorn woodpecker, Nuttal's woodpecker, western scrub jay, yellow-billed magpie, oak titmouse, white-breasted nuthatch, western bluebird, American robin, Phainopepla, lark sparrow, western fence lizard, southern alligator lizard, Gilbert's skink, slender salamander, Pacific gopher snake, racer, sharp-tailed snake, common kingsnake, Pacific treefrog, black-tailed deer, coyote, deer mouse, California vole, and California ground squirrel. Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), were observed primarily in the southern portion of Line 02 near the Main Administration Ditch and along Buffalo Creek. A *Biological Assessment Report* (ECORP Consulting, Inc., 2005) for the BOU was presented as Appendix B in the BOU FSP (Aerojet and others, 2006).

3.2.1.2 *Summary of Scope and Results of Remedial Investigations – Line 02 Region*

To simplify the discussions and presentation of data, the Line 02 Region has been divided into two areas that encompass source sites and other investigated features that are related, are in proximity to one another, or appear to be linked based on the presence of similar chemicals in soil and/or groundwater. The two investigation areas in the Line 02 Region are described below and shown in Figure 3.2-1:

- **Drum Storage Area –** Includes all of Source Areas 28E, 59E, and DSA; RCRA Unit Z; and various features such as collection systems, floor drains, sumps, storage areas, and a cleaning slab associated with the drum cleaning activities in the DSA. The DSA also includes various other features, including a septic tank and leach field, identified during the previous (pre-2005) and current investigations.
- **Main Line 02 Area –** Includes all of Source Areas 29E, E(d), E(e), E(m), and E(n); RCRA Unit T; and various features such as collection systems, drainage ditches, sumps, storage areas, and tanks. The Main Line 02 Area also includes various other features, including septic tanks and leach fields, identified during the previous (pre-2005) and current investigations.

<u>Summary of Scope and Results of Remedial Investigations – Drum Storage Area</u>

The DSA consists of Source Areas 28E, 59E, and DSA located in and around the former location of a drum storage and cleaning facility (Figure 3.2-1). The DSA also includes various features such as sumps, drains, ponds, concrete slabs, and septic tanks associated with the source areas and/or historical drum cleaning process.

The scope and results of RIs conducted in the DSA are summarized below.

Scope of Remedial Investigations

- **1984 – 1993:** Soil samples from 10 soil borings and 20 soil vapor samples were collected in the vicinity of Source Areas 28E, 59E, and DSA within the DSA. Soil vapor samples were analyzed for VOCs. Soil samples were analyzed for VOCs, SVOCs, perchlorate, and/or metals.
- **BOU RI (2005 to 2007):** 75 primary and 10 duplicate soil vapor samples, 16 primary and two duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 61 primary and 3 duplicate subsurface

(2.6 to 63 feet bgs) soil samples were collected from the three source areas within the DSA.

Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), TPH-D, TPH-Mo), perchlorate, NDMA, TOC, CEC, and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), TPH-D, TPH-Mo, perchlorate, NDMA, TOC, CEC, and/or geotechnical parameters.

Results of Remedial Investigations

The results of the BOU RI of the source areas within the DSA are summarized below. Soil vapor, surface soil, and subsurface soil sampling locations are shown in Figures 3.2-2, 3.2-3, and 3.2-4, respectively.

Volatile Organic Compounds

A total of 75 primary soil vapor samples were collected at Source Areas 28E, 59E, and DSA within the DSA and analyzed for VOCs, including TICs. The number of primary soil samples and sampling locations are summarized on the table below.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
28E	Shallow (0-10)	1	1
	Intermediate (11-20)	1	1
	Deep (21-30)	1	1
	Very Deep (>30)	1	1
59E	Shallow (0-10)	2	2
	Intermediate (11-20)	2	2
	Deep (21-30)	0	0
DSA	Shallow (0-10)	29	29
	Intermediate (11-20)	28	28
	Deep (21-30)	7	7
	Very Deep (>30)	3	3

Benzene, chloroform, cis-1,2-DCE,, PCE and TCE were the only VOCs detected in the vadose zone within the DSA at concentrations above their soil vapor RISLS. The location and depth of soil vapor samples containing concentrations of those VOCs above their respective RISLs are presented on the table below. BOU RI soil vapor sampling locations within the DSA are shown in Figure 3.2-2.

Depth Interval (ft bgs))	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	Benzene	DSA-SP13	84	130
	Chloroform	DSA-SP08	83	210
		DSA-SP09		990
		DSA-SP16		270
	cis-1,2-DCE	28E-SP16	3,650	55,000
	PCE	28E-SP16	320	800,000
		59E-SP09		950
	TCE	28E-SP16	961	10,000,000
		59E-SP09		5,900
		DSA-SP04		2,700
		DSA-SP05		6,700
		DSA-SP07		2,200
		DSA-SP17		2,400
		DSA-SP20		3,000
Intermediate (11 to 20)	Benzene	DSA-SP10	84	110
		DSA-SP18		170
		DSA-SP20		190
		DSA-SP26		280
		DSA-SP32		290
	Carbon Tet	DSA-SP04	58	180
	Chloroform	DSA-SP04	83	470
		DSA-SP08		530
		DSA-SP10		96
		DSA-SP12		180
		DSA-SP16		1,200
		DSA-SP20		99
	PCE	28E-SP16	320	97,000
	TCE	28E-SP16	961	3,200,000
		DSA-SP04		98,000
		DSA-SP05		4,700
		DSA-SP09		2,100
		DSA-SP10		2,000
		DSA-SP16		2,300
		DSA-SP17		1,300
		DSA-SP20		24,000
		DSA-SP27		2,300
Deep (21 to 30)	Benzene	DSA-SP24	84	140
	Carbon Tet	DSA-SP04	58	320
		DSA-SP10		78
	Chloroform	28E-SP16	83	310
		DSA-SP04		770
		DSA-SP10		160
		DSA-SP16		1,400
		DSA-SP17		150
		DSA-SP24		110
	1,2-DCA	28E-SP16	73.9	190

Depth Interval (ft bgs))	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
	PCE	28E-SP16	320	2,200
		DSA-SP04		1,400
	TCE	28E-SP16	961	430,000
		DSA-SP04		160,000
		DSA-SP10		7,700
		DSA-SP16		1,900
		DSA-SP23		1,200
		DSA-SP24		1,700
Very Deep (>30)	Carbon Tet	DSA-SP04	58	250
	Chloroform	28E-SP16	83	510
		DSA-SP04		580
		DSA-SP10		85
		DSA-SP16		1,600
	PCE	28E-SP16	320	13,000
		DSA-SP04		1,200
	TCE	28E-SP16	961	430,000
		DSA-SP04		130,000
		DSA-SP10		2,900
		DSA-SP16		3,500

- TCE was the predominant VOC detected in the vadose zone within the DSA. The highest TCE concentrations (up to 10,000,000 µg/m³) in shallow, intermediate, and deep soil vapor were detected at location 28E-SP16, which is immediately adjacent to the former location of the concrete-lined and unlined sump and ponds comprising Source Area 28E.
- TCE concentrations in soil vapor in the shallow, intermediate, and deep layers radiate laterally outward from the former location of the sump and ponds at Source Area 28E. Concentrations of TCE in soil vapor above its RISL originating from Source Area 28E has migrated towards the east and commingled with TCE and other VOCs originating from source areas within the Main Line 02 Area. The presence of thick brush and trees prohibited completion of the lateral extent of TCE in soil vapor north of the ponds at Source Area 28E. In general, the lateral extent of TCE concentrations in soil vapor above its RISL appears to increase with depth, with increased commingling and expansion in the intermediate and deep intervals, encompassing an area of roughly 40 acres within the Line 02 Region.
- TCE was detected at concentrations above its 1 percent vapor saturation concentration (4,877,690 µg/m³) and potentially indicative of the presence of residual product in the shallow interval at only one location (28E-SP16) at Source Area 28E.

- Chloroform was the second most predominant and widely distributed VOC in soil vapor within the DSA at concentrations above its RISL. The highest chloroform concentrations (up to 1,600 µg/m^3) were detected in the deep soil vapor interval at location 28E-SP16 immediately adjacent to the former location of the concrete-lined and unlined sump and ponds (Source Area 28E). The maximum concentration of chloroform is less than 1 percent of its vapor saturation concentrations and, therefore, not indicative of the presence of NAPL.

Metals

A total of 48 primary and four duplicate soil samples were collected at Source Areas 28E, 59E, and DSA in the DSA during the BOU RI and analyzed for metals, including mercury. Additionally, three samples were also analyzed for hexavalent chromium. The number of primary soil samples and sampling locations at Source Areas 28E, 59E, and DSA are summarized on the table below. Surface and subsurface soil sampling locations at Source Areas 28E, 59E, and DSA are shown in Figures 3.2-3 and 3.2-4, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
28E	Metals	3	3	6	3	8	2
	Mercury	3	3	6	3	8	2
	Hex Chrome	0	0	0	0	0	0
59E	Metals	3	3	6	3	2	1
	Mercury	3	3	6	3	2	1
	Hex Chrome	0	0	0	0	0	0
DSA	Metals	5	5	10	5	5	1
	Mercury	5	5	10	5	5	1
	Hex Chrome	0	0	0	0	0	0

Aluminum, manganese, and thallium were the only metals detected in soil at the source areas within the DSA at concentrations above background and their respective RISLs. As indicated in the table below, concentrations of those metals above their RISLs were detected only in soil samples collected at depths greater than 10 feet bgs.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
28E-SB02	35	Thallium	5.0	5.1
		Manganese	1,762	1,800
59E-SB03	11	Aluminum	76,140	79,000
DSA-SB01	33	Manganese	1,762	2,100
	43	Manganese	1,762	5,000

Semivolatile Organic Compounds

A total of 46 primary and 5 duplicate soil samples were collected at Source Areas 28E, 59E, and DSA in the DSA during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations at Source Areas 28E, 59E, and DSA for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
28E	SVOCs	4	4	4	2	8	2
59E	SVOCs	3	3	6	3	2	1
DSA	SVOCs	5	5	9	5	5	1

SVOCs were not detected in the surface, near-surface, and subsurface soil samples collected at the source areas within the DSA at concentrations above their respective RISLs.

Perchlorate

A total of 72 primary and five duplicate soil samples were collected in Source Areas 28E, 59E, and DSA within the DSA during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at Source Areas 28E, 59E, and DSA for perchlorate are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
28E	Perchlorate	7	7	14	7	24	6
59E	Perchlorate	3	3	6	3	2	1
DSA	Perchlorate	4	4	7	4	5	1

Perchlorate was detected at a concentration above the RISL in only one soil sample collected at one location in Source Area 28E. Perchlorate at 10,000 µg/kg was detected in a soil sample collected at a depth of 40 feet bgs from boring 28E-SB07 (Figure 3.2-4). Perchlorate was also detected in soil samples collected at 20, 30, and 50 feet bgs from boring 28E-SB07, but at concentrations well below its RISL of 7,800 µg/kg.

Total Petroleum Hydrocarbons

A total of 44 primary and four duplicate soil samples were collected at Source Areas 28E, 59E, and DSA within the DSA during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of primary soil samples and sampling locations at Source Areas 28E, 59E, and DSA are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
28E	TPH-D	3	3	4	2	8	2
	TPH-MO	3	3	4	2	8	2
59E	TPH-D	3	3	6	3	2	1
	TPH-MO	3	3	6	3	2	1
DSA	TPH-D	5	5	8	4	5	1
	TPH-MO	5	5	8	4	5	1

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). TPH-D and TPH-MO were not detected above their respective PGW SSLs in soil samples collected from Source Areas 28E, 59E, and DSA. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Compounds

Analysis for NDMA was performed on soil samples collected from the source areas (28E, 59E, and DSA) within the DSA during the BOU RI. The number of primary surface/near-surface and subsurface soil samples collected at each source area for NDMA and the number of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
28E	NDMA	0	0	0	0	0	0
59E	NDMA	3	3	6	3	2	1

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
DSA	NDMA	4	4	7	4	5	1

NDMA was not detected at concentrations above its RISL in surface, near-surface, or subsurface soil samples collected from Source Areas 28E, 59E, and DSA in the DSA.

Summary of Scope and Results of Remedial Investigations – Main Line 02 Area

The scope and results of RIs conducted in the Main Line 02 Area are summarized below.

Scope of Remedial Investigations

- ***1984 to 2002:*** Soil samples from 5 soil borings and 12 soil vapor samples were collected in the vicinity of Source Areas 29E, E(d), E(e), E(m), and E(n). Soil vapor samples were analyzed for VOCs. Soil samples were analyzed for VOCs, SVOCs, perchlorate, PCBs, TPH, pesticides, and/or metals.
- ***BOU RI (2005 to 2007):*** Fifty-three primary and 6 duplicate soil vapor samples, 54 primary and 8 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 51 primary subsurface (2.6 to 50 feet bgs) soil samples were collected within the Main Line 02 Area at depths ranging from 10 to 40 feet bgs.

  Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), PCBs, perchlorate, TPH-D, TPH-Mo, NDMA, pesticides, pH, TOC, CEC, and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), PCBs, perchlorate, TPH-D, TPH-Mo, NDMA, pesticides, pH, TOC, CEC, and/or geotechnical parameters.

Results of Remedial Investigations

The results of the BOU RI of the source areas within the Main Line 02 Area are summarized below. Soil vapor, surface soil, and subsurface soil sampling locations are shown in Figures 3.2-2, 3.2-3, and 3.2-4, respectively.

Volatile Organic Compounds

A total of 53 primary soil vapor samples were collected at Source Area 29E, E(d), E(e), E(m), and E(n) in the Main Line 02 Area and analyzed for VOCs, including TICs. The number of primary soil vapor samples and sampling locations are summarized on the table below.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
29E	Shallow (0-10)	6	6
	Intermediate (11-20)	6	6
	Deep (21-30)	2	2
	Very Deep (>30)	2	2
E(d)	Shallow (0-10)	2	2
	Intermediate (11-20)	1	1
	Deep (21-30)	0	0
	Very Deep (>30)	0	0
E(m)	Shallow (0-10)	6	6
	Intermediate (11-20)	8	8
	Deep (21-30)	0	0
	Very Deep (>30)	0	0
E(n)	Shallow (0-10)	8	8
	Intermediate (11-20)	8	8
	Deep (21-30)	1	1
	Very Deep (>30)	1	1

Benzene, carbon tetrachloride (Carbon Tet), chloroform, PCE, and TCE were the only VOCs detected in soil vapor samples collected at Source Area 29E, E(d), E(e), E(m), and E(n) in the Main Line 02 Area at concentrations above their respective RISLs. The location and depth of soil vapor samples containing concentrations of those VOCs above their respective RISLs are presented on the table below. BOU RI soil vapor sampling locations within the Main Line 02 Area are shown in Figure 3.2-2.

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	Carbon Tet	29E-SP09	58	2,200
	Chloroform	29E-SP09	83	990
	PCE	E(m)-SP10	320	560
		E(n)-SP04		530
		E(n)-SP05		850
	TCE	29E-SP09	961	18,000
Intermediate (11 to 20)	Benzene	DSA-SP10	84	110
		L2-ST26-SP05		120

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
	Carbon Tet	29E-SP09	58	7,000
		29E-SP10		100
		E(m)-SP10		62
	Chloroform	29E-SP09	83	2,400
		29E-SP11		120
		E(n)-SP08		210
		E(n)-SP09		540
	PCE	29E-SP07	320	770
		29E-SP08		1,600
		E(m)-SP10		7,100
		E(n)-SP05		2,200
		L2-ST26-SP05		360
		L2-ST26-SP06		330
	TCE	29E-SP07	961	8,900
		29E-SP08		62,000
		29E-SP09		64,000
		29E-SP11		15,000
		E(m)-SP10		1,100
		E(n)-SP05		1,700
Deep (21 to 30)	Carbon Tet	29E-SP09	58	280
	Chloroform	29E-SP09	83	210
		E(n)-SP11		190
	PCE	29E-SP08	320	2,500
		29E-SP09		1,400
	TCE	29E-SP08	961	44,000
		29E-SP09		23,000
Very Deep (>30)	Carbon Tet	29E-SP09	58	410
		E(n)-SP05		77
	Chloroform	29E-SP09	83	260
	PCE	29E-SP08	320	3,300
		29E-SP09		840
		E(n)-SP05		21,000
	TCE	29E-SP08	961	46,000
		29E-SP09		18,000
		E(n)-SP05		2,600

- TCE was the predominant VOC detected in the vadose zone within the Main Line 02 Area. The highest concentrations of TCE (up to 64,000 µg/m³) in the shallow (0 to 10 feet bgs), intermediate (11 to 20 feet bgs), and deep (21 to 30 feet bgs) soil vapor intervals were detected adjacent to a former concrete sump at the northeast corner of Building 02024. TCE concentrations detected in soil vapor within this area were less than 1 percent of its vapor saturation concentration (4,877,690 µg/m³) and, therefore, not indicative of the potential presence of residual product. The data indicate that the presence of TCE in soil vapor within the Main Line 02 Area is likely attributed to

discharges of diluted concentrations of VOCs to the former concrete sump at Building 02024.

- TCE was detected above its RISL in the shallow (3,000 µg/m^3) and intermediate (24,000 µg/m^3) soil vapor intervals at DSA-SP20, along the ditch north of Building 00022.
- TCE concentrations originating from the former concrete sump at Building 02024, Source Area 28E in the DSA, and the likely source within Area 00 have commingled and expanded to encompass an area of roughly 40 acres within the Line 02 Region.
- PCE was detected at concentrations above its RISL in the shallow (0 to 10 feet bgs), intermediate (11 to 20 feet bgs), and/or deep (21 to 30 feet bgs) soil vapor intervals near the former unlined pond and concrete-lined trough at Source Area 29E and the area of former Buildings 02025 and 02027. The presence of PCE in the vadose zone in the area of Buildings 02025 and 02027 appears to be associated with the former septic systems [Source Areas E(m) and E(n)] for those buildings.

Metals

A total of 88 primary and 7 duplicate soil samples were collected at Source Areas 29E, E(d), E(e), E(m), and E(n) in the Main Line 02 Area during the BOU RI and analyzed for metals. Eighty-one of the 88 primary samples and two of the seven duplicate soil samples were also analyzed for mercury and three of the 88 primary samples were analyzed for hexavalent chromium. The number of primary soil samples and sampling locations at Source Areas 29E, E(d), E(e), E(m), and E(n) are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29E	Metals	17	15	14	7	2	1
	Mercury	14	12	10	7	2	1
	Hex Chrome	2	2	0	0	0	0
E(d)	Metals	6	3	0	0	0	0
	Mercury	6	3	0	0	0	0
	Hex Chrome	0	0	0	0	0	0
E(e)	Metals	5	3	2	1	2	1
	Mercury	5	3	2	1	2	1
	Hex Chrome	0	0	0	0	0	0
E(m)	Metals	8	6	10	6	2	1
	Mercury	8	6	10	6	2	1
	Hex Chrome	0	0	0	0	0	0

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
E(n)	Metals	11	7	7	4	2	1
	Mercury	11	7	7	4	2	1
	Hex Chrome	0	0	0	0	0	0

Cadmium, manganese, and thallium were the only metals detected in soil samples collected at the source areas within the Main Line 02 Area above background and their respective RISLs. The location and depth of samples containing those metals at concentrations above their RISLs are provided on the table below. BOU RI surface and subsurface soil sampling locations within the Main Line 02 Area are shown in Figures 3.2-3 and 3.2-4, respectively.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Conc. (mg/kg)	> RISL
E(n)-SNS01	0.5	Cadmium	1.7	3.3	Y
E(e)-SB02	22	Manganese	1,762	4,900	Y
		Thallium	5.0	5.1	Y

Semivolatile Organic Compounds

A total of 84 primary and 7 duplicate soil samples were collected in Source Areas 29E, E(d), E(e), E(m), and E(n) in the Main Line 02 Area during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations at Source Areas 29E, E(d), E(e), E(m), and E(n) for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29E	SVOCs	13	11	12	6	2	1
E(d)	SVOCs	6	3	0	0	0	0
E(e)	SVOCs	5	3	2	1	2	1
E(m)	SVOCs	14	9	10	6	2	1
E(n)	SVOCs	11	7	3	2	2	1

Benzo(b&k)fluoranthene [B(b&k)F] and benzo(a)pyrene [B(a)P] were the only SVOCs detected above their RISLs in soil samples collected in the source areas within the Main Line 02 Area. The location and depth of samples containing those compounds at concentrations above their RISLs

are provided on the table below. Surface and subsurface soil sampling locations within the Main Line 02 Area are shown in Figures 3.2-3 and 3.2-4, respectively.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
E(d)-SNS01	0.5	Benzo(b&k)fluoranthene	38	88
L2-ST26-SB01	2.0	Benzo(a)pyrene	38	320
		Benzo(b&k)fluoranthene	38	740
L2-ST26-SNS02	0.5	Benzo(a)pyrene	38	55

Polychlorinated Biphenyls

Three primary soil samples were collected one location [E(m)-SD01] at Source Area E(m) during the BOU RI and analyzed for PCBs (Figures 3.2-3 and 3.2-4).

PCBs were not detected above their respective RISLs in the two surface and/or near-surface soil samples collected at E(m)-SD01.

Perchlorate

A total of 80 primary and 6 duplicate soil samples were collected at Source Areas 29E, E(d), E(e), E(m), and E(n) in the Main Line 02 Area during the BOU RI and analyzed for perchlorate. The number of sampling locations and primary soil samples analyzed for perchlorate at Source Areas 29E, E(d), E(e), E(m), and E(n) are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29E	Perchlorate	12	10	5	3	2	1
E(d)	Perchlorate	6	3	1	1	3	1
E(e)	Perchlorate	6	4	4	2	6	2
E(m)	Perchlorate	8	6	9	6	2	1
E(n)	Perchlorate	11	7	3	2	2	1

Perchlorate was not detected at concentrations above its RISL of 7,800 µg/kg in any of the surface, near-surface, or subsurface soil samples collected at the source areas within the Main Line 02 Area.

Total Petroleum Hydrocarbons

A total of 54 primary and 5 duplicate soil samples were collected at Source Areas 29E, E(d), E(e), E(m), and E(n) in the Main Line 02 Area during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of sampling locations and primary soil samples analyzed for TPH at Source Areas 29E, E(d), E(e), E(m), and E(n) in the Main Line 02 Area are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29E	TPH-D	13	11	12	6	2	1
	TPH-MO	13	11	12	6	2	1
E(d)	TPH-D	6	3	0	0	0	0
	TPH-MO	6	3	0	0	0	0
E(e)	TPH-D	5	3	2	1	2	1
	TPH-MO	5	3	2	1	2	1
E(m)	TPH-D	2	1	1	1	0	0
	TPH-MO	2	1	1	1	0	0
E(n)	TPH-D	8	4	1	1	0	0
	TPH-MO	8	4	1	1	0	0

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). The maximum concentrations of TPH-D and TPH-MO detected in soil samples collected from the Main Line 2 area were 370 mg/Kg and 1,200 mg/Kg, respectively. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected from Source Areas 29E, E(d), E(e), E(m), and E(n) within the Main Line 02 Area were NDMA, pesticides, and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area for those compounds and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29E	NDMA	13	11	5	3	2	1
E(d)	NDMA	0	0	0	0	0	0
	pH	0	0	0	0	0	0
E(e)	NDMA	0	0	0	0	0	0

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
	Pesticides	2	1	1	1	0	0
	pH	0	0	0	0	0	0
E(m)	NDMA	0	0	0	0	0	0
	pH	4	2	2	2	0	0
E(n)	NDMA	6	3	0	0	0	0
	pH	2	1	1	1	0	0

NDMA and pesticides were not detected at concentrations above their respective RISLs. The pH of the soil was generally within the normal range (5 to 9) for mineral soils (Brady, 1974).

3.2.2 *Summary of Environmental Setting and Remedial Investigations – Line 05 North*

The Line 05 North Area encompasses three source areas [Source Areas 51E, 52E, and E(l)] and various other features including sumps, a possible missile test stand, test cells and associated blast areas, a material storage area, and drains associated with former activities conducted at Building 05087 (Figure 3.2-5). Building 05087 is identified as a former engineering test laboratory where solid propellants, liner materials, trichloroethane (TCA), and TCE were handled.

Details concerning the scope and results of the RI for the Line 05 North Area are presented in Section 5.2 of the RI Report (Volume 1). The environmental setting for the Line 05 North Area and the scope and results of the RI are summarized below.

3.2.2.1 *Environmental Setting – Line 05 North Area*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Line 05 North Area are described below.

Topography

With the exception of approximately 20-feet-high earth revetments around Building 05087, the Line 05 North Area is relatively flat with a gentle, one degree dip that directs surface runoff to the northwest. A low-lying area identified as Source Area E(l) is located west of Building 05087 and a drainage ditch is located in the northeast portion of the Line 05 North

Area. Surface elevations in the Line 05 North Area range from 167 feet amsl in the east to 151 feet amsl in the west.

Geology

The surface and near-surface lithologies in the Line 05 North Area are comprised of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay to a depth of approximately 20 feet. Historical information indicates that a smaller dredger performed the dredging in the vicinity of the Line 05 North Area, which accounts for the dredging depth of approximately 20 feet compared to up to 90 feet elsewhere on the site. The Line 05 North Area has been graded and paved, but a review of historical photographs show that the area is surrounded by dredge tailings. The photographs also show that the dredge furrows are truncated by the grading in the Line 05 North Area, indicating the high likelihood that Line 05 North is in a dredged area. Additionally, subsurface lithologies described in well logs and most of the borehole logs are consistent with those observed in dredged areas. Native soils below the dredge tailings generally consist of fluvial deposits of sand and silt.

Soils

Soils in the Line 05 North Area consist primarily of Xerorthents that were graded for construction of Building 05087 and associated features. Xerorthents are very deep, somewhat excessively drained and excessively drained soils associated with dredge tailings. They are formed in material that has a high content of gravel and cobbles derived from mixed sources. The material was deposited as tailings after most of the fine-earth material was washed from it and removed during gold dredging activities. Slopes are short, complex, and disturbed (USDA – NRCS, 1993).

Surface Water Hydrology

Local surface water features within the Line 05 North Area consist of a drainage ditch and low-lying areas (Figure 3.2-5). The low-lying area west of Building 05087 is identified as Source Area E(l) and collects storm water runoff from the western portion of the Line 05 North Area. A ditch in the northeast portion of the Line 05 North Area conveys seasonal storm water runoff from the area surrounding Building 05087 to the upper portion of Buffalo Creek to the north. Upper Buffalo Creek discharges to the Westlakes Storm Water Retention Ponds.

Local Hydrogeology

The first saturated sediments encountered beneath the Line 05 North Area are either part of Perched Groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the WLLO Area, including Line 05 North. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Line 05 North Area is discussed below. Details regarding the occurrence of groundwater within the Line 05 North Area and distribution of chemicals in the groundwater are presented in Section 5.7 of the RI (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

Perched Groundwater is the shallowest saturated unit and typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities. Dredging activities disturbed the natural stratigraphy and the resulting spoils were deposited as unconsolidated and somewhat stratified sediments. As a result, the dredged materials are very permeable and are underlain by sediments that are typically less permeable. The base of Perched Groundwater often coincides with the interface between dredged and undredged materials.

Perched Groundwater was frequently encountered throughout the Line 05 North Area during the BOU RI at depths ranging from 9 to 20 feet bgs, with a median depth of 15.5 feet bgs. Based on similar water level elevations and the relatively uniform hydraulic gradient within Line 05 North, Perched Groundwater in the Line 05 North Area appears to be hydraulically connected. The direction of flow in the Perched Groundwater beneath the Line 05 North Area is variable and the hydraulic gradient ranges from approximately 0.0057 to 0.0278 ft/ft. The base of Perched Groundwater ranges from approximately 22 to 41 feet above the top of the FWBZ.

First Water-Bearing Zone (Layer S)

The FWBZ was encountered in three of four boreholes drilled in the Line 05 North Area during the BOU RI at depths ranging from 42 to 50 feet bgs. Depth to the FWBZ typically increased from east to west across the Line 05 North Area and flow direction in the FWBZ is primarily towards the west with an average gradient of approximately 0.01 ft/ft.

Ecological Habitat

The Line 05 North Area is comprised of paved and ruderal/disturbed habitat surrounded primarily by dredger tailings with some patches of oak woodland, Fremont cottonwood-oak woodland, and willow scrub.

Typical flora within the dredger tailings consists primarily of non-native grasses and other weedy species, such as Italian thistle and yellow star-thistle. Typical flora within the other vegetative communities include blue oak, valley oak, interior live oak, Fremont cottonwood, poison oak, hoary coffeeberry, California buckeye, wild oak, ripgut brome, hedgehog dog-tail grass, bedstraw, soap plant, and lupine. Fauna commonly encountered within the communities include various raptors, songbirds, Pacific treefrog, southern alligator lizard, mountain garter snake, western rattlesnake, wild turkey, Northern Flicker, Nuttall's woodpecker, California vole, deer mouse, western gray squirrel, raccoon, dusky-footed woodrat, desert cottontail, Botta pocket gopher, coyote, and black-tailed deer. Fauna are not common in the dredger tailings due in part to the cobble-boulder substrate and sparse vegetation cover. Blue elderberry shrubs, potential habitat for the valley elderberry longhorn beetle (*desmocerus californicus dimorphus*) are also scattered throughout the area surrounding Line 05 North.

A *Biological Assessment Report* (ECORP Consulting, Inc., 2005), including a habitat and vegetation map for the Line 05 North Area, was presented in Appendix B of the BOU FSP.

3.2.2.2 *Summary of Scope and Results of Remedial Investigations - Line 05 North Area*

The scope and results of the RI for the Line 05 North Area are summarized below. Details concerning the scope and results of the RI for the Line 05 North Area are presented in Section 5.2 of the RI Report (Volume 1).

Scope of Remedial Investigations

- ***1984 – 1993:*** Soil samples were collected from four soil borings and seven soil vapor samples were collected at seven locations in the vicinity of Source Areas 51E and 52E between 1984 and 1993. No soil or soil vapor samples were collected in the vicinity of Source Area E(l). The soil samples were analyzed for VOCs, SVOCs, perchlorate, and/or selected metals.
- ***BOU RI (2005 to 2007):*** Twenty-nine primary and 7 duplicate soil vapor samples, 24 primary and 5 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 50 primary and 8 duplicate subsurface (3.75 to 62 feet bgs) soil samples were collected within the Line 05 North Area.

  Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), perchlorate, TPH-D, TPH-Mo, total cyanide, NDMA, nitroguanidine, CEC, pH and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals (including hexavalent chromium), perchlorate, TPH-D, TPH-Mo, NDMA, nitroguanidine, TOC, CEC, pH, DI-WET, and/or geotechnical parameters.

Results of Remedial Investigations

The results of the RI of the Line 05 North Area are summarized below. Soil vapor, surface soil, and subsurface soil sampling locations are shown in Figures 3.2-6, 3.2-7, and 3.2-8, respectively.

Volatile Organic Compounds

A total of 29 primary soil vapor samples were collected at Source Areas 51E and 52E and other site features in the Line 05 North Area during the BOU RI and analyzed for VOCs. The number of primary soil vapor samples analyzed for VOCs and sampling locations at Source Areas 51E and 52E are summarized on the table below.

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
51E	Shallow (0-10)	1	1
	Intermediate (11-20)	1	1
	Deep (21-30)	0	0
52E	Shallow (0-10)	21	21

Source Area	Interval and Depth (ft bgs)	No. of Primary Samples	No. of Locations
	Intermediate (11-20)	5	5
	Deep (21-30)	2	2

PCE and TCE were the only VOCs detected at concentrations above their RISLs in soil vapor samples collected at Source Areas 51E and 52E. The location and depth of soil vapor samples containing concentrations of those VOCs above their respective RISLs are presented on the table below. BOU RI soil vapor sampling locations within Administration Area East are shown in Figure 3.2-6.

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	TCE	52E-SP22	961	1,600
Intermediate (11 to 20)	TCE	51E-SP11 52E-SP07	961	7,800 27,000
	PCE	51E-SP11 52E-SP07	320	600 2,300

Metals

A total of 73 primary and 13 duplicate soil samples were collected at Source Areas 51E, 52E, E(l), and other site features in the Line 05 North Area during the BOU RI and analyzed for metals, including hexavalent chromium and/or mercury. The number of primary soil samples and sampling locations in the Line 05 North Area are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
51E	Metals	2	2	4	2	2	1
	Mercury	2	2	3	2	2	1
	Hex Chrome	0	0	0	0	0	0
52E	Metals	20	20	37	20	2	1
	Mercury	19	19	36	19	2	1
	Hex Chrome	2	2	0	0	0	0
E(l)	Metals	1	1	2	1	3	1
	Mercury	1	1	2	1	3	1
	Hex Chrome	0	0	0	0	0	0

Cadmium and lead were detected in surface/near-surface soils collected within the Line 05 North Area above background and their respective RISLs. The detected concentrations of those metals above their RISLs and the depth and location of the samples are provided on the table below. Surface/near-surface sampling locations are shown in Figure 3.2-7.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
52E-SNS01	0.5	Cadmium	1.7	4.8
		Lead	150	170
52E-SB05	1.5	Cadmium	1.7	1.8
52E- SB12	1.0	Cadmium	1.7	4.0

Semivolatile Organic Compounds

A total of 46 primary and 7 duplicate soil samples were collected at Source Areas 51E, 52E, E(l), and other site features in the Line 05 North Area, during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations in the Line 05 North Area for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
51E	SVOCs	2	2	2	1	2	1
52E	SVOCs	18	19	14	9	2	1
E(l)	SVOCs	1	1	2	1	3	1

B(a)P and B(b&k)F were the only SVOCs detected at concentrations above their respective RISLs in soil samples collected within the Line 05 North Area. The detected concentrations of those compounds along with the sampling locations and sample depths are presented on the table below. Surface and/or near-surface soil sampling locations are shown in Figure 3.2-7.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
52E-SNS01	0.5	Benzo(b&k)fluoranthene	38	350
		Benzo(a)pyrene	38	130
52E-SB04	1.0	Benzo(b&k)fluoranthene	38	180

Perchlorate

A total of 72 primary and 6 duplicate soil samples were collected at Source Areas 51E, 52E, and E(l) and other site features in the Line 05 North Area during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations in the Line 05 North Area for perchlorate are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
51E	Perchlorate	2	2	4	2	2	1
52E	Perchlorate	21	21	33	17	4	2
E(l)	Perchlorate	1	1	2	1	3	1

Perchlorate was not detected above its RISL of 7,800 µg/kg in any of the surface, near-surface, or subsurface soil samples collected within the Line 05 North Area.

Total Petroleum Hydrocarbons

A total of 57 primary and 7 duplicate soil samples were collected at Source Areas 51E, 52E and E(l) and other site features in the Line 05 North Area during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of primary soil samples and sampling locations for TPH in the Line 05 North Area are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
51E	TPH-D	0	0	4	2	2	1
	TPH-MO	0	0	4	2	2	1
52E	TPH-D	19	19	24	14	2	1
	TPH-MO	19	19	24	14	2	1
E(l)	TPH-D	1	1	2	1	3	1
	TPH-MO	1	1	2	1	3	1

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). The maximum concentrations of TPH-D and TPH-MO detected in soil samples collected from the Line 05 North Area were 2,200 mg/Kg and 5,700 mg/Kg, respectively. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected from Source Areas 51E, 52E, and E(l) and other site features in the Line 05 North Area were NDMA, total cyanide, nitroguanidine, and pH. The number of primary surface/near-surface and subsurface soil samples collected for those analytes and the numbers of locations associated with each source area are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
51E	NDMA	2	2	2	1	2	1
	Nitroguanidine	2	2	2	1	2	1
	pH	0	0	0	0	0	0
52E	NDMA	17	17	7	5	2	1
	Total Cyanide	1	1	0	0	0	0
	Nitroguanidine	16	16	29	15	2	1
	pH	1	1	1	1	0	0
E(l)	NDMA	0	0	0	0	0	0
	Nitroguanidine	1	1	2	1	3	1
	pH	0	0	0	0	0	0

NDMA, total cyanide, and nitroguanidine were not detected above their PQLs in the soil samples collected at the source areas within Line 05 North. The pH of the soil was generally within the normal range (5 to 9) for mineral soils (Brady, 1974).

3.2.3 *Summary of Environmental Setting and Remedial Investigations – Westlakes Storm Water Detention Basins*

The Westlakes storm water detention system (referred to hereafter as the Westlakes) consists of two detention ponds (East and West Pond) and three associated overflow cells (Cells 1 through 3) surrounded by earthen embankments (Figure 3.2-9). Roads atop most of the embankments provided year-round access to the various surface water control features within the Westlakes. The Westlakes was constructed during the 1980s for the purpose of detaining surface water runoff from the Aerojet facility to allow settling of solids prior to discharge from the facility and to provide a mechanism for capture of potentially degraded water before it can migrate off site.

The Westlakes receives storm water runoff from various areas of the Aerojet facility via the Main Administration Area Ditch and Buffalo

Creek. The Administration Ditch receives storm water from the following BOU Source Areas: 3D, 4D, 5D, 6D, 8D, 9D, 11D, 12D, 50D, 51D, 52D, D(b), D(c), D(d), and 52D. In addition, storm water flow is captured from selected PGOU Source Areas, including 7D, 10D, and the Former Company Store. Buffalo Creek transects the Aerojet site and receives storm water from many source areas in Area 00, Line 01, Line 02, Line 06, and Zone 3.

Storm water runoff is staged in the Westlakes where it is generally allowed to infiltrate. On the rare occasion when the Westlakes become full, water is discharged from the Westlakes into Lower Buffalo Creek, which empties into the American River. Storm water discharges from the Westlakes to lower Buffalo Creek and the American River are regulated through the NPDES process (Aerojet and others, 2002).

The movement of water into and between the two ponds and three cells of the Westlakes is controlled through a series of culverts, flow gates, weirs, and pumping stations. A weir gate controls storm water flows in the Main Administration Ditch. A pump station near the northwest corner of the East Pond lifts storm water from the ditch into the East Pond. Natural flow in Buffalo Creek is towards the west and the Westlakes. Buffalo Creek runs along the south side of the Westlakes and usually discharges directly to Cell 1. If required, a bypass gate in the creek at the midpoint between the East and West Ponds can direct water from Buffalo Creek into one or both ponds. Water that is in the East and/or West Ponds is discharged, as necessary, to the three cells via the pathway described below.

If the East Pond becomes full, a flow gate structure allows water to be directed into the West Pond. When both the East and West Ponds become full, another flow gate structure allows water from both ponds to be discharged into Cell 1. Flow gate structures between the three cells allow for the movement of water from Cell 1 into Cell 2 and from Cell 2 into Cell 3. In addition to being transferred to the adjacent cell, storm water held in Cells 1, 2, and 3 can also be discharged via outlet structures to Lower Buffalo Creek.

Details concerning the scope and results of the RI for the Westlakes are presented in Section 5.3 of the RI Report (Volume 1). The environmental setting for the Westlakes and the scope and results of the RI are summarized below.

3.2.3.1 *Environmental Setting – Westlakes*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Westlakes Area are described in the following subsections.

Topography

With the exception of the earthen embankments surrounding the Westlakes, the topography is generally flat with a gradual grade that directs surface water from east to west. Surface elevations in the Westlakes range from 125 amsl in the west to 149 amsl in the east.

Geology

The lithologies underlying the Westlakes are comprised of interbedded gravel, sand, silt, and clays overlain by a thin surface layer of silt originating from the retention of surface water in the ponds and cells. Indurated silt (siltstone), clay (claystone), and sand (sandstone) were encountered in several wells at varying depths.

The surface and near surface lithologies in the Westlakes Area are comprised of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay. Historical information indicates that a smaller dredger performed the dredging in the Westlakes. In the vicinity of the Westlakes Area, the soils were dredged to depths ranging from 20 to 30 feet bgs. Grading activities during construction of the Westlakes makes it difficult to ascertain the actual extent of dredging; the presence of dredge tailings along the south and west boundaries of the Westlakes Area indicate that the entire area was most likely dredged.

The shallow subsurface lithologies described in the well logs and most of the borehole logs are generally consistent with those observed in dredged areas elsewhere on site. However, borelogs from within the detention ponds generally include a surface layer of silt, likely deposited from recent alluvial activity.

Soils

Soils in the vicinity of the Westlakes consist primarily of Xerorthents, dredge tailings-urban land complex with 0 to 2 percent slopes. The area is made up of leveled dredge tailings. The slopes have been shaped for urban uses. The region is about 45 percent Xerorthents and 40 percent

urban land. Included in this region are small areas of Americanos and Natomas soils and Slickens. Americanos soils are on low stream channels and Natomas soils are on low terraces. Xerorthents are small, very deep, and are somewhat excessively drained to excessively drained soils found in areas of dredge tailings. They are formed in material that has a high content of gravel and cobbles derived from mixed sources. The material was deposited as tailings after most of the fine-earth material was washed from it and removed during gold dredging activities. Slopes are generally short, complex, and disturbed (USDA – NRCS 1993).

Surface Water Hydrology

In addition to the Westlakes, local surface water features include Upper and Lower Buffalo Creek, the Main Administration Ditch, and the Folsom South Canal. With the exception of the Folsom South Canal, surface water features in the Westlakes Area are used to divert and control seasonal storm water runoff from the Aerojet site. The Folsom South Canal, which parallels the Aerojet property line to the south and west, was constructed to provide cooling water to the now inactive Rancho Seco Nuclear facility. Water from the canal is currently used for irrigation.

As described earlier, storm water from various areas of the Aerojet site flows into upper Buffalo Creek or the Administration Ditch and then into the Westlakes. Storm water runoff is staged in the Westlakes where it either infiltrates or is discharged to Lower Buffalo Creek and ultimately to the American River. Storm water discharges to Buffalo Creek/American River are regulated through the NPDES (RWQCB, 2002).

Local Hydrogeology

The first saturated sediments encountered beneath the Westlakes are either part of Perched Groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the Westlakes Area. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Westlakes Area is discussed below. Details

regarding the occurrence of groundwater within the Westlakes Area and the distribution of chemicals in the groundwater are presented in Section 5.7 of the RI Report (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

Perched Groundwater was not encountered in the boreholes drilled within the Westlakes during the BOU RI. However, because the boreholes were only drilled to a total depth of 6 or 12 feet bgs, it is possible that Perched Groundwater may be present in the Westlakes at depths greater than 12 feet bgs.

First Water-Bearing Zone (Layer S)

The FWBZ occurs within sands and gravels (with variable amounts of silt) that range from approximately 20- to 60-feet thick. These sands and gravels comprise the upper portion of Layer C of the Sitewide Hydrostratigraphic Model.

The depth to the top of the FWBZ increases from east to west from Line 02 to the Westlakes Area. The top of the FWBZ was encountered at depths of approximately 80 feet bgs near the west side of the Westlakes storm water retention cells. Water level elevations in most FWBZ wells have declined by up to approximately 30 feet. The highest rates of decline (approximately 5 feet per year) were observed from 1983 through 1989. Water level elevations were relatively stable in most wells from 1991 through 2006, with typical water level elevation increases and decreases of approximately 5 feet. Seasonal water level elevation fluctuations of up to 42 feet have been observed, although seasonal fluctuations of 5 to 10 feet were more common. Wells located near the Westlakes Storm Water Retention Cells exhibited the highest seasonal fluctuations.

The hydraulic gradient for the FWBZ was evaluated based on a single water level data set collected in April 2006. This data set was selected because it included water level measurements from the new monitor wells installed during the BOU RI, as well as from existing monitoring wells.

The overall direction of the hydraulic gradient for the FWBZ is from east to west. The gradient deviates beneath Line 02 where the hydraulic gradient trends more to the northwest. This apparent deviation is nearly

coincident with the contact between the dredged and non-dredged areas. Downgradient of Line 02 and throughout the Line 05 and Westlakes areas, the direction of the hydraulic gradient is west. The magnitude of the hydraulic gradient across the Line 02/Westlakes Area averages approximately 0.01 ft/ft.

Potential vertical hydraulic gradients between Perched Groundwater and the FWBZ have not been calculated, but Perched Groundwater ranges from approximately 20 to 50 feet higher in elevation than the FWBZ, suggesting a strong potential for downward vertical migration of Perched Groundwater to the FWBZ.

Ecological Habitat

The storm water detention ponds (Westlakes) are surrounded to the north by annual grassland and to the south by dredger tailings. The detention ponds consist of riparian flora interspersed with ruderal/disturbed habitat; a highly disturbed vegetation community. Typical flora in the detention ponds consist of cottonwood and willow trees, herbaceous weeds, curly dock, and hard-stem bullrush. Non-native, naturalized Mediterranean grasses represent the predominant flora species within annual grassland habitat and the dredger tailings. Typical fauna in this area includes wild turkey, great blue heron, various raptors and song birds, rock wren, deer mouse, western harvest mouse, common king snake, western rattlesnake, and coyote.

A seasonal wet area was observed along the west boundary of the Westlakes. In addition, Buffalo Creek traverses through the area and riparian flora such as cottonwood and willow trees, blackberry bushes, elderberry shrubs, and various herbaceous species were observed along the edges of the creek. Typical fauna in these areas includes red-wing black bird, marsh wren, and great blue heron.

Blue elderberry shrubs, potential habitat for the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), were observed scattered throughout the entire Westlakes Area.

3.2.3.2 *Summary of Scope and Results of Remedial Investigations – Westlakes Storm Water Detention Basins*

The scope and results of RIs of the Westlakes are summarized below.

Scope of Remedial Investigations

- **Prior to 2005:** No source areas have been identified within the Westlakes and, therefore, no previous investigations have been conducted.
- BOU RI (2005-2007): Thirty-seven primary surface and/or near-surface (0 to 2.5 feet bgs) soil samples and 19 primary subsurface (4 to 11.5 feet bgs) soil samples were collected at 20 locations within the various ponds and cells comprising the Westlakes. Soil vapor sampling for VOCs was not proposed in the BOU FSP (Aerojet et al., 2006b) due to the likelihood of encountering wet soil. However, four soil samples collected at two locations were analyzed for VOCs.

  Surface/near-surface and subsurface soil samples were analyzed for VOCs, SVOCs, metals (including hexavalent chromium), perchlorate, PCBs, TPH-D, TPH-Mo, pesticides, NDMA, nitroguanidine, CEC, TOC, pH, DI-WET, and/or geotechnical parameters.

Results of Remedial Investigation

The results of the BOU RI of the Westlakes storm water detention basins are summarized below. BOU RI surface and subsurface soil sampling locations are shown in Figures 3.2-10 and 3.2-11, respectively.

Volatile Organic Compounds

Due to the likelihood of encountering wet soil, soil vapor samples were not collected within the Westlakes. However, four soil samples were collected at two locations (WL-SD01 and WL-SD02) and analyzed for VOCs. No VOCs were detected above their respective PQLs in the soil samples.

Metals

A total of 52 primary soil samples were collected within the Westlakes during the BOU RI and analyzed for metals. Two additional samples were analyzed only for mercury and/or hexavalent chromium. The number of primary soil samples and sampling locations within the Westlakes are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
WL	Metals	37	20	15	9	0	0
	Mercury	34	17	14	9	0	0
	Hex Chrome	34	17	13	8	0	0

No metals were detected at concentrations above background and their respective RISLs in the surface, near-surface, and subsurface soil samples collected within the Westlakes.

Semivolatile Organic Compounds

A total of 47 primary soil samples were collected within the Westlakes during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations within the Westlakes for SVOCs are summarized on the table below. Soil sampling locations are shown in Figures 3.2-10 and 3.2-11.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
WL	SVOCs	34	17	13	9	0	0

SVOCs were not detected above their respective RISLs in surface, near-surface, and subsurface soil samples collected within the Westlakes. Additionally, TICs were not detected during the SVOC analysis of the subsurface soil samples.

Polychlorinated Biphenyls

A total of 41 primary soil samples were collected within Westlakes during the BOU RI and analyzed for PCBs. The number of primary soil samples and sampling locations within the Westlakes are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
WL	PCBs	34	17	7	5	0	0

PCBs were not detected above their respective RISLs in the surface, near-surface, and subsurface soil samples collected within the Westlakes.

Perchlorate

A total of 50 primary soil samples were collected within the Westlakes during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations for perchlorate within the Westlakes are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
WL	Perchlorate	31	17	19	11	0	0

Perchlorate at 9,000 µg/kg, above its RISL of 7,800 µg/kg, was detected in a sample collected at 5 feet bgs at location WL-SB01 in Cell 1. Perchlorate above its RISL was not, however, detected in samples collected at 0.5 and 11 feet bgs from that boring (WL-SB01).

Total Petroleum Hydrocarbons

A total of 14 primary soil samples were collected within the Westlakes during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of primary soil samples and sampling locations for TPH in the Westlakes are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
WL	TPH-D	14	7	0	0	0	0
	TPH-MO	14	7	0	0	0	0

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). TPH-D and TPH-MO were not detected above their respective PGW SSLs in soil samples collected from the Westlakes area. Volatile constituents and PAHs were included in the VOC and SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected within the Westlakes were NDMA, pesticides, OBPA, nitroguanidine, and pH. The number of primary surface/near-surface and subsurface soil samples collected within the Westlakes for each analysis, and the numbers of

locations are summarized on the table below. Surface/near-surface and subsurface soil sampling locations are shown in Figures 3.2-10 and 3.2-11, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
WL	NDMA	8	4	5	4	0	0
	Pesticides	34	17	17	10	0	0
	OBPA	42	21	12	9	0	0
	Nitroguanidine	34	17	7	5	0	0
	pH	34	17	17	10	0	0

NDMA, pesticides, OBPA, and nitroguanidine were not detected above their respective PQLs or RISLs in the surface, near-surface, or subsurface soil samples collected within the Westlakes. The pH of the soil was within the normal range (5 to 9) expected for mineral soils (Brady, 1974).

3.2.4 *Summary of Environmental Setting and Remedial Investigations – Western Administration Area Ditch and Buffalo Creek*

The western portion of the Main Administration Area Ditch and Buffalo Creek comprise the two drainages that historically and currently discharge directly into the Westlakes (Figure 3.2-12).

Between 1951 and 1980, the lower section of Buffalo Creek in the southern portion of the Aerojet property has been realigned numerous times to accommodate construction at Aerojet and construction of the Folsom South Canal and Westlakes (Aerojet, 2002b). Prior to 1951, Buffalo Creek flowed south towards the general area of Line 02 where it turned back towards the west and emptied into an area of dredge tailings. Sometime between 1951 and 1961, the Administration Area Ditch was extended westward to Buffalo Creek and Buffalo Creek west of Line 02 was excavated and realigned for use as a drainage ditch. During construction of the Folsom South Canal in the early 1970s, Buffalo Creek was again realigned and its course diverted towards the south and over the Folsom South Canal via an overpass. Review of aerial photographs show that the East and West Ponds and Cells 1 and 2 of the Westlakes were present in the early 1970s at the start of construction of the Folsom South Canal, with final construction completed in the late 1970s. Buffalo Creek underwent a final realignment during construction of the Westlakes and redirected towards the west in the area of Line 02 to allow discharge into the

Westlakes. An approximate 800-feet section of Buffalo Creek abandoned as a result of the realignment is present immediately west of Line 02.

The western portion of the Main Administration Area Ditch and Buffalo Creek in the area of the Westlakes and within the BOU are described below and shown in Figure 3.2-12.

Western Main Administration Area Ditch – The Main Administration Area Ditch receives storm water from BOU Source Areas 3D, 4D, 5D, 6D, 8D, 9D, 11D, 12D, 50D, 51D, 52D, D(b), D(c), D(d), and 52D and PGOU Source Areas 7D and 10D. The scope and results of the BOU RI of the upper portion of the Main Administration Area Ditch are presented below.

Buffalo Creek – Buffalo Creek transects the Aerojet site and receives storm water from many source areas in Area 00, Line 01, Line 02, Line 06, and Zone 3. Within the BOU, Buffalo Creek is comprised of three principal drainages referred to in this report as Upper, Lower, and Abandoned (RI Report (Figure 3.2-12). Upper Buffalo Creek includes its current channel beginning just east of the BOU to the point of discharge to Westlakes. Lower Buffalo Creek includes the current channel that receives surface water discharges from the Westlakes and from the American River GET facility. Abandoned Buffalo Creek refers to a section of drainage adjacent to Line 02 that formerly connected Buffalo Creek and the Main Administration Area Ditch. This section of the channel was abandoned following construction of the Westlakes that runs adjacent to Line 02 and formerly discharged to the Main Administration Area Ditch southwest of Line 02.

Details concerning the scope and results of the RI for the Western Main Administration Area Ditch and Buffalo Creek are presented in Section 5.4 of the RI Report (Volume 1). The environmental setting for the Western Main Administration Area Ditch and Buffalo Creek and the scope and results of the RI are summarized below.

3.2.4.1 *Environmental Setting – Western Administration Area Ditch and Buffalo Creek*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Western Administration Area Ditch and Buffalo Creek are described below.

Topography

An elevated access road runs parallel to the north side of the Main Administration Area Ditch from Hazel Boulevard to the Westlakes. Between the Administration Area and Westlakes, the ditch is approximately 10-feet deep and roughly 10- to 20-feet wide. A gentle east-west slope provides enough elevation change to allow water to flow towards the Westlakes. East of Line 02, the Main Administration Ditch is bordered on the north by dredge tailings and on the south by native, undredged material of an ancestral American River terrace. West of Line 02, the Main Administration Area Ditch/Buffalo Creek is bordered on the south and north by dredge tailings.

As previously discussed, Buffalo Creek transects the entire Aerojet site from east to west. Within the BOU, Buffalo Creek has a fairly uniform slope that provides drainage towards the west and Westlakes. Buffalo Creek is bordered in some areas of the BOU by facility areas (paved, disturbed areas). Between Line 02 and Westlakes, Buffalo Creek is bordered to the north and south by dredge tailings.

Geology

The Main Administration Area Ditch and Buffalo Creek transect both dredged and undredged portions of the Aerojet site. Surface geology of the dredged areas consists of cobbles mixed with silts and clays and the undredged areas consist of indurated, dense layers of silts and clays interbedded with sands and cobbles with clays and silts.

Soils

The Main Administration Area Ditch and Buffalo Creek transect Xerorthents and the Redding-Corning-Red Bluff complex. Xerorthents are a dredge tailings-urban land complex with 0 to 2 percent slopes. Xerorthents along the drainages have been graded and reshaped during construction of the drainages. The Xerorthents are divided by elongated areas of Americanos and Natomas soils and Slickens. These soils are very deep and are somewhat excessively drained to excessively drained soils.

The Redding-Corning-Red Bluff complex consists of moderately well-drained soils that are moderately deep over a cemented hard pan. This soil unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. The

Redding soils are typically a surface layer of gravelly loam with subsoil comprised of a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam.

Surface Water Hydrology

In addition to Buffalo Creek and the Main Administration Ditch, local surface water features include the Westlakes, the Folsom South Canal, and remnants of the former Valley Ditch. Buffalo Creek and the Main Administration Area Ditch are used to control seasonal storm water runoff from the Aerojet site and discharge into the Westlakes. Storm water runoff is staged in the Westlakes where it either infiltrates or is discharged to Lower Buffalo Creek and ultimately to the American River under the NPDES.

Local Hydrogeology

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Buffalo Creek and the western portion of the Main Administration Area Ditch Administration Area is discussed below. As previously noted, an evaluation of the potential discharge of groundwater to surface water within the BOU was performed and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

Perched groundwater (Layer Y) is the shallowest saturated unit and typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities. Along Buffalo Creek and the western portion of the Main Administration Area Ditch, perched groundwater may be encountered at depths ranging from 15 to 45 feet bgs

First Water-Bearing Zone (Layer S)

The FWBZ (Layer S) occurs in the upper portion of a sand and gravel unit containing variable amounts of silt ranging from approximately 50- to 75-feet thick, and that thins to the east. This sand and gravel unit generally corresponds to Layer C. Along Buffalo Creek and the western portion of the Main Administration Area Ditch, the FWBZ may be encountered at depths ranging from 34 to 76 feet bgs.

Ecological Habitat

Within the BOU, the Main Administration Area Ditch and Buffalo Creek flow through a variety of vegetative communities populated by a fairly wide range of flora and fauna. Vegetative communities commonly found adjacent to the Main Administration Area Ditch and Buffalo Creek include annual grassland, oak woodland, Fremont cottonwood-oak woodland, and patches of coyote brush scrub and willow scrub. Additionally, valley foothill riparian is found along much of Buffalo Creek within the BOU.

Typical flora encountered in those vegetative communities include herbaceous weeds, non-native naturalized Mediterranean grasses, trees including oaks and cottonwood, woody shrubs, and various riparian plants. Typical fauna include various raptors, wild turkey, northern flicker, yellow-rumped warbler, Bullock's oriole, savannah sparrow, western meadowlark, song sparrow, black-headed grosbeak, Acorn woodpecker, Nuttal's woodpecker, western scrub jay, yellow-billed magpie, oak titmouse, white-breasted nuthatch, western bluebird, American robin, Phainopepla, lark sparrow, western fence lizard, southern alligator lizard, Gilbert's skink, slender salamander, Pacific gopher snake, racer, sharp-tailed snake, common kingsnake, Pacific treefrog, bullfrog, black-tailed deer, coyote, brush rabbit, Virginia opossum, deer mouse, California vole, and California ground squirrel. Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), were also observed along the banks and adjacent to the Main Administration Area Ditch and Buffalo Creek. A *Biological Assessment Report* (ECORP Consulting, Inc., 2005) for the BOU was presented as Appendix B in the BOU FSP (Aerojet and others, 2006).

3.2.4.2 *Summary of Scope and Results of Remedial Investigations – Western Administration Area Ditch and Buffalo Creek*

The scope and results of RIs of the Western Administration Area Ditch and Buffalo Creek are summarized below

Scope of Remedial Investigations

- ***1993:*** One sediment/soil sample was collected from the Main Administration Area Ditch west of the Administration Area and analyzed for metals. Sediment/soil samples were collected at 1,000-foot intervals along Buffalo Creek during the Stage 1 RI and were

analyzed for metals (silver, lead, mercury, and selenium); SVOCs; NDMA; and/or perchlorate.

- BOU RI (2005-2007): Thirty-one primary and two duplicate surface and/or near-surface (0 to 2.5 feet bgs) sediment/soil samples and one primary subsurface (2.6 to 5 feet bgs) soil sample were collected at 23 locations within and adjacent to the western portion of the Main Administration Area Ditch and Buffalo Creek. Soil vapor sampling for VOCs within the Main Administration Ditch and Buffalo Creek was not proposed in the BOU FSP (Aerojet et al., 2006b) due to the likelihood of encountering wet soil. However, as indicated below, selected soil samples were analyzed for VOCs

  Surface/near-surface sediment/soil samples and the subsurface soil sample were analyzed for VOCs, SVOCs, metals (including hexavalent chromium), perchlorate, PCBs, TPH-D, TPH-Mo, pesticides, NDMA, nitroguanidine, CEC, TOC, and/or pH.

Results of Remedial Investigations

The results of BOU RIs for the Western Administration Area Ditch and Buffalo Creek are summarized below. BOU RI surface and subsurface soil sampling locations are shown in Figure 3.2-13.

Volatile Organic Compounds

Four primary sediment/near-surface sediment samples were collected at 0.25 and 1 foot bgs at two locations (WL-SD01 and WL-SD02) in Lower Buffalo Creek during the BOU RI and analyzed for VOCs (Figure 3.2-13).

VOCs were not detected in the sediment samples at concentrations above their RISLs.

Metals

A total of 32 primary samples were collected at 23 locations within and adjacent to the western portion of the Administration Area Ditch and Buffalo Creek. The sampling included the following:

- A total of 26 primary surface soil/sediment samples were collected at 23 locations within the western portion of the Administration Area Ditch and Buffalo Creek. Seventeen samples were analyzed for all metals, including mercury and hexavalent chromium. Nine step-out soil/sediment samples were analyzed for selected metals including

aluminum, cadmium, chromium, hexavalent chromium, copper, lead, nickel, silver, and zinc.

- One sample (WL-SD15) was collected from a drainage between Schnitzer Steel and Buffalo Creek and analyzed for select metals.
- One subsurface soil sample was collected at 5 feet bgs at one location (59E-SD01) and analyzed for all metals, including mercury and hexavalent chromium.
- Four surface/near-surface soil samples were collected from the banks of Buffalo Creek at three locations and analyzed for select metals. The samples were collected to evaluate the presence of metals in soil removed from the ditch as part of previous maintenance activities. Bank sampling locations and corresponding surface sediment/soil sampling locations are identified on the table below.

Bank Sample Location	Drainage Sample Location
59E-SB07	59E-SD01
59E-SB06/28E-SNS01	59E-SD04
59E-SB08	59E-SD02

Cadmium was the only metal detected at a concentration statistically above background and its RISL of 1.7 mg/kg. Cadmium at 27.9 mg/kg was detected in a surface (0.25 feet bgs) soil sample collected at location BC-SD01 (Figure 3.2-13).

Semivolatile Organic Compounds

A total of 18 primary and 1 duplicate sediment/surface soil samples were collected at 9 locations within the western portion of the Main Administration Area Ditch and Buffalo Creek and analyzed for SVOCs, including TICs. Additionally, one subsurface soil sample was collected at 5 feet bgs at one location (59E-SD01) and analyzed for SVOCs. The number of primary soil samples and sampling locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
Buffalo Creek	SVOCs	18	9	1	1	0	0

B(a)P and B(b&k)F were detected above their respective RISLs in two sediment/soil samples collected at one location within the Westlake Drainages. The detected concentrations for those compounds above their RISLs and the location and sample depth at which those compounds were detected are listed on the table below. Sampling locations are shown in Figure 3.2-13.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
WL-SD11	0.5	Benzo(a)pyrene	38	45
		Benzo (b&k)fluoranthene	38	110
	1.5	Benzo (b&k)fluoranthene	38	46

Polychlorinated Biphenyls

A total of 23 primary and 1 duplicate sediment/soil samples were collected at 15 locations along the western portion of the Main Administration Area Ditch and Buffalo Creek during the BOU RI and analyzed for PCBs. Sampling locations are shown in Figure 3.2-13.

Aroclor 1254 was the only PCB detected in surface sediment soil samples collected from Buffalo Creek at concentrations above its RISL. The location and depth of samples containing PCBs above their respective RISLs are summarized on the table below. BOU RI surface and subsurface soil sampling locations within the Main Administration Area Ditch and Buffalo Creek are shown in Figures 3.2-13.

Sample Location	Depth (ft bgs)	PCB	RISL (µg/kg)	Concentration (µg/kg)
BC-SD01	0.25	Aroclor 1254	220	740
BC-SD02	0.25	Aroclor 1254	220	1,100
WL-SD02	0.25	Aroclor 1254	220	240
	1.5	Aroclor 1254	220	250
WL-SD09	1.5	Aroclor 1254	220	360
WL-SD11	0.5	Aroclor 1254	220	430

The data indicate that concentrations of Aroclor 1254 are primarily limited to an approximate 2,500-feet section of Buffalo Creek that begins just south of Area 00 and continues downstream to the confluence of the former alignment of Buffalo Creek and the Administration Area Ditch. Additionally, PCBs were detected in sediment/soil samples collected along the current course of Buffalo Creek approximately 1,000-feet downstream of the abandoned section of Buffalo Creek west of Line 02.

The data suggest that PCBs in the sediment/soil within Buffalo Creek may have originated from source areas in Area 00.

Perchlorate

A total of 12 primary surface sediment/soil samples were collected at 6 locations (59E-SD01, 59E-SD02, WL-SD01, WL-SD02, WL-SD11, and WL-SD12) along Buffalo Creek during the BOU RI and analyzed for perchlorate. Additionally, one subsurface soil sample collected at 5 feet bgs at one location (59E-SD01) and one bank sample collected at one location (28E-SNS01) were also analyzed for perchlorate. Surface and subsurface soil sampling locations within the Main Administration Area Ditch and Buffalo Creek are shown in Figures 3.2-13.

Perchlorate was not detected above its PQL or RISL in the surface sediment/soil, subsurface soil, and bank soil samples collected within and adjacent to Buffalo Creek.

Total Petroleum Hydrocarbons

A total of 12 primary surface sediment/soil samples were collected at 6 locations (59E-SD01, 59E-SD02, WL-SD09, WL-SD11, WL-SD12, and WL-SD13) along Buffalo Creek during the BOU RI and analyzed for TPH-D and TPH-Mo. Additionally, one subsurface soil sample collected at 5 feet bgs (59E-SD01) and one bank sample collected at (28E-SNS01) were also analyzed for TPH-D and TPH-Mo. Surface and subsurface soil sampling locations within the Main Administration Area Ditch and Buffalo Creek are shown in Figure 3.2-13.

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). TPH-D and TPH-MO were not detected at concentrations above their respective PGW SSls in soil samples collected from the Main Administration Area Ditch and Buffalo Creek. Volatile constituents and PAH associated with those compounds were included in the VOC and SVOC analysis of soil samples.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected within and adjacent to the western portion of the Administration Area Ditch and Buffalo Creek were NDMA, pesticides, OBPA, nitroguanidine, and pH. The number of primary surface/near-surface and subsurface soil samples collected within the Westlakes for each analysis, and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
Buffalo Creek	NDMA	5	3	0	0	0	0
	Pesticides	20	13	1	1	0	0
	OBPA	10	5	0	0	0	0
	Nitroguanidine	10	5	0	0	0	0
	pH	8	4	0	0	0	0

NDMA, pesticides, OBPA, and nitroguanidine were not detected above their respective RISLs in the sediment samples or bank sample collected from the Main Administration Area Ditch and Buffalo Creek. The pH of the samples was within the normal range (5 to 9) expected for mineral soils (Brady, 1974).

3.2.5 *Summary of Environmental Setting and Remedial Investigations – Open Space Areas 5, 6, and 7*

Open Space Areas 5, 6, and 7 (OS5, OS6, and OS7) consist of buffer zones located between operational areas (Line 02 and Line 05 North) on the site and neighboring properties to the north (Figure 3.2-14). OS6 is incorporated into and synonymous with the Westlakes Area.

Details concerning the scope and results of the RI for Open Space Areas 5 and 7 are presented in Section 5.5 of the RI Report (Volume 1). The environmental setting for the Open Space Areas 5 and 7 and the scope and results of the RI are summarized below.

3.2.5.1 *Environmental Setting – Open Space Areas 5 and 7*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of OS5 and OS7 are described in the following subsections. As previously discussed, OS6 is synonymous with the Westlakes Area and is discussed in Section 3.2.3.

Topography

OS5 is relatively flat with a shallow low-lying area adjacent to Buffalo Creek. OS5 was not dredged, but the eastern portion of the area was graded during the realignment of Buffalo Creek as part of the construction of the Westlakes. Buffalo Creek runs along the eastern and northern border of OS5. A dirt road traverses OS5 from east to west.

OS7 consists of an area of east-west aligned dredge tailings divided by slickens and the topography is undulating and irregular. A dirt road transects the area from east to west.

Geology

No borings were drilled within OS5 and, therefore, no site-specific geological information is available. However, as with Line 02, OS5 is located along an ancestral American River terrace and the geology is expected to be similar to that of Line 02. The geology of the terrace areas consists of interbedded layers of relatively permeable and relatively lower permeability sediments. Relatively permeable layers are made up of silty, poorly and well-graded sands and gravels; and silty and clayey gravels and silts. Relatively lower permeability sediment layers consist of low plasticity clays and silts, and silty and clayey sands.

Borings were not drilled within OS7, but the review of aerial photographs show that OS7 and Line 05 North are both included in the same dredge field. Therefore, the geology of OS7 is likely the same as for Line 05 North, which consists of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay to a depth of approximately 20 feet. Native soils below the dredge tailings generally consist of fluvial deposits of sand and silt.

Soils

OS5 was not dredged and soils are classified as Redding-Corning-Red Bluff consisting of moderately well-drained soils that are moderately deep over a cemented hard pan. This soil unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. The Redding soils are typically a surface layer of gravelly loam with subsoil comprised of a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam.

OS7 was dredged and the soils are classified as Xerorthents. Xerorthents are very deep, somewhat excessively drained, and excessively drained soils associated with dredge tailings. They are formed in material that has a high content of gravel and cobbles derived from mixed sources. The material was deposited as tailings after most of the fine-earth material was

washed from it and removed during gold dredging activities. Slopes are short, complex, and disturbed (USDA – NRCS 1993).

Surface Water Hydrology

Buffalo Creek is the only surface water feature within OS5 and OS7 (Figure 3.2-14). Surface water runoff in OS5 is generally towards Buffalo Creek to the east and north. Surface water runoff in OS7 is limited by the presence of the dredge tailings and generally infiltrates into the subsurface.

Local Hydrogeology

The first saturated sediments encountered beneath OS5 and OS7 are either part of Perched Groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Open Space Areas 5 and 7 is discussed below. Details regarding the occurrence of groundwater within the Westlakes Area and distribution of chemicals in the groundwater are presented in Section 5.7 of the RI Report (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

Borings were not drilled in OS5 and OS7 and, therefore, site-specific information regarding the presence of Perched Groundwater can not be ascertained. However, the geology of OS5 and OS7 are similar to that observed in Line 02 and Line 05 North and, therefore, their hydrogeology is likely similar.

Perched Groundwater was encountered in the Line 02 Area during the BOU RI at depths of 43 to 45 feet bgs (123 to 129 feet amsl) in the undredged sediments beneath the western portion of Line 02. Perched

Groundwater beneath the Line 02 Area and throughout the Westlakes/Line 02 Area is discontinuous and lateral hydraulic gradients were not evaluated.

Perched Groundwater typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities as in OS7. Within Line 05 North, located immediately east of OS7, Perched Groundwater was frequently encountered at depths ranging from 9 to 20 feet bgs, with a median depth of 15.5 feet bgs. The direction of flow in the Perched Groundwater beneath the Line 05 North Area was variable with hydraulic gradients ranging from approximately 0.0057 to 0.0278 ft/ft.

First Water-Bearing Zone (Layer S)

The depth to the top of the FWBZ increases from east to west across the Westlakes/Line 02 Area. The FWBZ is shallowest (34 feet bgs) to the east of Line 02, increasing to approximately 76 feet bgs in the Line 05 North/OS7 Area.

<u>Ecological Habitat</u>

OS5 includes lands that were not dredged and annual grassland constitutes the principal vegetative community with valley foothill riparian occurring along Buffalo Creek. Non-native, naturalized Mediterranean grasses are the dominant species within the annual grassland. Typical fauna within these communities include various raptors, western fence lizard, Gilbert's skink, Pacific gopher snake, racer, common kingsnake, bullfrog, wild turkey, savannah sparrow, western meadowlark, bushtit, Hutton's vireo, hermit thrush, Wilson's warbler, black-headed grosbeak, brush mouse, deer mouse, western harvest mouse, brush rabbit, Virginia opossum, California vole, California ground squirrel, and coyote.

OS7 consists of dredge tailings. Vegetative communities within that area include Fremont cottonwood-oak woodland and willow scrub. Valley foothill riparian is associated with Buffalo Creek. Typical flora in these areas include Fremont cottonwood and oaks with an understory of annual grasses, coyote brush, Himalayan blackberry, poison oak, pennyroyal, sedge, bulrush, vervain, and cattail. Examples of wildlife species encountered in these communities include various raptors, California slender salamander, Gilbert's skink, southern alligator lizard, northern flicker, Acorn woodpecker, Nuttal's woodpecker, oak titmouse, white-

breasted nuthatch, deer mouse, California vole, western gray squirrel, and Botta pocket gopher.

Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), have been observed scattered through OS5 and OS7.

3.2.5.2 *Summary of Scope and Results of Remedial Investigations – Open Space Areas 5, 6, and 7*

The scope and results of RI of Open Space Areas 5 and 7 are summarized below.

Scope of Remedial Investigation

- **Prior to 2005:** OS5 and OS7 were not included in previous investigations conducted at the Aerojet site.
- **BOU RI (2005-2007):** Three primary soil vapor samples were collected within OS5 and analyzed for VOCs. Two primary and two duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples and two primary and one duplicate subsurface (5 to 11 feet bgs) soil samples were collected at OS5. Surface and/or near-surface soil samples were analyzed for metals, SVOCs, perchlorate, and TPH. Subsurface soil samples were analyzed for SVOCs.

Results of Remedial Investigation

The results of the BOU RI for Open Space Areas 5 and 7 are summarized below. BOU RI soil vapor and surface/subsurface soil sampling locations are shown in Figures 3.2-15 and 3.2-16, respectively.

Volatile Organic Compounds

Based on evaluation of the existing data for OS5, the BOU FSP concluded that soil vapor sampling was needed to determine if VOCs were present in the vadose zone within the storage yard and near the tanks at OS5.

Six primary samples were collected at four locations within OS5 during the BOU RI and analyzed for VOCs. Soil vapor samples were collected at two locations (OS5-F1-SP01 and OS5-F2-SP01) to evaluate the presence of VOCs at the storage yard and near the former tanks. Soil vapor samples were collected at two other locations (28E-SP17 and 28E-SP19) as part of

step-out sampling to evaluate the extent of VOCs originating from Source Area 28E in Line 02.

Area	Depth (ft bgs)	No. of Primary Samples	No. of Locations
OS5	0-10	2	2
	11-20	1	1
28E	0-10	2	2
	11-20	1	1

VOCs were not detected above their respective RISLs in the shallow (0 to 10 feet bgs) and intermediate (11 to 20 feet bgs) soil vapor samples collected in OS5.

Metals

Two primary and two duplicate soil samples were collected at two locations (OS5-F1-SB01 and OS5-F2-SB01) within the storage yard and near the former tanks during the BOU RI and analyzed for metals, including mercury. Sampling locations are shown in Figure 3.2-16.

Metals were not detected above their respective RISLs in the surface/near-surface soil samples collected in OS5.

Semivolatile Organic Compounds

Four primary and three duplicate soil samples were collected at two locations (OS5-F1-SB01 and OS5-F2-SB01) within the storage yard and near the former tanks during the BOU RI and analyzed for SVOCs.

SVOCs were not detected above their respective RISLs in the surface, near-surface, or subsurface soil collected within OS5.

Perchlorate

Two primary and two duplicate surface/near-surface soil samples were collected at two locations (OS5-F1-SB01 and OS5-F2-SB01) within the storage yard and near the former tanks during the BOU RI and analyzed for perchlorate during the BOU RI. Sampling locations are shown in Figure 3.2-16.

Perchlorate was not detected above its PQL or RISL in the surface/near-surface soil samples collected within OS5.

Total Petroleum Hydrocarbons

Two primary and two duplicate surface/near-surface soil samples were collected at two locations (OS5-F1-SB01 and OS5-F2-SB01) within the storage yard and near the former tanks during the BOU RI and analyzed for TPH-D and TPH-Mo. Sampling locations are shown in Figure 3.2-16.

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). TPH-D and TPH-MO were not detected at concentrations above their respective PGW SSls in soil samples collected from OS5. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

3.2.5.3 *Summary of Scope and Results for Surface Water Remedial Investigation – Central Portion of the Boundary Operable Unit*

The central portion of the BOU, also referred to as the WLLO Area, includes Buffalo Creek and the western portion of the Main Administration Area Ditch, both of which discharge into the Westlakes (Figures 3.2-9 and 3.2-12).

The scope and results of the RI of surface water in the WLLO Area are summarized below.

Scope of Remedial Investigation

Prior to 2005: Surface water sampling of the western portion of the Administration Area Ditch and Buffalo Creek was not conducted during previous investigations.

BOU RI (2005-2007): Thirteen primary and 8 duplicate surface water samples were collected from the WLLO Area at 13 locations. The 13 primary and 8 duplicate samples were analyzed for VOCs; total and dissolved metals; SVOCs; OBPA; total extractable petroleum hydrocarbons; DOC; anions (including nitrate, nitrite, phosphate, sulfate, chloride, and fluoride); and alkalinity. Additionally, selected samples were also analyzed for NDMA, perchlorate, pesticides, nitroguanidine, hexavalent chromium (total and dissolved), and TPH.

Results of Remedial Investigation

The results of the BOU RI surface water investigation of the drainages within the WLLO Area are summarized below. BOU RI surface water sampling locations are shown in Figures 3.2-17 and 3.2-18.

Volatile Organic Compounds

VOCs were not detected above their respective HH SWSLs in the surface water samples collected within the WLLO Area.

Semivolatile Organic Compounds

Bis(2-ethylhexyl)phthalate [B(2-EH)P], a common laboratory contaminant, at an estimated concentration of 110 µg/L, was detected in only one surface water sample (WL-SW04).

Total and Dissolved Metals

Antimony, arsenic, copper, iron, lead, manganese, molybdenum, thallium, and vanadium were the only metals detected in surface water samples collected from the WLLO Area at total concentrations above their respective SWSLs. Arsenic and vanadium were the only metals detected in surface water samples collected from the WLLO Area at dissolved concentrations above their respective SWSLs.

Perchlorate

- Perchlorate was detected above its SWSL in surface water samples collected from drainages and low-lying areas at the following locations within the WLLO Area:
  - E(l)-SW01, a low-lying area west of Building 05087 in Line 05 North;
  - E(m)-SW01 and E(n)-SW01, a drainage swale and low-lying area north of the former location of Buildings 02025, 02026, and 02027 in the northeast portion of Line 02;
  - WL-SW06 and WL-SW07 in the section of Administration Ditch/Buffalo Creek;
  - 59E-SW01, 59E-SW02, and WL-SW05 within Buffalo Creek upstream of Westlakes; and
  - WL-SW01 at the southern portion of Buffalo Creek, downstream of Westlakes.
- The highest concentrations of perchlorate were detected in the surface water sample collected from the low-lying area west of Building 05087 [Source Area E(l)]. The presence of perchlorate in the surface water at this location is attributed to historical testing activities conducted at this facility.

- Buffalo Creek transects the Aerojet site and receives surface water runoff from multiple source areas in Zone 3, Area 46, Line 01, Line 02, and Area 00. The detections of perchlorate in surface water collected from Buffalo Creek may not be attributable to a single source.
- The presence of perchlorate in surface water collected from the surface drainage [E(n)-SW01] east of the former location of Buildings 02025, 02026, and 02027 and the low-lying area [E(m)-SW01] in the northern portion of Line 02 is attributed to surface water runoff from the areas surrounding Buildings 02020 (an oxidizer grind station), 02021, 02022, 02023, and 02025.

Total Petroleum Hydrocarbons

TPH-D and TPH-Mo were detected at 300 and 560 µg/L, respectively, in the surface water sample collected at WL-SW08. A SWSL has not been established for TPH-D and TPH-Mo.

Pesticides

The pesticides aldrin, alpha-BHC, heptachlor, and heptachlor epoxide were detected at concentrations greater than their SWSLs in surface water samples collected from E(m)-SW01 and 59E-SW02.

Pesticides were detected above their SWSLs in only one surface water sample (59E-SW02) collected from Buffalo Creek. Pesticides were not detected above their SWSLs in surface water samples collected upstream (59E-SW01) or downstream (WL-SW05) of that location.

Miscellaneous Compounds

NDMA was detected in four primary or duplicate surface water samples collected in 2005 at concentrations or estimated concentrations ranging from 0.0046 to 0.13 µg/L. However, NDMA was not detected above its PQL or MDL in a surface water sample collected from the East Pond in January 2010.

Nitroguanidine and OBPA were not detected above their PQLs in the surface water samples.

3.2.5.4 *Summary of Groundwater Remedial Investigation – WLLO Area of the Boundary Operable Unit*

Shallow groundwater investigated beneath the Westlakes; Line 02; Northern Line 05; and Open Space Areas 6, 7, and 8 (WLLO Area) includes perched groundwater and the FWBZ. The extent of perched groundwater appears to be limited, and groundwater elevations suggest that perched groundwater infiltrates into the FWBZ. Hydraulic gradients in the FWBZ indicate that groundwater in this portion of the BOU generally flows to the west-southwest.

Potential source sites located in Line 02 and northern Line 05 have apparently contributed PCE, TCE, and perchlorate to groundwater. TCE concentrations in perched groundwater are shown in Figure 3.2-19. TCE and perchlorate concentrations in the FWBZ are shown in Figures 3.2-20 and 3.2-21, respectively. Chemical concentrations are relatively higher in groundwater to the south of these areas, indicative of other sources associated with the southern portions of Lines 01, 05, and Chemical Plant 1. PCE and perchlorate in perched groundwater and in the FWBZ emanating from the Line 02 and northern Line 05 areas do not extend as far downgradient as the northwestern Aerojet property boundary. Rather, these compounds are present below the FWBZ in Hydrostratigraphic Layer C, where they are targeted by the "Inner-Barrier" GET system of the Western Groundwater Operable Unit.

With the above-noted exceptions of PCE, TCE, and perchlorate, the WLLO Area does not appear to be a continuing source of chemicals to groundwater. B(2-EH)P and several metals were reported above their respective screening levels, although they do not appear to be widely distributed in groundwater.

There is an existing GET system located along the northwestern Aerojet property boundary, downgradient of the potential sources in the WLLO Area. GET E Extraction Wells 4530 and 4535 extract groundwater from Layers C and D near the Aerojet property boundary just west of Westlakes. The Record of Decision for the Western Groundwater Operable Unit requires hydraulic containment of chemicals in all hydrostratigraphic layers at this location.

3.3 *SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS – CHEMICAL PLANT 2 REGION*

The Chemical Plant 2 Region of the BOU encompasses the five MAs listed below.

- **Chemical Plant 2 North:**
  - Source Areas 59F, 62F, CP2-07, CP2-08, and F(c) and various features and structures associated with the former nitroplasticizer and chemical manufacturing facilities (Buildings 15002, 15007, 15008, 15009, 15010, 15014, 15015, 15016, and 15020);
  - Former Resource Conservation and Recovery Act (RCRA) Unit I; and
  - Septic tank at Building 15007 (CP2-ST07).
- **Chemical Plant 2 South:**
  - Source Areas 60F and 61F and various features and structures associated with the former nitroplasticizer and chemical manufacturing facilities (Buildings 15001, 15003, 15004, 15005, 15011, 15017, and 15094);
  - RCRA Unit E; and
  - Septic tanks at Building 15001 (CP2-ST01/03).
- **Magazine Area (Includes Open Space Area 3):**
  - Septic Tanks at Buildings 48013 (A48-ST13) and 48019 (A48-ST19);
  - Former RCRA Unit C; and
  - Magazine Buildings 48004, 48010, and Building 48014
- **Dredge Pit and Eastern Basin:** Source Area 25F.
- **Open Spaces 1, 2, and 4.**

Details concerning the scope and results of the RI for those five areas are presented in Section 6.0 of the RI Report (Volume I). The environmental setting for each of those areas and the scope and results of the RIs conducted at those MAs are summarized below.

3.3.1 *Summary of Environmental Setting and Scope and Results of Remedial Investigations – Chemical Plant 2 North and South*

Chemical Plant 2 was originally operated as a nitroplasticizer manufacturing facility by Aerojet. The plant was shut down in 1968 and later reactivated in 1975 by Cordova Chemical Company for other chemical manufacturing activities. Reported chemical usage at Chemical Plant 2 included potassium carbonate, methyl-2-bromobutyrate, ethylenimine, toluene, acetone, ATS, styrene oxide, tert-butylalcohol (t-BuOH), methanol, methylene chloride, sodium carbonate, acetic anhydride, sulfuric acid, caustic soda, hydrogen chloride, hydrogen sulfide, epichlorohydrin, crotononitirle, ethylene oxide, isopropanol alcohol, pluracol, N-tetramethylethylene diamine, pentaerythryitol triacrylate, and trimethylol propane triacrylate.

Chemical Plant 2 encompasses seven source areas [59F, 60F, 61F, 62F, F(c), CP2-07, and CP2-08 (also referred to as F(c)N in the BOU FSP (Aerojet and others, 2006)] and various other features including sumps, drains, septic systems, storage and manufacturing facilities, and the former locations of two injection wells (Figure 3.3-1). The injection wells were used to inject wastewater from Chemical Plant 2 into deep groundwater zones below a depth of approximately 1,000 feet below ground surface (bgs). Injection Well 1 was constructed in 1962 and received nitroplasticizer manufacturing process wastewater and chemical manufacturing wastewater from 1963 to 1985. Injection Well 2 was constructed in 1976 to provide standby waste disposal capacity for the waste stream from Chemical Plant 2 operations. Both injection wells were closed pursuant to separate state and federal orders.

The Chemical Plant 2 Area is divided into two investigation units: Chemical Plant 2 Area North and Chemical Plant 2 Area South (Figure 3.3-1). Details concerning the scope and results of the RI for those two areas are presented in Section 6.1 of the RI Report (Volume 1). The environmental setting for the Chemical Plant 2 Area and the scope and results of the RI are summarized below.

3.3.1.1 *Environmental Setting – Chemical Plant 2 North and South*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Chemical Plant 2 Area, including Chemical Plant 2 Area North and South, are described below.

Topography

Chemical Plant 2 is situated on a relatively flat area due to the extensive grading during construction of the facility. The relative flatness of the facility is broken by the presence of large earthen revetments around several of the buildings and storage tanks. The facility area is sited in an area that was historically dredged and is surrounded by areas of dredging. Although grading makes it difficult to ascertain, the presence of dense, indurated material during drilling suggests that undredged areas may have been present at the facility site. During construction, the elevation of the facility area was raised and its elevation is approximately 5 to 10 feet higher than the surrounding area. North of the railroad tracks), the ground surface slopes towards the north-northwest and surface water drainage in the northern portion of the Chemical Plant 2 Area is in that direction. In the southern portion of Chemical Plant 2, the ground slopes towards the south-southeast and surface water drainage in that area is primarily in that direction. The southern boundary of Chemical Plant 2 consists of slickens areas that are roughly 10 feet lower than the facility.

A rail line enters the site from the west and splits into four separate lines within the facility. The rail line transects the facility from east to west and as a result, surface water drainage north of the tracks is generally towards the north and surface water drainage south of the rail line is towards the south.

Geology

Available historical aerial photographs indicate that the native landscape in the vicinity of Chemical Plant 2 has been extensively altered by historical dredging and grading and that much of the facility was likely constructed on dredge tailings. However, as will be discussed below, an undredged ancestral American River terrace is also present within the Chemical Plant 2 Area. Review of the aerial photographs indicates that the area surrounding Chemical Plant 2 may have been dredged more than once. Dredge tailings are present around the southern and southeastern boundaries of the site, and the northernmost potions of the site (including the low area north of Site 59F). Dredge tailings in the Chemical Plant 2 Area extend to depths between 70 and 90 feet bgs.

A northeast-southwest trending ancestral American River terrace forms a strip of undredged material that extends across the northern portion of Chemical Plant 2 (Source Area 59F), and to undredged material exposed

in the Dredge Pit and Eastern Basin. This terrace is evidenced by the presence of hard, indurated material encountered during drilling in the northwest half of the site in the area of Source Areas 59F and CP2-08. Historically, auger rigs encountered refusal in these areas at an average depth of approximately 25 feet. The geologic material of the terrace consists of moderate to well indurated siltstones with thin layers of gravels, gravels with sand, clayey sands, clayey gravels with sand, and gravels with clay and sand.

Soils

Dredge tailings are classified as Xerorthents. Xerorthents are very deep, somewhat excessively drained and excessively drained soils associated with dredge tailings. They are formed in material that has a high content of gravel and cobbles derived from mixed sources. The material was deposited as tailings after most of the fine-earth material was washed from it and removed during gold dredging activities. Slopes are short, complex, and disturbed (United State Department of Agriculture [USDA] – Natural Resources Conservation Service [NRCS], 1993).

Soils in the undredged areas are classified as Redding-Corning-Red Bluff, which are moderately well-drained soils that are moderately deep over a cemented hard pan. This soil unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. The Redding soils are typically a surface layer of gravelly loam with subsoil comprised of a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam.

Surface Water Hydrology

The nearest bodies of water are Rebel Hill Ditch approximately one-half mile to the south, Folsom South Canal approximately one mile to the west, and Buffalo Creek approximately one and one-half miles to the north.

The rail line that transects the site from east to west provides a man-made diversion for surface water flow at the facility. North of the rail line, surface water flow is primarily towards the north-northwest with the majority of surface water flow into the low-lying areas north of the facility. In the southern portion of the facility, south of the rail line,

surface water flow is primarily towards the south-southwest and into the slicken areas along the southern boundary of the facility.

Local Hydrogeology

The first saturated sediments encountered beneath Chemical Plant 2 are either part of Perched Groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the area. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the Perched Groundwater and FWBZ beneath Chemical Plant 2 is discussed below. Details regarding the occurrence of groundwater within the Chemical Plant 2 Region and distribution of chemicals in the groundwater are presented in Section 6.6.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath Chemical Plant 2 is discussed below. Details regarding the occurrence of groundwater within the Chemical Plant 2 Region and distribution of chemicals in the groundwater are presented in Section 6.6 of the RI (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

There are several Perched Groundwater zones in the Chemical Plant 2 Region, which have been generally grouped into an Upper Perched Zone and a Lower Perched Zone. The definitions refer to an assemblage of several perched groundwater zones, and not one specific unit.

The Upper Perched Zone typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities. The base of the Upper Perched Zone generally coincides with the interface between the permeable dredged material and the relatively impermeable, undredged material. In the Chemical Plant 2 Area, the Upper Perched Zone typically occurs within the upper 40 feet of the ground surface, but was noted as shallow as 10 feet bgs along the western boundary

(boring 59F-SP39) of Chemical Plant 2 Area North and as deep as 75 feet bgs in Chemical Plant 2 Area South (Well 129). Upper Perched Groundwater elevations have stayed relatively stable since approximately 1988 and generally demonstrate 10 feet or less of seasonal fluctuation.

Lower Perched Groundwater within Chemical Plant 2 occurs in discontinuous sand lenses in a generally fine-grained lithologic unit. Due to its presence in the sand lenses, the Lower Perched Groundwater is also discontinuous and is encountered at depths between 74 and 93 feet bgs. Historical groundwater data indicates that prior to 1998, the FWBZ was present at elevations nearly equal to the Lower Perched Groundwater and the Lower Perched Groundwater technically did not exist. The Lower Perched Groundwater represents water left perched as a result of the decrease in water levels in the FWBZ.

Due to the limited number of monitoring wells, groundwater flow direction and gradient within the Upper and Lower Perched Groundwater could not be ascertained with any certainty.

First Water-Bearing Zone (Layer S)

The FWBZ in the Chemical Plant 2 Region occurs within Layer A. Depth to the top of FWBZ in the Chemical Plant 2 Area ranges from 80 to 110 feet bgs and generally increases southeast of Chemical Plant 2, mostly due to increased elevations associated with the ancestral American River terrace. Groundwater elevations in the FWBZ have decreased an average of 39 feet between 1983/1984 and April 2006, with lowest levels generally occurring between 1994 and 1996. Data indicate that groundwater elevations in the FWBZ are continuing to drop.

Flow direction in the FWBZ is generally towards the west, consistent with the migration of groundwater from the Line 03 Area east of Chemical Plant 2 towards Aerojet Groundwater and Extraction System E/F (GET E/F) Extraction Wells 4007 and 4310. The average hydraulic gradient across the Chemical Plant 2 Area is approximately 0.0064 feet per foot (ft/ft), but flattens to approximately 0.0004 ft/ft in the area immediately upgradient (east) of Chemical Plant 2.

<u>Ecological Habitat</u>

Chemical Plant 2 is surrounded by a variety of habitats including buildings, ruderal/disturbed habitat, paved surfaces, dredger tailings

with annual grassland, Fremont cottonwood woodland, Fremont cottonwood-oak woodland, and coyote brush-willow scrub.

Flora near the buildings, ruderal/disturbed habitat, and paved surfaces typically include herbaceous weeds, non-native invasive species, and ornamental landscape species. Fauna species common to this area are habitat generalists such as the rock pigeon, mourning dove, western fence lizard, European starling, house mouse, and deer mouse, or species that may venture in from adjacent vegetation communities.

Non-native, naturalized Mediterranean grasses represent the predominant flora species within the annual grassland habitat interspersed with the dredger tailings. Fauna species are not common in the dredger tailings due in part to the cobble-boulder substrate and sparse vegetation cover. However, the annual grassland mixed in with the dredger tailings allows for foraging ground for some species, including the western fence lizard, common king snake, white-tailed kite, red-tailed hawk, and coyote.

Fremont cottonwood woodland and Fremont cottonwood-oak woodland support similar flora and fauna. Fremont cottonwood is the dominant tree species, with oak and willow species as sub-dominant members of the canopy. The understory ranges from open areas dominated by annual grasses to dense, developed shrub layers. Flora species typically observed in the understory include coyote brush, poison oak, willow, and various annual grasses. Common fauna species include Pacific treefrog, western rattlesnake, Cooper's hawk, red-tailed hawk, American kestrel, wild turkey, great horned owl, various songbirds, California vole, deer mouse, coyote, and black-tailed deer. In addition, an emergent marsh area and a few seasonal wet areas are located within this habitat type.

The coyote brush-willow scrub community is dominated by coyote brush and shrub-type willows. Other common flora includes blue elderberry, poison oak, hoary coffeeberry, a variety of thistles, and annual grasses. This community is typically found in low-lying areas between the dredge tailing piles. Fauna species typically include a variety of snakes, California quail, towhee, mourning dove, California vole, black-tailed jackrabbit, desert cottontail, raccoon, gray fox, coyote, and black-tailed deer.

A large, low-lying area is located north of the Chemical Plant 2 Area that retains rain water and remains indurated throughout the wet season and dries up in the dry season. A variety of waterfowl utilize the seasonal ponds during the wet season.

Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), were observed scattered throughout the entire Chemical Plant 2 Area. A *Biological Assessment Report* (ECORP Consulting, Inc., 2005) for the BOU was presented in Appendix B of the BOU FSP.

3.3.1.2 *Summary of Scope and Results of Remedial Investigations – Chemical Plant 2 Area North*

The scope and results of RIs conducted in the Chemical Plant 2 North Area are summarized below.

Scope of Remedial Investigations

- ***1979 – 2004:*** Soil samples from approximately 30 soil borings and over 40 soil vapor samples were collected in the vicinity of Source Areas 59F, 62F, F(c), CP2-07, and CP2-08. Soil vapor samples were analyzed for VOCs. Soil samples were analyzed for VOCs, SVOCs, perchlorate, paraldehyde, prowl, and/or metals.
- ***BOU RI (2005 to 2007):*** Seventy-three primary and 8 duplicate soil vapor samples, 103 primary and 10 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 155 primary and 12 duplicate subsurface (2.6 to 120 feet bgs) soil samples were collected at the five source areas within Chemical Plant 2 Area North.

  Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals, perchlorate, TPH-D, TPH-Mo, pesticides, pH, TOC, CEC, DI-WET, and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals, perchlorate, TPH-D, TPH-Mo, pesticides, pH, TOC, CEC, DI-WET, and/or geotechnical parameters.

Results of Remedial Investigations

The results of the BOU RIs of the source areas within Chemical Plant 2 Area North are summarized below. Soil vapor, surface soil, and subsurface soil sampling locations are shown in Figures 3.3-2, 3.3-3, and 3.3-4, respectively.

Volatile Organic Compounds

As indicated on the table below, 73 primary soil vapor samples were collected at Source Areas 59F, 62F, F(c), CP2-07, and CP2-08 within

Chemical Plant 2 Area North and analyzed for VOCs. Additionally, the presence of TICs was evaluated as part of the VOC analysis.

Source Area	Depth (ft bgs)	No. of Primary Samples	No. of Locations
59F	Shallow (0-10)	8	8
	Intermediate (11-20)	8	8
	Deep (21-30)	1	1
62F	Shallow (0-10)	5	4
	Intermediate (11-20)	7	6
	Deep (21-30)	0	0
F(c)	Shallow (0-10)	1	1
	Intermediate (11-20)	2	2
	Deep (21-30)	0	0
CP2-07	Shallow (0-10)	15	15
	Intermediate (11-20)	15	15
	Deep (21-30)	5	5
CP2-08	Shallow (0-10)	4	4
	Intermediate (11-20)	2	2
	Deep (21-30)	0	0

1,2-DCA, benzene, Carbon Tet, chloroform, PCE, tetrahydrofuran (THF), and vinyl chloride were detected in soil vapor samples collected at the source areas within Chemical Plant 2 Area North at concentrations above their respective RISLs. The location and depth of soil vapor samples containing concentrations of those VOCs above their respective RISLs are presented on the table below. BOU RI soil vapor sampling locations within Chemical Plant 2 Area North are shown in Figure 3.3-2.

Depth Interval (ft bgs))	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	1,2-DCA	59F-SP33	73.9	4,300
		59F-SP34		41,000
		59F-SP35		88,000
		62F-SP06		78
		CP2-07-SP01		230,000
		CP2-07-SP04		180
		CP2-07-SP06		480
		CP2-08-SP11		170
	Benzene	CP2-07-SP01	84	100
	Carbon Tet	CP2-07-SP02	58	1,500
		CP2-07-SP03		610
		CP2-07-SP06		96
		CP2-07-SP07		140
	Chloroform	59F-SP36	83	120
		CP2-07-SP01		3,700
		CP2-07-SP04		210

Depth Interval (ft bgs))	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
		CP2-07-SP05		190
		CP2-07-SP06		1,400
	PCE	59F-SP38	320	510
	Tetra-hydrofuran	CP2-07-SP01	989	2,800
	Vinyl Chloride	59F-SP34	31	51
		59F-SP35		540
		CP2-07-SP01		64,000
Intermediate (11 to 20)	1,2-DCA	59F-SP33	73.9	33,000
		59F-SP34		30,000
		59F-SP35		310,000
		59F-SP36		120
		62F-SP06		79
		CP2-07-SP01		8,600,000
		CP2-07-SP04		210
		CP2-07-SP06		160
		CP2-08-SP12		2,600 J
	Benzene	CP2-07-SP04	84	89
	Carbon Tet	CP2-07-SP06	58	100
	Chloroform	59F-SP35	83	160
		CP2-07-SP01		120,000
		CP2-07-SP04		740
		CP2-07-SP05		360
		CP2-07-SP06		530
		CP2-RE05-SP01		1,200
		CP2-RE05-SP02		120
	PCE	59F-SP38	320	380
	Vinyl Chloride	59F-SP33	31	71
		59F-SP34		55
		59F-SP35		830
		CP2-07-SP01		120,000
Very Deep (>30)	1,2-DCA	CP2-07-SP01	73.9	2,200,000
	Chloroform	CP2-07-SP01	83	12,000

- 1,2-DCA was the predominant VOC detected in soil vapor within Chemical Plant 2 Area North at concentrations above its RISL.
- The highest 1,2-DCA concentrations (up to 8,600,000 µg/m³) were detected in the shallow (0 to 10 feet bgs), intermediate (11 to 20 feet bgs), and deep (21 to 30 feet bgs) soil vapor intervals adjacent to a sump north of Chemical Plant 2 (Building 15007). The sump received discharges from trench drains within Chemical Plant 2. 1,2-DCA concentrations detected the intermediate (20 feet bgs) soil vapor interval near the sump are potentially indicative of the presence of residual product.

- Concentrations of 1,2-DCA above its RISL were also detected within and north of the former location of the holding basins and tanks (Source Area 59F) and at locations between the sump and the holding basin and tanks. The former holding basins and tanks received discharge from the sump north of Building 15007 via pipes and drain lines.
- Chloroform was the second most predominant VOC detected in soil vapor within Chemical Plant 2 Area North at concentrations above its RISL. Chloroform was detected above its RISL at the same locations where 1,2-DCA was detected above its RISL and the extent of chloroform generally corresponds to the extent of 1,2-DCA.
- Vinyl chloride was detected above its RISL at those locations (59F-SP34, 59F-SP35, and CP2-07-SP01) having the highest concentrations of 1,2-DCA. The extent of vinyl chloride in soil vapor above its RISL is encompassed within the footprint of the 1,2-DCA plume.

Metals

A total of 217 primary and 17 duplicate soil samples were collected at 70 locations at Source Areas 59F, 62F, F(c), CP2-07, and CP2-08 within Chemical Plant 2 Area North during the BOU RI and analyzed for metals. Additionally, 212 samples were also analyzed for mercury and three were analyzed for hexavalent chromium. The number of primary soil samples and sampling locations at Source Areas 59F, 62F, F(c), CP2-07, and CP2-08 are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
59F	Metals	37	28	28	15	11	8
	Mercury	29	24	28	15	11	8
	Hex Chrome	1	1	0	0	0	0
62F	Metals	9	8	14	7	7	2
	Mercury	9	8	14	7	7	2
	Hex Chrome	0	0	0	0	0	0
F(c)	Metals	6	6	6	3	4	1
	Mercury	6	6	6	3	4	1
	Hex Chrome	0	0	0	0	0	0
CP2-07	Metals	17	17	30	16	13	3
	Mercury	17	17	27	14	13	3
	Hex Chrome	1	1	1	1	0	0
CP2-08	Metals	15	11	14	7	6	2
	Mercury	15	11	11	6	6	2
	Hex Chrome	0	0	0	0	0	0

Arsenic and chromium were the only metals detected at concentrations statistically above background and their RISLs in soil samples collected in the source areas within Chemical Plant 2 Area North. However, it should be noted that while the concentrations are above the background level of 11 milligrams per kilogram (mg/kg) for RCRB soil, they are generally below the background level of 17 mg/kg for Xerorthents soil. Concentrations of arsenic and chromium above background and their RISLs, and the sample locations and depths, are listed in the table below. Surface and near-surface soil sampling locations are shown in Figure 3.3-3.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concentration (mg/kg)
59F-SNS01	2.5	Arsenic	0.07	17
59F-SD02	1.5	Arsenic	0.07	15
62F-SB10	1	Arsenic	0.07	35
CP2-08-SB14	1	Chromium	211	240

Semivolatile Organic Compounds

A total of 167 primary and 15 duplicate soil samples were collected at 59 locations at Source Areas 59F, 62F, F(c), CP2-07, and CP2-08 within Chemical Plant 2 Area North during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations at Source Areas 59F, 62F, F(c), CP2-07, and CP2-08 for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
59F	SVOCs	29	24	23	14	11	8
62F	SVOCs	8	6	9	5	7	2
F(c)	SVOCs	6	6	4	2	4	1
CP2-07	SVOCs	12	12	12	8	13	3
CP2-08	SVOCs	15	11	8	4	6	2

B(a)P and B(b&k)F were the only SVOCs detected in soil samples collected within the Chemical Plant 2 Area North at concentrations above their RISLs. Concentrations of those compounds above their RISLs and the location and depth of the sample having the detected concentrations are listed in the table below. Surface/near-surface and subsurface soil sampling locations are shown on Figures 3.3-3 and 3.3-4, respectively.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
59F-SNS01	0.5	Benzo(b&k)fluoranthene	38	48
59F-SB22	1.0	Benzo(a)pyrene Benzo(b&k)fluoranthene	38 38	39 84
59F-SB15	5.0	Benzo(b&k)fluoranthene	38	41
59F-SB26	1.0	Benzo(a)pyrene Benzo(k)fluoranthene	38 38	150 J 110 J
62F-SNS02	0.5	Benzo(b&k)fluoranthene	38	39
CP2-08-SNS04	0. 5	Benzo(a)pyrene Benzo(b&k)fluoranthene	38 38	94 J 220 J

Polychlorinated Biphenyls

A total of 52 primary and 3 duplicate soil samples were collected at 22 locations at Source Areas 59F, F(c), and CP2-08 within Chemical Plant 2 Area North during the BOU RI and analyzed for PCBs. The number of primary soil samples and sampling locations at Source Areas 59F, F(c), and CP2-08 for PCBs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
59F	PCBs	9	7	2	2	0	0
62F	PCBs	0	0	0	0	0	0
F(c)	PCBs	6	6	4	2	4	1
CP2-07	PCBs	0	0	0	0	0	0
CP2-08	PCBs	13	9	8	5	6	2

Aroclors 1248 and 1254 were detected at concentrations exceeding their respective RISLs in surface and/or near-surface soil samples within Chemical Plant 2 Area North. Aroclor 1254 was detected above its RISL in only one subsurface soil sample collected within Chemical Plant 2 Area North. The PCB Aroclor detected above its screening level, the detected concentration, and the depth and location of the sample are identified in the table below. Surface/near-surface and subsurface soil sampling locations are shown in Figures 3.3-3 and 3.3-4, respectively.

Sample Location	Depth (ft bgs)	PCB	RISL (µg/kg)	Concentration (µg/kg)
59F-SD01	0.25	Aroclor 1248	220	16,000 J
59F-SD02	0.25 1.5 5.0	Aroclor 1248 Aroclor 1254 Aroclor 1254	220 220 220	540 J 320 J 440
59F-SB26	1.0	Aroclor 1254	220	1,100
59F-SB27	1.0	Aroclor 1254	220	350
59F-SB28	1.0	Aroclor 1254	220	2,800
F(c)-SNS03	0.5	Aroclor 1254	220	230
F(c)-SB04	1.0	Aroclor 1248	220	120,000
CP2-08-SNS04	0.5	Aroclor 1254	220	480
CP2-08-SB10	2.0	Aroclor 1248	220	230 J
CP2-08-SB12	1.0	Aroclor 1254	220	1,900

- PCBs above their RISLs were detected in surface soils collected near several features at Source Areas F(c) and CP2-08 located within an area encompassing approximately 0.6 acre. These features include the former location of a PCB transformer, a boiler and compressor blowdown sump from Building 15014 and 15015, a dry well that received waste from Building 15010, and a former chemical storage area (Building 15008).
- Aroclors 1248 and 1254 above their RISLs were also detected at numerous locations along the drainage swales and ditches immediately west of Source Areas F(c) and CP2-08 and in the low-lying areas north and west of Source Area 59F.
- The data indicates PCBs likely originated from releases associated with the various features within Source Areas F(c) and CP2-08 and were then transported into the ditches, drainages, and low-lying areas via surface water runoff.

Perchlorate

A total of 56 primary and 7 duplicate soil samples were collected at 19 locations at Source Area 59F during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at Source Area 59F are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
59F	Perchlorate	24	19	21	13	11	8

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
62F	Perchlorate	0	0	0	0	0	0
F(c)	Perchlorate	0	0	0	0	0	0
CP2-07	Perchlorate	0	0	0	0	0	0
CP2-08	Perchlorate	0	0	0	0	0	0

Perchlorate was not detected above its RISL in any of the surface, near-surface, or subsurface soil samples collected at Source Area 59F.

Total Petroleum Hydrocarbons

A total of 26 primary and 2 duplicate soil samples were collected at nine locations at Source Areas F(c), CP2-07, and CP2-08 within Chemical Plant 2 Area North during the BOU RI and analyzed for TPH-D and TPH-Mo. The number of primary soil samples and sampling locations at Source Areas F(c), CP2-07, and CP2-08 are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
59F	TPH-D	0	0	0	0	0	0
	TPH-MO	0	0	0	0	0	0
62F	TPH-D	0	0	0	0	0	0
	TPH-MO	0	0	0	0	0	0
F(c)	TPH-D	6	6	3	2	4	1
	TPH-MO	6	6	3	2	4	1
CP2-07	TPH-D	1	1	2	1	5	1
	TPH-MO	1	1	2	1	5	1
CP2-08	TPH-D	2	2	3	2	0	0
	TPH-MO	2	2	3	2	0	0

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). TPH-D and TPH-MO were not detected at concentrations above their respective PGW SSls in soil samples collected from the Chemical Plant 2 Area North. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Pesticides

A total of 161 primary and 16 duplicate soil samples were collected at 62 locations in Source Areas F(c), CP2-07, and CP2-08 within Chemical Plant 2 Area North during the BOU RI and analyzed for pesticides. The number

of primary soil samples and sampling locations at Source Areas F(c), CP2-07, and CP2-08 are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
59F	Pesticides	29	24	24	14	11	8
62F	Pesticides	9	8	5	3	4	1
F(c)	Pesticides	0	0	0	0	0	0
CP2-07	Pesticides	22	22	24	14	13	3
CP2-08	Pesticides	12	8	4	2	4	1

Pesticides, including pendimethalin (Prowl), were not detected above their RISLs in any of the surface/near-surface or subsurface soil samples collected at the source areas within Chemical Plant 2 Area North.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected at the source areas [59F, 62F, F(c), CP2-07, and CP2-08] within Chemical Plant 2 Area North during the BOU RI were OBPA and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area for those analytes, and the number of locations, are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
59F	OBPA	24	19	22	14	11	8
	pH	24	19	28	15	11	8
62F	OBPA	7	6	2	1	1	1
	pH	2	1	1	1	0	0
F(c)	OBPA	1	1	1	1	3	1
	pH	0	0	0	0	0	0
CP2-07	OBPA	17	17	12	8	13	3
	pH	11	11	22	11	13	3
CP2-08	OBPA	12	8	2	1	4	1
	pH	2	2	4	2	0	0

OBPA was not detected above its PQL or RISL the soil samples collected within Chemical Plant 2 Area North. With the exception of two samples, the pH of the surface and subsurface soil samples was within the normal range (5 to 9) for mineral soil (Brady, 1974). A soil sample collected at a

depth of 1 foot bgs from boring CP2-07-SB12 had a pH of 11.7 and a soil sample collected at 5 feet bgs from boring 59F-SB16 had a pH of 9.85.

3.3.1.3 *Summary of Scope and Results of Remedial Investigations – Chemical Plant 2 Area South*

Chemical Plant 2 Area South encompasses Source Areas 60F and 61F, two former storage areas that were part of RCRA E, the former location of the Stouffer Chemical Plant, and various features south of the railroad tracks that transect the area (Figure 3.3-1). Various features include sumps, hazardous material storage areas, a chemical disposal dry well, drainage areas, and the previous location of storage tanks associated with the former Stouffer Chemical Plant.

The scope and results of RIs conducted at the source areas within Chemical Plant 2 Area South are summarized below.

Scope of Remedial Investigations

- ***1984 – 2002:*** Soil samples from 5 soil borings and 10 soil vapor samples were collected in the vicinity of Source Areas 60F and 61F, the former Stouffer Chemical Plant, and associated features. Soil vapor samples were analyzed for VOCs. Soil samples were analyzed for SVOCs, perchlorate, PCBs, TPH, pesticides, and/or metals.
- ***BOU RI (2005 - 2007):*** Thirty-five primary and 7 duplicate soil vapor samples, 17 primary and 5 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 35 primary and two duplicate subsurface (2.6 to 99 feet bgs) soil samples were collected at Source Areas 60F and 61F and associated features in Chemical Plant 2 Area South.

  Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals, PCBs, TPH-D, TPH-Mo, pesticides, pH, TOC, CEC, and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals, PCBs, TPH-D, TPH-Mo, pesticides, pH, TOC, CEC, and/or geotechnical parameters.

Results of Remedial Investigation

The results of the BOU RI of the source areas within Chemical Plant 2 Area South are summarized below. Soil vapor, surface soil, and

subsurface soil sampling locations are shown in Figures 3.3-2, 3.3-3, and 3.3-4, respectively.

Volatile Organic Compounds

A total of 35 primary soil vapor samples were collected 15 locations at Source Areas 60F and 61F and other areas within Chemical Plant 2 Area South and analyzed for VOCs, including TICs.

Source Area	Depth (ft bgs)	No. of Primary Samples	No. of Locations
60F	0-10	11	11
	11-20	11	11
	21-30	0	0
	>30	5	5
61F	0-10	4	4
	11-20	4	4
	21-30	0	0
	>30	0	0

1,2-DCA, chloroform, and vinyl chloride were the only VOCs detected in the soil vapor samples collected at the source areas within Chemical Plant 2 Area South at concentrations above their respective RISLs. The location and depth of soil vapor samples containing concentrations of those VOCs above their respective RISLs are presented on the table below. BOU RI soil vapor sampling locations within Chemical Plant 2 Area South are shown in Figure 3.3-2.

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	1,2-DCA	61F-SP03	73.9	760
		62F-SP06		78
		CP2-RE05-SP01		300,000
		CP2-RE05-SP02		38,000
		CP2-RE05-SP05		340
		CP2-RE05-SP06		12,000
	Chloroform	CP2-RE05-SP01	83	3,000
		CP2-RE05-SP02		400
	Vinyl Chloride	CP2-RE05-SP01	31	240
Intermediate (11 to 20)	1,2-DCA	61F-SP03	73.9	330
		62F-SP06		79
		CP2-RE05-SP01		110,000
		CP2-RE05-SP02		9,900
		CP2-RE05-SP06		4,300
	Chloroform	CP2-RE05-SP01	83	1,200
		CP2-RE05-SP02		120

Depth Interval (ft bgs)	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
	Vinyl Chloride	CP2-RE05-SP01	31	58
Very Deep (>30)	1,2-DCA	CP2-RE05-SP06	73.9	910

- 1,2-DCA was the predominant VOC detected in soil vapor within Chemical Plant 2 Area South at concentrations above its RISL.
- The highest 1,2-DCA concentrations (up to 300,000 µg/m³) were detected in the shallow (0 to 10 feet bgs) and intermediate (11 to 20 feet bgs) soil vapor intervals at locations CP2-RE05-SP01 and CP2-RE05-SP02 in the area of the former Stouffer Chemical Plant and associated storage tanks.
- Chloroform was the second most predominant VOC detected in soil vapor within Chemical Plant 2 Area South at concentrations above its RISL. Chloroform was detected above its RISL in the shallow (0 to 10 feet bgs) and intermediate (11 to 20 feet bgs) soil vapor intervals at two locations (CP2-RE05-SP01 and CP2-RE05-SP02) within Chemical Plant 2 Area South. The soil vapor data indicate that chloroform in soil vapor within Chemical Plant 2 Area South is likely associated with the former Stouffer Chemical Plant and that the extent of chloroform in soil vapor is encompassed within the plume of 1,2-DCA originating from the area of the former Stouffer Chemical Plant.
- Vinyl chloride was detected above its RISL in the shallow (0 to 10 feet bgs) and intermediate (11 to 20 feet bgs) soil vapor intervals at only one location (CP2-RE05-SP01) within Chemical Plant 2 Area South. The detection of vinyl chloride in soil vapor at this location is attributed to releases associated with the former Stouffer Chemical Plant.

Metals

A total of 52 primary and 7 duplicate soil samples were collected at 17 locations at Source Areas 60F and 61F in Chemical Plant 2 Area South during the BOU RI and analyzed for metals, including mercury. The number of primary soil samples and sampling locations at Source Areas 60F and 61F are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
60F	Metals	12	12	22	11	7	2
	Mercury	12	12	22	11	7	2
	Hex Chrome	0	0	0	0	0	0
61F	Metals	3	3	2	1	4	1
	Mercury	5	5	2	1	4	1
	Hex Chrome	0	0	0	0	0	0

Metals were not detected at concentrations above their respective RISLs in the surface, near-surface, and subsurface soil samples collected at the source areas within Chemical Plant 2 Area South.

Semivolatile Organic Compounds

A total of 48 primary and 7 duplicate soil samples were collected at 17 locations at Source Areas 60F and 61F within Chemical Plant 2 Area South during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations at Source Areas 60F and 61F for SVOCs are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
60F	SVOCs	12	12	18	9	7	2
61F	SVOCs	5	5	2	1	4	1

B(b&k)F and pentachlorophenol were the only SVOCs detected in soil samples collected within the Chemical Plant 2 Area South at concentrations above their respective RISLs. Concentrations of those compounds above their RISLs and the location and depth of the sample having the detected concentrations are listed in the table below. Surface/near-surface and subsurface soil sampling locations are shown on Figures 3.3-3 and 3.3-4, respectively.

Sample Location	Depth (ft bgs)	SVOC	RISL (µg/kg)	Concentration (µg/kg)
60F-SNS01	0.5	Benzo(b&k)fluoranthene	38	58
61F-SNS01	0.5	Benzo(b&k)fluoranthene	38	130 J
		Pentachlorophenol	56	2,800

As shown on Figure 3.3-3, borings 60F-SNS01 and 61F-SNS01 are in areas that may have received surface water runoff from the laboratory (Building 15001).

Polychlorinated Biphenyls

Three primary soil samples were collected at one location at Source Area 60F within Chemical Plant 2 Area South during the BOU RI and analyzed for PCBs. The number of primary soil samples and sampling locations at Source Area 60F for PCBs are summarized on the table below. Surface/near-surface and subsurface soil sampling locations are shown in Figures 3.3-3 and 3.3-4, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
60F	PCBs	1	1	2	1	0	0
61F	PCBs	0	0	0	0	0	0

PCBs were not detected above their respective PQLs or RISLs in any of the soil samples collected at the source areas within the Chemical Plant 2 Area South.

Total Petroleum Hydrocarbons

Two primary and two duplicate soil samples were collected at Source Area 60F within Chemical Plant 2 Area South during the BOU RI and analyzed for TPH-D and TPH-Mo.

RISLs were not established for TPH-D and TPH-Mo; however, PGW SSLs were agreed upon for TPH-D (100 mg/Kg) and TPH-MO (500 mg/Kg) (see Section 3.1.3.3 of the RI). TPH-D and TPH-MO were not detected at concentrations above their respective PGW SSls in soil samples collected from the Chemical Plant 2 Area South. Volatile constituents in those compounds were included in the VOC analysis of soil vapor samples and PAHs were included in the SVOC analysis of soil samples.

Pesticides

A total of 44 primary and 7 duplicate soil samples were collected at 17 locations at Source Areas 60F and 61F within Chemical Plant 2 Area South during the BOU RI and analyzed for pesticides. The number of primary soil samples and sampling locations for pesticides at Source Areas 60F and 61F are summarized on the table below. Surface/near-surface and

subsurface soil sampling locations are shown in Figures 3.3-3 and 3.3-4, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
60F	Pesticides	12	12	14	7	7	2
61F	Pesticides	5	5	2	1	4	1

Pesticides, including pendimethalin (Prowl), were not detected in the surface/near-surface and subsurface soil samples collected at Source Areas 60F and 61F at concentrations above their respective RISLs.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected at Source Areas 60F and 61F and other features within Chemical Plant 2 Area South were OBPA and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
60F	OBPA	13	12	12	6	7	2
	pH	11	11	20	10	7	2
61F	OBPA	3	3	2	1	4	1
	pH	2	2	0	0	0	0

OBPA was not detected above its PQL or RISL in any of the soil samples collected at Source Areas 60F and 61F within Chemical Plant 2 Area South. The pH of the soil was within the normal range (5 to 9) for mineral soils (Brady, 1974).

3.3.2 *Summary of Environmental Setting and Remedial Investigations – Magazine Area*

The Magazine Area (Aerojet Area 48) consists of storage bunkers, shipping and transfer facilities, and safety shelters (Figure 3.3-5). Open Space 3 essentially encompasses the same lands as the Magazine Area and, therefore, is included in this summary of the Magazine Area.

Details concerning the scope and results of the RI for the Magazine Area are presented in Section 6.2 of the RI Report (Volume 1). The environmental setting for the Magazine Area and the scope and results of the RI are summarized below.

3.3.2.1 *Environmental Setting – Magazine Area*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Magazine Area are described in the following subsections.

Topography

The topography of the Magazine Area is relatively flat as result of grading during construction of the bunkers. The relatively flat topography is broken up by the presence of large revetments around each of the bunkers and by some remnant dredging features such as slicken valleys and some cobble piles.

Geology

The surface and near-surface lithologies in the Magazine Area are comprised of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay to a depth between 45 and 55 feet. The Magazine Area has been heavily graded and paved, but a review of historical photographs shows that the area is surrounded by dredge tailings. Native soils below the dredge tailings generally consist of fluvial deposits of sand and silt and are likely similar to those encountered during drilling in the dredge pit and Eastern Basin.

Soils

Soils in the vicinity of the Magazine Area consist primarily of Xerorthents; dredge tailings with 2 to 50 percent slopes. These are very deep, somewhat excessively drained to excessively drained soils found in areas of dredge tailings. They are formed in material that has a high content of gravel and cobbles derived from mixed sources. The material was deposited as tailings after most of the fine-earth material was washed from it and removed during gold dredging activities. Slopes are short, complex, and disturbed (USDA – NRCS, 1993).

Surface Water Hydrology

There are no prominent surface water features such as creeks, ponds, or ditches within the Magazine Area. Surface water runoff from the area surrounding the bunkers generally percolates into the ground or flows into nearby low-lying areas, primarily remnant slickens valleys.

Local Hydrogeology

The first saturated sediments encountered beneath the Magazine Area are either part of Perched Groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the Administration Area. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Magazine Area is discussed below. . Details regarding the occurrence of groundwater within the Chemical Plant 2 Region and the distribution of chemicals in the groundwater are presented in Section 6.6 of the RI (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

There are several Perched Groundwater zones in the Chemical Plant 2 Region, which have been generally grouped into an Upper Perched Zone and a Lower Perched Zone. The definitions refer to an assemblage of several perched groundwater zones, and not one specific unit.

The Upper Perched Zone typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities. The base of the Upper Perched Zone generally coincides with the interface between the permeable dredged material and the relatively impermeable, undredged material. The Upper Perched Zone was identified at two locations in the northern portion of the Magazine Area near Buildings 48013 and 48019 at depths of 30 and 46 feet bgs.

Lower Perched Groundwater occurs in discontinuous sand lenses in a generally fine-grained lithologic unit that have not been dredged. Lower Perched Groundwater was not encountered in the Magazine Area.

First Water-Bearing Zone (Layer S)

The FWBZ in the Magazine Area occurs within Layer A, but the saturated thickness of that layer in the Magazine Area during the BOU RI sampling period was only about two feet during the RI sampling period.

Depth to the top of FWBZ in the Magazine Area ranges from approximately 65 to 80 feet bgs and decreases towards the south-southeast in the direction of the Dredge Pit and Eastern Basin. Groundwater elevations in the FWBZ have decreased an average of 39 feet between 1983/1984 and April 2006, with lowest levels generally occurring between 1994 and 1996. Data indicates that groundwater elevations in the FWBZ are continuing to drop.

Flow direction in the FWBZ is general towards the west, consistent with the migration of groundwater from the Line 03 Area east of Chemical Plant 2 towards GET E/F Extraction Wells 4007 and 4310. The average hydraulic gradient across Chemical Plant 2 Area is approximately 0.0064 ft/ft, but flattens to approximately 0.0004 in the area immediately upgradient (east) of Chemical Plant 2.

<u>Ecological Habitat</u>

The Magazine Area contains a wide variety of habitats including buildings, ruderal/disturbed habitat, paved surfaces, dredger tailings, annual grassland, Fremont cottonwood woodland, Fremont cottonwood-oak woodland, and coyote brush-willow scrub.

Flora near the buildings, ruderal/disturbed habitat, and paved surfaces typically includes herbaceous weeds, non-native invasive species, and ornamental landscape species. Fauna species common to this area are habitat generalists such as the rock pigeon, mourning dove, western fence lizard, European starling, house mouse, and deer mouse; or species that may venture in from adjacent vegetation communities.

Non-native, naturalized Mediterranean grasses represent the predominant flora species within the annual grassland habitat interspersed with the dredger tailings. Fauna species are not common in the dredger tailings due in part to the cobble-boulder substrate and sparse vegetation cover.

However, the annual grassland mixed in with the dredger tailings allows for foraging ground for some species, including the western fence lizard, common king snake, white-tailed kite, red-tailed hawk, and coyote.

Fremont cottonwood woodland and Fremont cottonwood-oak woodland support similar flora and fauna. Fremont cottonwood is the dominant tree species, with oak and willow species as sub-dominant members of the canopy. The understory ranges from open areas dominated by annual grasses to dense, developed shrub layers. Flora species typically observed in the understory include coyote brush, poison oak, willow, and various annual grasses. Common fauna species include the Pacific tree frog, western rattlesnake, Cooper's hawk, red-tailed hawk, American kestrel, wild turkey, great horned owl, various songbirds, California vole, deer mouse, coyote, and black-tailed deer.

The coyote brush-willow scrub community is dominated by coyote brush and shrub type willows. Other common flora includes blue elderberry, poison oak, hoary coffeeberry, a variety of thistles, and annual grasses. This community is typically found in low-lying areas between the dredge tailing piles. Fauna species typically include a variety of snakes, California quail, towhee, mourning dove, California vole, black-tailed jackrabbit, desert cottontail, raccoon, gray fox, coyote, and black-tailed deer.

Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), were observed scattered throughout the entire Magazine Area. A *Biological Assessment Report* (ECORP Consulting, Inc. 2005) for the BOU was presented as Appendix B in the BOU FSP (Aerojet and others, 2006).

3.3.2.2 *Summary of Scope and Results of Remedial Investigations – Magazine Area*

The scope and results of RIs conducted in the Magazine Area/Open Space Area 3 are summarized below.

<u>Scope of Remedial Investigations</u>

- **1993:** Soil vapor samples were collected at a depth of 10 feet bgs at four locations in the vicinity of the septic systems at Buildings 48013 and 48019 and analyzed for select VOCs.
- ***BOU RI (2005 to 2007):*** Twenty-seven primary and 1 duplicate soil vapor samples, 8 primary and 1 duplicate surface and/or near-surface

(0 to 2.5 feet bgs) soil samples, and 7 primary subsurface (2.6 to 11.5 feet bgs) soil samples were collected within the Magazine Area.

Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals, perchlorate, nitroguanidine, DI-WET, and/or geotechnical parameters. Subsurface soil samples were analyzed for SVOCs, metals, perchlorate, nitroguanidine, DI-WET, and/or geotechnical parameters.

Results of Remedial Investigations

The results of the RI of the Magazine Area/Open Space Area 3 are summarized below. Soil vapor, surface soil, and subsurface soil sampling locations are shown in Figures 3.3-6, 3.3-7, and 3.3-8, respectively.

Volatile Organic Compounds

A total of 27 primary soil vapor samples were collected at 11 locations within the Magazine Area during the BOU RI and analyzed for VOCs, including TICs. The number of primary soil vapor samples analyzed for VOCs and sampling locations and depth are summarized on the table below.

Area	Depth (ft bgs)	No. of Primary Samples	No. of Locations
Magazine Area	Shallow (0-10)	11	11
	Intermediate (11-20)	11	11
	Deep (21-30)	5	5

PCE at concentrations above its RISL of 320 µg/m^3 was detected in only two soil vapor samples collected at one location within the Magazine Area. PCE at 1,800 µg/m^3 and 400 µg/m^3 was detected in soil vapor samples collected at 10 and 30 feet bgs, respectively, at location A48-ST13-SP06. A48-ST13-SP06 is adjacent to the septic tank and leach system associated with Building 48013 (Figures 3.3-6).

Metals

A total of 9 primary soil samples were collected within the Magazine Area during the BOU RI and analyzed for metals, including mercury. The number of primary soil samples and sampling locations in the Magazine Area are summarized on the table below. Surface/near-surface and subsurface soil sampling locations are shown in Figures 3.3-7 and 3.3-8, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
OS3	Metals	6	3	0	0	0	0
	Mercury	6	3	0	0	0	0
	Hex Chrome	0	0	0	0	0	0
Magazine Area	Metals	2	2	7	3	0	0
	Mercury	2	2	7	3	0	0
	Hex Chrome	0	0	0	0	0	0

Metals were not detected above their respective RISLs in the soil samples collected within the Magazine Area.

Semivolatile Organic Compounds

A total of 15 primary and 1 duplicate soil samples were collected within the Magazine Area during the BOU RI and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations for SVOCs are summarized on the table below. Surface/near-surface and subsurface soil sampling locations are shown in Figures 3.3-7 and 3.3-8, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
OS3	SVOCs	6	3	0	0	0	0
Magazine Area	SVOCs	8	5	7	3	0	0

SVOCs were not detected above their respective RISLs in soil samples collected within the Magazine Area.

Perchlorate

Nine primary and one duplicate soil samples were collected within the Magazine Area during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at the Magazine Area for perchlorate are summarized on the table below. Surface/near-surface and subsurface soil sampling locations are shown in Figures 3.3-7 and 3.3-8, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
OS3	Perchlorate	6	3	0	0	0	0
Magazine Area	Perchlorate	7	4	2	1	0	0

Perchlorate was not detected above its RISL in any of the soil samples collected within the Magazine Area.

Nitroguanadine

Fifteen primary soil samples were collected at eight locations within the Magazine Area during the BOU RI and analyzed for nitroguanidine. Eight surface/near-surface soil samples were collected at five locations and seven subsurface (2.6 to 12 feet bgs) samples were collected at three locations. Surface/near-surface and subsurface soil sampling locations are shown in Figures 3.3-7 and 3.3-8, respectively.

Nitroguanidine was not detected above its PQL or RISL in any of the surface/near-surface and subsurface soil samples collected within the Magazine Area.

3.3.3 *Summary of Environmental Setting and Remedial Investigations – Dredge Pit and Eastern Basin*

Two historical dredge pits are located approximately 2,400 feet (one-half mile) east, northeast of Chemical Plant 2 (Figure 3.3-9). The western-most dredge pit (Source Area 25F) is referred to as the Dredge Pit and the eastern-most pit is referred to as the Eastern Basin. The edges of the Dredge Pit and Eastern Basin are roughly 180 feet apart and may have historically been connected by a small draw. The Eastern Basin is not identified as a source area, but was included in the BOU RI to assess the potential presence of chemicals.

Details concerning the scope and results of the RI for those two areas are presented in Section 6.3 of the RI Report (Volume 1). The environmental setting for the Dredge Pit and Eastern Basin and the scope and results of the RI are summarized below.

3.3.3.1 *Environmental Setting – Dredge Pit and Eastern Basin*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of the Dredge Pit and Eastern Basin are described in the following subsections.

Topography

The topography of the area north, south, and east of the Dredge Pit and Eastern Basin is dominated by dredge tailings consisting of furrows of cobbles divided by slicken valleys. West of the Dredge Pit and Eastern Basin, the terrain is relatively flat with a slight upward slope towards the west. The review of aerial photographs indicate that hard, indurated material (possibly an ancestral American River terrace) that likely did not contain significant amount of gold was encountered by the dredgers as they moved towards the west and therefore dredging operations were halted.

The Dredge Pit and Eastern Basin are connected to each other and the main paved roads (Burma Road and Oklahoma Road) by dirt roads.

Geology

Both the Dredge Pit and Eastern Basin are on the contact between dredged and undredged material, which reflects a change in the lithologic material. The dredged areas surrounding the pits are comprised of approximately 70 to 90 feet of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay underlain by undisturbed layers of weak to well indurated poorly graded gravels with sand, clayey sands, clayey gravels with sand, and gravels with clay and sand to depth of 70 feet below the bottom of the Dredge Pit.

In the undredged areas west of the dredge pits, and on the north, south, and west sidewalls of the Dredge Pit, the lithology consists of interbeds of moderate to well indurated siltstones with thin layers of gravels, gravels with sand, clayey sands, clayey gravels with sand, and gravels with clay and sand; similar to the lithologies encountered below the dredge pits.

Soils

The Dredge Pit and Eastern Basin are located at the contact between dredged and undredged material and therefore the soils consist of both Xerorthents and Redding-Corning-Red Bluff. Xerorthents are very deep,

somewhat excessively drained and excessively drained soils associated with dredge tailings. They are formed in material that has a high content of gravel and cobbles derived from mixed sources. The material was deposited as tailings after most of the fine-earth material was washed from it and removed during gold dredging activities. Slopes are short, complex, and disturbed (USDA – NRCS, 1993).

The Redding-Corning-Red Bluff complex consists of moderately well-drained soils that are moderately deep over a cemented hard pan. The soils form in alluvium that is derived from mixed rock sources. The Redding soils are typically a surface layer of gravelly loam with subsoil comprised of a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam (USDA – NRCS, 1993).

Surface Water Hydrology

Rain water accumulation in the Dredge Pit and Eastern Basin during the wet season account for the only local surface water features. Surface water runoff in the area of the dredge tailings is minimal and most of the precipitation infiltrates into the soil. The Dredge Pit and Eastern Basin generally contain water during the wet season and dry out during the summer and fall. The duration in which water may be present in the pits varies depending on the amount of precipitation received during the winter months.

Local Hydrogeology

The first saturated sediments encountered in the area of the Dredge Pit and Eastern Basin is either part of Perched Groundwater or within the FWBZ. For the purposes of this RI, FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the area of investigation. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater (Layer Y) and FWBZ (Layer S) beneath the Dredge Pit and Eastern Basin is discussed below. Details regarding the occurrence of groundwater within the

Chemical Plant 2 Region and distribution of chemicals in the groundwater are presented in Section 6.6 of the RI Report (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

There are several Perched Groundwater zones in the Chemical Plant 2 Region, which have been generally grouped into an Upper Perched Zone and a Lower Perched Zone. The definitions refer to an assemblage of several perched groundwater zones, and not one specific unit.

The Upper Perched Zone typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities and the base generally coincides with the interface between the permeable dredged material and the relatively impermeable, undredged material. In the Dredge Pit Area, the Upper Perched Zone was encountered at a depth of roughly 10 feet bgs.

Lower Perched Groundwater occurs in discontinuous sand lenses in a generally fine-grained lithologic unit and is water that was left perched as a result of the decrease in water levels in the FWBZ. Lower Perched Groundwater was not encountered beneath the Dredge Pit and Eastern Basin.

First Water-Bearing Zone (Layer S)

The FWBZ in the area of the Dredge Pit and Eastern Basin occurs within Layer A. Depth to the top of FWBZ in the area ranges from 54 feet bgs in the Dredge Pit to 115 feet bgs in the dredged areas south of the pits. The increase in depth to groundwater is generally due to increased elevations beyond the interior of the pits and an ancestral American River terrace. Groundwater elevations in the FWBZ have decreased an average of 39 feet between 1983/1984 and April 2006, with lowest levels generally occurring between 1994 and 1996. Data indicates that groundwater elevations in the FWBZ are continuing to drop.

Flow direction in the FWBZ is general towards the west, consistent with the migration of groundwater from the Line 03 Area east of Chemical Plant 2 towards GET E/F Extraction Wells 4007 and 4310. The average hydraulic gradient across Chemical Plant 2 Area is approximately

0.0064 ft/ft, but flattens to approximately 0.0004 in the area immediately upgradient (east) of Chemical Plant 2.

Ecological Habitat

The area surrounding the Dredge Pit and Eastern Basin consists primarily of dredger tailings and patches of coyote scrub brush.

Typical flora within the dredger tailings consists primarily of non-native grasses and other weedy species, such as Italian thistle and yellow star-thistle. The coyote scrub brush community is most commonly encountered in the slickens area between the dredge piles and is dominated by coyote brush and other shrubs such as blue elderberry, poison oak, willow, and hoary coffeeberry. Fauna commonly encountered within the coyote scrub brush include various raptors, western fence lizard, mountain garter snake, western rattlesnake, ringneck snake, Pacific gopher snake, California quail, Bewick's wren, wrentit, California thrasher, spotted towhee, California towhee, deer mouse, California vole, black-tailed jackrabbit, desert cottontail, raccoon, gray fox, coyote, and black-tailed deer. Fauna are not common in the dredger tailings due in part to the cobble-boulder substrate and sparse vegetation cover.

Blue elderberry shrubs, potential habitat for the valley elderberry longhorn beetle (*desmocerus californicus dimorphus*) are also scattered throughout the area surrounding the Dredge Pit and Eastern Basin.

A *Biological Assessment Report* (ECORP Consulting, Inc. 2005), including a habitat and vegetation map for the dredge pit area, was presented in Appendix B of the BOU FSP.

3.3.3.2 *Summary of Scope and Results of Remedial Investigations – Dredge Pit and Eastern Basin*

The scope and results of RIs conducted at the Dredge Pit and Eastern Basin are summarized below.

Scope of Remedial Investigations

- ***1978 – 1993:*** Soil samples from soil borings and trenches and 11 soil vapor samples were collected in the bottom of the Dredge Pit (Source Area 25F). Soil vapor samples were analyzed for VOCs. Soil samples were analyzed for VOCs, SVOCs, metals, and/or pesticides (including

Prowl). Sampling was not conducted in the Eastern Basin during previous investigations.

- ***BOU RI (2005 to 2007):*** Soil vapor samples were not collected at the bottom of the Dredge Pit (Source Area 25F) or the Eastern Basin due to the presence of ponded water. Soil samples were collected at one location in the Dredge Pit and analyzed for VOCs. Nineteen primary and two duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples and 48 primary and 4 duplicate subsurface (2.6 to 61 feet bgs) soil samples were collected at Source Area 25F and the Eastern Basin.

  Surface and/or near-surface soil samples were analyzed for VOCs, SVOCs, metals, N-nitrosodimethylamine (NDMA), pesticides (including Prowl), pH, TOC, CEC, and/or geotechnical parameters. Subsurface soil samples were analyzed for VOCs, SVOCs, metals, pesticides (including Prowl), pH, TOC, CEC, DI-WET, and/or geotechnical parameters.

Results of Remedial Investigations

The results of the RI of the Dredge Pit and Eastern Basin are summarized below. Surface and subsurface soil sampling locations are shown in Figures 3.3-10 and 3.3-11, respectively.

Volatile Organic Compounds

Soil samples were collected at 0.25, 1.5, and 5 feet bgs from one boring (25F-SD01) drilled at the lowest point in the Dredge Pit (Source Area 25F) and analyzed for VOCs, including TICs. The soil sampling location is shown in Figures 3.3-10 and 3.3-11.

VOCs were not detected at concentrations above their respective RISLs in the soil samples collected from boring 25F-SD01.

Metals

A total of 53 primary and 6 duplicate soil samples were collected at 14 locations at Source Area 25F and the Eastern Basin during the BOU RI and analyzed for metals, including mercury. The number of primary soil samples and sampling locations at Source Areas 25F and the Eastern Basin are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
Dredge Pit (25F)	Metals	10	9	11	6	17	4
	Mercury	10	9	11	6	17	4
	Hex Chrome	0	0	0	0	0	0
Eastern Basin	Metals	5	4	10	4	0	0
	Mercury	5	4	10	4	0	0
	Hex Chrome	0	0	0	0	0	0

- Mercury was detected at a concentration statistically above background and its RISL of 18 mg/kg in one near-surface soil collected within the Dredge Pit. Mercury at 34 mg/kg was detected in a near-surface (1 foot bgs) soil sample collected from boring 25F-SB07 (Figure 3.3-10).
- Metals were not detected above their respective RISLs in the soil samples collected within the Eastern Basin.

Semivolatile Organic Compounds

A total of 54 primary and five duplicate soil samples were collected at 14 locations at Source Area 25F and the Eastern Basin and analyzed for SVOCs, including TICs. The number of primary soil samples and sampling locations at Source Area 25F and the Eastern Basin for SVOCs are summarized on the table below. Surface and subsurface soil sampling locations are shown in Figures 3.3-10 and 3.3-11, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
Dredge Pit (25F)	SVOCs	7	6	11	6	17	4
Eastern Basin	SVOCs	9	8	10	4	0	0

SVOCs were not detected above their respective RISLs in the soil samples collected within the Dredge Pit and Eastern Basin.

Pesticides

A total of 63 primary and eight duplicate soil samples were collected at 14 locations at Source Area 25F and the Eastern Basin and analyzed for pesticides, including Prowl. The number of primary soil samples and sampling locations at Source Area 25F and the Eastern Basin for SVOCs

are summarized on the table below. Surface and subsurface soil sampling locations are shown in Figures 3.3-10 and 3.3-11, respectively.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
Dredge Pit (25F)	Pesticides	10	9	21	10	17	4
Eastern Basin	Pesticides	5	4	10	4	0	0

Pesticides, including Prowl, were not detected above their respective RISLs in the soil samples collected from the Dredge Pit (Source Area 25F) or Eastern Basin.

Miscellaneous Compounds

Miscellaneous analyses performed on soil samples collected at Source Area 25F and the Eastern Basin were OBPA and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area for each analysis and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
Dredge Pit (25F)	OBPA	7	6	11	6	17	4
	pH	7	6	11	6	17	4
Eastern Basin	OBPA	5	4	10	4	0	0
	pH	5	4	10	4	0	0

- OBPA was not detected above its PQL or RISL in the soil samples collected at Source Area 25F and the Eastern Basin.
- Four surface soil samples and 22 subsurface soil samples collected within the Dredge Pit (Source Area 25F) had a pH above the normal high level of 9 for mineral soils (Brady, 1974). The high pH observed in the soils could potentially be related to discharges of wastes from Chemical Plant 2. The pHs for soil within the Eastern Basin were within the normal range (5 to 9) for mineral soils.

3.3.4 *Summary of Environmental Setting and Remedial Investigations – Open Space Areas 1, 2, and 4*

Open Space Areas 1, 2, and 4 (OS1, OS2, and OS4) consist of buffer zones located between operational areas (Chemical Plant 2 and Line 3) on the site and neighboring properties to the west and south (Figure 3.3-12).

Details concerning the scope and results of the RI for OS1, OS2, and OS4 are presented in Section 6.4 of the RI Report (Volume 1). The environmental setting for those three open spaces and the results of the RI are summarized below.

3.3.4.1 *Environmental Setting – Open Space Areas 1, 2, and 4*

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of OS1, OS2, and OS4 are described below. As previously discussed, OS3 is synonymous with the Magazine Area and is discussed in Section 6.2.

Topography

With the exception of graded areas around a few buildings such as Aerojet GET E/F, OS1 consists primarily of dredge tailings comprised of relatively low mounds of cobbles separated by low-lying slicken valleys. Topographic relief in the area is provided by a strip of undredged material representing an ancestral American River terrace transects OS1 diagonally from the southwest to the northeast. This thin section of elevated land may have potentially been used as an access road during dredging and possibly may have included a branch line/ditch extending from Rebel Hill Ditch near Old White Rock Road.

OS2 is buffer land between Chemical Plant 2/Magazine Area and Line 03. OS2 consists of land that has been deeply and extensively dredged and consists of high, wide cobble piles separated by deep slicken valleys that support vegetation. A few graded dirt roads along the top of the cobble piles cross the area.

OS4 is buffer land between the Magazine Area and Chemical Plant 1/ Line 05. OS4 consists of dredge tailings with both north-south and east-west trending cobble piles separated by slickens valleys that support vegetation. A dirt road is present along the eastern boundary of OS4.

Geology

The geology of Open Space Areas 1, 2, and 4, based on borings and wells located within or adjacent to those areas, is described below.

Open Space Areas 1 and 2

The majority of the land within OS1 and OS2 has been extensively dredged for gold and data indicate that dredging in these areas was accomplished to depths ranging from 70 to 90 feet bgs. The geology in OS1 and OS2 is similar to that observed in the area of the Dredge Pit and Eastern Basin consisting of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay to depths of 70 to 90 feet, underlain by undisturbed layers of weak to well-indurated poorly graded gravels with sand, clayey sands, clayey gravels with sand, and gravels with clay and sand.

Although the majority of the land encompassed by OS1 and OS2 has been dredged, a northeast-southwest trending ancestral American River terrace forms a strip of undredged material that divides the dredging areas in OS1 and OS2 from those in the Magazine Area and OS4. This strip of undredged American River terrace extends from near the intersection of Old White Rock Road and New White Rock Road to across the northern portion of Chemical Plant 2 (Source Area 59F) to the undredged material exposed in the Dredge Pit and Eastern Basin. The geologic material of the terrace consists of moderate to well-indurated siltstones with thin layers of gravels, gravels with sand, clayey sands, clayey gravels with sand, and gravels with clay and sand.

Open Space Area 4

The lands encompassed by OS4 have been entirely dredged and the lithologic material consists of reworked Quaternary-aged fluvial deposits of cobbles, sand, silt, and clay to depths between 45 and 55 feet bgs, underlain by undisturbed layers of weak to well-indurated poorly graded gravels with sand, clayey sands, clayey gravels with sand, and gravels with clay and sand.

Soils

Dredge tailings are classified as Xerorthents. Xerorthents are very deep, somewhat excessively drained, and excessively drained soils associated with dredge tailings. They are formed in material that has a high content

of gravel and cobbles derived from mixed sources. The material was deposited as tailings after most of the fine-earth material was washed from it and removed during gold dredging activities. Slopes are short, complex, and disturbed (USDA – NRCS, 1993).

Undredged portions of OS1, OS2, and OS4 are classified as Redding-Corning-Red Bluff consisting of moderately well-drained soils that are moderately deep over a cemented hard pan. This soil unit is found on intermediate and high terraces, terrace remnants, and the side slopes of terraces in the eastern part of Sacramento County. The soils form in alluvium that is derived from mixed rock sources. The Redding soils are typically a surface layer of gravelly loam with subsoil comprised of a gravelly claypan, which is in turn underlain by a hardpan at a depth of 20 to 40 inches. The Corning-Red Bluff soils are typically a loam with a subsoil of clay loam, gravelly loam, and gravelly clay loam.

Surface Water Hydrology

Surface water within the dredge tailings typically infiltrates quickly into the underlying soils or temporarily ponds in the slickens valleys. No predominant surface water features are present within OS1, OS2, and OS4, but historical remnants of Rebel Hill Ditch may be found along the southern boundary of OS1 and OS2.

Local Hydrogeology

The first saturated sediments encountered beneath Open Space Areas 1, 2, and 4 are either part of Perched Groundwater or within the FWBZ. As previously discussed, the FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across the Administration Area. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the Open Space Areas is discussed below. Details regarding the occurrence of groundwater within the Chemical Plant 2 Region and distribution of chemicals in the groundwater are presented in Section 6.6 of the BOU RI (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within

the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

Perched Groundwater (Layer Y)

There are several Perched Groundwater zones in the Chemical Plant 2 Region, which have been generally grouped into an Upper Perched Zone and a Lower Perched Zone. The definitions refer to an assemblage of several perched groundwater zones, and not one specific unit.

The Upper Perched Zone typically occurs in ancestral American River sediments that have been reworked by historical gold-dredging activities. The base of the Upper Perched Zone generally coincides with the interface between the permeable dredged material and the relatively impermeable, undredged material. The Upper Perched Groundwater typically occurs within the upper 40 feet of the ground surface, but was noted as shallow as 10 feet bgs along the western boundary of Chemical Plant 2 and as deep as 75 feet bgs in the southern portion of Chemical Plant 2. Since the geology of OS1 and OS2 are similar to that encountered at Chemical Plant 2, it is likely that Upper Perched Groundwater exists within the dredged portions of OS1 and OS2. Additionally, Upper Perched Groundwater was identified at the northern boundary of OS4 at a depth of 46 feet bgs and is likely present within much of the dredged areas encompassed by OS4.

Lower Perched Groundwater was found to occur in discontinuous sand lenses in a generally fine-grained lithologic unit primarily within the Chemical Plant 2 area. Insufficient data exists to determine the presence of Lower Perched Groundwater beneath OS1, OS2, and OS4, but several wells within OS2 that historically monitored the FWBZ were dry during the BOU RI sampling period.

First Water-Bearing Zone (Layer S)

The FWBZ in the southwestern portion of the Aerojet site and beneath OS1, OS2, and OS4 generally occurs within Layer A. However, the thickness of Layer A varies and the saturated thickness of Layer A in the Magazine Area (OS3 and OS4) was only 2 feet. Depth to the top of FWBZ beneath Open Space Areas 1, 2, and 4 ranges from approximately 75 to 110 feet bgs and generally increases southeast of Chemical Plant 2, mostly due to increased elevations associated with the ancestral American River terrace. Groundwater elevations in the FWBZ have decreased an average of 39 feet between 1983/1984 and April 2006, with lowest levels generally

occurring between 1994 and 1996. Data indicates that groundwater elevations in the FWBZ are continuing to drop.

Flow direction in the FWBZ is general towards the west, consistent with the migration of groundwater from the Line 03 Area east of Chemical Plant 2 towards GET E/F Extraction Wells 4007 and 4310. The average hydraulic gradient across Chemical Plant 2 Area is approximately 0.0064 ft/ft, but flattens to approximately 0.0004 in the area immediately upgradient (east) of Chemical Plant 2.

Ecological Habitat

A brief description of the ecological habitats within OS1, OS2, and OS4 are provided below.

Open Space 1

OS1 includes both dredged and undredged lands. With the exception of those areas that have been graded (ruderal/disturbed), the predominant vegetative communities consist of annual grassland and coyote brush scrub. Large areas of Fremont-cottonwood woodland are present in the central portion of OS1 and coyote brush-willow scrub is present primarily along historical slicken valleys. Non-native, naturalized Mediterranean grasses are the dominant species within the annual grassland and coyote brush and other shrubs such as blue elderberry, poison oak, willow, and hoary coffeeberry dominate the coyote brush-willow scrub community. Fremont cottonwood is the principal tree species within the Fremont-cottonwood woodland with willow and/or oak occurring as subdominant members.

Typical fauna within these communities include various raptors, Pacific treefrog, southern alligator lizard, western fence lizard, Gilbert's skink, Pacific gopher snake, racer, common kingsnake, western rattlesnake, northern harrier, wild turkey, savannah sparrow, western meadowlark, Northern flicker, Nutall's woodpecker, western scrub-jay, oak titmouse, American robin, yellow-rumped warbler, Bullock's oriole, deer mouse, western harvest mouse, California vole, California ground squirrel, coyote, and black-tailed deer.

Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), have been observed scattered throughout OS1.

Open Space 2

OS2 consists primarily of dredge tailings with small portions of undredged areas present in the northern portion of the area. Vegetative communities within OS2 consist of Fremont cottonwood-oak woodland surrounded by annual grassland and occasional patches of willow scrub. Non-native, naturalized Mediterranean grasses are the dominant species within the annual grassland and Fremont cottonwood is the principal tree species within the Fremont-cottonwood woodland with willow and/or oak occurring as subdominant members. The willow scrub community occurs primarily within the slicken valleys between the cobble furrows and consists of densely-spaced shrub willow.

Wildlife species encountered in these communities include various raptors, Pacific treefrog, California slender salamander, Gilbert's skink, southern alligator lizard, western fence lizard, mountain garter snake, Pacific gopher snake, racer, common kingsnake, western rattlesnake, northern flicker, Acorn woodpecker, Nuttal's woodpecker, oak titmouse, white-breasted nuthatch, mourning dove, black phoebe, Bewick's wren, bushtit, spotted towhee, California towhee, deer mouse, California vole, dusky-footed woodrat, desert cottontail, raccoon, western gray squirrel, Botta pocket gopher, and black-tailed deer.

Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), have been observed scattered through OS2.

Open Space 4

OS4 consists entirely of dredge tailings with linear mounds of cobbles separated by slicken valleys. Vegetation in OS4 is found almost exclusively within the slicken valleys and consists of Fremont cottonwood woodland or coyote brush-willow scrub.

Typical fauna within these communities include various raptors, Pacific treefrog, southern alligator lizard, western fence lizard, mountain garter snake, ringneck snake, Pacific gopher snake, western rattlesnake, wild turkey, Northern flicker, California quail, Nuttal's woodpecker, western scrub-jay, oak titmouse, California thrasher, American robin, yellow-rumped warbler, Bullock's oriole, Bewick's wren, spotted towhee, California towhee, deer mouse, California vole, black-tailed jackrabbit, desert cottontail, gray fox, coyote, and black-tailed deer.

Blue elderberry shrubs, potential habitat for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), have also been observed scattered through OS4.

3.3.4.2 *Summary of Scope and Results of Remedial Investigations – Open Space Areas 1, 2, and 4*

The scope and results of the RIs of OS1, OS2, and OS4 are summarized below.

Scope of Remedial Investigations

- **Prior to 2005:** OS1, OS2, and OS4 were not included in previous investigations conducted at the Aerojet site.
- **BOU RI (2005 to 2007):** Ten primary soil vapor samples, 3 primary and 2 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 11 primary and 3 duplicate subsurface (5 to 121 feet bgs) soil samples were collected within OS1, OS2, and/or OS4. Soil vapor samples were analyzed for VOCs. Surface/near-surface and subsurface soil samples were analyzed for metals SVOCs, and/or pesticides.

Results of Remedial Investigations

The results of the BOU RI of OS1, OS2, and OS4 are summarized below. Soil vapor and surface/subsurface soil sampling locations are shown in Figure 3.3-12

Volatile Organic Compounds

As indicated on the table below, ten primary samples were collected at 5 locations within OS1, OS2, and OS4 during the BOU RI and analyzed for VOCs (Figure 3.3-12).

Area	Depth (ft bgs)	No. of Primary Samples	No. of Locations
OS1	Shallow (0-10)	1	1
	Intermediate (11-20)	1	1
OS2	Shallow (0-10)	1	1
	Intermediate (11-20)	1	1
OS4	Shallow (0-10)	3	3
	Intermediate (11-20)	3	3

- VOCs were not detected above their respective RISLs in the soil vapor samples collected in OS1 and OS2.
- Benzene was detected above its RISL in intermediate soil vapor samples collected at two locations in OS4. Benzene at 88 and 98 µg/m^3 were detected in soil vapor samples collected at a depth of 20 feet bgs at OS4-F1-SP02 and OS4-F1-SP03, respectively. Benzene was not detected above its RISL in the shallow (10 feet bgs) soil vapor samples collected at those locations.

Metals

Fourteen primary and five duplicate soil samples were collected at one location (OS1-F1-SB01) in OS1 and two locations (OS2-F1-SB01 and OS2-F1-SB02) in OS2 during the BOU RI and analyzed for metals, including mercury. The number of primary soil samples and sampling locations in OS1 and OS2 along with summary statistics for the samples are summarized on the table below. Soil samples were not collected in OS4. Soil sampling locations are shown in Figure 3.3-12.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
OS1	Metals	1	1	2	1	0	0
	Mercury	1	1	2	1	0	0
	Hex Chrome	0	0	0	0	0	0
OS2	Metals	2	2	4	2	5	2
	Mercury	2	1	4	2	5	2
	Hex Chrome	0	0	0	0	0	0

Metals were not detected above their respective RISLs in the surface/near-surface and subsurface soil samples collected in OS1 and OS2.

Semivolatile Organic Compounds

Eleven primary and five duplicate soil samples were collected at one location (OS1-F1-SB01) in OS1 and at two locations (OS2-F1-SB01 and OS2-F1-SB02) in OS2 during the BOU RI and analyzed for SVOCs. The number of primary soil samples and sampling locations at OS1 and OS2 for SVOCs are summarized on the table below. Soil samples were not collected in OS4. Soil sampling locations are shown in Figure 3.3-12.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
OS1	SVOCs	1	1	0	0	0	0
OS2	SVOCs	2	2	4	2	5	2

SVOCs were not detected above their respective RISLs the soil samples collected within OS1 and OS2.

Miscellaneous Analyses

Samples collected within OS2 were analyzed for pesticides and pH. The number of primary surface/near-surface and subsurface soil samples collected at each source area for each analysis, and the numbers of locations are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
OS2	Pesticides	2	2	2	1	5	2
	pH	1	1	2	1	5	2

Pesticides, including Prowl, were not detected above their respective RISLs in the soil samples collected within OS2. The pH for soil samples collected in OS2 were within the normal range (5 to 9) for mineral soils.

3.3.5 *Summary of Scope and Results of Surface Water Remedial Investigations – Chemical Plant 2 Region*

Two areas where surface water accumulates for any period of time and potentially received discharges from source areas are the low-lying area immediately north of Source Area 59F at Chemical Plant 2 and the Dredge Pit (Source Area 25F).

The scope and results of the RI of surface water in those two areas are summarized below.

Scope of Remedial Investigations

- **Prior to 2005:** Surface water sampling of the low-lying area north of Source Area 59F and the Dredge Pit was not conducted during previous investigations.

- **BOU RI (2005-2007):** Two primary and one duplicate surface water samples were collected from both the low-lying area and the Dredge Pit. The samples were analyzed for VOCs; total and dissolved metals; SVOCs; OBPA; pesticides (including Prowl); DOC; nitrate; nitrite; anions (including phosphate, sulfate, chloride, and fluoride); and alkalinity.

Results of Remedial Investigation

The results of the BOU RI surface water investigation of the low-lying area north of Source Area 59F and the Dredge Pit (Source Area 25F) are summarized below.

Volatile Organic Compounds

VOCs were not detected at concentrations above their respective SWSLs in the surface water samples collected within the low-lying area north of Source Area 59F or the Dredge Pit (Source Area 25F).

Semivolatile Organic Compounds

SVOCs were not detected at concentrations above their respective SWSLs in the surface water samples collected within the low-lying area north of Source Area 59F or the Dredge Pit (Source Area 25F).

Metals

Arsenic and vanadium were the only metals detected in surface water samples collected from the low-lying area north of Source Area 59F and the Dredge Pit (Source Area 25F) at dissolved concentrations above their respective SWSLs.

Pesticides

The pesticide heptachlor epoxide was detected at concentrations above its SWSL in surface water samples collected at one location (59F-SW01) in the low-lying area north of Source Area 59F and at one location (25F-SW01) in the Dredge Pit (Source Area 25F). The presence of that pesticide in surface water is likely the result of historical discharges from Chemical Plant 2 (Building 15007).

Miscellaneous Compounds

OBPA was not detected above its PQL or SWSL in the surface water samples collected from the low-lying area north of Source Area 59F and the Dredge Pit (Source Area 25F). Nitrate and nitrite were detected above their respective SWSLs in surface water samples collected from the low-lying area north of Source Area 59F.

3.3.6 *Summary of Groundwater Remedial Investigation – Chemical Plant 2 Region*

A number of perched groundwater zones were identified in the relatively thick (75 to 110 foot) vadose zone. Based on relative depths and elevations, the perched groundwater appears to be an assemblage of individual zones that are discontinuous and of limited lateral extent. Assemblages of perched groundwater zones were grouped together into an upper perched zone and a lower perched zone.

Perched groundwater beneath Sites 25F, 59F, and CP2-07 contains VOCs (primarily 1,2-DCA). The 1,2-DCA appears to be derived from local sources in the Chemical Plant 2 area. The region of FWBZ currently containing 1,2-DCA beneath Chemical Plant 2 is a small remnant of a larger plume that was identified during the Stage 1 RI in 1993. Since that time, 1,2-DCA concentrations have decreased several orders of magnitude due to mass removal by the GET E/F system, source depletion, and possibly biodegradation.

In the FWBZ, TCE and perchlorate are the COPCs reported at the greatest concentrations and with the greatest areal extent. TCE, 1,2-DCA, and perchlorate concentrations in the FWBZ are shown in Figures 3.3-13, 3.3-14, and 3.3-15, respectively. Where TCE and perchlorate are detected in the FWBZ, the sources appear to be located upgradient of the BOU. The perched groundwater beneath Site CP2-07 contains up to 216 µg/L perchlorate as indicated by one sample from one well. Any potential contribution of perchlorate from perched groundwater to the FWBZ is masked by the perchlorate derived from upgradient sources.

3.4 *SUMMARY OF ENVIRONMENTAL SETTING AND REMEDIAL INVESTIGATIONS – AREA 39*

Aerojet Area 39 encompasses approximately 90 acres within the 835-acre Prairie City SVRA that is owned and operated by the State of California

(County of Sacramento Department of Parks and Recreation). Rocket test facilities were constructed within Area 39 by Aerojet in the 1960s, but the programs were halted and the facilities were never used. Area 39 was used between 1970 and 1972 for burning chemical wastes generated by Aerojet.

Area 39 encompasses seven source areas (29B, 30B, 31B, 32B, 33B, 34B, and 35B) that include former test stands and areas used for the burning of laboratory wastes and propellants (Figure 3.4-1).

Details concerning the scope and results of the RI for Area 39 are presented in Section 7.0 of the RI Report (Volume 1). The environmental setting for Area 39 and the scope and results of the RI are summarized below.

3.4.1 Environmental Setting – Area 39

The topography, geology, soils, surface water hydrology, general hydrogeology, and ecological habitat of Area 39 are described below.

3.4.1.1 Topography

The topography of Area 39 consists of rolling hills and ravines with elevations ranging from approximately 220 to 330 feet above mean sea level (msl). The man-made ravine/blast apron constructed as part of the former K-1 Test Stand for the control of deluge water during testing is approximately 25 to 30 feet below grade at its deepest point and is a predominant topographic feature in the area. The ravine/blast apron also serves as the headwaters for the main surface water drainage feature within Area 39.

3.4.1.2 Geology

Area 39 is located in the southeastern portion of the Prairie City SVRA. The western areas of the SVRA were dredged for gold; however, the potential source areas are located on undredged sediments. Drill logs and exposed outcrops indicate that the majority of sediment comprising the vadose zone is fine-grained, generally consisting of interbedded layers of dense, indurated, sandstone, sandy and gravelly siltstone, and claystone. Exceptions occur in some areas where coarse sand channels of the Mehrten Formation are incised into the finer-grained materials. The vadose zone ranges in thickness from 20 to 70 feet.

3.4.1.3 *Soils*

Area 39 soils are made up of four distinct map units: Hadselville-Pentz complex, 2 to 30 percent slopes; Pentz-Lithic Xerorthents complex, 30 to 40 percent slopes; Red Bluff-Xerorthents dredge tailings complex, 2 to 50 percent slopes; and Redding gravelly loam, 0 to 8 percent slopes. The following text provides a brief description of each soil unit from the soil survey of Sacramento County, California (United State Department of Agriculture – Natural Resources Conservation Service, 1993).

The Hadselville-Pentz complex, 2 to 30 percent slopes unit, is found on hills. Slopes are complex and are characterized by mound-intermound microrelief. This unit is about 45 percent Hadselville soil and 45 percent Pentz soil. The Hadselville soil is in the intermound areas. The Pentz soil is on the mounds. Included in this unit are small areas of Hicksville, Keyes, Ranchoseco, Pardee, Peters, and Redding soils and Lithic Xerorthents. Also included are areas that have slopes of 30 to 50 percent and soils that have a subsoil of sandy clay loam and are underlain by weakly consolidated sediments at a depth of 20 to 40 inches. Included areas make up about 10 percent of the total acreage.

The Pentz-Lithic Xerorthents complex, 30 to 40 percent slopes map unit, is on the side slopes of hills. Slopes are convex or plane. This unit is about 80 percent Pentz soil and 15 percent Lithic Xerorthents. Lithic Xerorthents are in scattered areas where the underlying sediments are strongly consolidated and hard. Included in this unit are small areas of Keyes and Redding soils and Rock outcrop. Keyes soils are in concave areas at the base of the slopes. Redding soils are on high terrace remnants. The Rock outcrop occurs as horizontal bands and ledges. Also included are soils that have slopes of less than 30 percent or more than 50 percent and soils that have a subsoil of sandy clay loam and are underlain by consolidated sediment at a depth of about 20 to 30 inches. Included areas make up about 5 percent of the total acreage.

The Red Bluff-Xerorthents dredge tailings complex, 2 to 50 percent slopes map unit, is on high terraces that have been disturbed during mining activities. Slopes are complex. This unit is about 45 percent Red Bluff soil and 40 percent Xerorthents. The Red Bluff soil is in the relatively undisturbed areas on terraces where slopes are 2 to 5 percent and are convex. The Xerorthents are in dredge tailings where slopes are 2 to 50 percent and are short, complex, and disturbed. Included in this unit are small areas of Corning, Hicksville, and Redding soils and Slickens. Hicksville soils are on low-stream terraces. Slickens are at the base of the

slopes in the areas of tailings. Also included are soils that have a hardpan layer at a depth of 40 to 60 inches and soils that have slopes of 5 to 30 percent. Included areas make up about 15 percent of the total acreage.

The Redding gravelly loam, 0 to 8 percent slopes map unit, is a moderately deep, moderately well-drained soil on high terraces and terrace remnants. It formed in gravelly and cobbly alluvium derived from mixed rock sources. Slopes are dominantly convex, but are incised by many shallow intermittent drainage ways and depressions. Typically, the surface layer is strong brown gravelly loam about 7 inches thick. The upper 13 inches of the subsoil is yellowish red loam and gravelly loam. The lower 8 inches is a claypan of reddish brown and yellowish red gravelly clay. A very gravelly clay hardpan that is strongly cemented with silica is at a depth of about 28 inches. In some areas, the surface layer is gravelly sandy loam. In other areas, the subsoil has a very gravelly strata. Included in this unit are small areas of Corning, Hicksville, Keyes, and Pardee soils and Xerorthents. Hicksville soils are on low-stream terraces. Keyes and Pardee soils are on hills. Red Bluff soils are on the slightly higher, convex slopes north of the Consumnes River. Also included are Durixeralfs and Xerarents in areas that have been cut and filled during land leveling or grading activities, soils that have a hardpan at a depth of 40 to 60 inches, and soils on the side slopes of terraces that have slopes of 8 to 15 percent. Included areas make up about 25 percent of the total acreage.

3.4.1.4 *Surface Water Hydrology*

There are no naturally occurring lakes, rivers, or streams within Area 39 that contain water on a year-round basis. However, there are several drainages that may support ephemeral streams or storm water runoff during the rainy season. Surface water runoff at Area 39 is towards the south-southeast and into Coyote Creek (Figure 3.4-1).

There are two local drainages within Area 39. One drainage originates near the east end of the former K-1 Rocket Test Stand (Site 29B) and trends southeast to the southern perimeter of Area 39. Two ponds are located along the course of the drainage. The ponds were not present during the Stage 1 RI, and were apparently created by the construction of two small earthen dams across the drainage channel. For reference, the northern pond has been designated as A39-Pond 1 and the southern pond was designated A39-Pond 2 (Figure 3.4-1).

The second drainage originates near the top of the hill in the central portion of Source Area 30B, the former Production Waste Burn Area. The drainage is joined by other smaller drainages and trends towards the south-southwest and the southern perimeter of Area 39.

All these drainages are crisscrossed by tracks left by off-road vehicles operating within the SVRA.

3.4.1.5 *Local Hydrogeology*

The first saturated sediments encountered beneath Area 39 are either part of perched groundwater or within the FWBZ. The FWBZ is defined as the upper 20 to 30 feet of saturated sediments that are laterally continuous across Area 39. Perched groundwater and the FWBZ were subdivided from the more regional hydrostratigraphic layer designations to allow for evaluation of potential risks associated with VOCs migrating upward as vapor through the soil into indoor air. Because of this subdivision, perched groundwater is designated as Layer Y and the FWBZ is designated as Layer S.

The general hydrogeology of the perched groundwater and FWBZ beneath Area 39 is discussed below. Details regarding the occurrence of groundwater within Area 39 and the distribution of chemicals in the groundwater are presented in Section 7.4 of the BOU RI (Volume 1). Note that an evaluation of potential discharge of groundwater to surface water within the BOU was performed evaluation and concluded that there are no groundwater discharges to surface water within the BOU.

<u>Perched Groundwater (Layer Y)</u>

Perched groundwater is the shallowest saturated unit and generally occurs in 5- to 25-feet-thick sand lenses throughout Area 39. As discussed in Section 7.1.2, the lithologic material within Area 39 consists of indurated sedimentary units, which were not dredged for gold. Because the area was not dredged, perched groundwater is present within the permeable sand lenses as opposed to the contact between dredged and undredged materials as observed in most other areas within the BOU. Due to the variable topography and the existence of water in the sand lenses, perched groundwater is encountered within Area 39 at depths ranging from 9 to 75 feet below ground surface (bgs). Depth to perched groundwater is greater along the hills and ridges and shallower closer to the drainages.

Due to the relatively impermeable lithologic material within Area 39, most precipitation flows off the site instead of infiltrating into the soil. As a result, perched groundwater in Area 39 does not demonstrate significant seasonal variations.

First Water-Bearing Zone (Layer S)

The FWBZ within Area 39 occurs in 5- to 10-feet-thick sand lenses that generally correspond to the upper portion of Layer C of the *Western Groundwater Operable Unit Groundwater Flow Model* (Aerojet, 2004d). In May 2007, the depth to the top of the FWBZ ranged from approximately 38 to 109 feet bgs. Depth to the FWBZ is generally greater near ridges, and shallower near drainages.

As with the perched groundwater, the FWBZ at Area 39 demonstrates a relatively small degree of seasonal fluctuation relative to the other sites investigated within the BOU. Groundwater flow in the FWBZ across Area 39 is generally to the southwest with a gradient of approximately 0.02 feet per foot (ft/ft).

3.4.1.6 Ecological Habitat

Area 39 is located on a State of California-operated off-highway vehicle (OHV) park. The park is called the Prairie City SVRA. The entire park is scattered with OHV trails, most are unpaved; however, there are some paved main roads. Area 39 is mainly ruderal/disturbed annual grassland habitat, intermixed with some paved areas, and a few seasonal ponds.

The ruderal/disturbed annual grassland community is dominated by herbaceous weeds, and non-native, naturalized Mediterranean grasses. Fauna species common to this area are habitat generalists such as the rock pigeon, mourning dove, western fence lizard, European starling, house mouse, and deer mouse, or species that may venture in from adjacent vegetation communities. Because Area 39 is located on land owned by the State of California, the *Biological Assessment Report* (ECORP Consulting, Inc., 2005) for the BOU did not include a survey of Area 39.

3.4.2 Summary of Scope and Results of Remedial Investigations –Area 39

The scope and results of the RI for the source areas and features within Area 39 are summarized below.

Scope of Remedial Investigations

- **1985 – 1993:** Over 250 soil samples and roughly 35 soil vapor samples were collected at Source Areas 29B through 35B between 1985 and 1993. Soil vapor samples were analyzed for VOCs. Soil samples were analyzed for VOCs, SVOCs, metals, perchlorate, NDMA, and/or dioxins and furans.
- **BOU RI (2005 to 2007):** Sixty-three primary and 5 duplicate soil vapor samples, 36 primary and 1 duplicate surface and/or near-surface (0 to 2.5 feet bgs) soil samples, and 36 primary and 1 duplicate subsurface (2.6 to 32 feet bgs) soil samples were collected at the 7 source areas within Area 39.

  Soil vapor samples were analyzed for VOCs. Surface and/or near-surface soil samples were analyzed for SVOCs, metals, perchlorate, dioxins and furans, TOC, CEC, DI-WET, and/or geotechnical parameters. Subsurface soil samples were analyzed for metals, perchlorate, TOC, CEC, DI-WET, and/or geotechnical parameters.

Results of Remedial Investigations

The results of the BOU RI of the source areas within Area 39 are summarized below. Soil vapor, surface soil, and subsurface soil sampling locations are shown in Figures 3.4-2, 3.4-3, and 3.4-4, respectively.

Volatile Organic Compounds

As indicated on the table below, 63 primary soil vapor samples were collected at 62 locations at Source Areas 29B through 35B within Area 39 and analyzed for VOCs. Additionally, the presence of TICs was evaluated as part of the VOC analysis.

Source Area	Depth (ft bgs)	No. of Primary Samples	No. of Locations
30B	0-10	13	13
	11-20	10	10
32B	0-10	5	5
	11-20	6	5
	21-30	0	0
	>30	1	1
33B	0-10	13	13
	11-20	12	12
	21-30	0	0
	>30	1	1
35B	0-10	1	1

Source Area	Depth (ft bgs)	No. of Primary Samples	No. of Locations
	11-20	1	1

Benzene, carbon tetrachloride (Carbon Tet), chloroform, 1,1-dichloroethene (1,1-DCE), PCE, and TCE were detected in the soil vapor samples collected at the source areas within Area 39 at concentrations above their respective RISLs. TCE was the predominant VOC detected in soil vapor within Area 39 at concentrations above its RISL. The location and depth of soil vapor samples containing concentrations of those VOCs above their respective RISLs are presented on the table below. BOU RI soil vapor sampling locations within Area 39 are shown in Figure 3.4-2.

Depth Interval (ft bgs))	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	Benzene	32B-SP07	84	100
	Carbon Tet	30B-SP15	58	4,700
		30B-SP22		190
		30B-SP23		59
	Chloroform	32B-SP11	83	94
		33B-SP11		100
		33B-SP14		1,600
		33B-SP21		2,100
	1,1-DCE	33B-SP14	20,805	27,000
		33B-SP21		43,000
	PCE	33B-SP14	320	24,000
	TCE	32B-SP11	961	95,000
		33B-SP11		1,200
		33B-SP14		1,200,000
		33B-SP20		16,000
		33B-SP21		1,700,000
Intermediate (11 to 20)	Benzene	30B-SP15	84	320
		32B-SP08		90
	Carbon Tet	30B-SP13	58	66
		30B-SP14		1,700
		30B-SP15		280
		30B-SP22		160
		30B-SP23		360
	Chloroform	30B-SP14	83	800
		30B-SP15		110
		32B-SP11		100
		33B-SP09		130
		33B-SP11		640
		33B-SP14		1,700
		33B-SP21		2,300
	1,1-DCE	33B-SP14	20,805	28,000
		33B-SP21		60,000
	PCE	30B-SP14	320	530

Depth Interval (ft bgs))	VOC	Sample Location	Soil Vapor RISL (µg/m³)	Concentration (µg/m³)
Shallow (0 to 10)	Benzene	32B-SP07	84	100
	Carbon Tet	30B-SP15	58	4,700
		30B-SP22		190
		30B-SP23		59
	Chloroform	32B-SP11	83	94
		33B-SP11		100
		33B-SP14		1,600
		33B-SP21		2,100
	1,1-DCE	33B-SP14	20,805	27,000
		33B-SP21		43,000
	PCE	33B-SP14	320	24,000
	TCE	32B-SP11	961	95,000
		33B-SP11		1,200
		33B-SP14		1,200,000
		33B-SP20		16,000
		33B-SP21		1,700,000
	TCE	30B-SP13	961	2,500
		30B-SP14		24,000
		32B-SP11		130,000
		33B-SP09		1,300
		33B-SP11		15,000
		33B-SP14		1,200,000
		33B-SP15		4,300
		33B-SP20		3,700
		33B-SP21		1,700,000

- The presence of TCE in the vadose zone at Source Areas 30B, 32B, and 33B is attributed to releases associated with historical burning activities.
- Chloroform was the second most predominant VOC detected in soil vapor within Area 39 at concentrations above its RISL, but below its PGW SVSL. Chloroform was detected above its RISL in soil vapor samples collected within those areas where TCE was also detected.
- Carbon Tet was detected above its RISL in the shallow (0 to 10 feet bgs) and/or intermediate (11 to 20 feet bgs) soil vapor intervals at five locations (30B-SP13, 30B-SP14, 30B-SP15, 30B-SP22, and 30B-SP23) in only one (Source Area 30B) of the seven source areas within Area 39.

Metals

A total of 64 primary and two duplicate soil samples were collected at 23 locations at Source Areas 29B through 34B within Area 39 during the BOU RI and analyzed for metals, including mercury. The number of primary soil samples and sampling locations at Source Areas 29B, 30B, 31B, 32B, 33B, and 34B are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29B	Metals	9	8	15	8	0	0
	Mercury	9	8	13	8	0	0
	Hex Chrome	0	0	0	0	0	0
30B	Metals	5	5	9	5	1	1
	Mercury	5	5	9	5	1	1
	Hex Chrome	0	0	0	0	0	0
31B	Metals	5	3	2	1	0	0
	Mercury	5	3	2	1	0	0
	Hex Chrome	0	0	0	0	0	0
32B	Metals	4	4	7	4	1	1
	Mercury	4	4	7	4	1	1
	Hex Chrome	0	0	0	0	0	0
33B	Metals	2	2	2	1	0	0
	Mercury	2	2	2	1	0	0
	Hex Chrome	0	0	0	0	0	0
34B	Metals	1	1	1	1	0	0
	Mercury	1	1	1	1	0	0
	Hex Chrome	0	0	0	0	0	0

Cadmium and thallium were the only metals detected in soil samples within Area 39 at concentrations above their respective RISLs. The location and depth of the samples and the detected concentrations of those metals are provided in the table below. Surface/near-surface soil sampling locations are shown in Figure 3.4-3.

Sample Location	Depth (ft bgs)	Metal	RISL (mg/kg)	Concent ration (mg/kg)
29B-SB09	5.0	Thallium	5.0	6.3
32B-SB04	5.0	Thallium	5.0	6.6
	11.5	Thallium	5.0	6.0
33B-SB03	1.5	Cadmium	1.7	3.9

Semivolatile Organic Compounds

Four primary surface and near-surface soil samples were collected at two locations (31B-SD01 and 31B-SD02) at Source Area 31B during the BOU RI and analyzed for SVOCs, including TICs (Figure 3.4-3).

SVOCs were not detected in the surface or near-surface soil samples collected at Source Area 31B at concentrations above their respective PQLs or RISLs.

Perchlorate

A total of 63 primary and two duplicate soil samples were collected at 23 locations at Source Areas 29B through 35B within Area 39 during the BOU RI and analyzed for perchlorate. The number of primary soil samples and sampling locations at Source Areas 29B, 30B, 31B, 32B, 33B, and 34B are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29B	Perchlorate	9	8	14	8	0	0
30B	Perchlorate	5	5	9	5	0	0
31B	Perchlorate	5	3	2	1	0	0
32B	Perchlorate	4	4	7	4	1	1
33B	Perchlorate	2	2	2	1	0	0
34B	Perchlorate	1	1	1	1	1	1

Perchlorate was not detected above its RISL in any of the soil samples collected at Source Areas 29B through 34B.

Dioxins and Furans

A total of 16 primary soil samples were collected at eight locations at Source Areas 30B and 34B within Area 39 during the BOU RI and analyzed for dioxins and furans. Although Source Areas 32B and 33B were identified as burn areas, previous RI samples collected from this site were analyzed for dioxins and furans. Analytical results indicated that dioxins and furans were not above screening levels; therefore, dioxins and furans were not selected as COPCs for Source Areas 32B or 33B. The number of primary soil samples and sampling locations at Source Areas 30B and 34B for dioxins and furans are summarized on the table below.

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
29B	Dioxins/Furans	0	0	0	0	0	0
30B	Dioxins/Furans	10	5	0	0	0	0
31B	Dioxins/Furans	0	0	0	0	0	0
32B	Dioxins/Furans	0	0	0	0	0	0
33B	Dioxins/Furans	0	0	0	0	0	0

Source Area	Compound	Surface/Near-Surface (0-2.5 ft bgs)		Subsurface (2.6 to 12 ft bgs)		Subsurface (>12 ft bgs)	
		No. of Samples	No. of Locations	No. of Samples	No. of Locations	No. of Samples	No. of Locations
34B	Dioxins/Furans	6	3	0	0	0	0
35B	Dioxins/Furans						

The toxic equivalency quotient (TEQs, or 2,3,7,8-TCDD equivalents) for dioxins and furans in all surface/near-surface soil samples collected at Source Area 30B and 34B was below the RISL.

3.4.3 *Summary of Scope and Results for Surface Water Remedial Investigation – Area 39*

There are two local drainages within Area 39 that have been observed to contain surface water runoff during the rainy season. The main drainage within Area 39 originates near the east end of the former K-1 Rocket Test Stand (Site 29B) and trends southeast to the southern perimeter of Area 39. Two ponds are located along the course of the drainage downstream of the former Test Stand. The ponds were not present during the Stage 1 RI, and were apparently created by the construction of two small earthen dams across the drainage channel. The northern pond has been designated as A39-Pond 1 and the southern pond was designated A39-Pond 2 (Figures 3.4-1 and 3.4-5).

A second smaller drainage originates near the top of the hill in the central portion of Source Area 30B, the former Production Waste Burn Area. The drainage is joined by other smaller drainages and trends towards the south-southwest and the southern perimeter of Area 39.

The scope and results of the RI of surface water in Area 39 are summarized below.

<u>Scope of Remedial Investigations</u>

- **Prior to 2005:** Surface water sampling was not conducted at Area 39 during previous investigations.
- **BOU RI (2005-2007):** Four primary surface water samples were collected at four locations along the main drainage originating from near the east end of the former K-1 Rocket Test Stand (Site 29B) (Figure 3.4-5). The samples were analyzed for VOCs; total and dissolved metals; SVOCs; perchlorate; DOC; nitrate; nitrite; anions (including phosphate, sulfate, chloride, and fluoride); and alkalinity.

Results of Remedial Investigation

The results of the BOU RI surface water investigation of drainages in Area 39 are summarized below. BOU RI surface water sampling locations are shown in Figure 3.4-5.

Volatile Organic Compounds

VOCs were not detected at concentrations above their respective SWSLs in the surface water samples collected within the drainage.

Semivolatile Organic Compounds

SVOCs were not detected at concentrations above their PQLs or respective SWSLs in the surface water samples collected from the main drainage within Area 39.

Metals

Metals were not detected in surface water samples collected from the main drainage within Area 39 at dissolved concentrations above their respective SWSLs.

Perchlorate

Perchlorate was not detected in the surface water samples above the PQL or its SWSL.

Nitrate and Nitrite

Nitrate was detected at a concentration of 2,700 µg/L in the surface water sample collected at location 31B-SW02. Nitrate was not detected above the PQL of 100 µg/L in the surface water sample collected at location 31B-SW01.

Nitrite was not detected in the two surface water samples collected from the main drainage within Area 39 at concentrations above the PQL of 100 µg/L or its SWSL.

3.4.4 *Summary of Groundwater Remedial Investigation – Area 39*

The most widespread chemical in groundwater beneath Area 39 is perchlorate in perched groundwater. Perched groundwater does not

appear to be present north of Area 39, thereby limiting the lateral extent of perchlorate in perched groundwater north of apparent Source Sites 32B and 33B. Further south, Sites 30B and 31B appear to have also contributed perchlorate to perched groundwater, and the extent has been adequately delineated. Perchlorate was detected in only one well in the FWBZ at a concentration greater than 6 µg/L.

VOCs, comprised predominantly of TCE, were reported in samples of perched groundwater from beneath Site 33B vicinity at concentrations greater than maximum contaminant levels (MCLs) (Figure 3.4-6). The lateral extent of TCE in perched groundwater has been adequately delineated. The highest reported TCE concentration was 4,600 µg/L in a grab sample. The available data indicate the FWBZ does not contain VOC concentrations greater than MCLs (Figure 3.4-7).

Besides cadmium and thallium, no other compounds were reported above screening levels in perched groundwater or the FWBZ. There are no known sources of cadmium or thallium in soils, and the presence of these compounds may be unrelated to historical Aerojet activities.

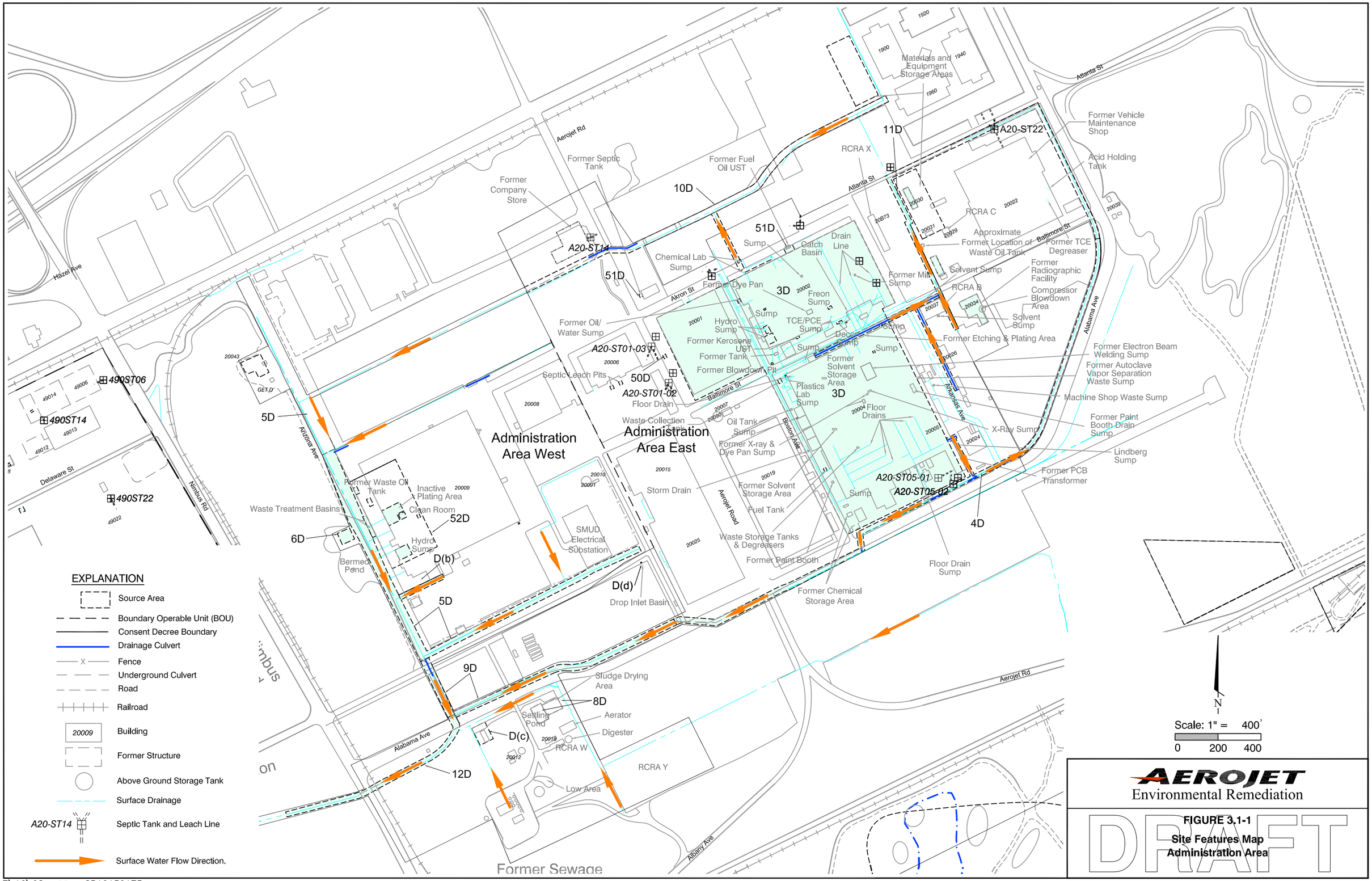


FIGURE 3.1-1
Site Features Map
Administration Area

7\16\08 PR SR10130173

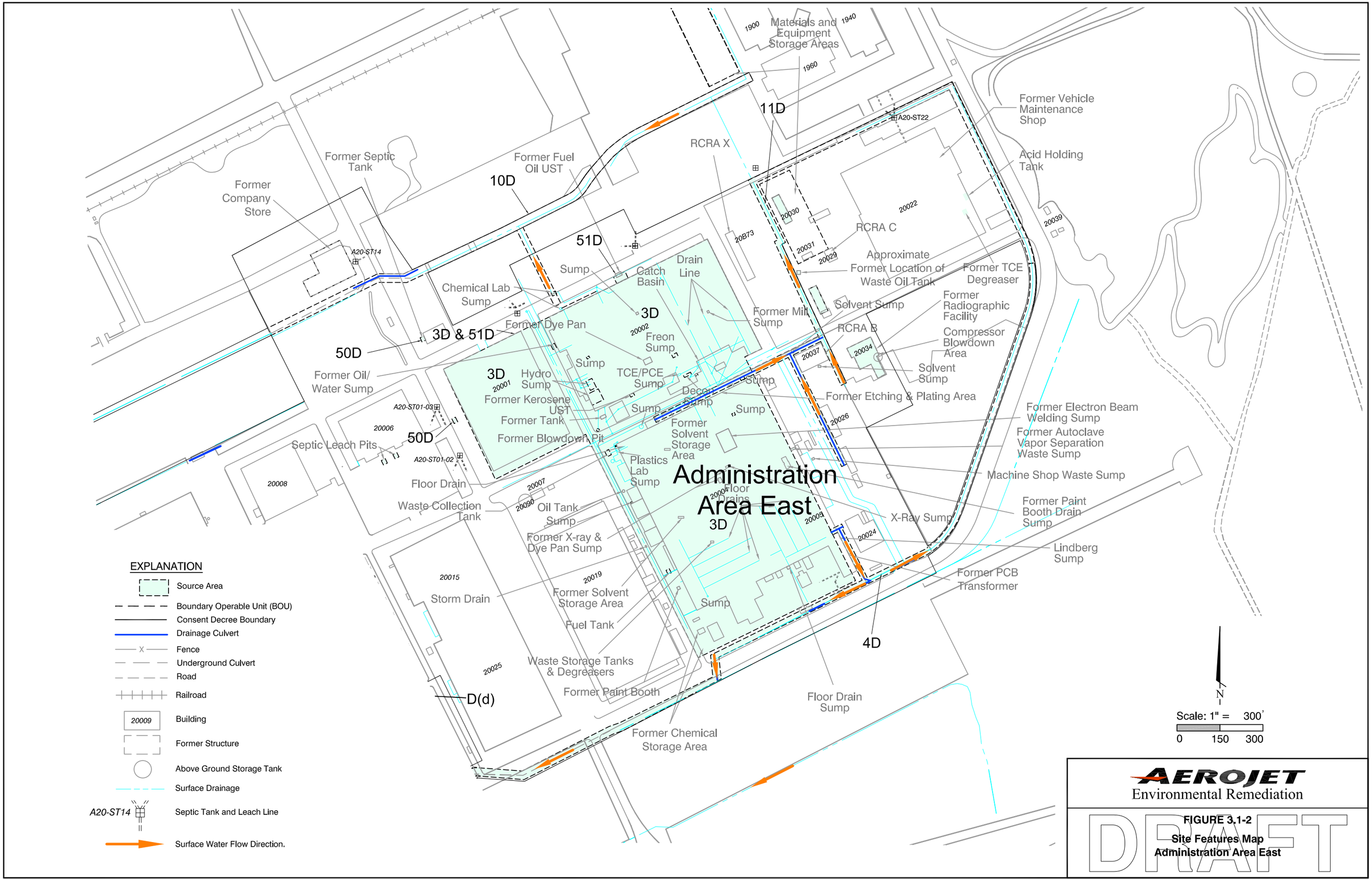
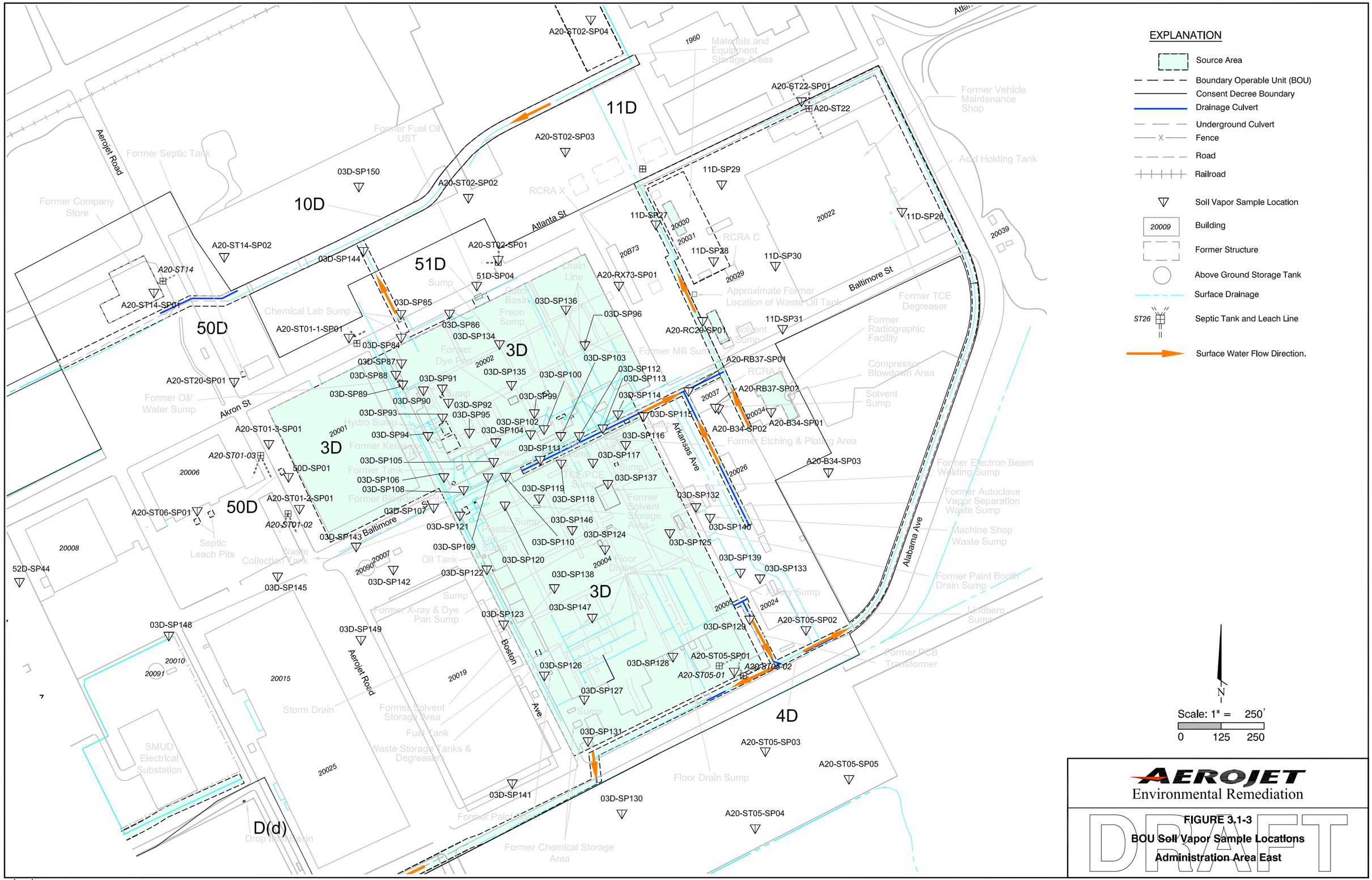
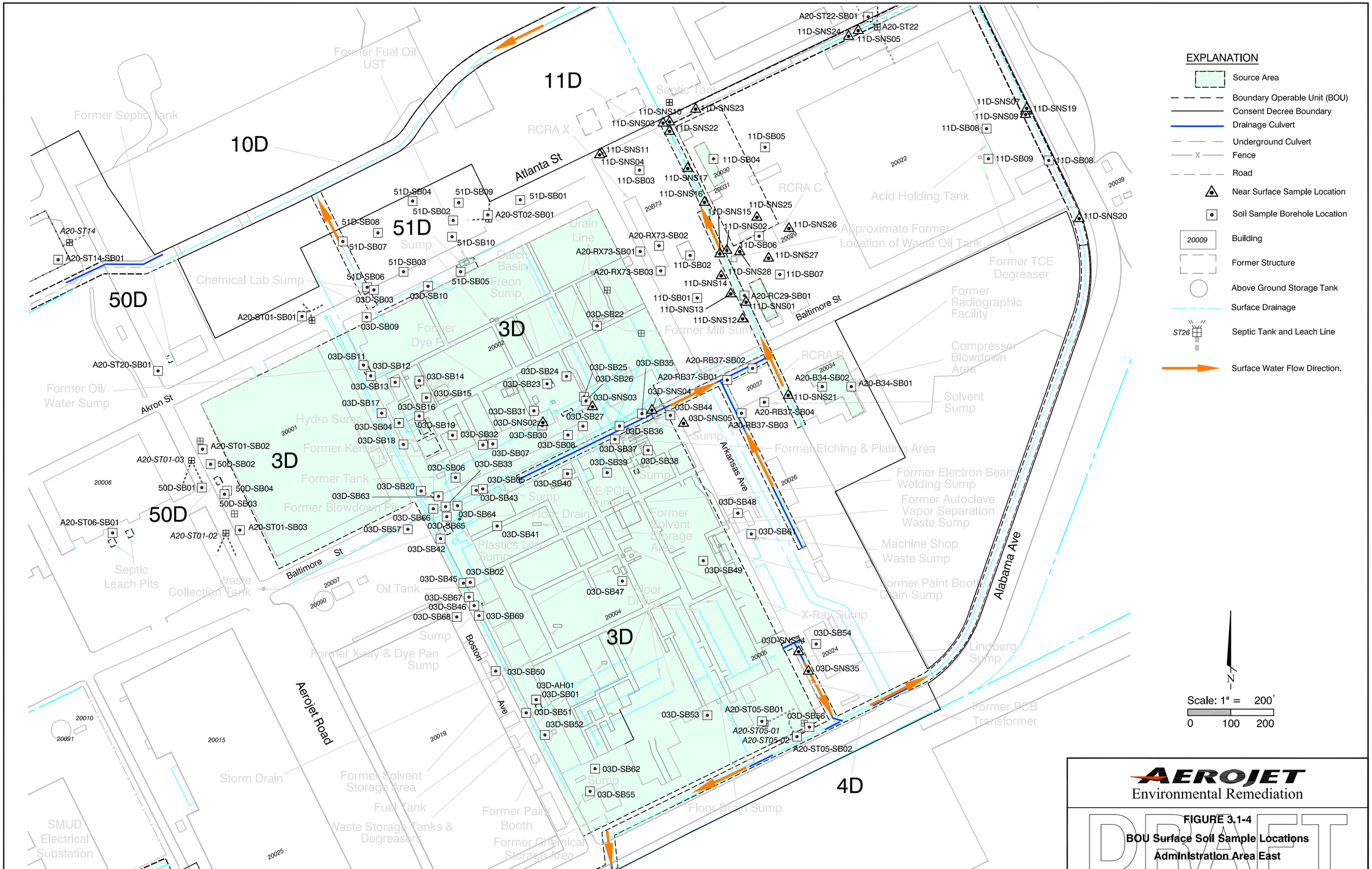


FIGURE 3.1-2
Site Features Map
Administration Area East

7\17\08 PR SR10130174



8/14/08 PR SR10130175



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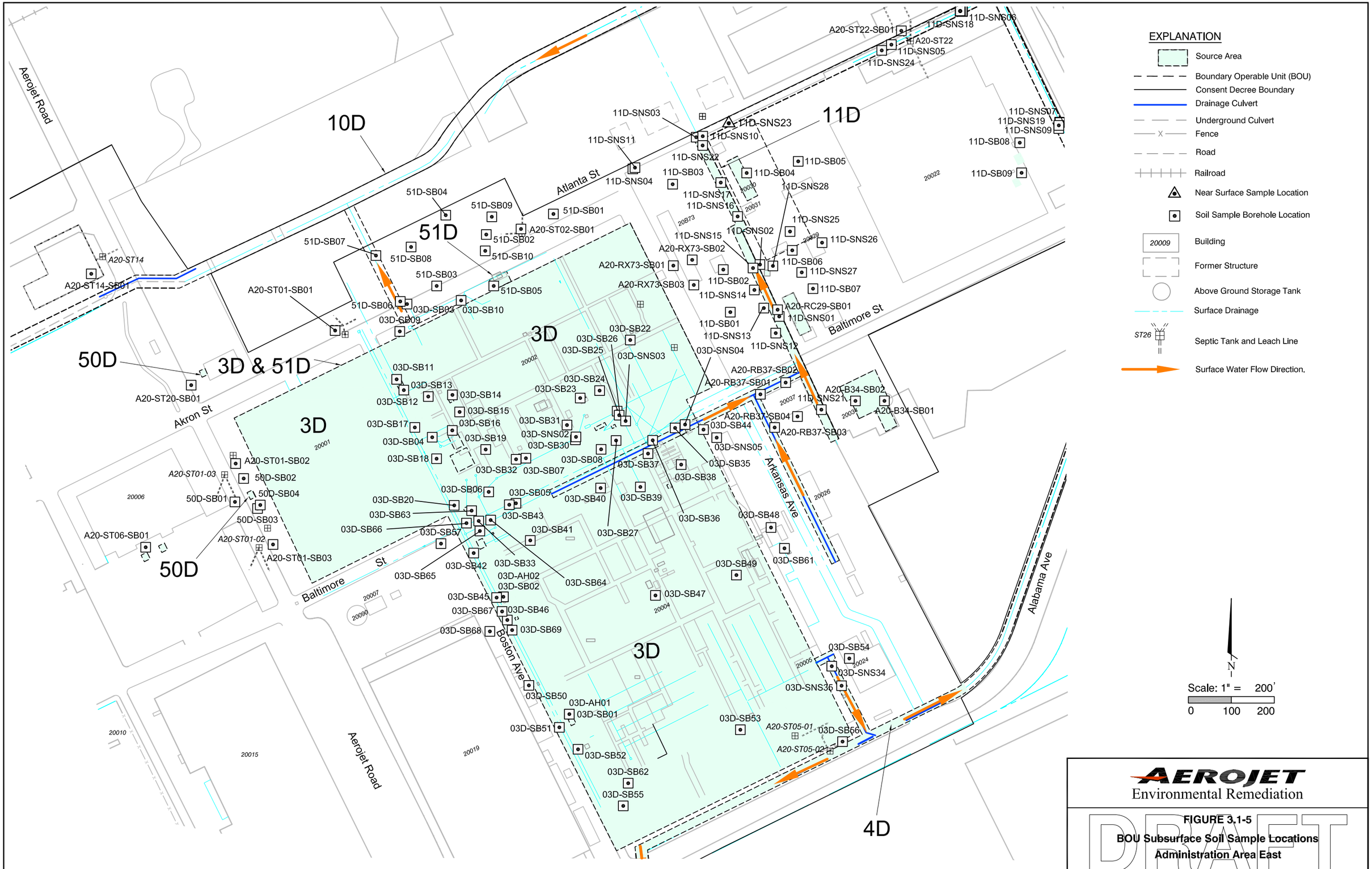

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Environmental Remediation

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FIGURE 3.1-5
BOU Subsurface Soil Sample Locations
Administration Area East

7/17/08 PR SR10130177

Administration Area West

Akron St
Baltimore St
Arizona Ave
Alabama Ave

20001
20006
20008
20009
20010
20091
20015
20025
20018
20012

A20-ST01-03
A20-ST01-02
50D
Septic Leach Pits
Hazardous Materials Storage
Former Waste Oil Tank
Waste Treatment Basins
6D
Bermed Pond
Paint Spray Booth
Inactive Plating Area
Sump
TCE Degreaser
52D
Clean Room
Hydro Sump
Deep Sump
SMUD Electrical Substation
D(b)
Hazardous Materials Storage
Concrete Pad
Dye Pen Sump
Drop Inlet Basin
D(d)
5D
9D
8D
Sludge Drying Area
Settling Pond
Aerator
Digester
Sludge Drying Area
D(c)
Treatment Works
Digester
Treatment Works
RCRA W
RCRA Y
Low Area
12D
Holding Tank

EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- ST26 Septic Tank and Leach Line
- Surface Water Flow Direction.

N

Scale: 1" = 200'

0 100 200

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FIGURE 3.1-6
Site Features Map
Administration Area West

7\17\08 PR SR10130178

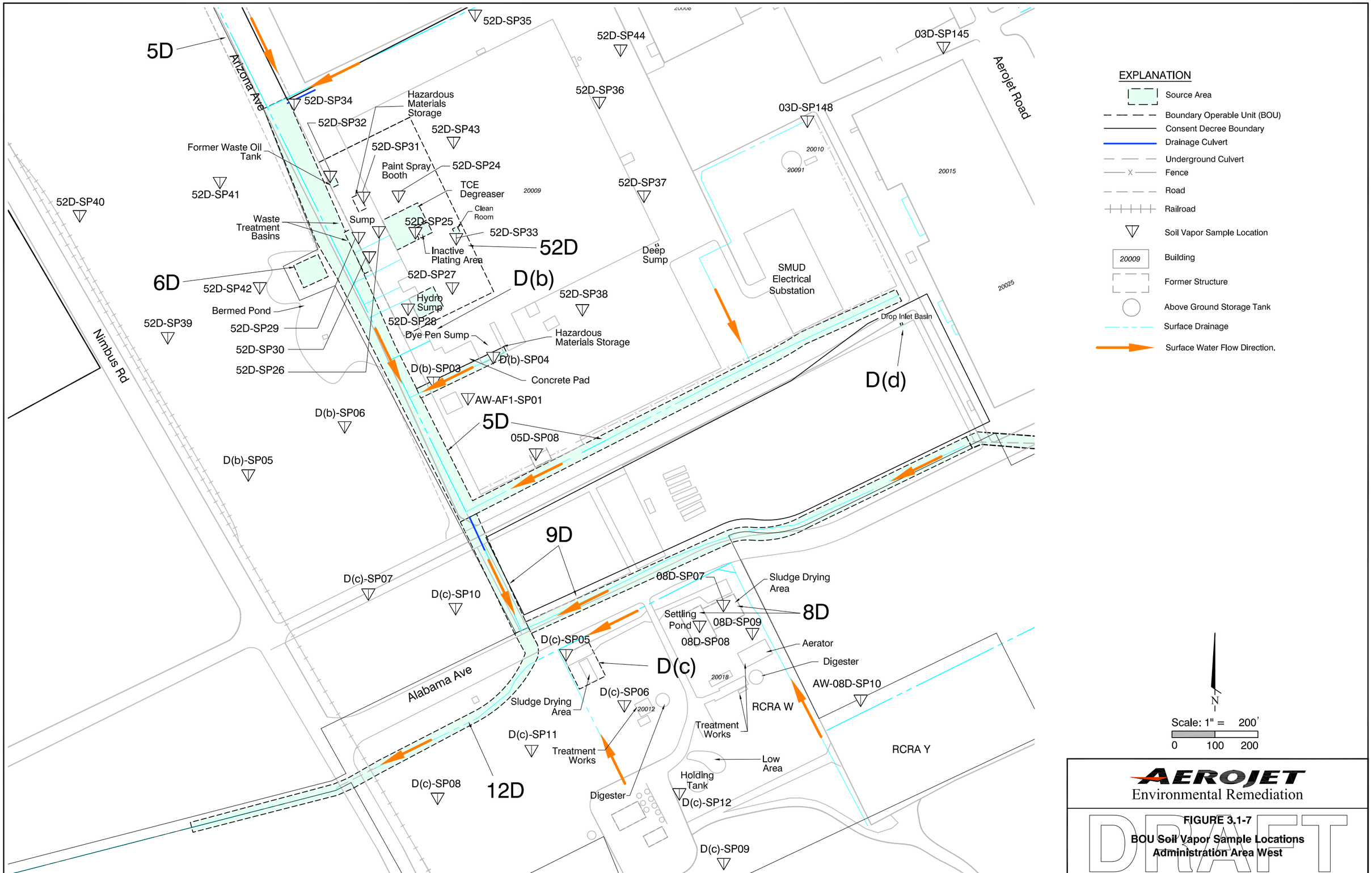

FIGURE 3.1-7
BOU Soil Vapor Sample Locations
Administration Area West

7\17\08 PR SR10130179

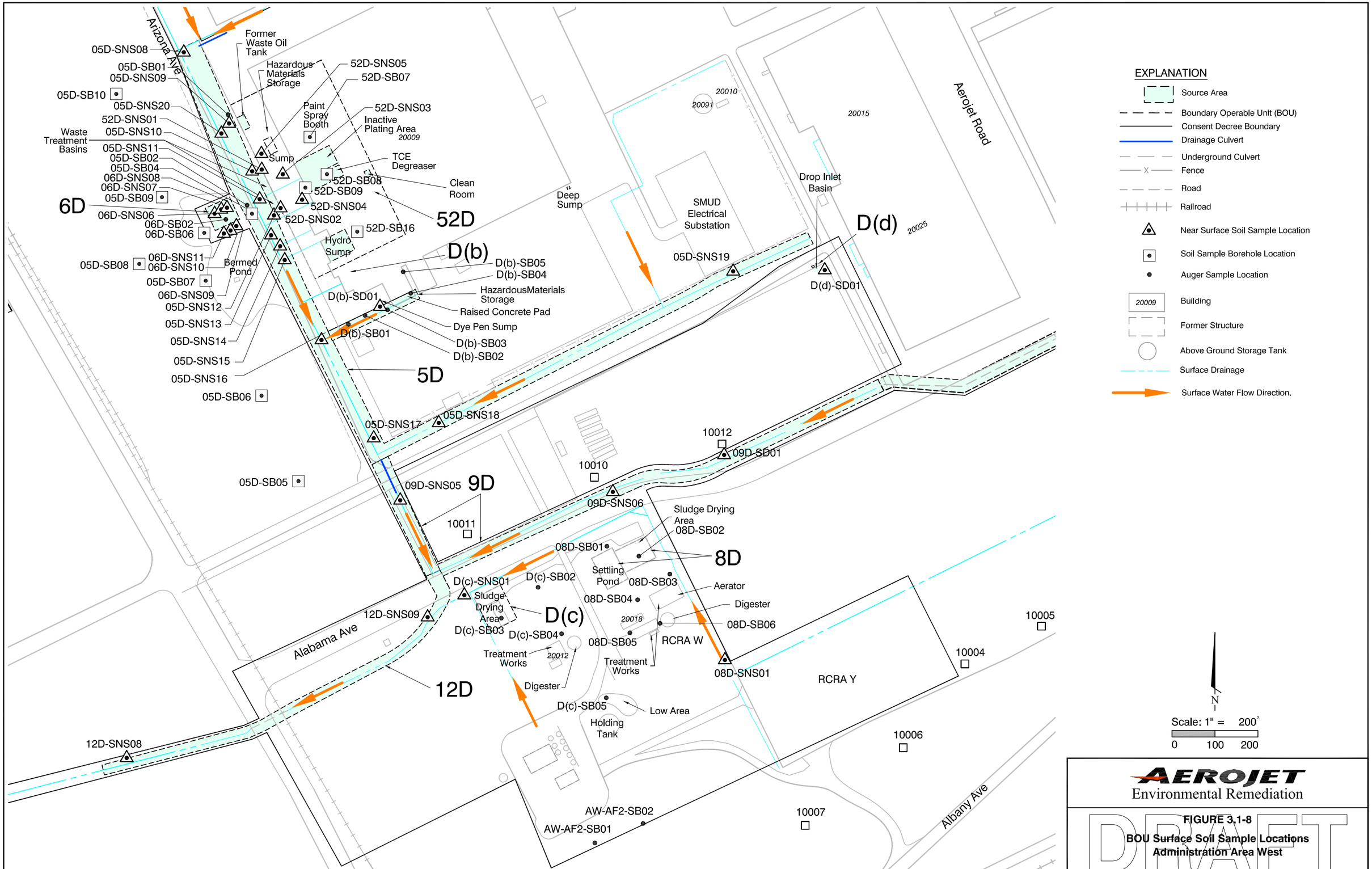

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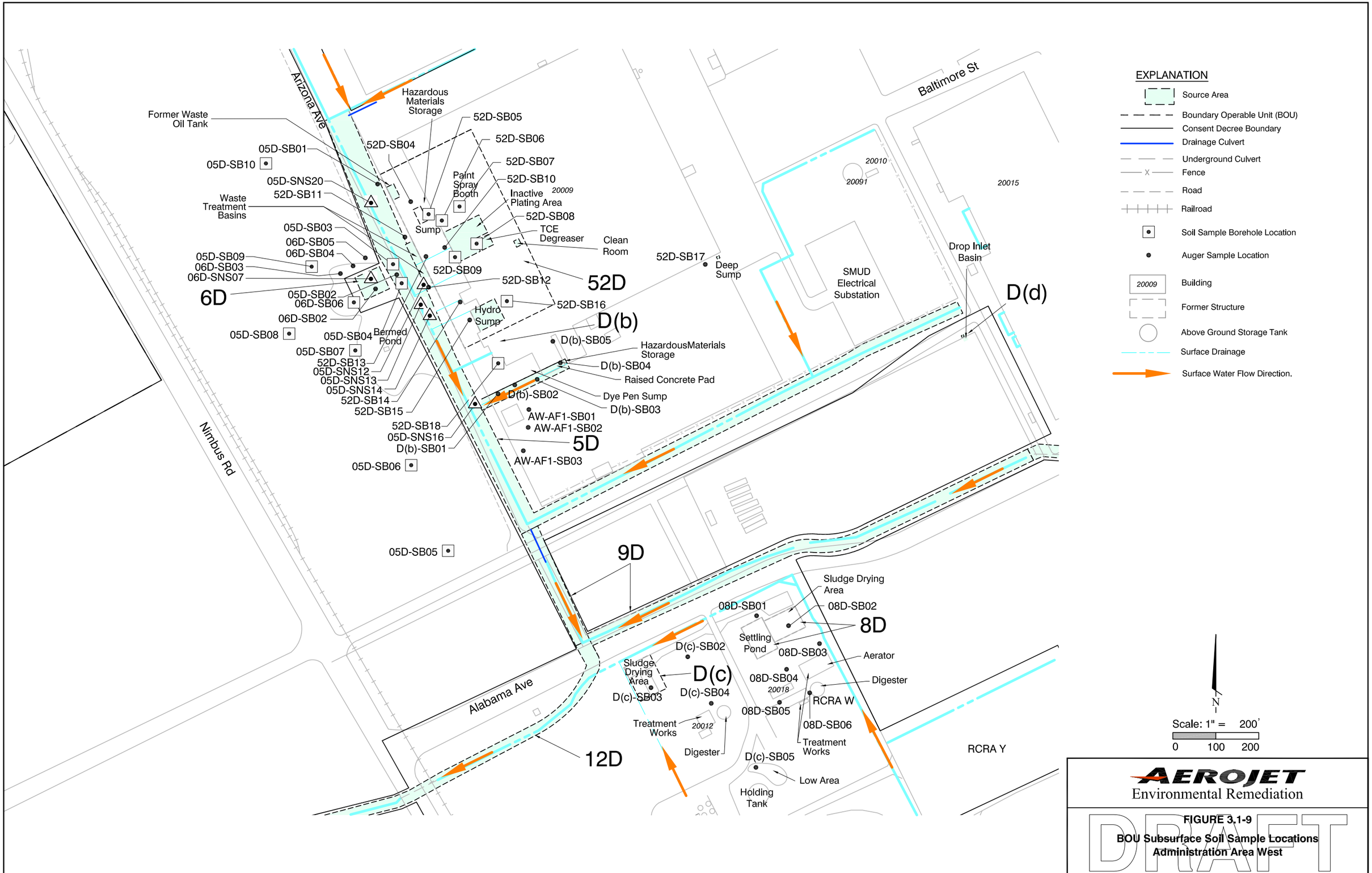
FIGURE 3.1-8
BOU Surface Soil Sample Locations
Administration Area West

7\17\08 PR SR10130180



7\17\08 PR SR10130181

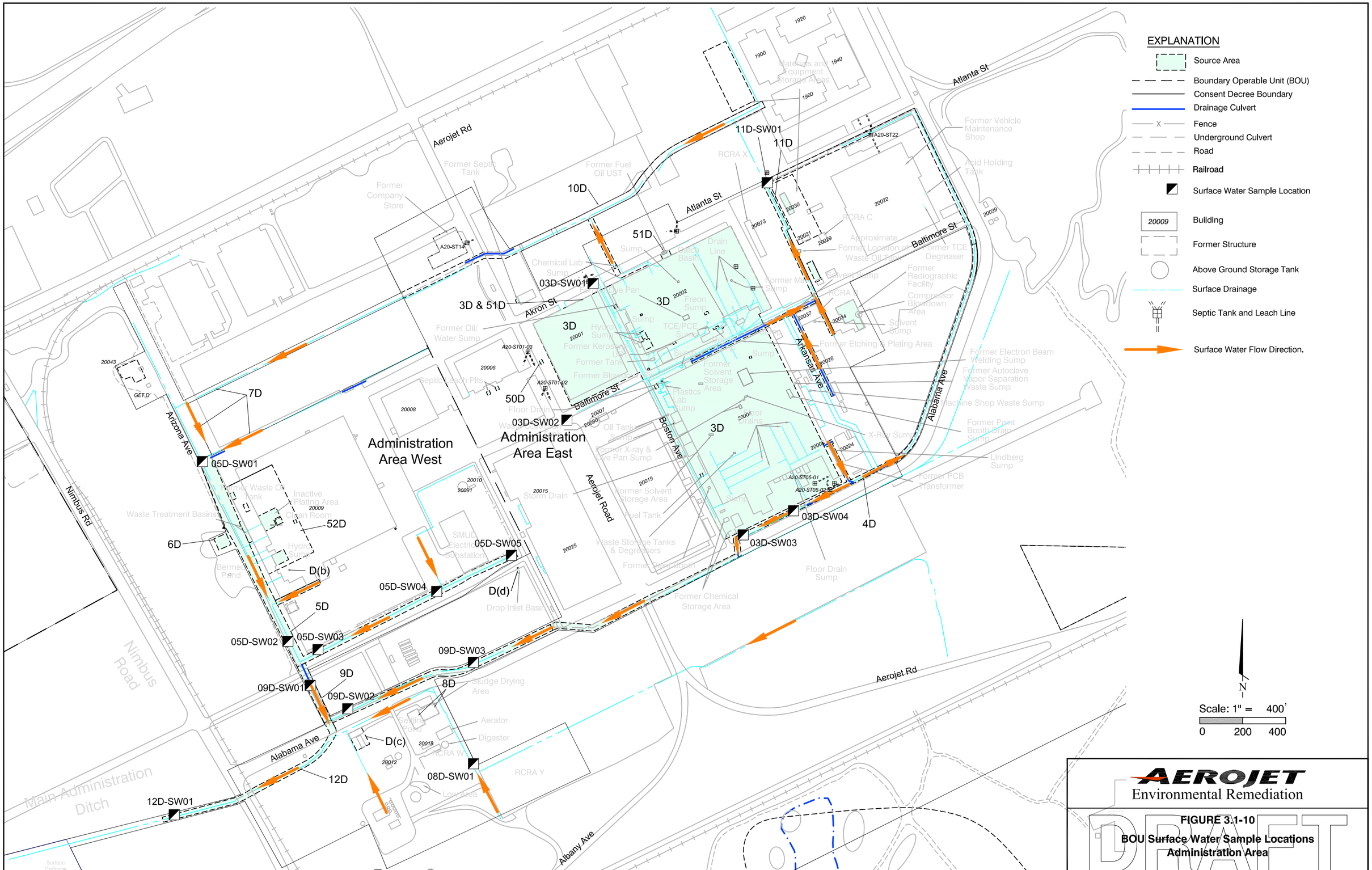
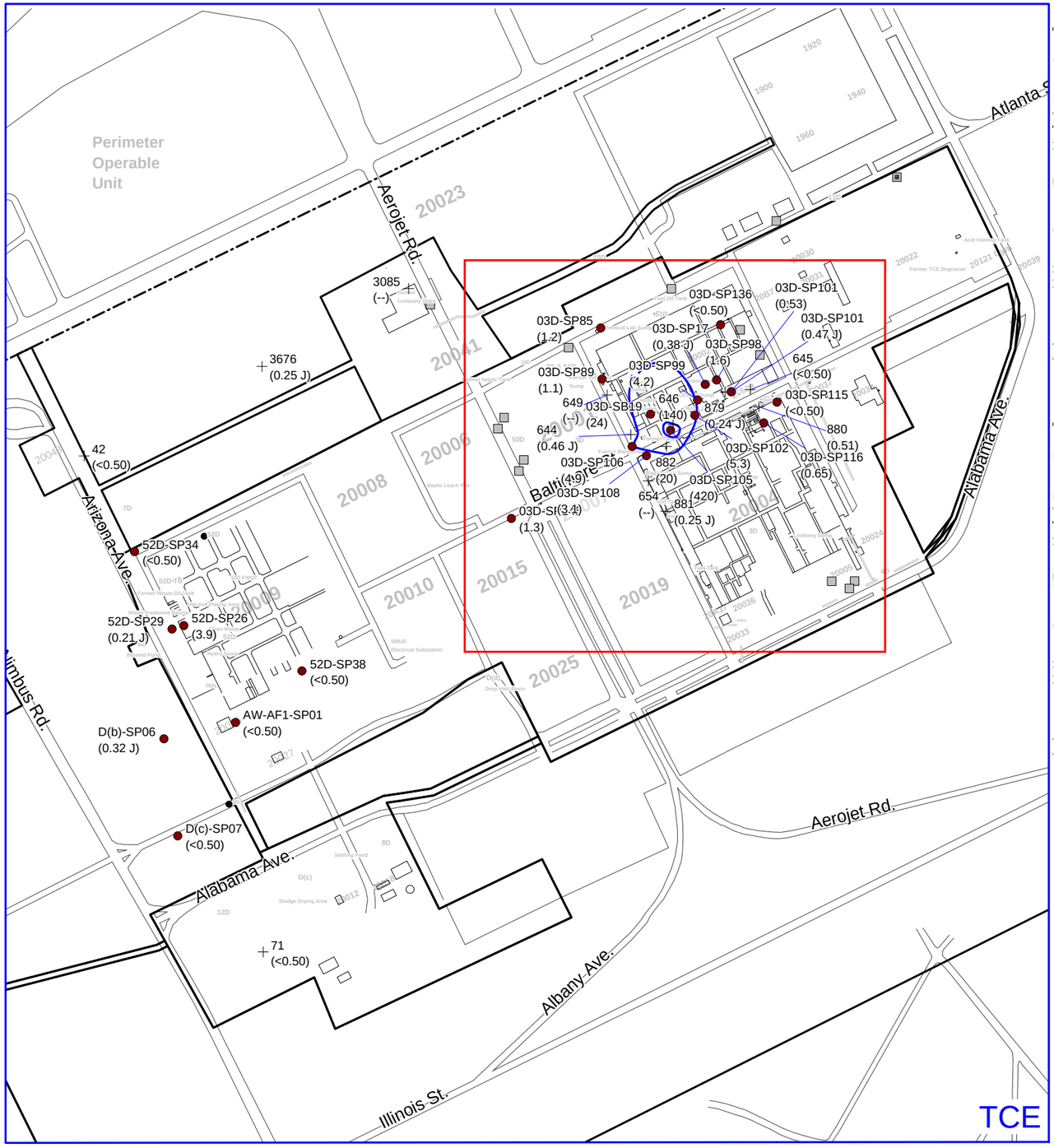


FIGURE 3.1-10
BOU Surface Water Sample Locations
Administration Area

9\11\08 PR SR10130182



Explanation

03D-SP29 (61.3)	Grab Groundwater Sample Location and Concentration (ug/L) - Data not used for contouring
645 (61.3)	Monitoring Well, ID and Concentration (ug/L)

Note: -- = not sampled.
"J" = Estimated Concentration
Sample Period - October 2005 to October 2006

Iso-Concentration Contour (ug/L) - lines dashed where inferred

Aerojet Property Boundary

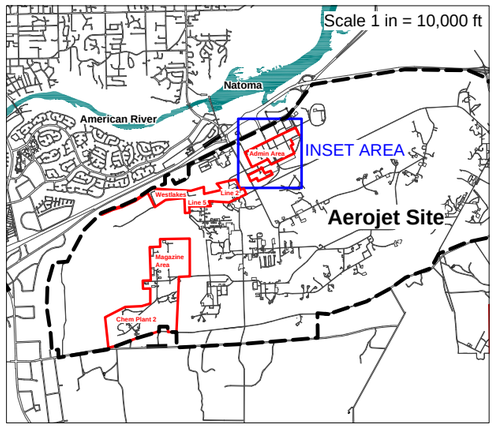
Consent Decree Boundary

20026 Building

Septic Tank

5(d) Source Area ID

Drainage Culvert



N

0 500 1,000
feet

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Environmental Remediation

Figure 3.1-11
Perched Groundwater
VOC Iso-concentration Contours
Administration Area - Boundary Operable Unit (OU-6)

Figure created on behalf of Aerojet by: CVEI
CENTRAL VALLEY ENVIRONMENTAL, INC.

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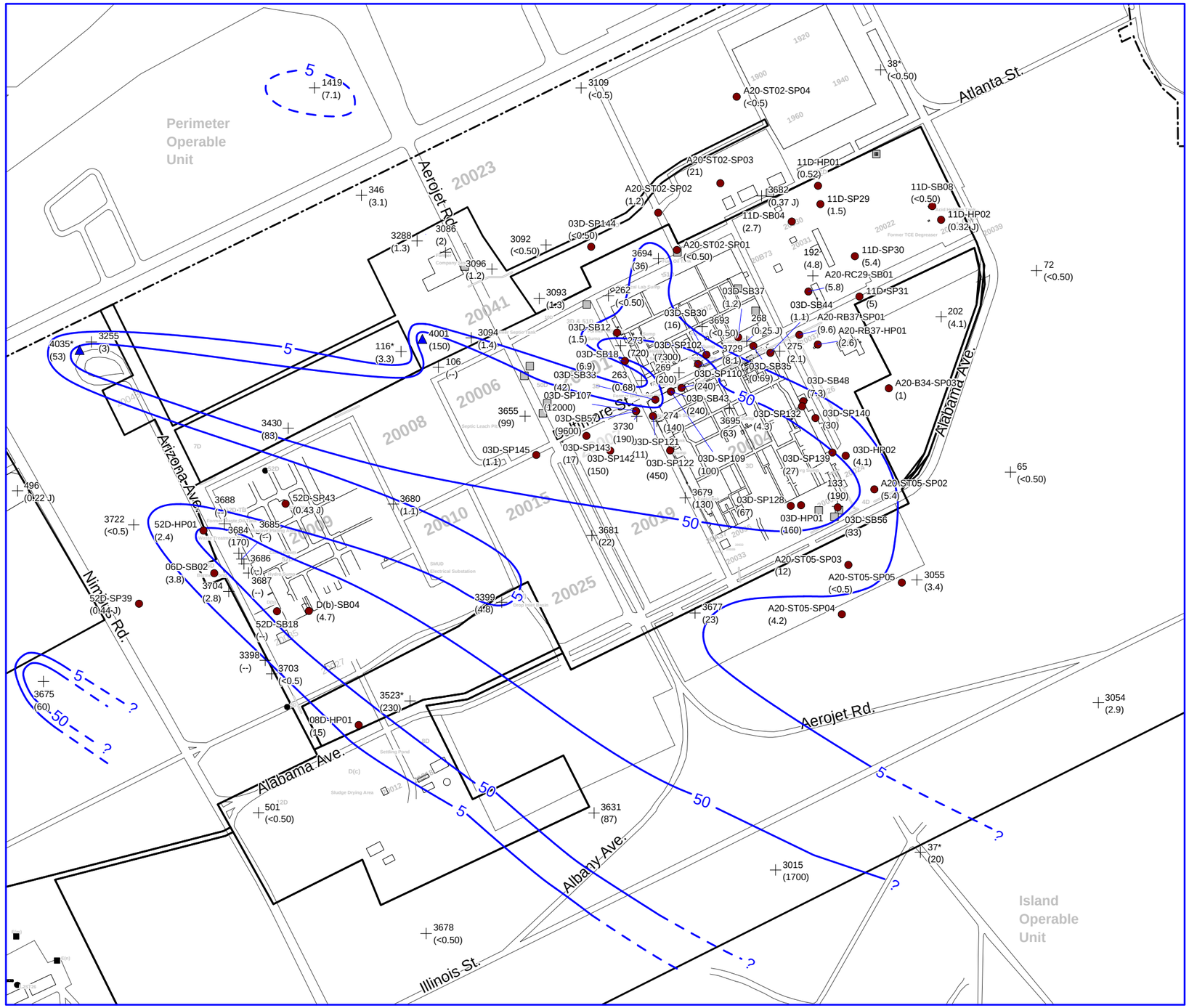
SR10130190



Explanation

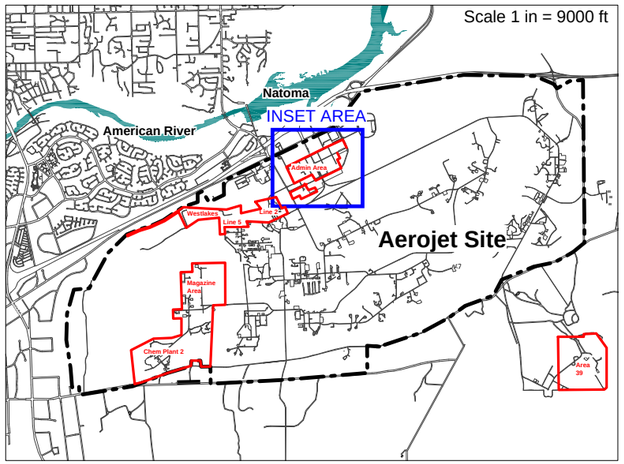
- 03D-SP29 (61.3) — Grab Groundwater Sample Location and Concentration (ug/L) - Data not used for contouring
- 645 (61.3) — Monitoring Well, ID and Concentration (ug/L)
- 4001 -- — Extraction Well, ID and Concentration (ug/L)

* = Well screen extends below the first water-bearing zone (FWBZ) Concentrations may not be representative of the FWBZ

-- = not sampled. "J" = estimated concentration

Sample Period - October 2005 to October 2006

- Iso-Concentration Contour (ug/L) - lines dashed where inferred
- Aerojet Property Boundary
- Consent Decree Boundary
- 20026 — Building
- Septic Tank
- 5(d) — Source Area ID
- Drainage Culvert



N

0 500 1,000 feet

AEROJET
Environmental Remediation

Figure 3.1-12
First Water-Bearing Zone
TCE Iso-concentration Contours
Administration Area - Boundary Operable Unit (OU-6)

Figure created on behalf of Aerojet by: CVEI CENTRAL VALLEY ENVIRONMENTAL, INC.

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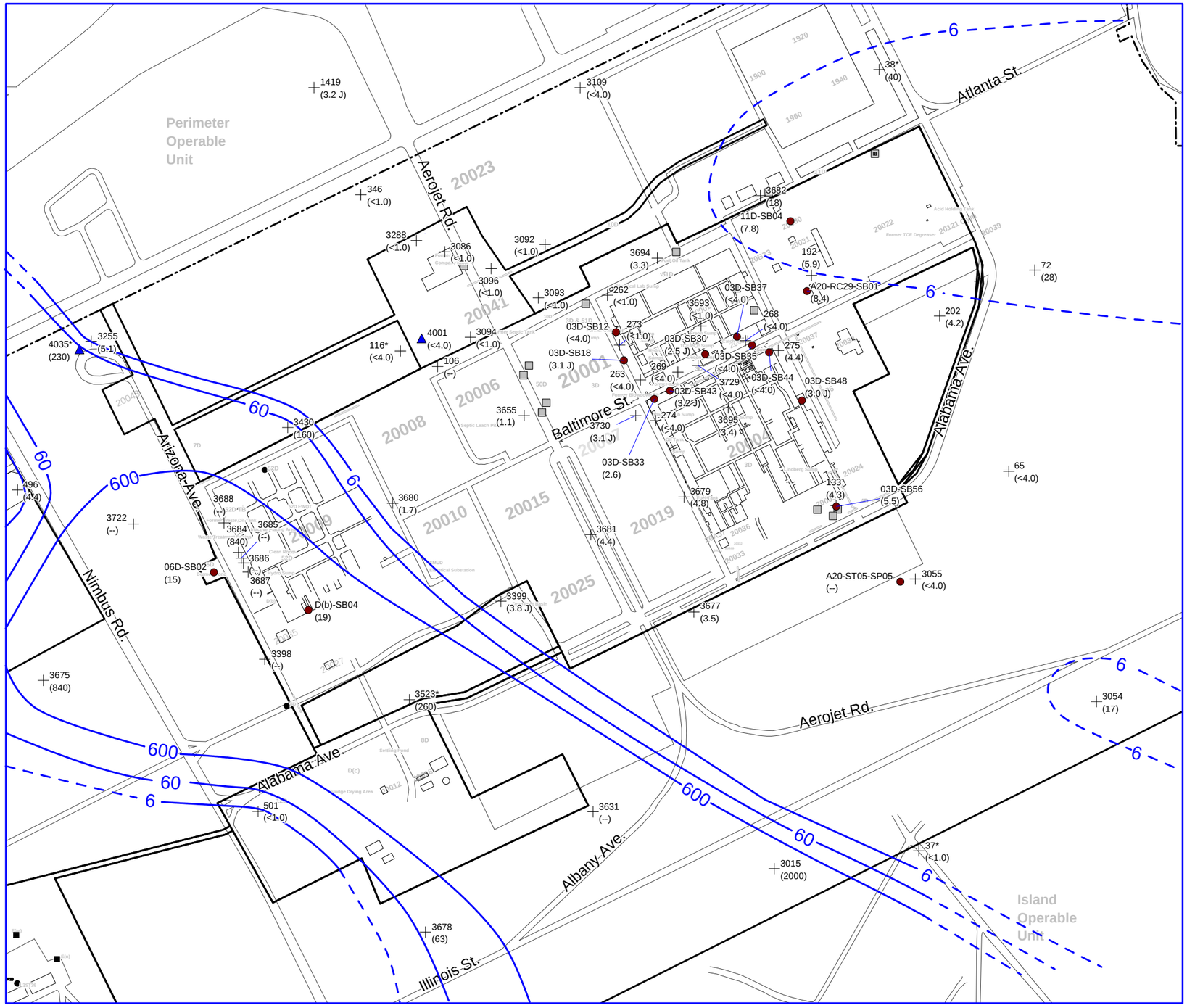
SR10130190



Explanation

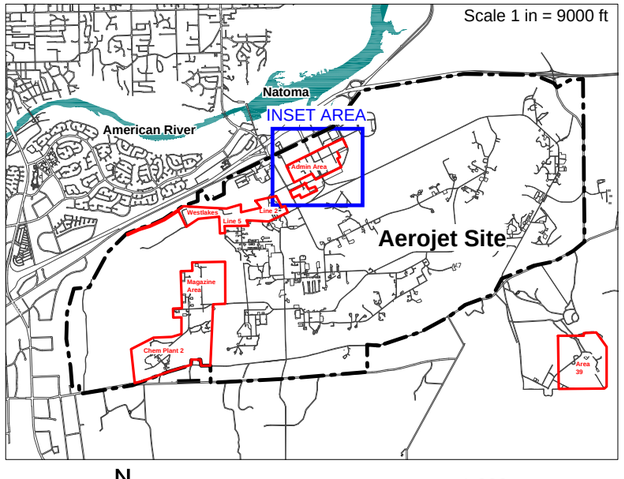
- 03D-SP29 (61.3) — Grab Groundwater Sample Location and Concentration (ug/L) - Data not used for contouring
- 645 (61.3) — Monitoring Well, ID and Concentration (ug/L)
- 4001 -- — Extraction Well, ID and Concentration (ug/L)

* = Well screen extends below the first water-bearing zone (FWBZ) Concentrations may not be representative of the FWBZ

-- = not sampled. "J" = estimated concentration

Sample Period - October 2005 to October 2006

- Iso-Concentration Contour (ug/L) - lines dashed where inferred
- Aerojet Property Boundary
- Consent Decree Boundary
- 20026 — Building
- Septic Tank
- 5(d) — Source Area ID
- Drainage Culvert



N

0 500 1,000 feet

AEROJET
Environmental Remediation

Figure 3.1-13
First Water-Bearing Zone
Perchlorate Iso-concentration Contours
Administration Area - Boundary Operable Unit (OU-6)

Figure created on behalf of Aerojet by: CVEI CENTRAL VALLEY ENVIRONMENTAL, INC.

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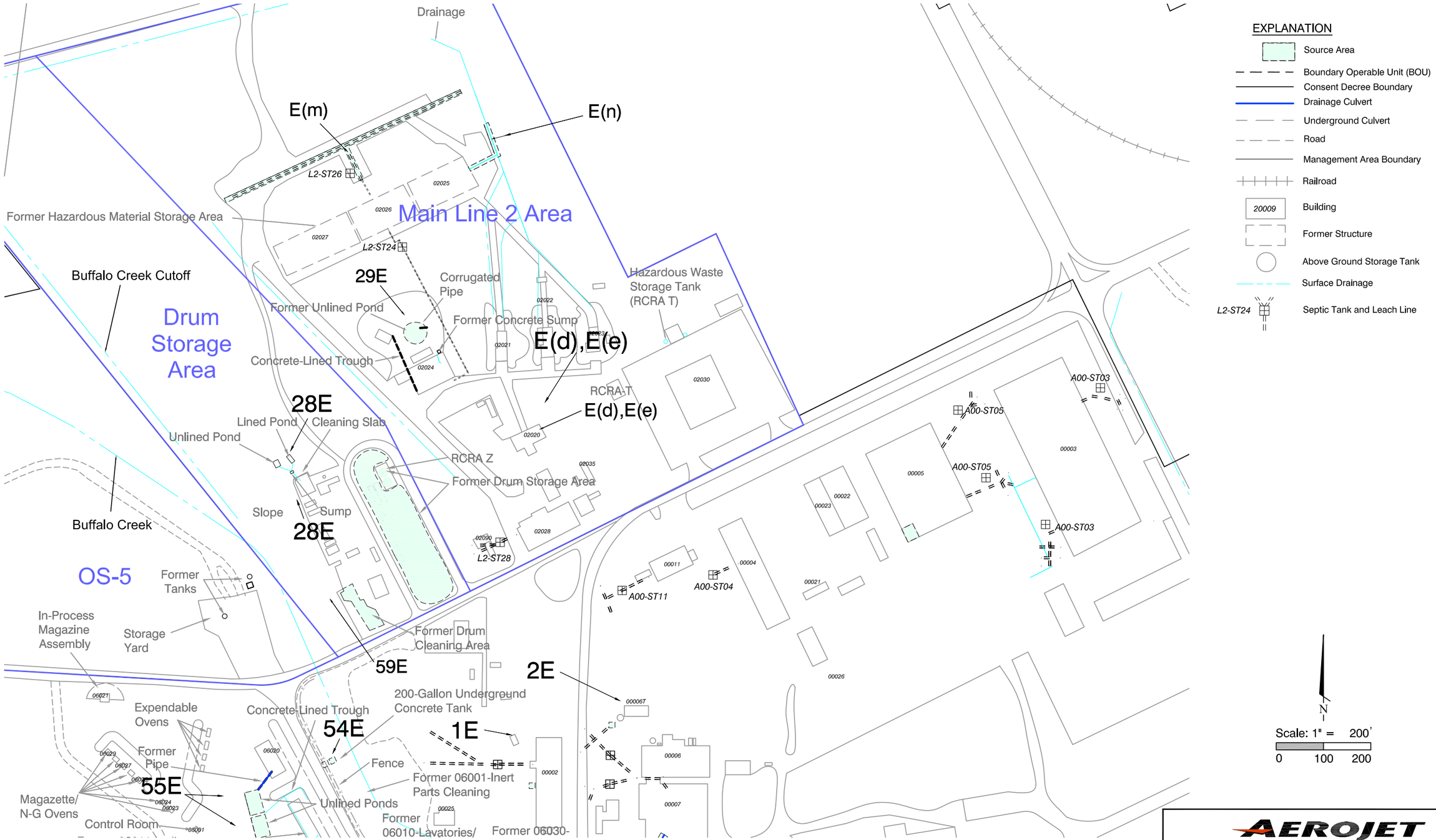
SR10130190

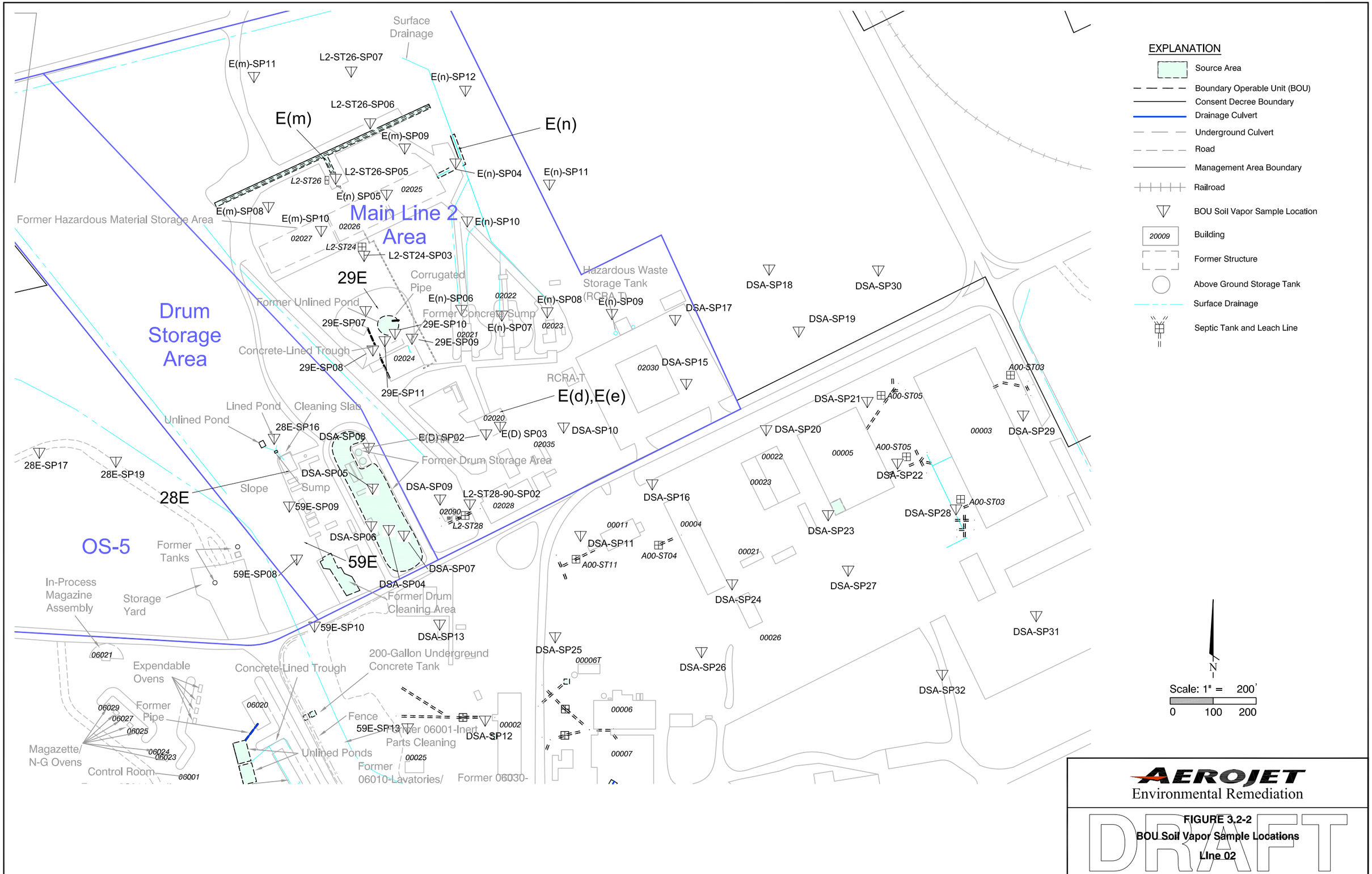


AEROJET
Environmental Remediation

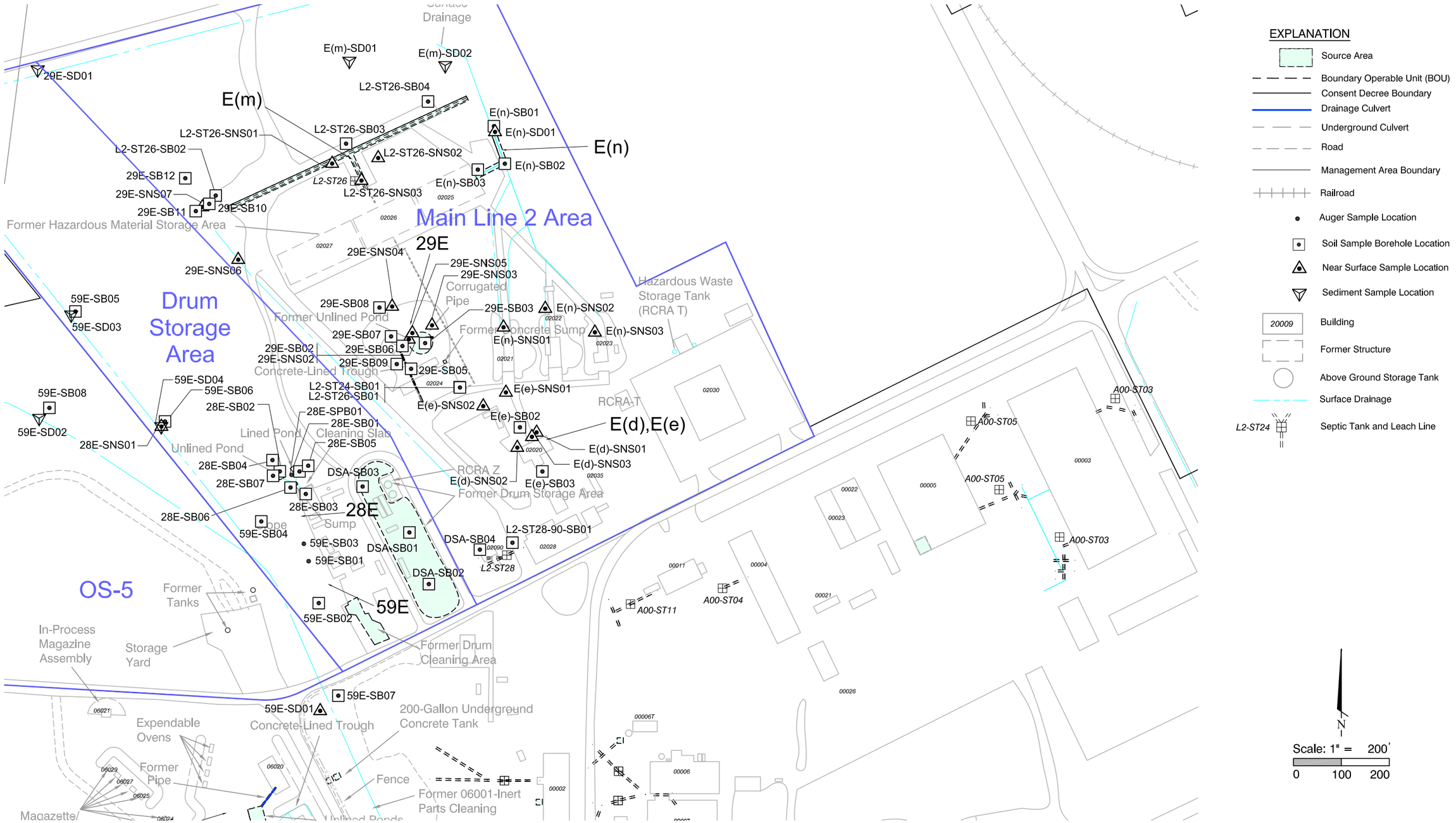
DRAFT

FIGURE 3.2-1
Site Features Map
Line 02

09/15/10 PER SR10130183



09/14/10 PER SR10130186

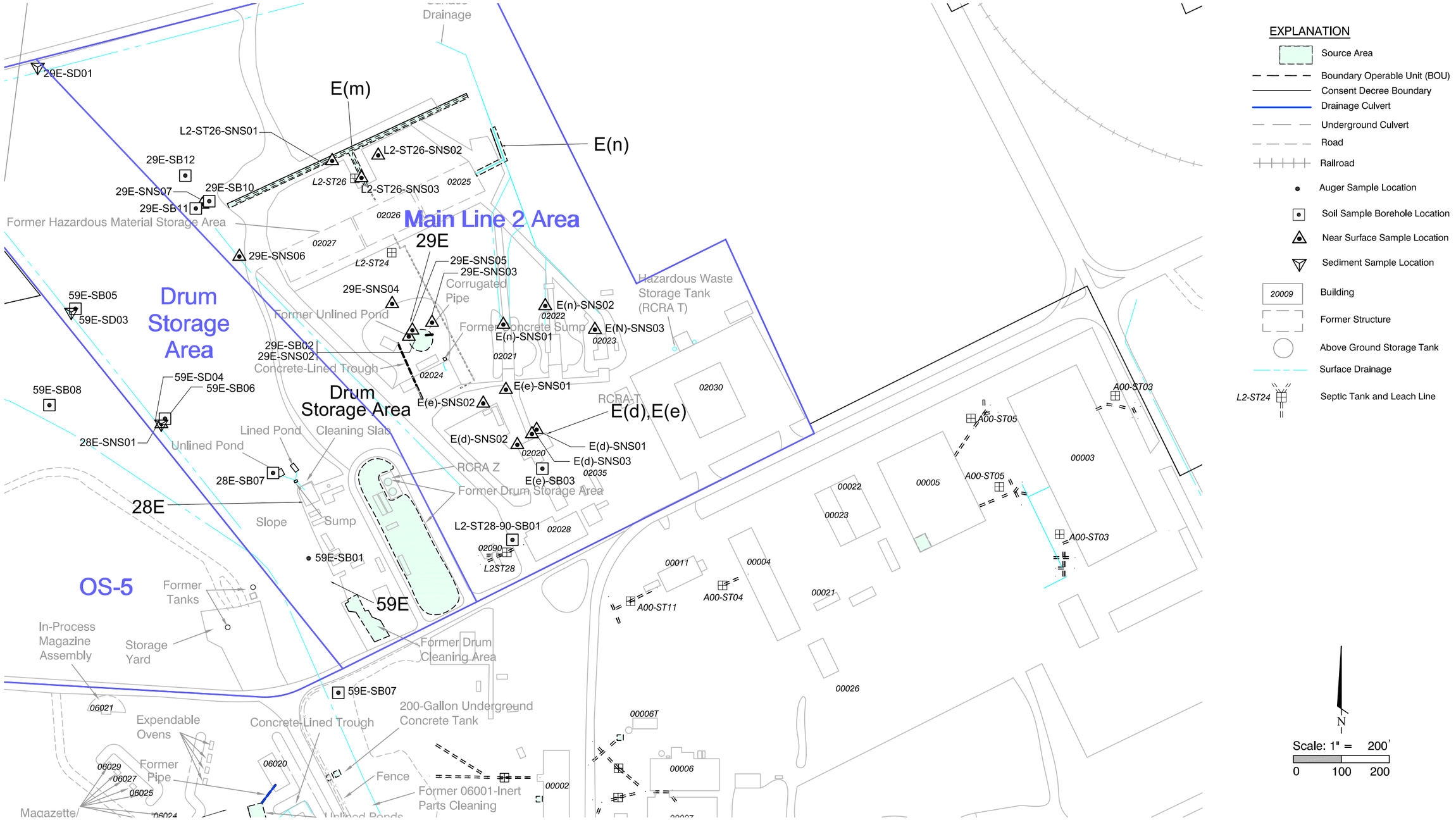


AEROJET
Environmental Remediation

DRAFT

FIGURE 3.2-3
BOU Surface Soil Sample Locations
Line 02

09/15/10 PER SR10130184

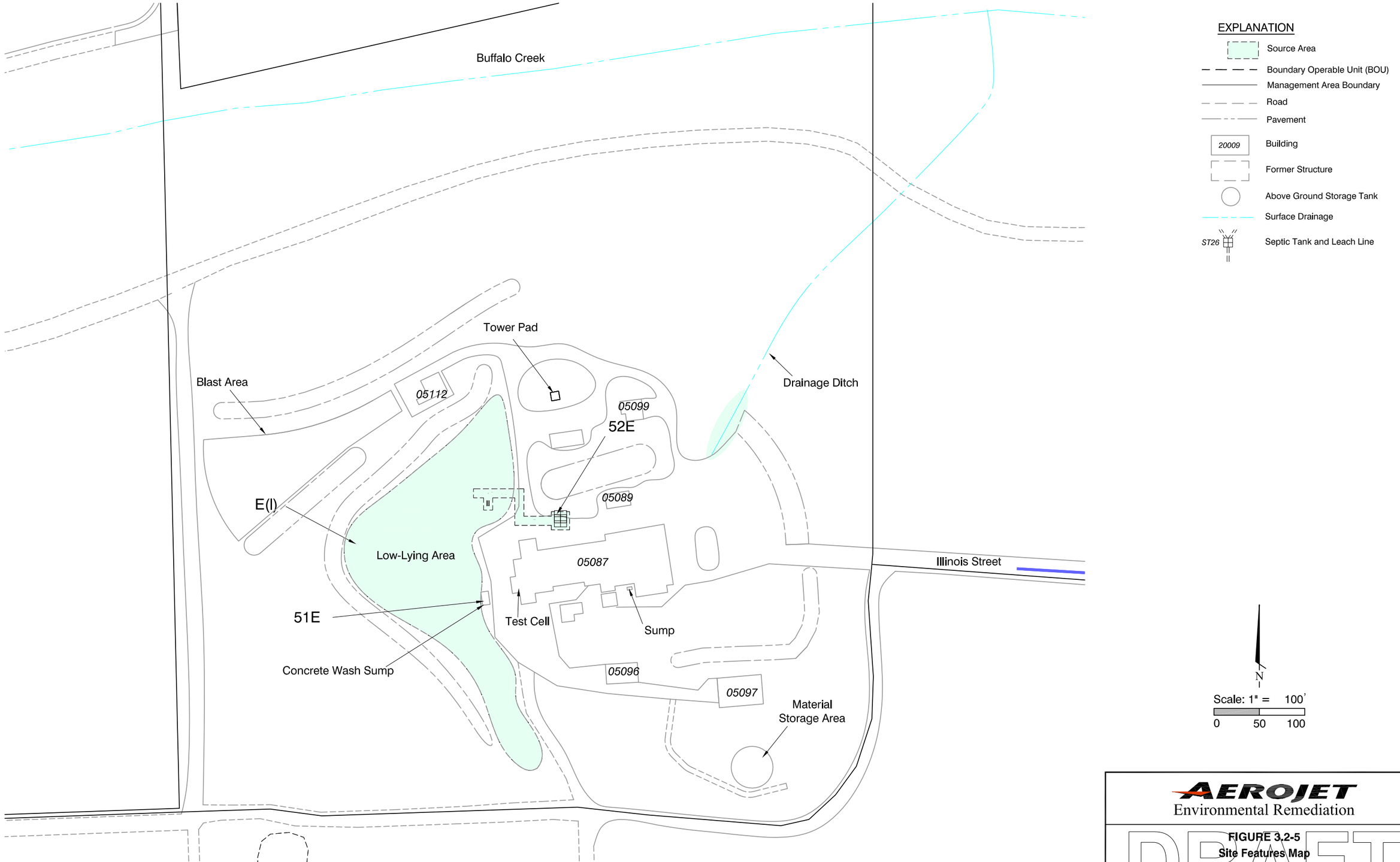


AEROJET
Environmental Remediation

DRAFT

FIGURE 3.2-4
BOU Subsurface Soil Sample Locations
Line 02

09/15/10 PER SR10130185

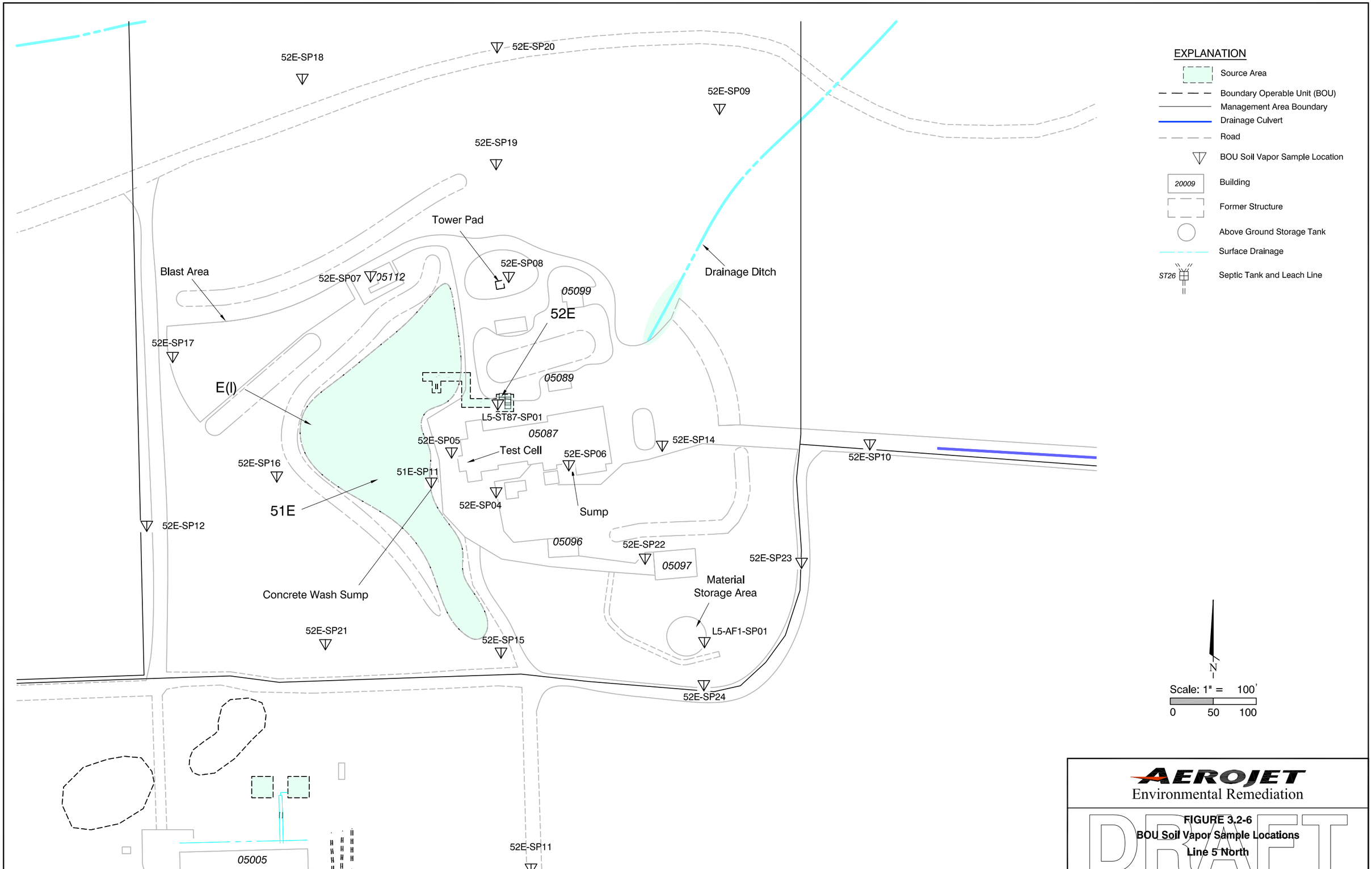


AEROJET
Environmental Remediation

DRAFT

FIGURE 3.2-5
Site Features Map
Line 5 North

7/22/08 PER SR10130187

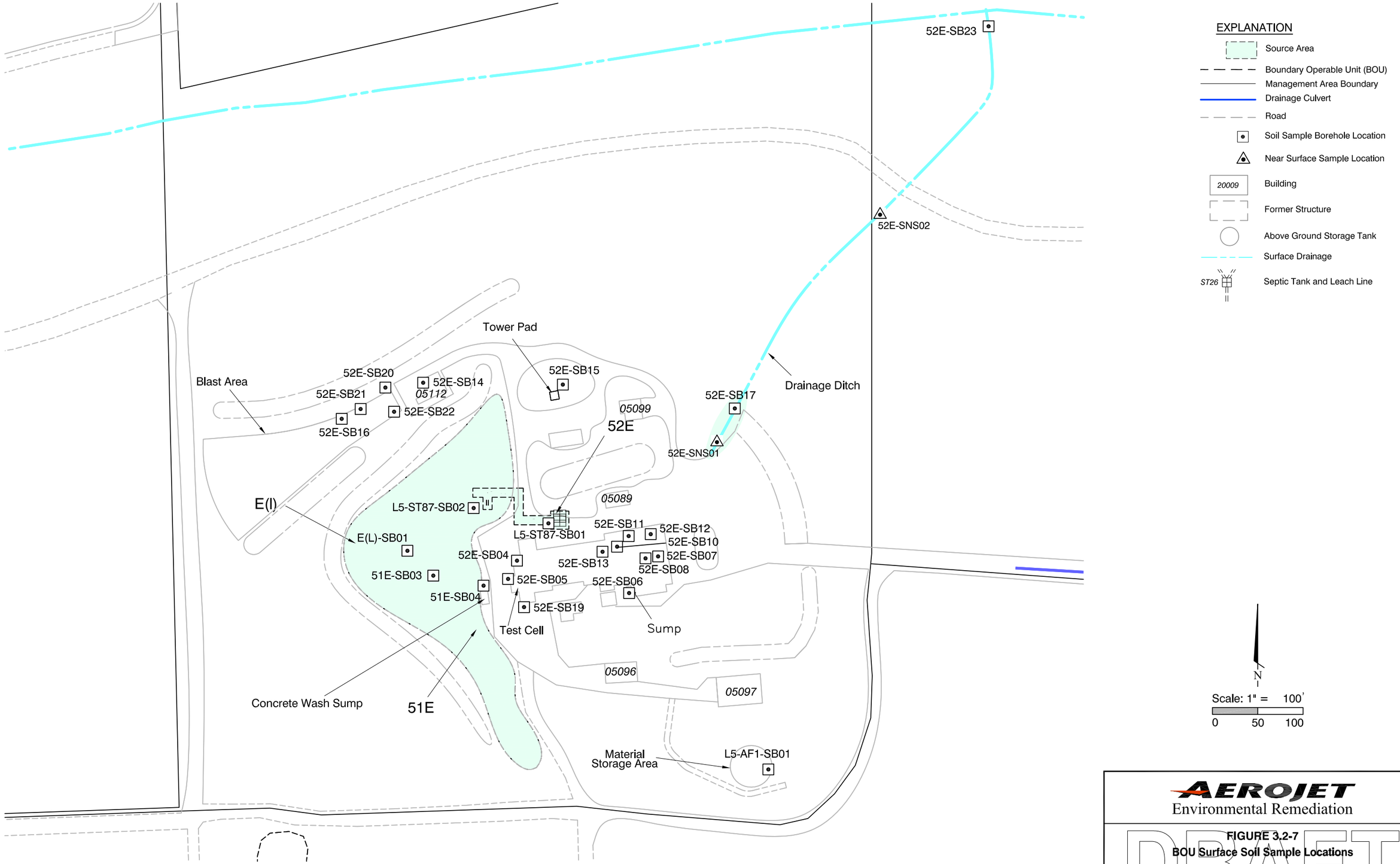


AEROJET
Environmental Remediation

FIGURE 3.2-6
BOU Soil Vapor Sample Locations
Line 5 North

DRAFT

7/22/08 PER SR10130188

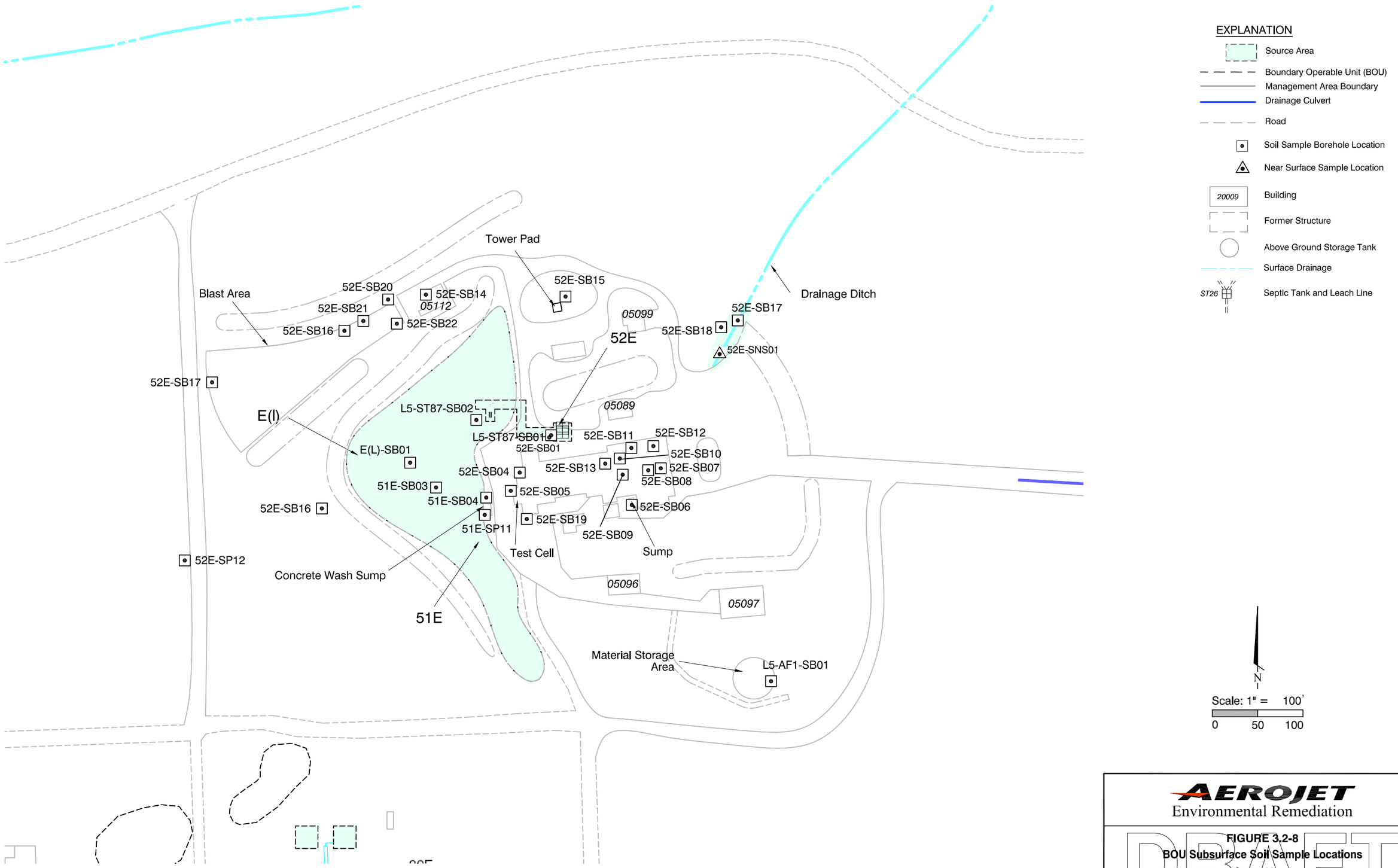


AEROJET
Environmental Remediation

FIGURE 3.2-7
BOU Surface Soil Sample Locations
Line 5 North

DRAFT

7/22/08 PER SR10130189



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Environmental Remediation

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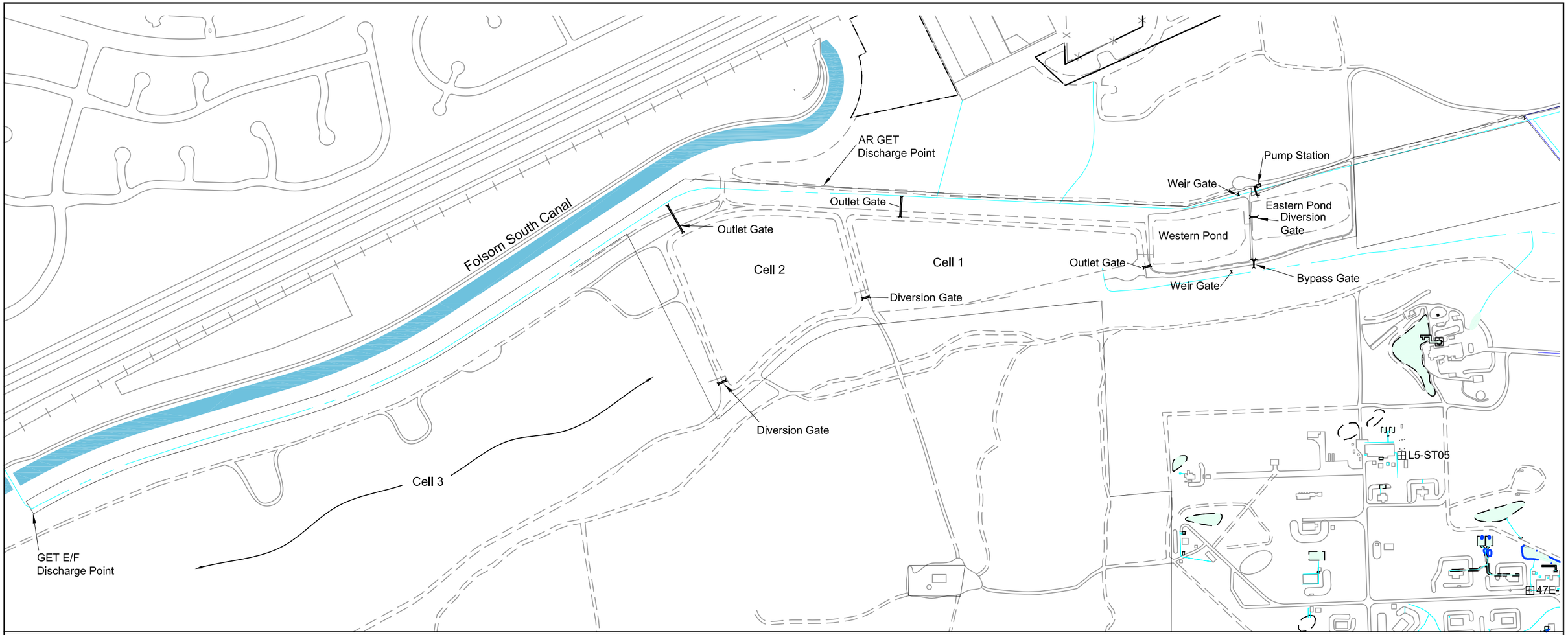
FIGURE 3.2-8
BOU Subsurface Soil Sample Locations
Line 5 North

7/22/08 PER SR10131153



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Road
- Railroad
- 20009 Building
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- AR American River
- GET Groundwater Extraction and Treatment

N

Scale: 1" = 500'

0 250 500

AEROJET
Environmental Remediation

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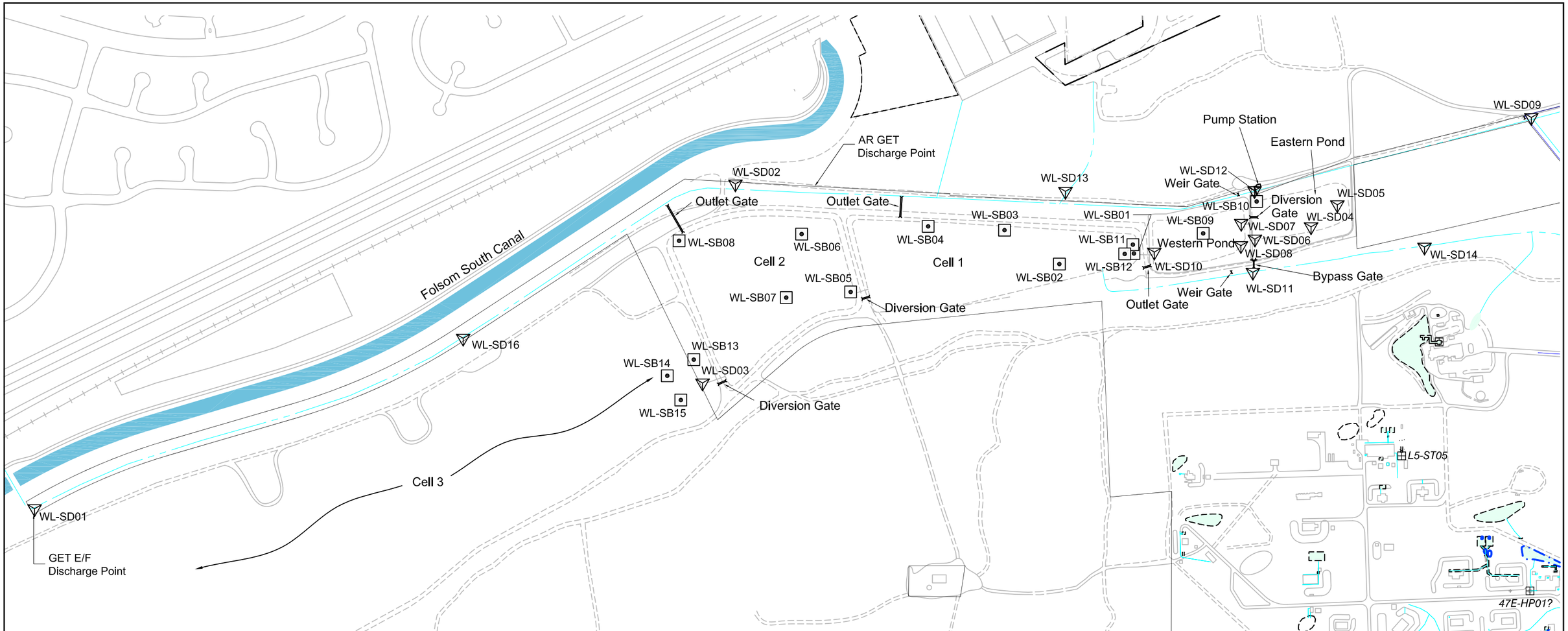
FIGURE 3.2-9
Site Features Map
Westlakes and Open Space Area 6

9/8/08 PER SR10131154



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Road
- Sediment Sample Location
- Soil Sample Borehole Location
- 20009 — Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- ST26 — Septic Tank and Leach Line
- AR — American River
- GET — Groundwater Extraction and Treatment

N

Scale: 1" = 500'

0 250 500

AEROJET
Environmental Remediation

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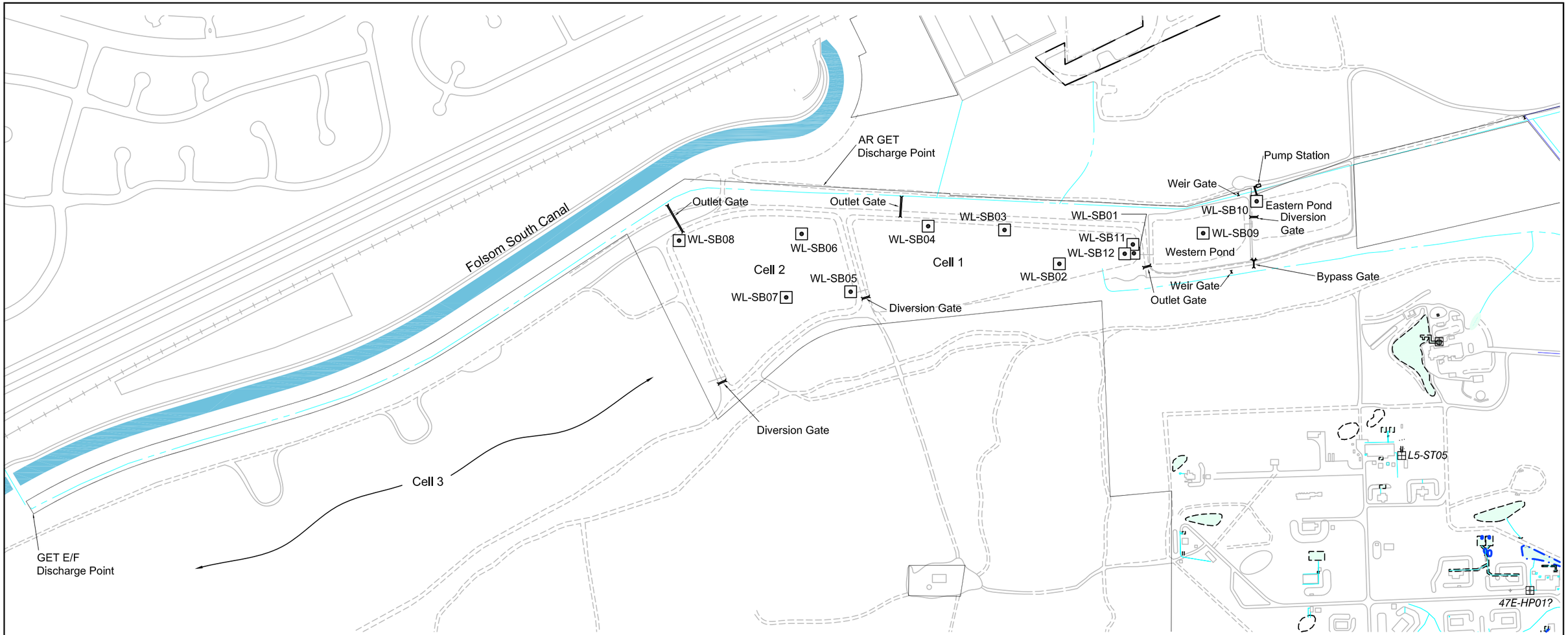
FIGURE 3.2-10
BOU Surface Soil Sample Locations
Westlakes

7/22/08 PER SR10131155



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Road
- Sediment Sample Location
- Soil Sample Borehole Location
- 20009 — Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- ST26 — Septic Tank and Leach Line
- AR — American River
- GET — Groundwater Extraction and Treatment

N

Scale: 1" = 500'

0 250 500

AEROJET
Environmental Remediation

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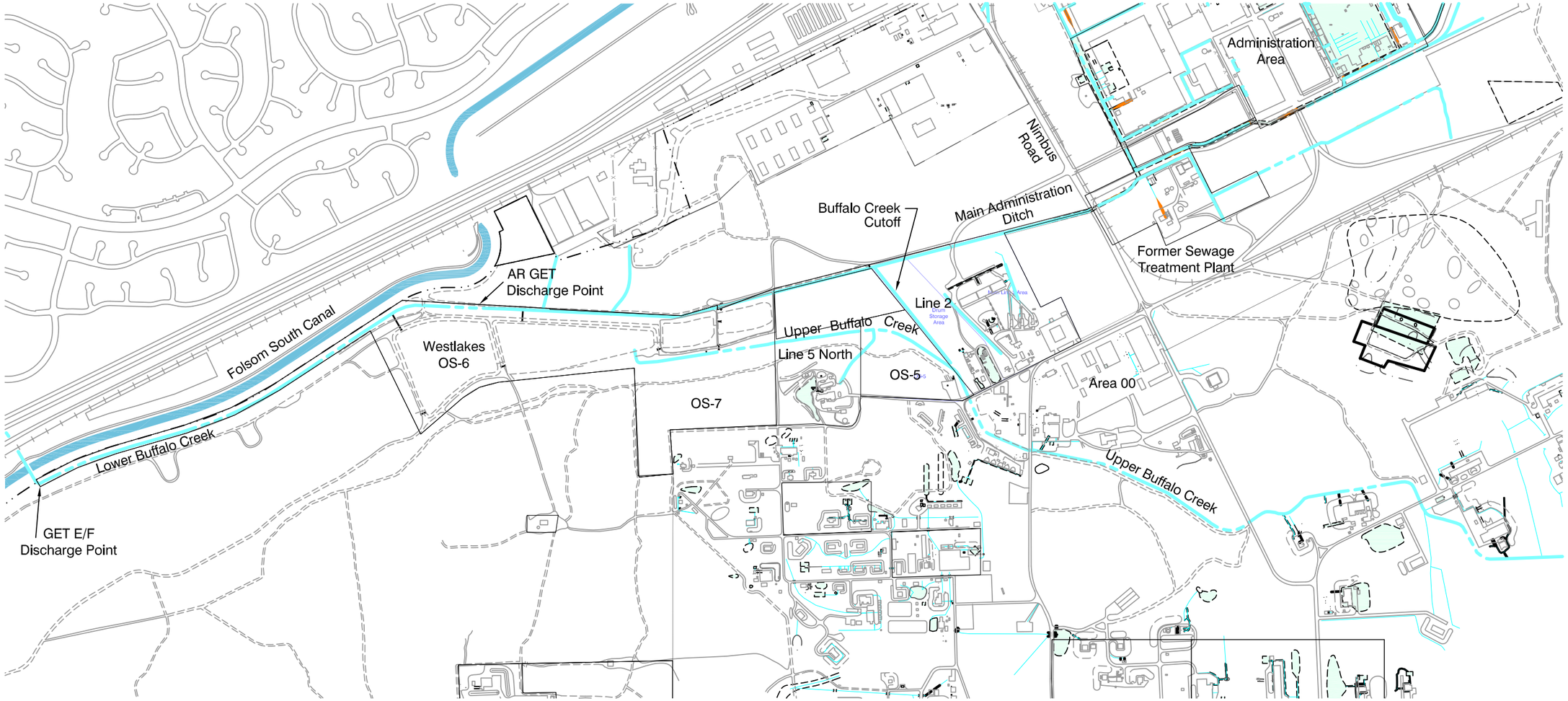
FIGURE 3.2-11
BOU Subsurface Soil Sample Locations
Westlakes

7/22/08 PER SR10131156



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Underground Culvert
- Fence
- Road
- Railroad
- AR American River
- GET Groundwater Extraction and Treatment
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- L2-ST24 Septic Tank and Leach Line

N

Scale: 1" = 1000'

0 500 1000

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Environmental Remediation

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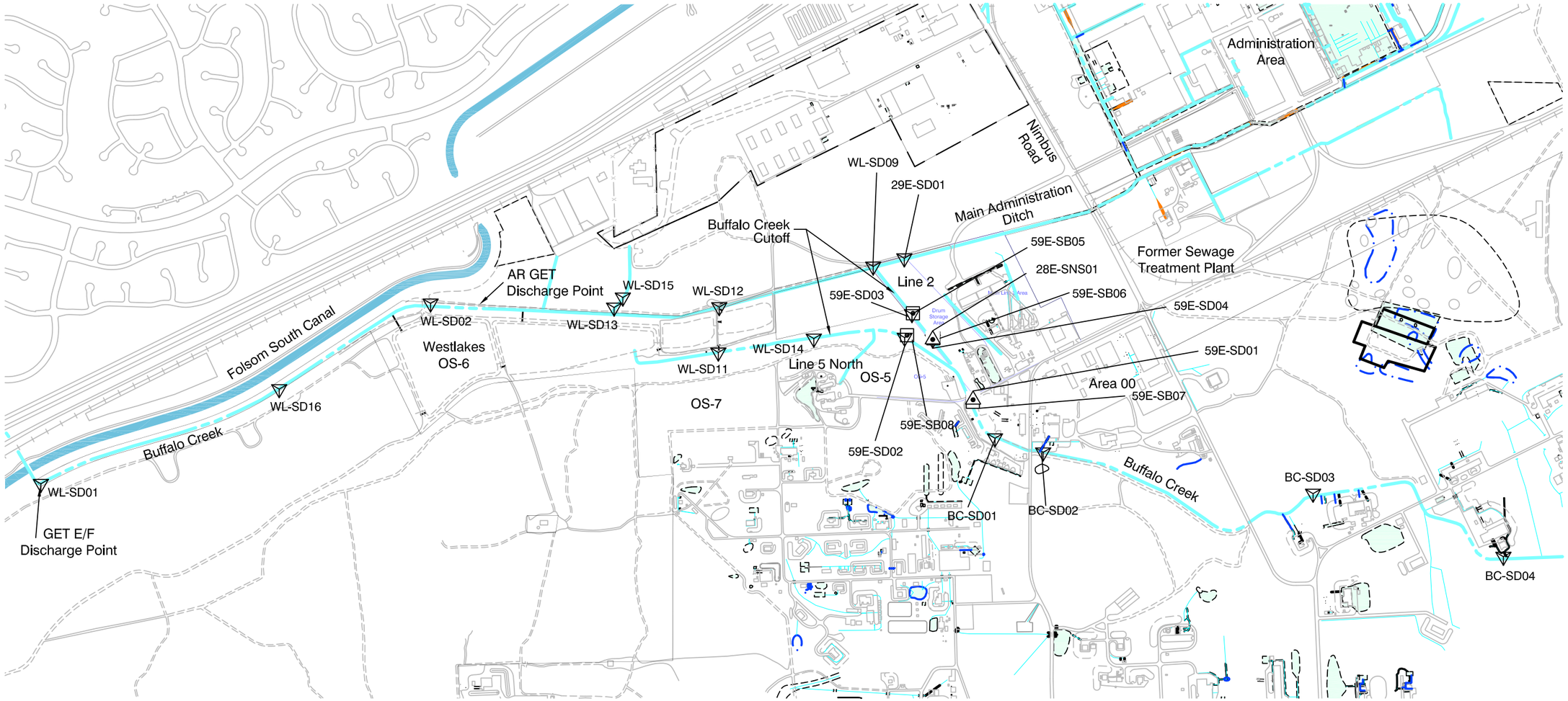
3.2-12

Site Features Map

Buffalo Creek

09/10/10 PR SR10131157



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Underground Culvert
- Fence
- Road
- Railroad
- Soil Sample Borehole Location
- Near Surface Sample Location
- Sediment Sample
- 20009 — Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- L2-ST24 — Septic Tank and Leach Line
- AR — American River
- GET — Groundwater Extraction and Treatment

N

Scale: 1" = 1000'

0 500 1000

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Environmental Remediation

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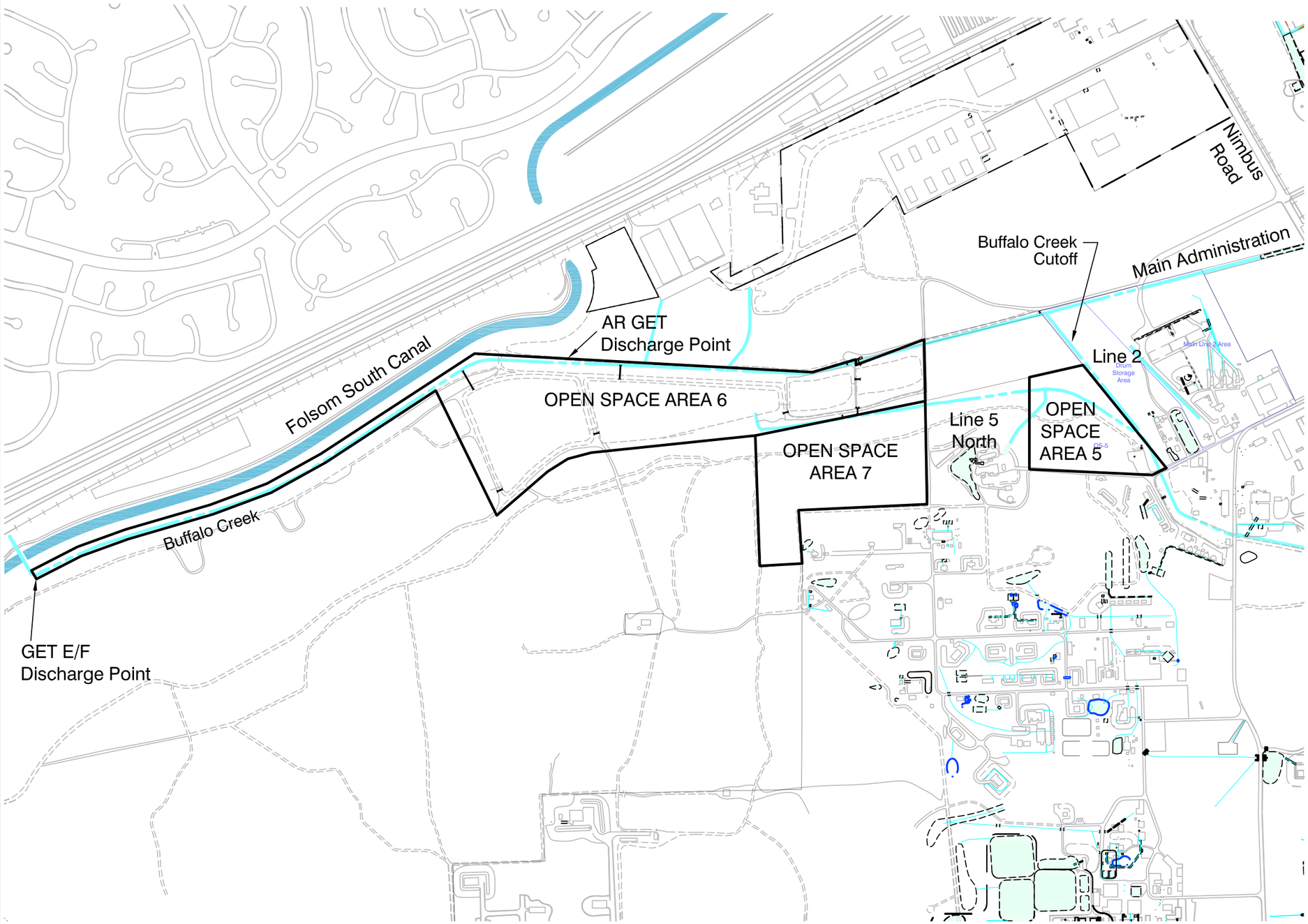
FIGURE 3.2-13
BOU Soil Sample Locations
Buffalo Creek

7\22\08 PR SR10131158



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Road
- Management Area Boundary
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- AR American River
- GET Groundwater Extraction and Treatment

N

Scale: 1" = 800'

0 400 800

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Environmental Remediation

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FIGURE 3.2-14
Site Features
Open Space Areas 5, 6, and 7

8/14/08 pr SR10131159

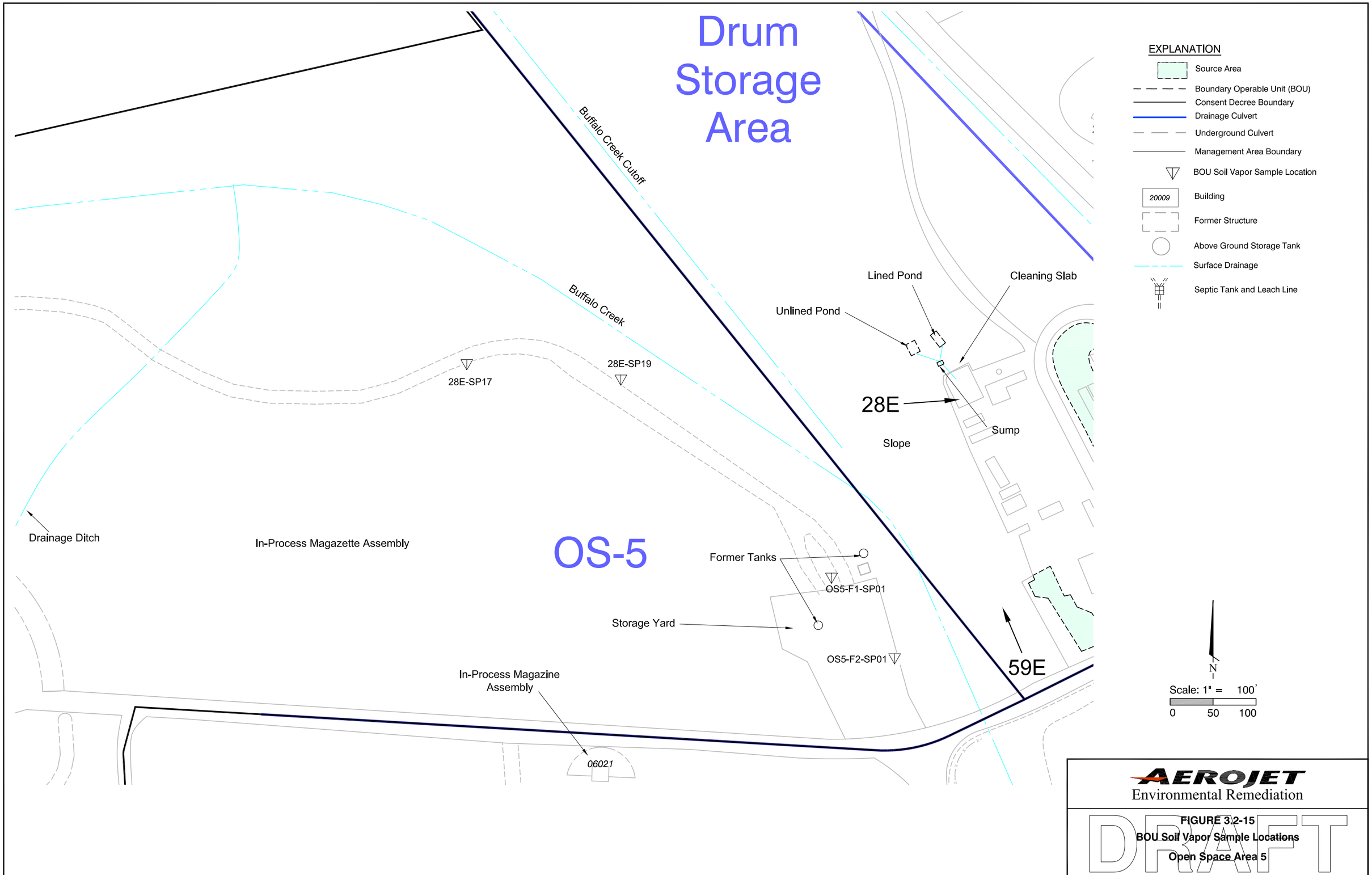

FIGURE 3.2-15
BOU Soil Vapor Sample Locations
Open Space Area 5

3/12/08 PER SR10131160

Drum Storage Area

Buffalo Creek Cutoff

Buffalo Creek

Lined Pond

Cleaning Slab

Unlined Pond

28E

Sump

Slope

Drainage Ditch

In-Process Magazette Assembly

OS-5

Former Tanks

OS5-F1-SB01

Storage Yard

OS5-F2-SB01

59E

In-Process Magazine Assembly

06021

EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Road
- Management Area Boundary
- Soil Sample Borehole Location
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line

N

Scale: 1" = 100'

0 50 100

AEROJET
Environmental Remediation

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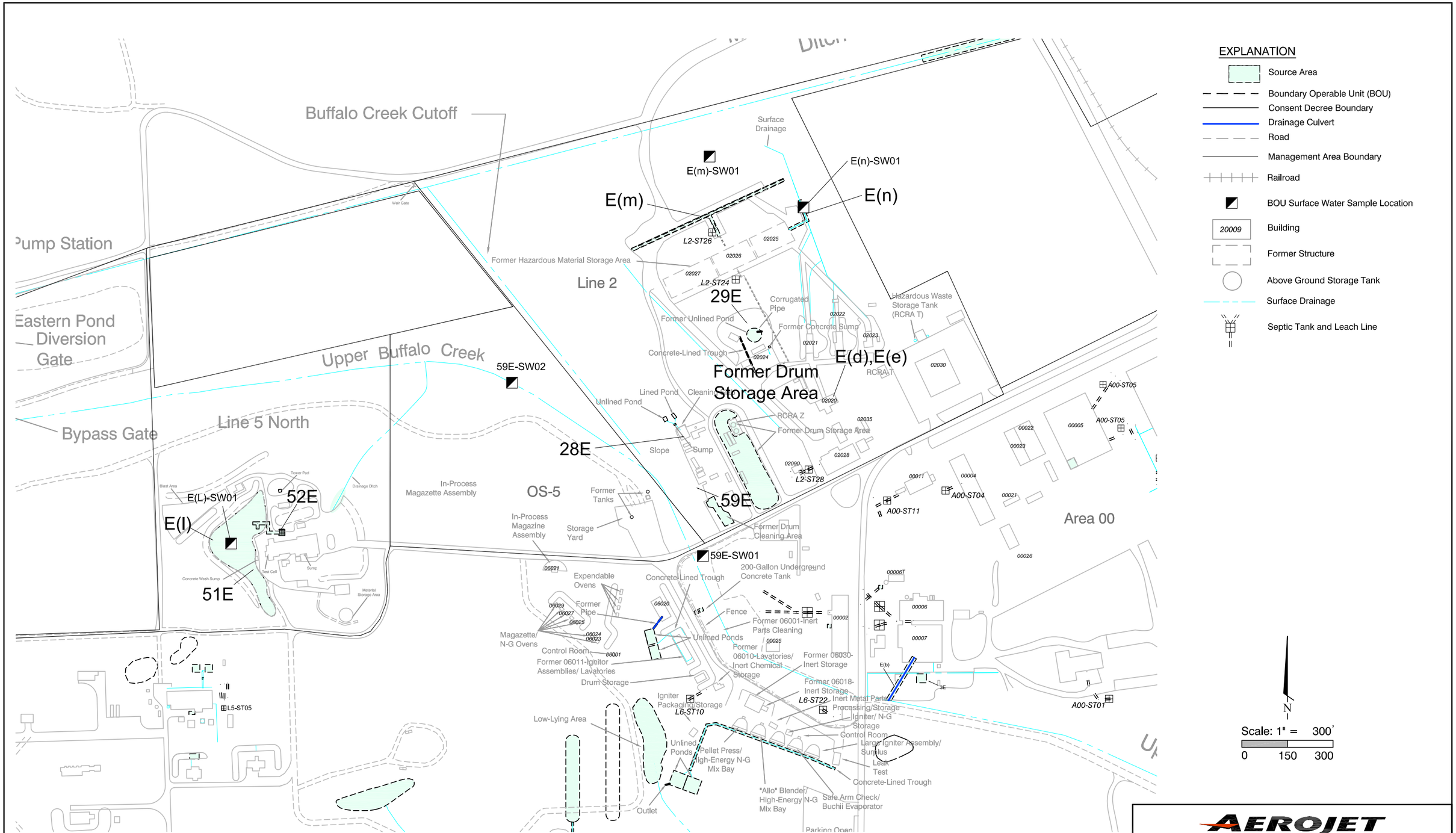
FIGURE 3.2-16
BOU Soil Sample Locations
Open Space Area 5

9/11/08 PER SR10131161



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Environmental Remediation

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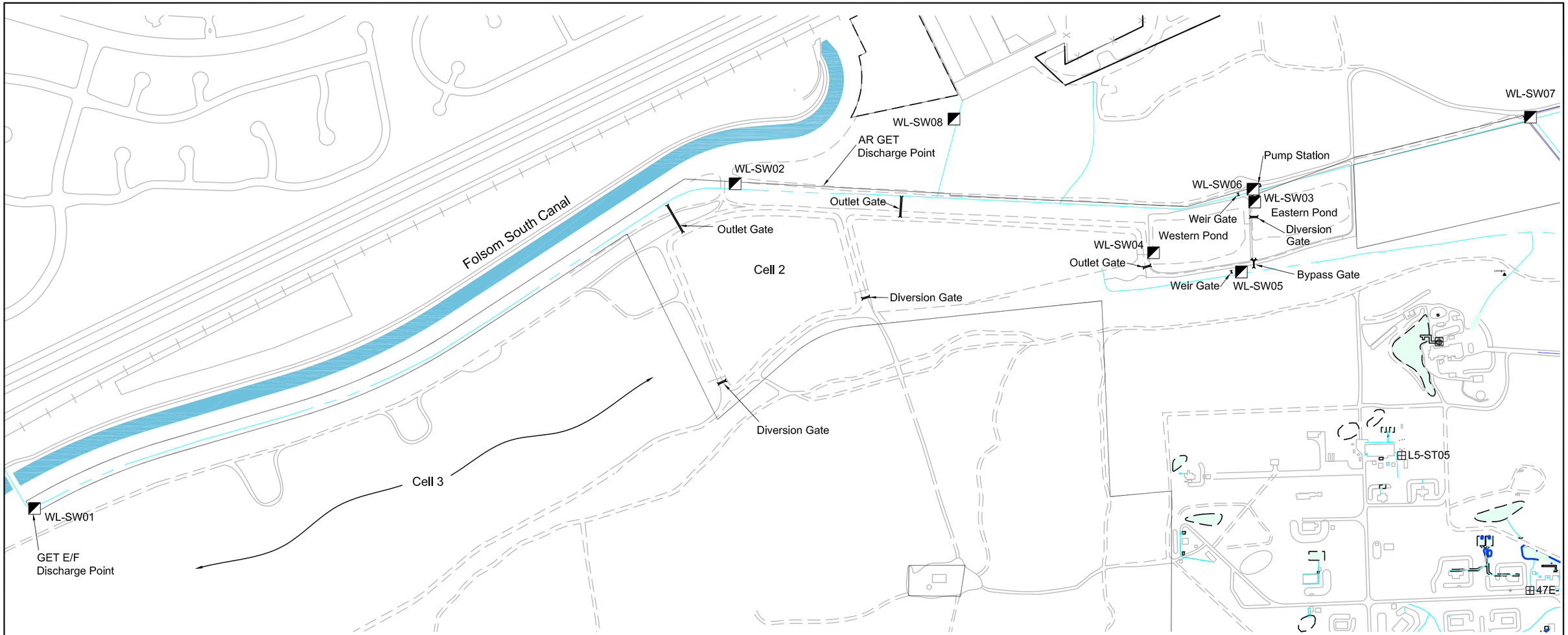
FIGURE 3.2-17
BOU Surface Water Sample Locations
Line 02 and Line 5 North, and Buffalo Creek Areas

9/8/08 PER SR10131162



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Road
- BOU Surface Water Sample Location
- Railroad
- 20009 Building
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- AR American River
- GET Groundwater Extraction and Treatment

N

Scale: 1" = 500'

0 250 500

AEROJET
Environmental Remediation

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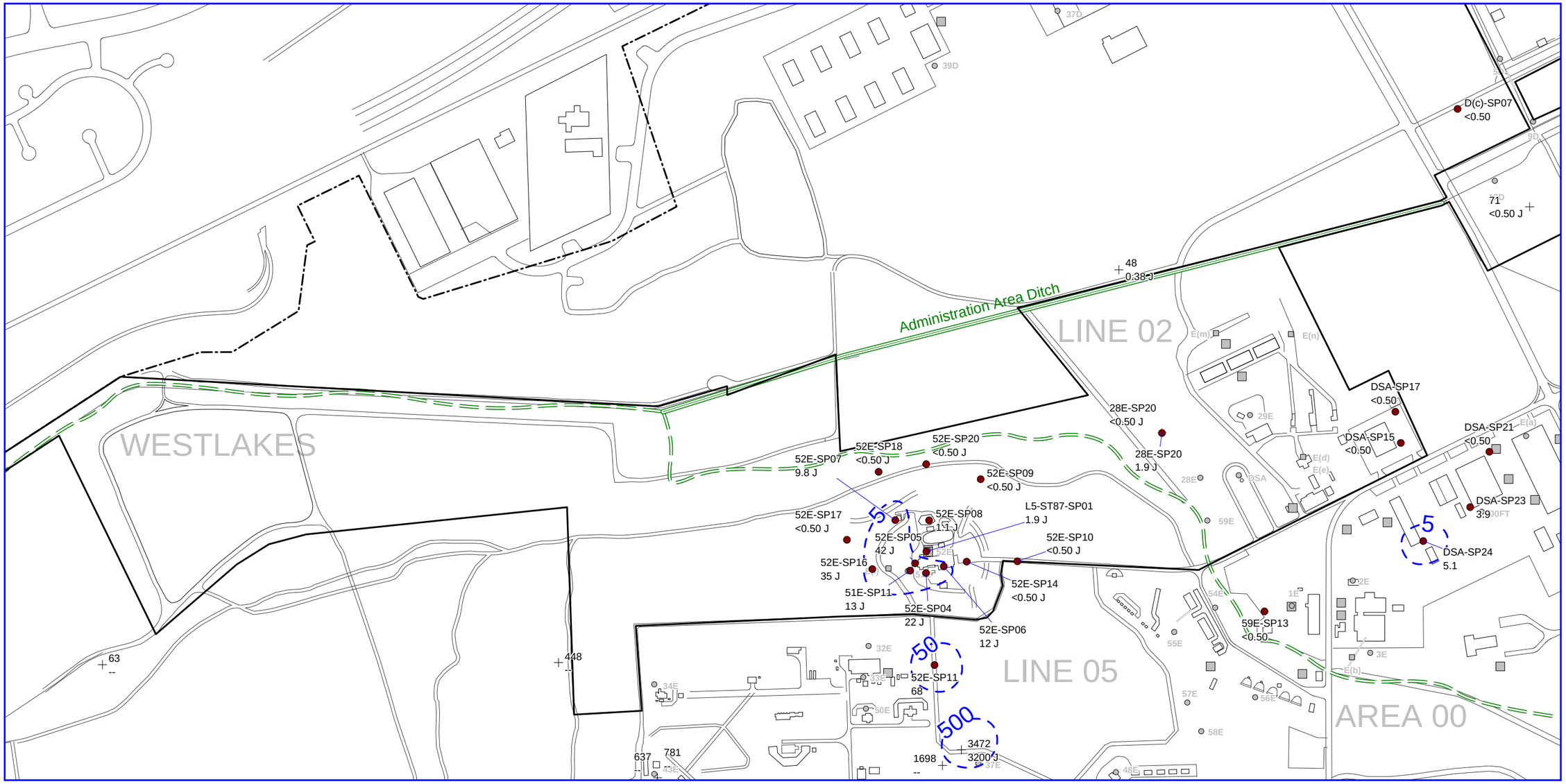
FIGURE 3.2-18
BOU Surface Water Sample Locations
Westlakes

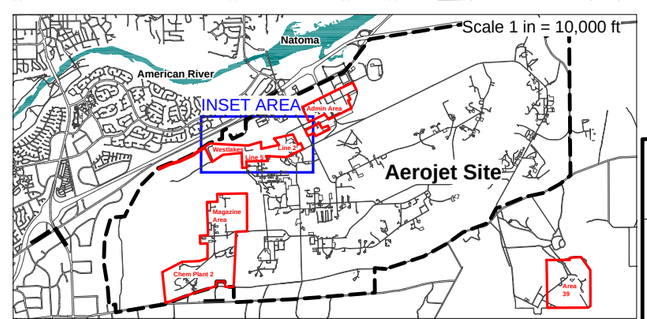
7/22/08 PER SR10131163



Explanation

- 03D-SP01 61.3 — Grab Groundwater Sample Location and Concentration (ug/L)
- 645 61.3 — Monitoring Well, ID and Concentration (ug/L)
- Iso-Concentration Contour (ug/L) - lines dashed where inferred
- Aerojet Property Boundary
- Buffalo Creek
- Building
- Consent Decree Boundary
- Drainage Culvert
- Septic Tank
- 39D — Source Site ID

Note: -- = Not Sampled Sample Period - October 2005 to October 2006
* = Asterisk Indicates Data Collected Outside RI Sampling Period. J = Estimated Value PGW SVSL = Protection to Groundwater Soil Vapor Screening Level



N

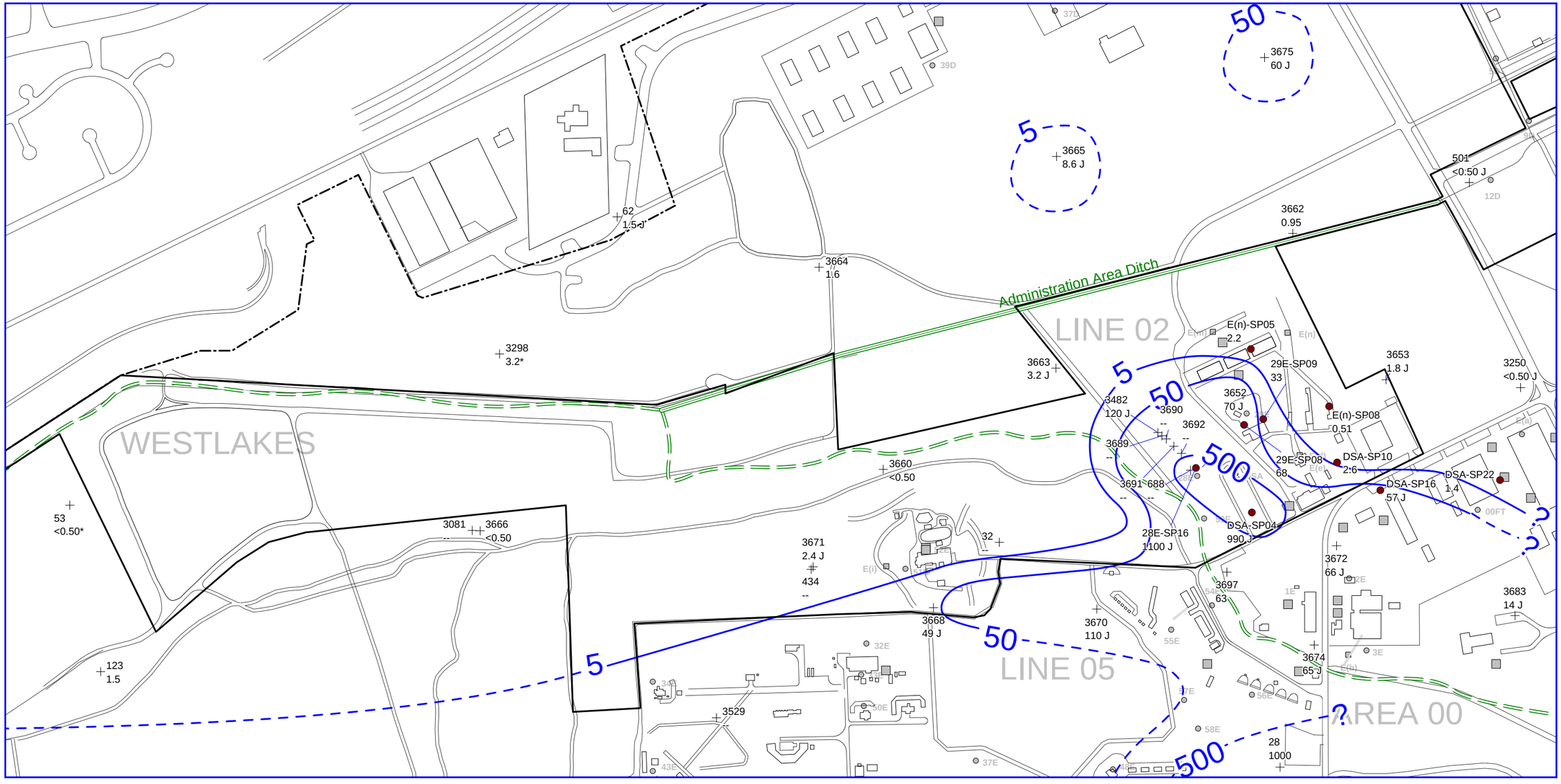
0 500 1,000
feet

Figure created on behalf of Aerojet by: CVEI
CENTRAL VALLEY ENVIRONMENTAL, INC.

AEROJET
Environmental Remediation

Figure 3.2-19
Perched Groundwater
TCE Iso-concentration Contours
Westlakes Area, Boundary Operable Unit (OU-6)

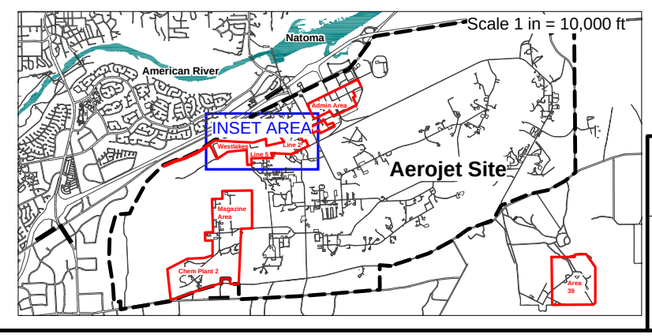
SR10130190



Explanation

- 03D-SP01 61.3 — Grab Groundwater Sample Location and Concentration (ug/L)
- 645 61.3 — Monitoring Well, ID and Concentration (ug/L)
- Iso-Concentration Contour (ug/L) - lines dashed where inferred
- Aerojet Property Boundary
- Buffalo Creek
- Building
- Consent Decree Boundary
- Septic Tank
- Drainage Culvert
- 39D — Source Site ID

Note: -- = Not Sampled Sample Period - October 2005 to October 2006
* = Asterisk Indicates Data Collected Outside RI Sampling Period. J = Estimated Value PGW SVSL = Protection to Groundwater Soil Vapor Screening Level



N

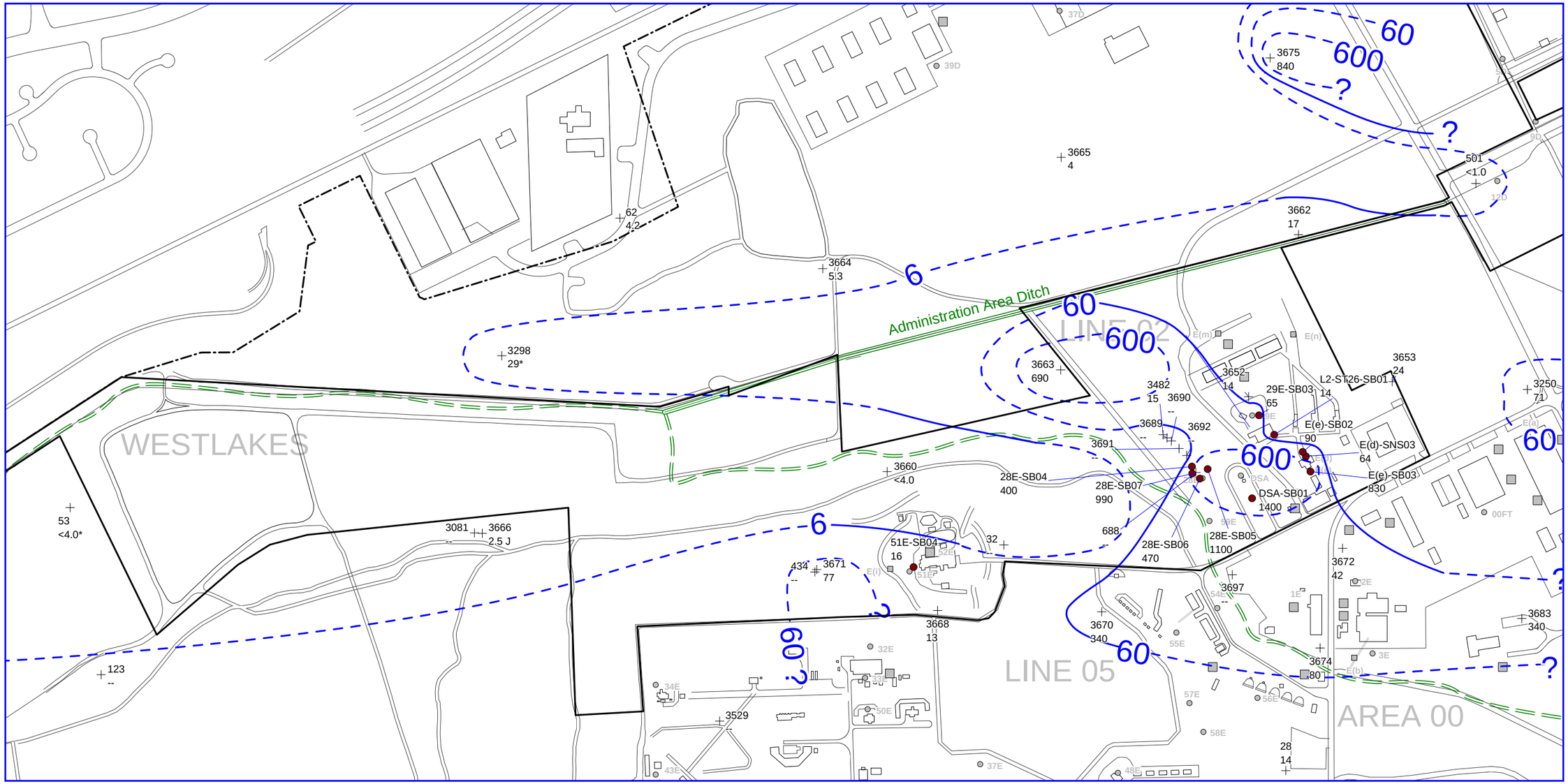
0 500 1,000
feet

Figure created on behalf of Aerojet by: CVEI
CENTRAL VALLEY ENVIRONMENTAL, INC.

AEROJET
Environmental Remediation

Figure 3.2-20
First Water-Bearing Zone
TCE Iso-Concentration Contours
Westlakes Area, Boundary Operable Unit (OU-6)

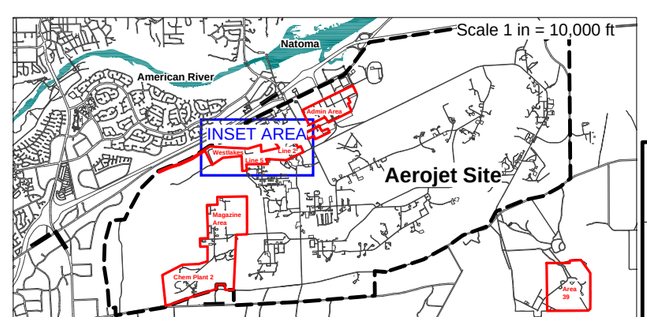
SR10130190



Explanation

- 03D-SP01 61.3 — Grab Groundwater Sample Location and Concentration (ug/L)
- 645 61.3 — Monitoring Well, ID and Concentration (ug/L)
- Iso-Concentration Contour (ug/L) - lines dashed where inferred
- Aerojet Property Boundary
- Buffalo Creek
- Building
- Consent Decree Boundary
- Septic Tank
- Drainage Culvert
- 39D — Source Site ID

Note: -- = Not Sampled J = Estimated Value PGW SSL = Protection to Groundwater Soil Screening Level
* = Asterisk Indicates Data Collected Outside RI Sampling Period Sample Period = October 2005 to October 2006



N

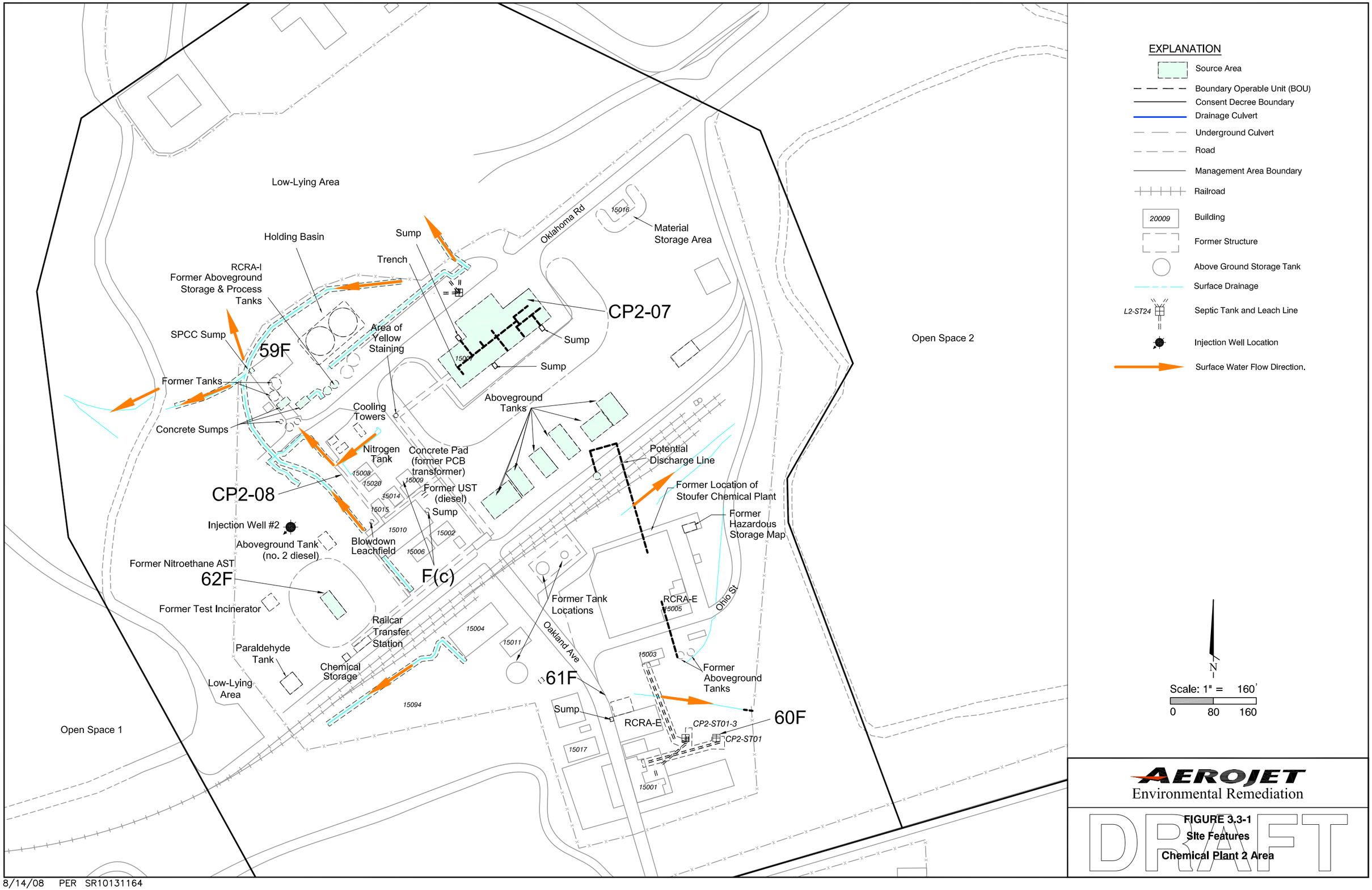
0 500 1,000
feet

Figure created on behalf of Aerojet by: CVEI
CENTRAL VALLEY ENVIRONMENTAL, INC.

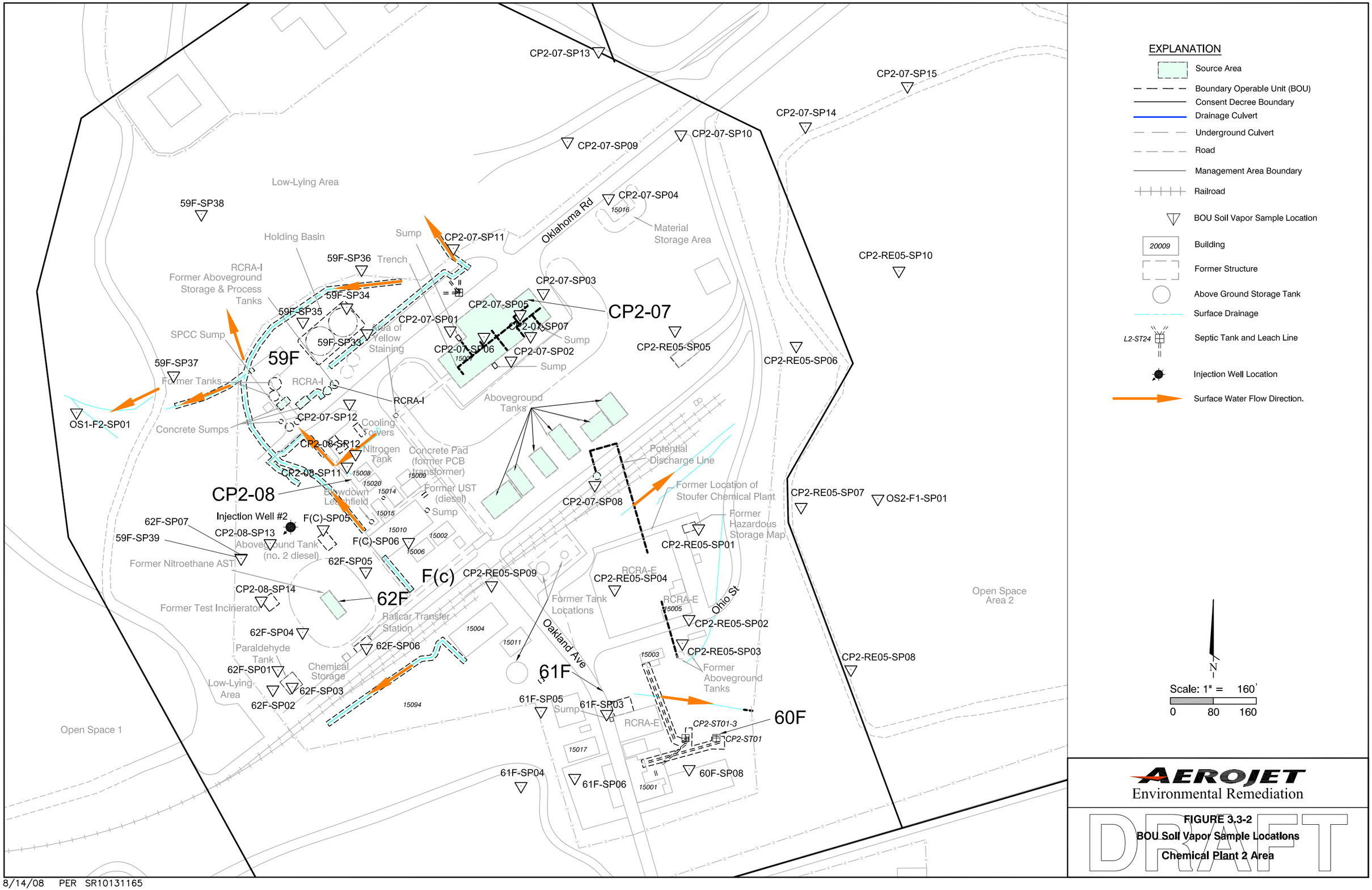
AEROJET
Environmental Remediation

Figure 3.2-21
First Water-Bearing Zone
Perchlorate Iso-Concentration Contours
Westlakes Area, Boundary Operable Unit (OU-6)

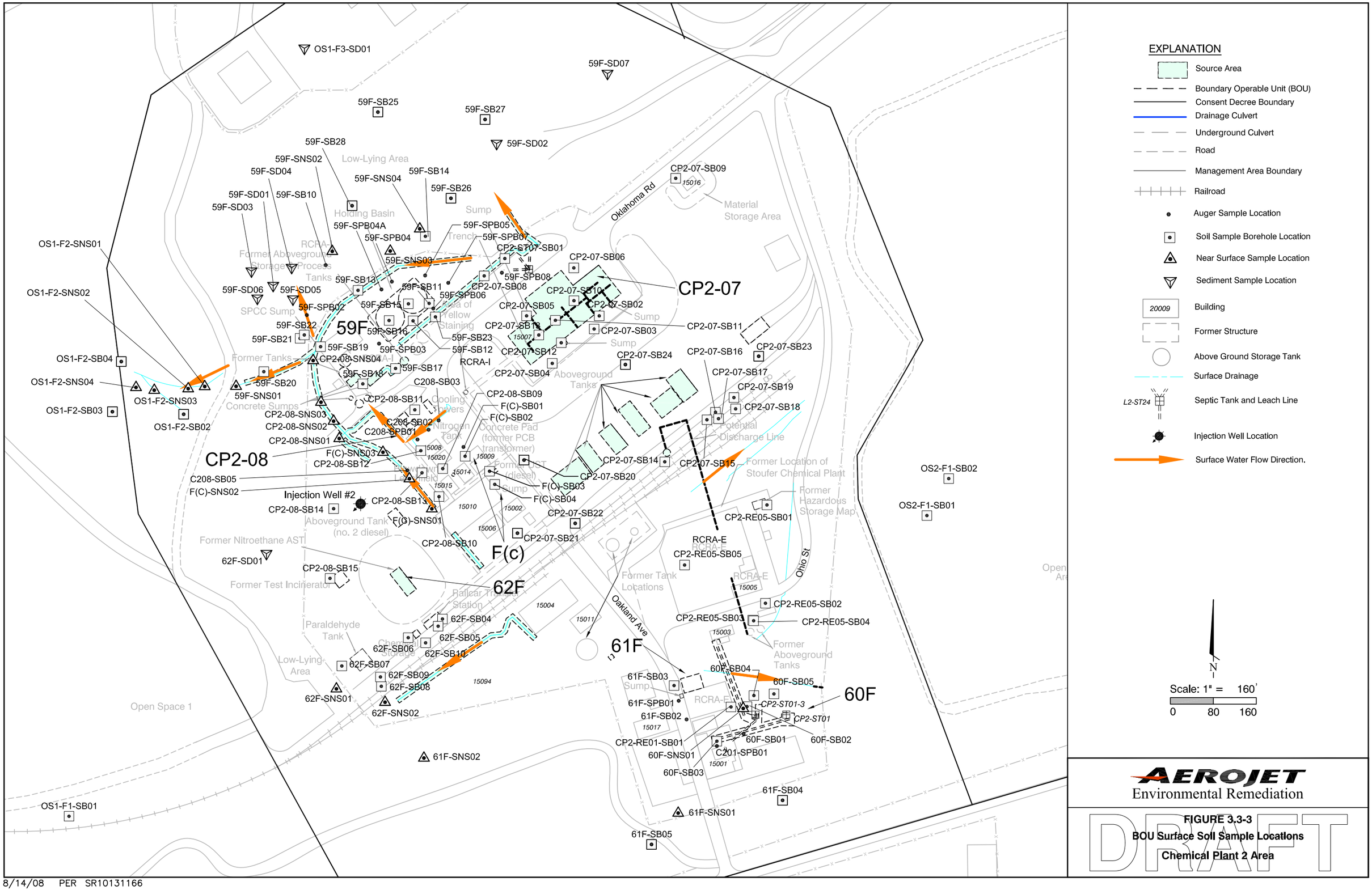
SR10130190



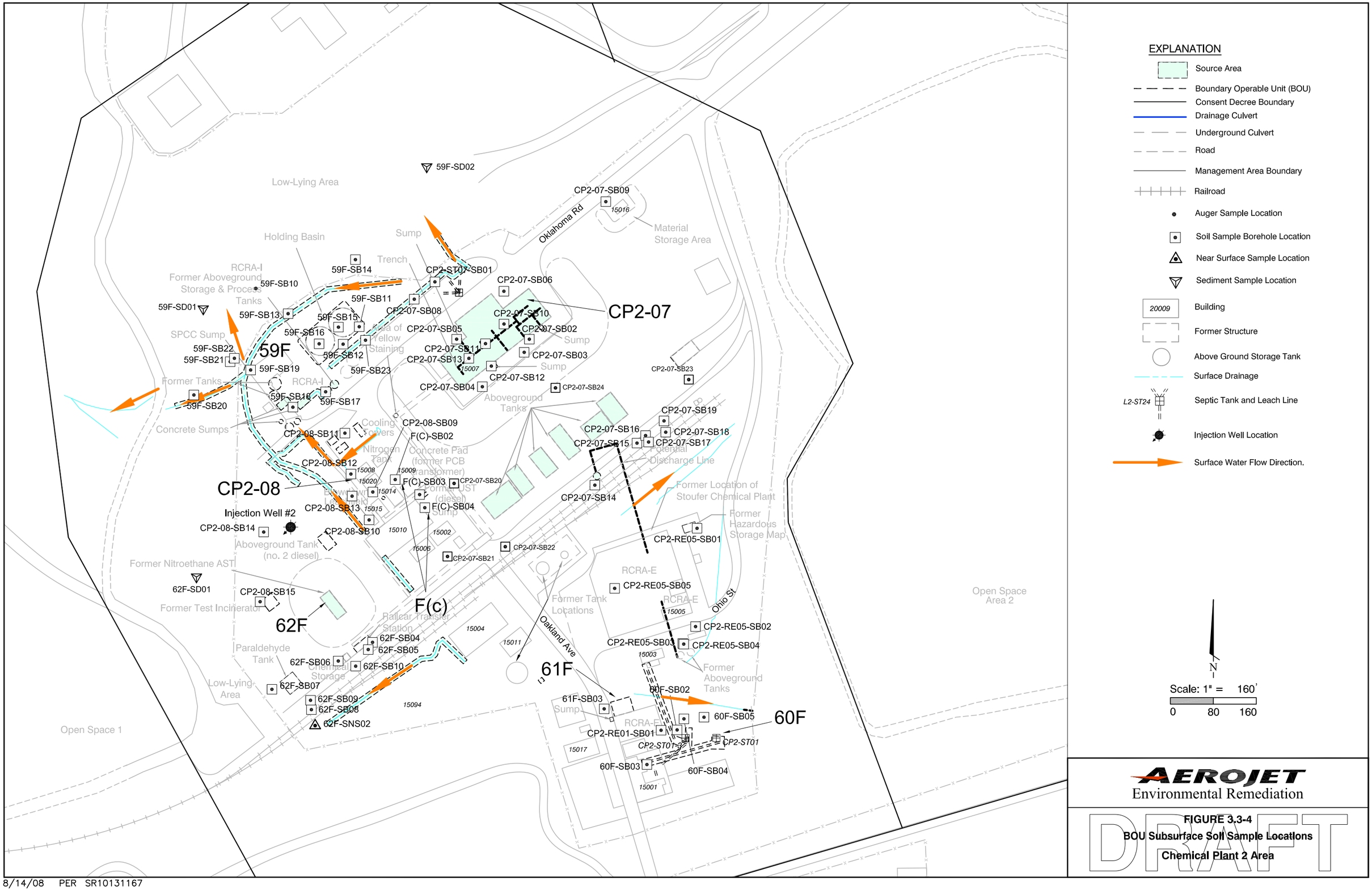
8/14/08 PER SR10131164



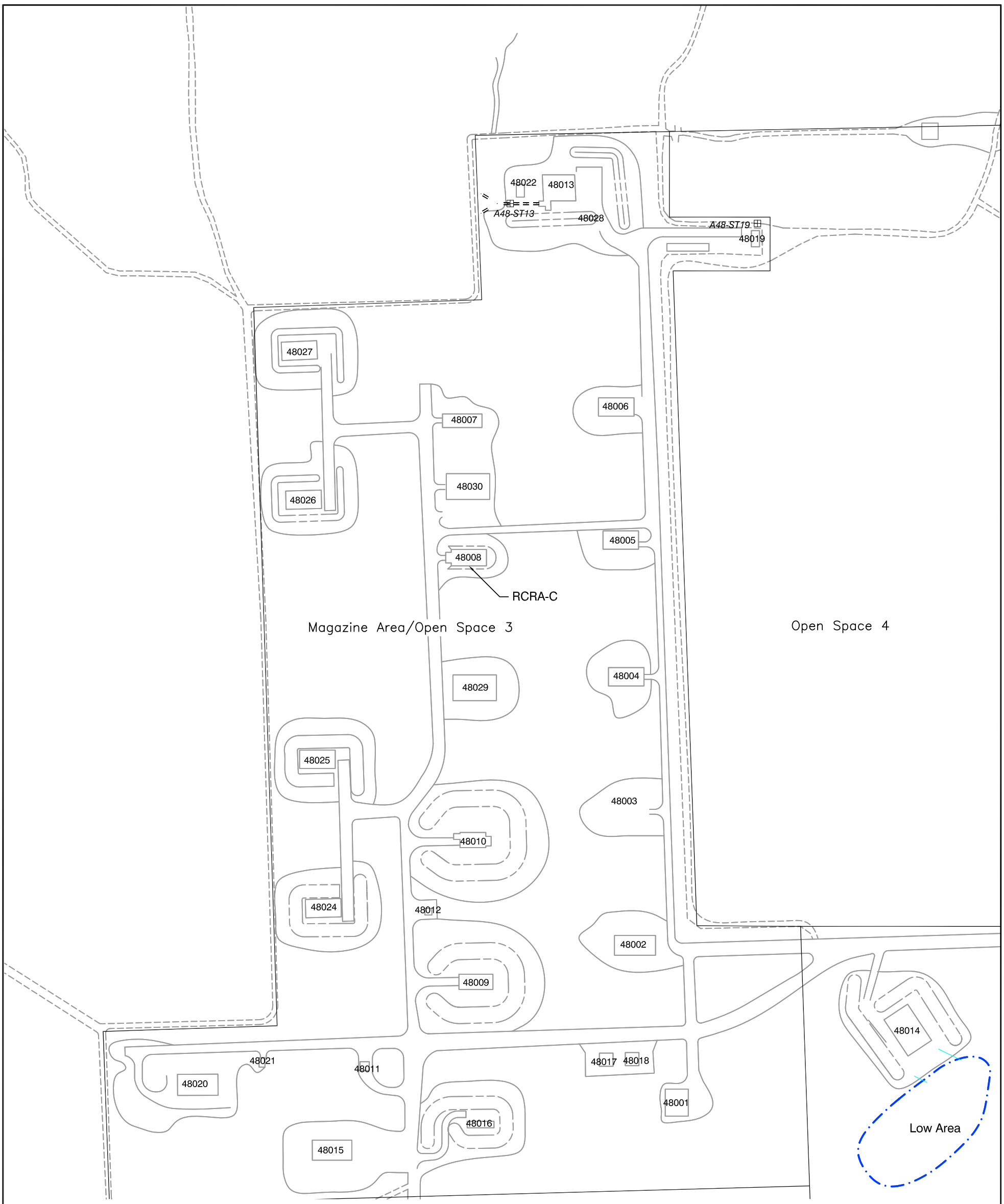
8/14/08 PER SR10131165



8/14/08 PER SR10131166



8/14/08 PER SR10131167



EXPLANATION

- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Management Area Boundary
- Road
- Berm
- 40815 Building
- Surface Drainage
- ST26 Septic Tank and Leach Line

N

Scale: 1" = 300'

0 150 300

AEROJET
Environmental Remediation

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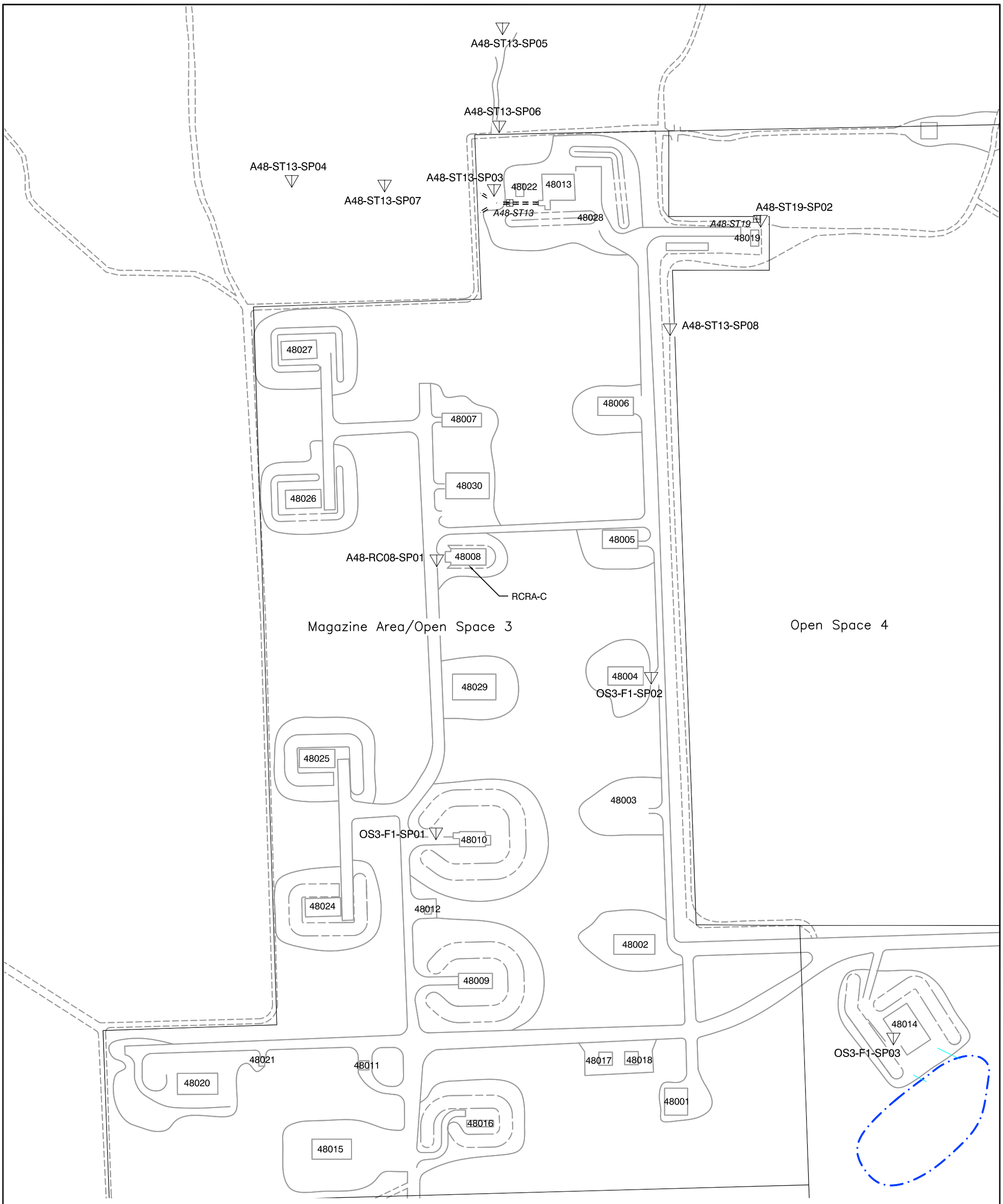
FIGURE 3.3-5
Site Features
Magazine Area and Open Space 3

8/14/08 pr SR10131168



EXPLANATION

- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Management Area Boundary
- Road
- Berm
- BOU Soil Vapor Sample Location
- 40815 Building
- Surface Drainage
- ST26 Septic Tank and Leach Line

N

Scale: 1" = 300'

0 150 300

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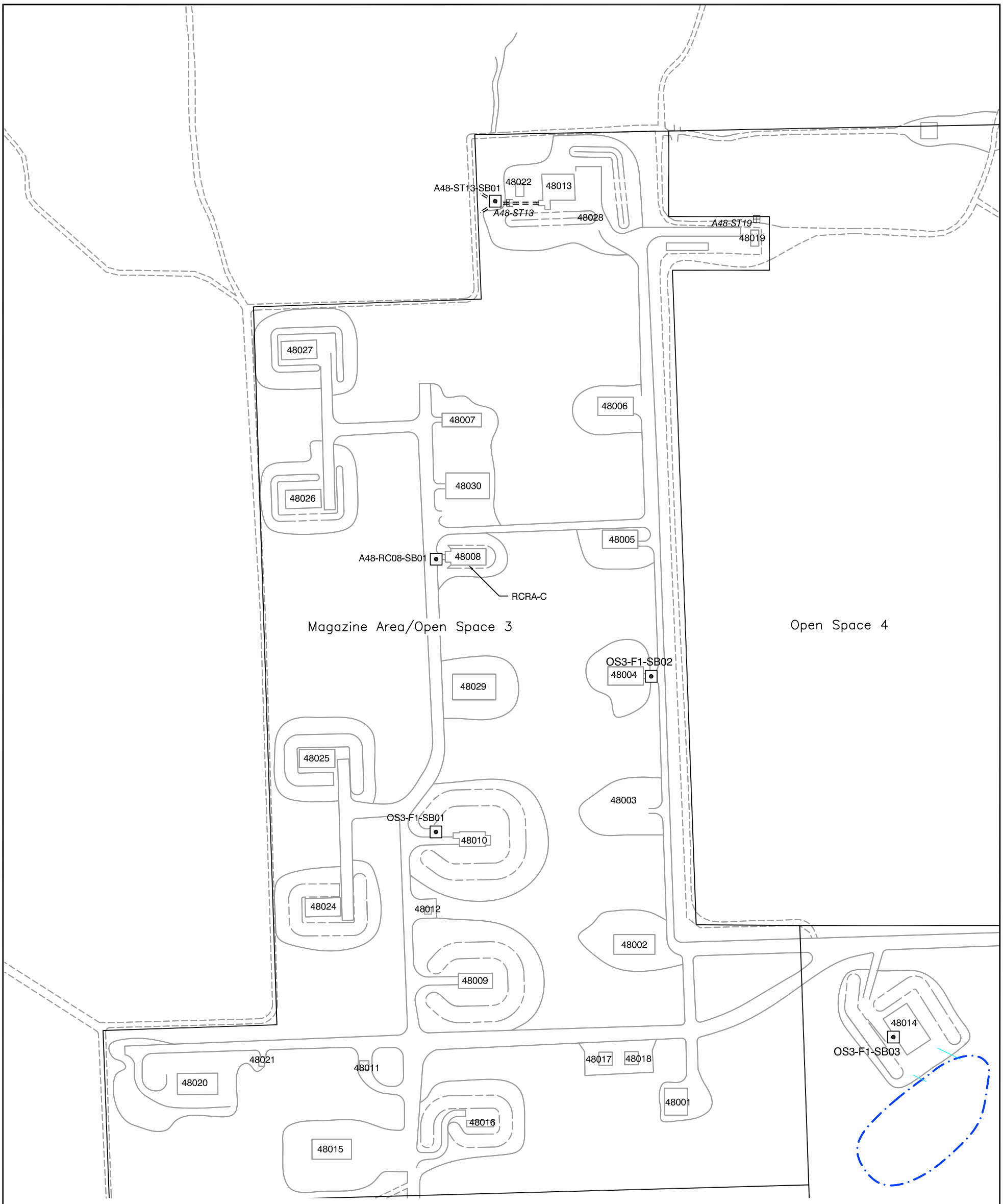
FIGURE 3.3-6
BOU Soil Vapor Sample Locations
Magazine Area and Open Space 3

5/22/08 pr SR10131169



EXPLANATION

- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Management Area Boundary
- Road
- Berm
- Soil Sample Borehole Location
- 40815 Building
- Surface Drainage
- ST26 Septic Tank and Leach Line

N

Scale: 1" = 300'

0 150 300

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FIGURE 3.3-7
BOU Surface Soil Sample Locations
Magazine Area and Open Space 3

5/22/08 pr SR10131170

EXPLANATION

- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Management Area Boundary
- Road
- Berm
- Soil Sample Borehole Location
- 40815 Building
- Surface Drainage
- ST26 Septic Tank and Leach Line

N

Scale: 1" = 300'

0 150 300

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Environmental Remediation

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FIGURE 3.3-8
BOU Subsurface Soil Sample Locations
Magazine Area and Open Space 3

5/22/08 pr SR10131171

EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Road
- Management Area Boundary

N

Scale: 1" = 100'

0 50 100

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Environmental Remediation

DRAFT

FIGURE 3.3-9
Site Features
Dredge Pit and Eastern Basin

8/14/08 PER SR10131172

EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Road
- Management Area Boundary
- Soil Sample Borehole Location
- Sediment Sample Location

N

Scale: 1" = 100'

0 50 100

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Environmental Remediation

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FIGURE 3.3-10
BOU Surface Soil Sample Locations
Dredge Pit and Eastern Basin

8/14/08 PER SR10131173

EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Road
- Management Area Boundary
- Soil Sample Borehole Location
- Sediment Sample Location

N

Scale: 1" = 100'

0 50 100

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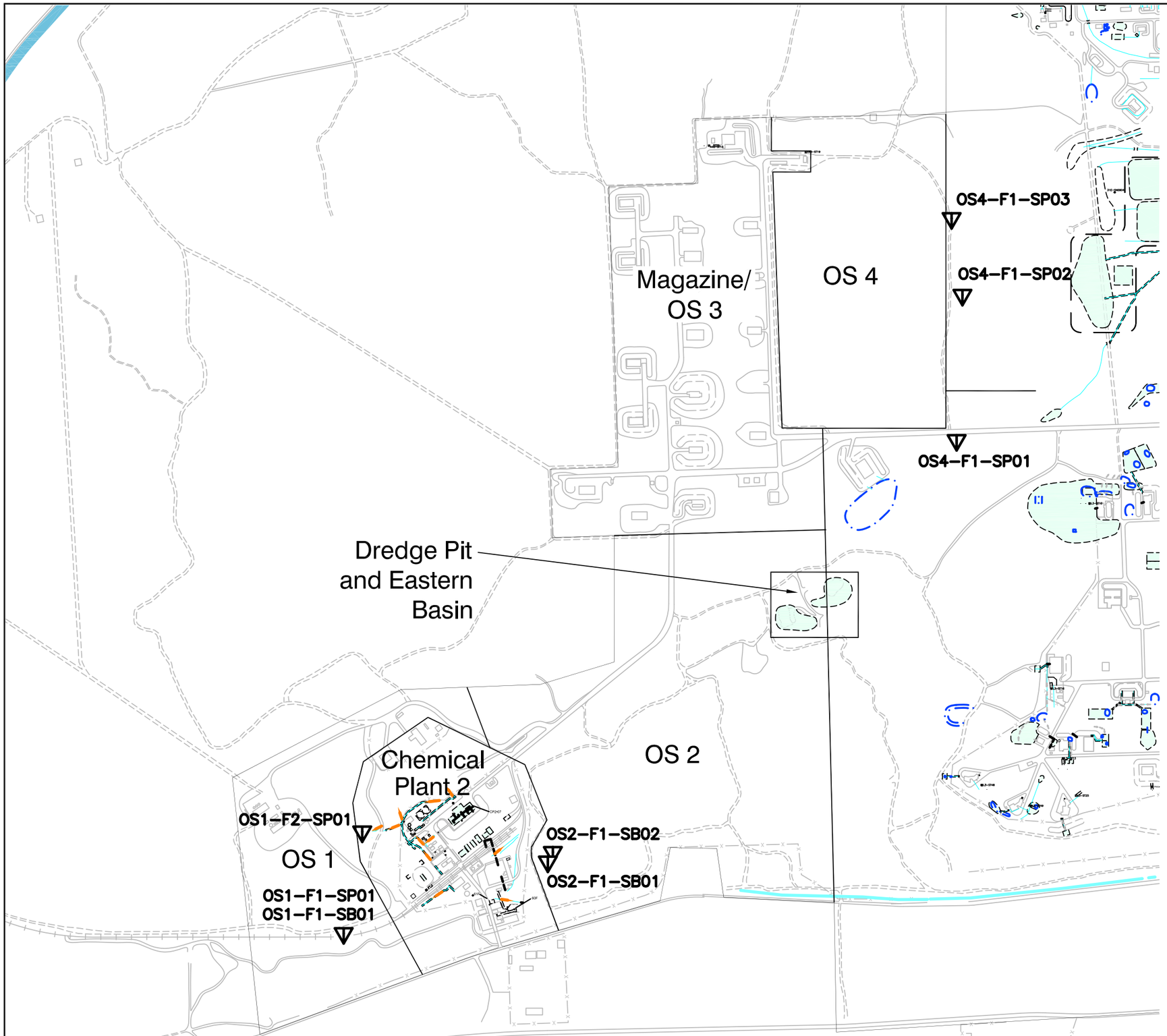
Environmental Remediation

DRAFT

FIGURE 3.3-11
BOU Subsurface Soil Sample Locations
Dredge Pit and Eastern Basin

8/14/08 PER SR10131174



EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Underground Culvert
- Fence
- Road
- Railroad
- BOU Soil Vapor Sample Location
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage

N

Scale: 1" = 100'

0 50 100

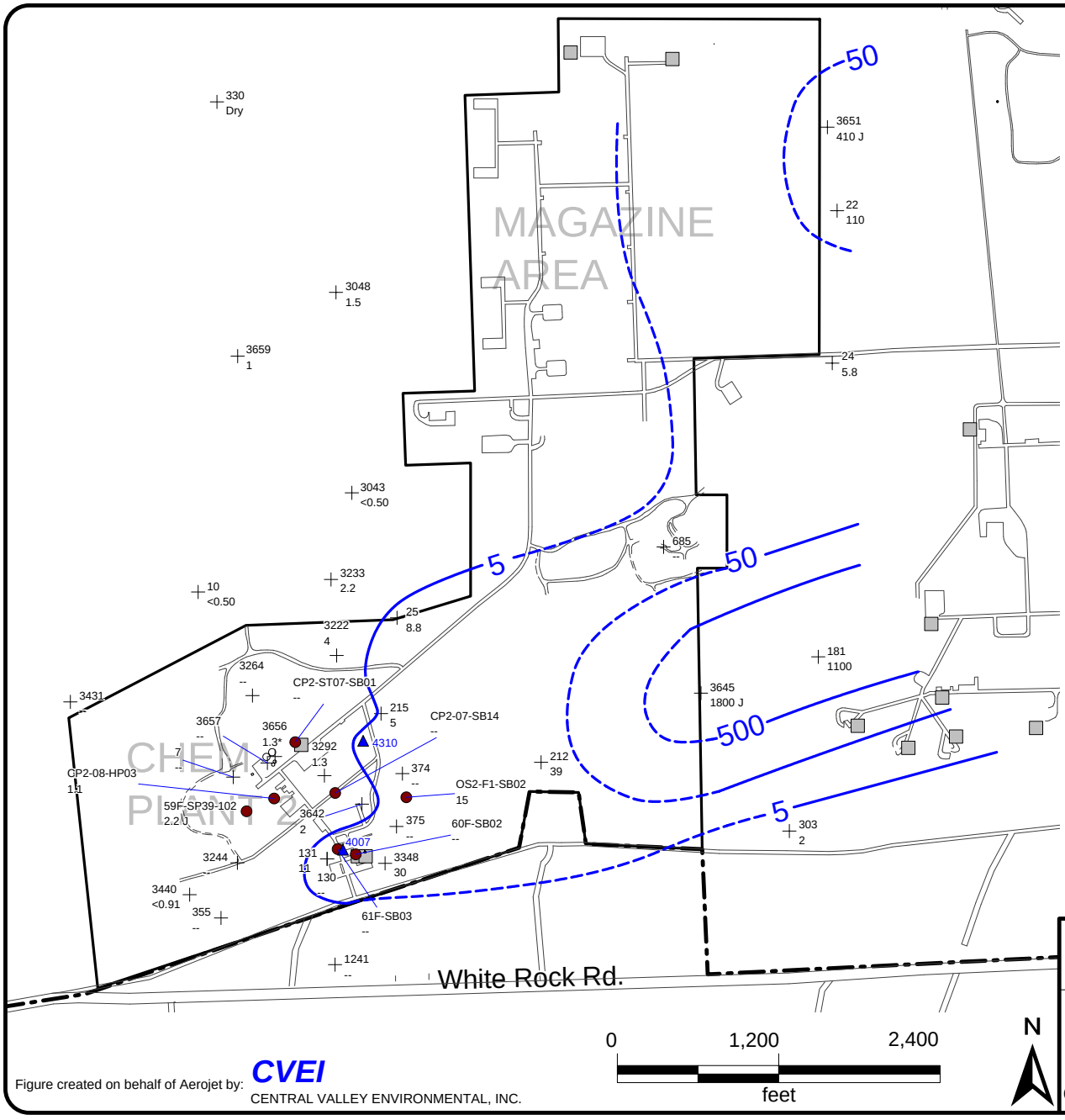
AEROJET
Environmental Remediation

FIGURE 3.3-12

BOU Soil and Soil Vapor Sampling Locations

Open Space Areas 1, 2, and 4

5\22\08 PR SR10131175



Explanation

03D-SP29 50	Grab Groundwater Sample Location and Concentration (ug/L)
645 50	Monitoring Well, ID and Concentration (ug/L)
4310	Extraction Well
	Iso-Concentration Contour (ug/L) - line dashed where inferred
	Aerojet Property Boundary
	Boundary Operable Unit
	Septic Tank
5(d)	Source Area ID

Note: -- = not analyzed * = analyzed in May 2007
J = estimated value

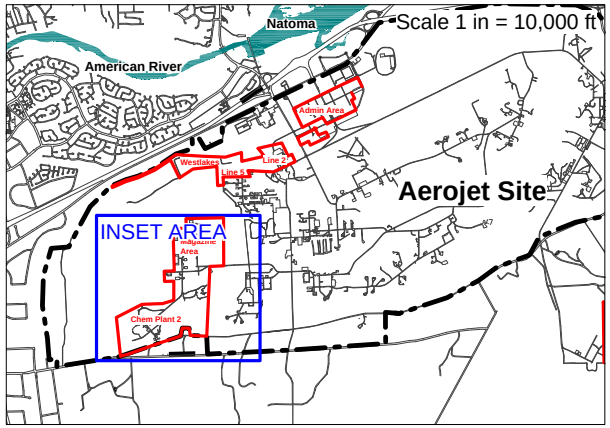


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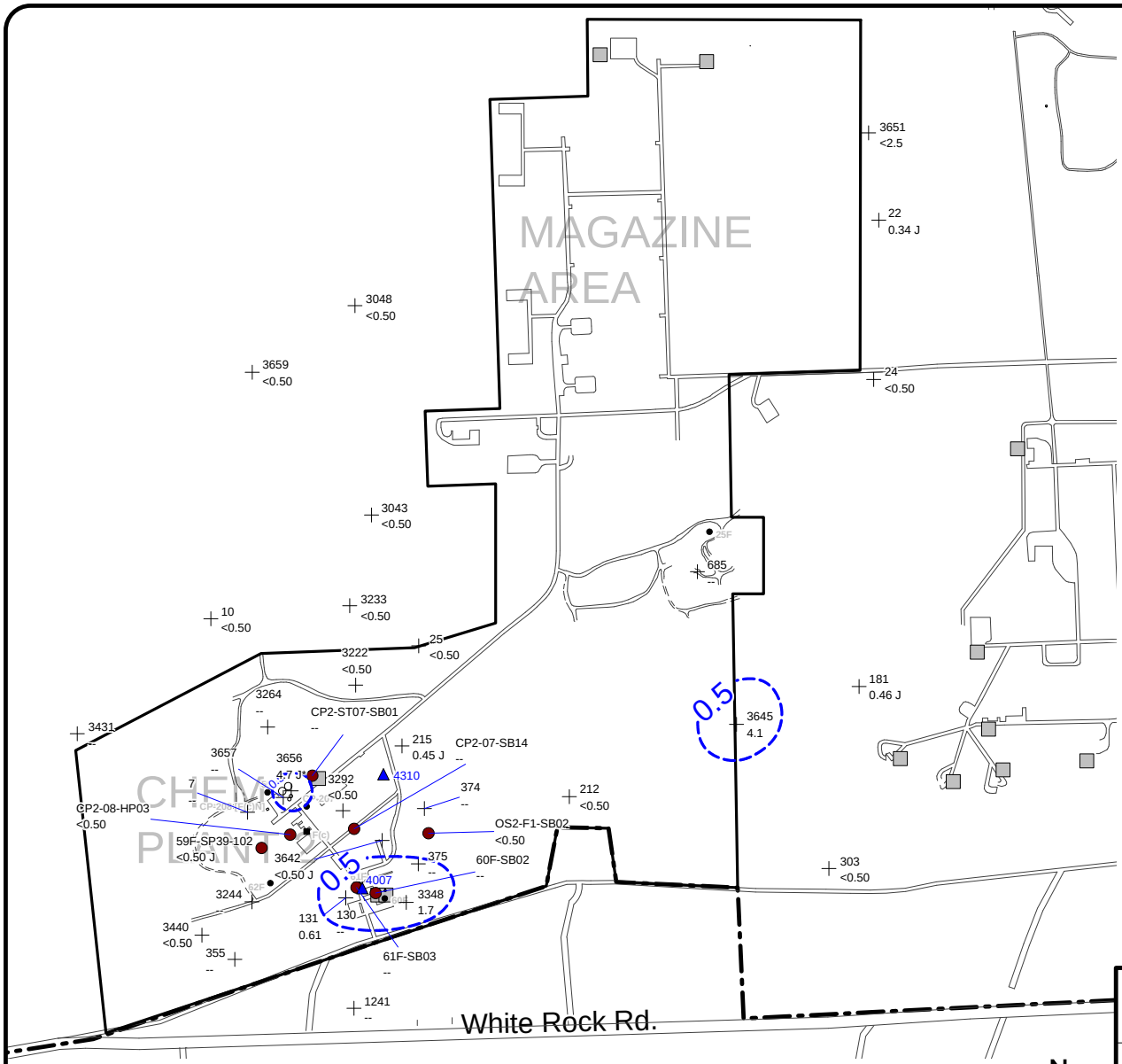
Figure 3.3-13
First Water-Bearing Zone
TCE Iso-Concentration Contours
October 2005 - October 2006
Chemical Plant 2 Region - Boundary Operable Unit (OU-6)

SR10130190



Explanation

03D-SP29 50	Grab Groundwater Sample Location and Concentration (ug/L)
645 50	Monitoring Well, ID and Concentration (ug/L)
4310	Extraction Well
	Iso-Concentration Contour (ug/L) - line dashed where inferred
	Aerojet Property Boundary
	Boundary Operable Unit
	Septic Tank
5(d)	Source Area ID

Note: -- = not analyzed * = analyzed in May 2007
J = estimated value

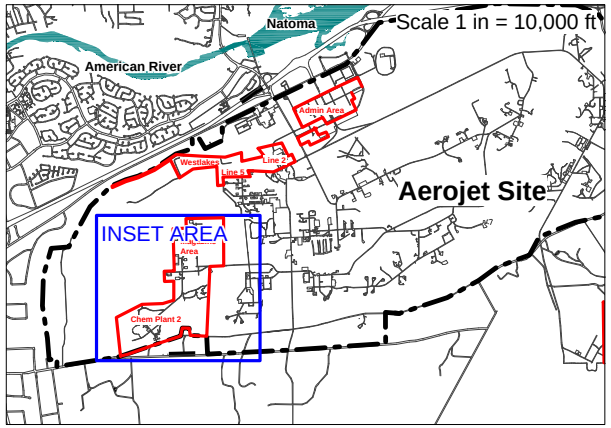


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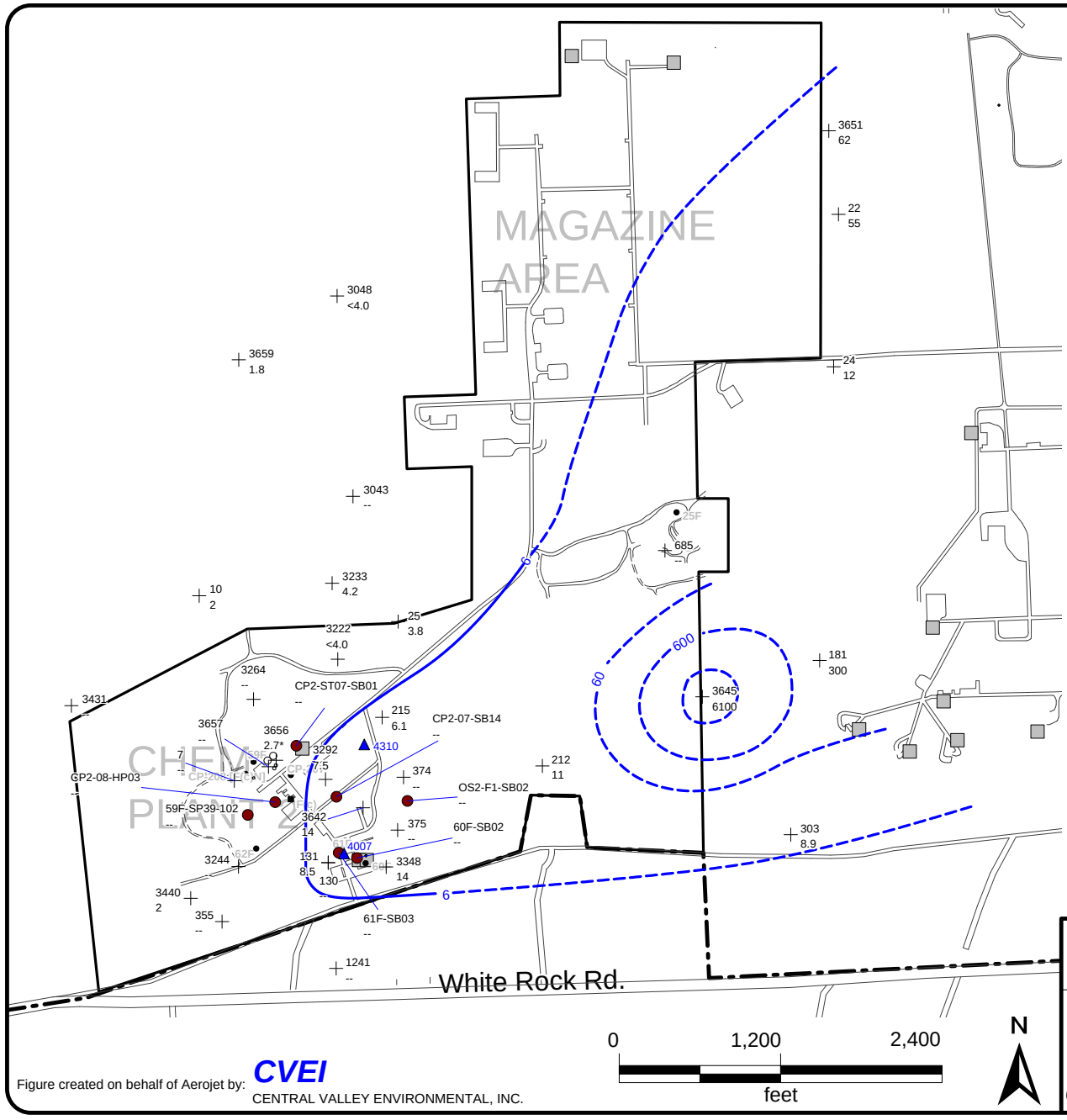
Figure 3.3-14
First Water-Bearing Zone
1,2 - DCA Iso-Concentration Contours
October 2005 - October 2006
Chemical Plant 2 Region - Boundary Operable Unit (OU-6)

SR10130190



Explanation

03D-SP29 50	Grab Groundwater Sample Location and Concentration (ug/L)
645 50	Monitoring Well, ID and Concentration (ug/L)
4310	Extraction Well
	Iso-Concentration Contour (ug/L) - line dashed where inferred
	Aerojet Property Boundary
	Boundary Operable Unit
	Septic Tank
5(d)	Source Area ID

Note: -- = not analyzed * = analyzed in May 2007
J = estimated value

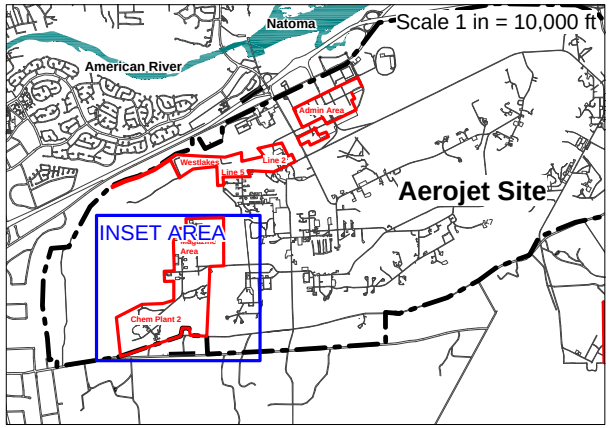


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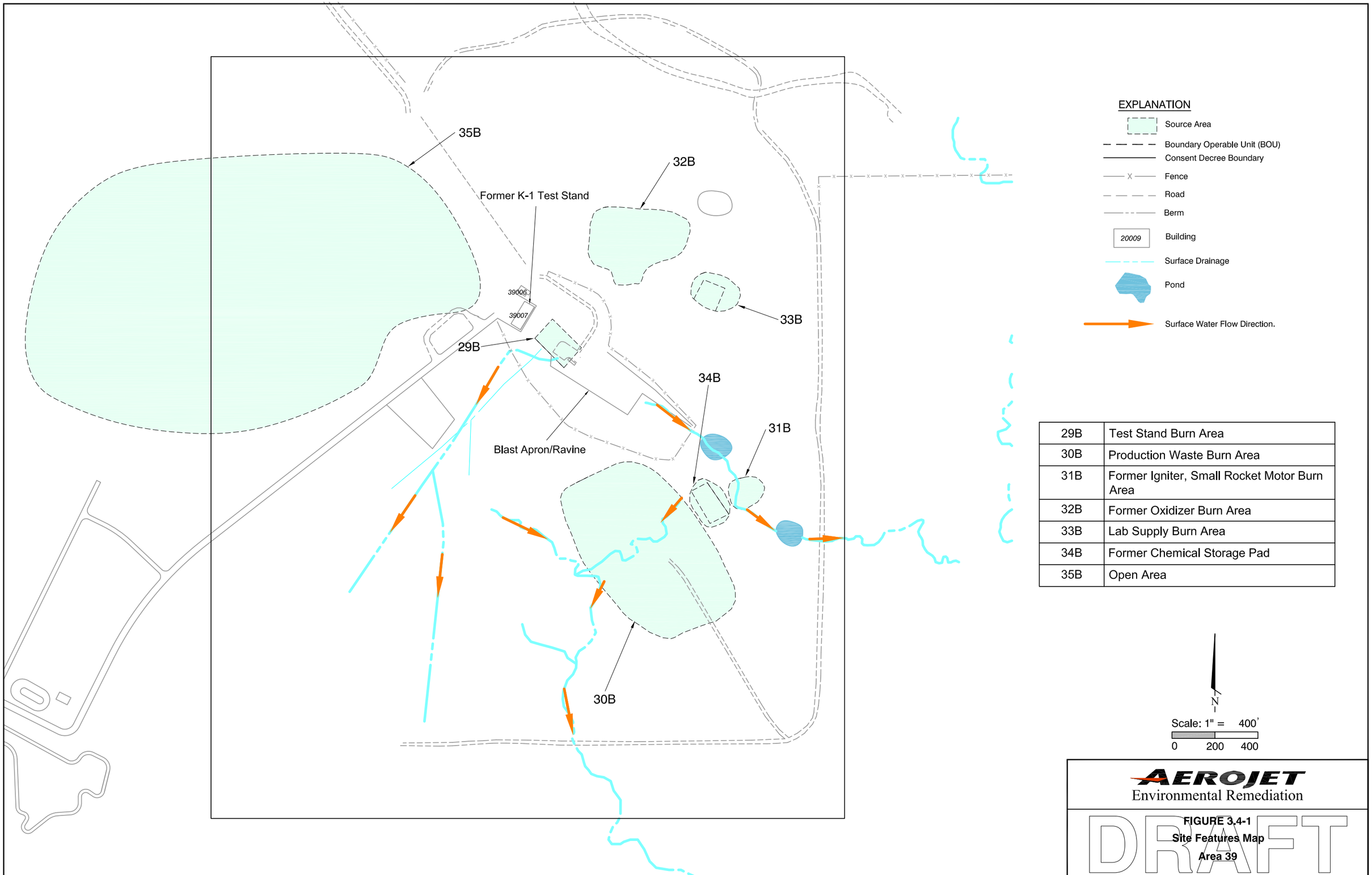
Figure 3.3-15
First Water-Bearing Zone
Perchlorate Iso-Concentration Contours
October 2005 - October 2006
Chemical Plant 2 Region - Boundary Operable Unit (OU-6)

SR10130190



29B	Test Stand Burn Area
30B	Production Waste Burn Area
31B	Former Igniter, Small Rocket Motor Burn Area
32B	Former Oxidizer Burn Area
33B	Lab Supply Burn Area
34B	Former Chemical Storage Pad
35B	Open Area

FIGURE 3.4-1
Site Features Map
Area 39

09/14/10 PR SR10131178

35B
32B
33B
29B
34B
31B
30B

35B-SP04
32B-SP08
32B-SP09
32B-SP07
32B-SP10
32B-SP11
39006
39007
33B-SP16
33B-SP14
33B-SP13
33B-SP10
33B-SP15
33B-SP20
33B-SP21
33B-SP09
33B-SP11
33B-SP12
33B-SP19
33B-SP17
33B-SP18
30B-SP18
30B-SP17
30B-SP13
30B-SP14
30B-SP21
30B-SP19
30B-SP20
30B-SP10
30B-SP11
30B-SP15
30B-SP22
30B-SP12
30B-SP23

EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Fence
- Road
- Berm
- BOU Soil Vapor Sample Location
- 20009 Building
- Surface Drainage
- Pond
- Surface Water Flow Direction.

N

Scale: 1" = 300'

0 150 300

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FIGURE 3.4-2
BOU Soil Vapor Sample Locations
Area 39

09/14/10 PR SR10131179

35B
32B
32B-SB04
32B-SB02
32B-SB05
32B-SB03
33B-SB03
33B
39006
39007
29B
29B-SB05
29B-SB04
29B-SB06
34B
29B-SB08
29B-SB09
29B-SB07
31B-SD01
31B
29B-SB10
34B-SB02
34B-SNS02
34B-SNS03
30B-SB07
30B-SNS02
31B-SB02
29B-SB11
30B-SB04
30B-SNS04
30B-SNS03
34B-SNS01
31B-SD02
30B-SB08
30B-SNS05
30B-SNS01
30B-SB05
30B-SB06
30B

EXPLANATION

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Fence
- Road
- Berm
- Soil Sample Borehole Location
- Near Surface Sample Location
- Sediment Sample Location
- 20009 Building
- Surface Drainage
- Pond
- Surface Water Flow Direction.

N

Scale: 1" = 300'

0 150 300

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FIGURE 3.4-3
BOU Surface Soil Sample Locations
Area 39

09/14/10 PR SR10131180

35B

32B

32B-SB04

32B-SB02

32B-SB05

32B-SB03

33B-SB03

33B

39006

39007

29B

29B-SB05

29B-SB04

29B-SB06

34B

29B-SB08

29B-SB09

29B-SB07

31B

34B-SB02

29B-SB10

30B-SB07

29B-SB11

31B-SB02

30B-SB04

30B-SB08

30B-SB05

30B-SB06

30B

EXPLANATION

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

Fence

Road

Berm

Soil Sample Borehole Location

20009 Building

Surface Drainage

Pond

Surface Water Flow Direction.

N

Scale: 1" = 300'

0 150 300

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Environmental Remediation

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FIGURE 3.4-4

BOU Subsurface Soil Sample Locations

Area 39

09/14/10 PR SR10131181

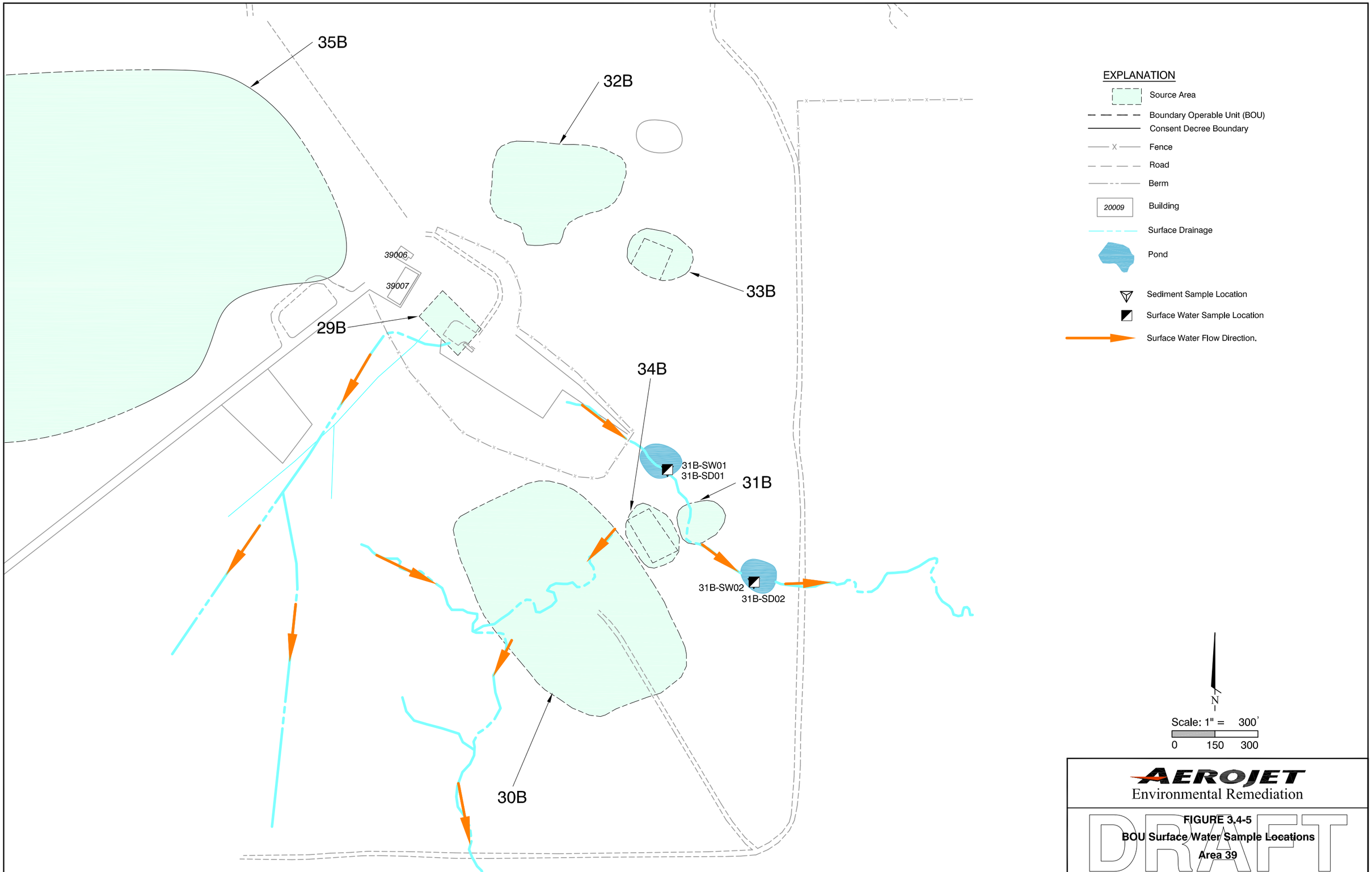
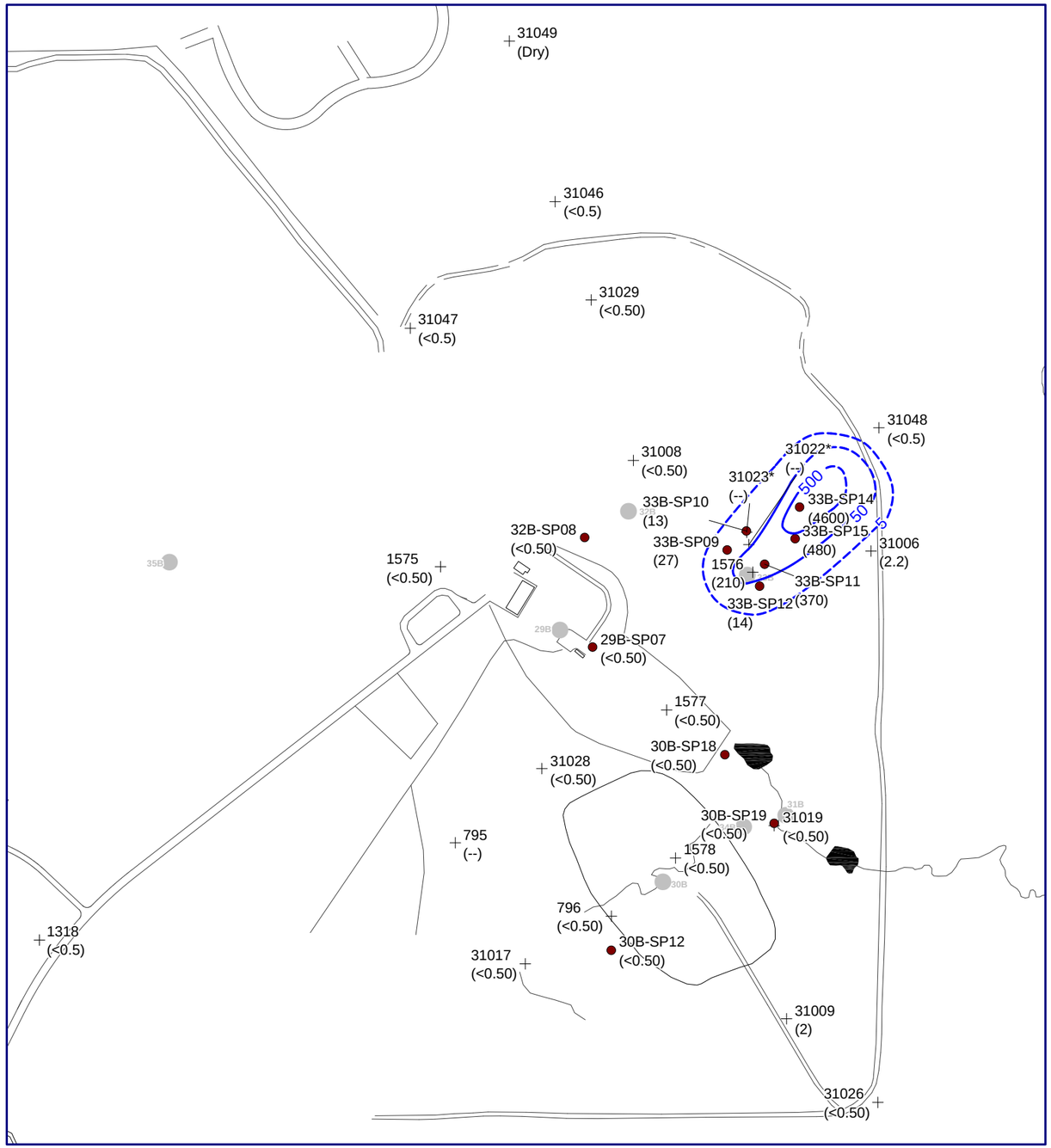


FIGURE 3.4-5
BOU Surface Water Sample Locations
Area 39

9\11\08 PR SR10131182



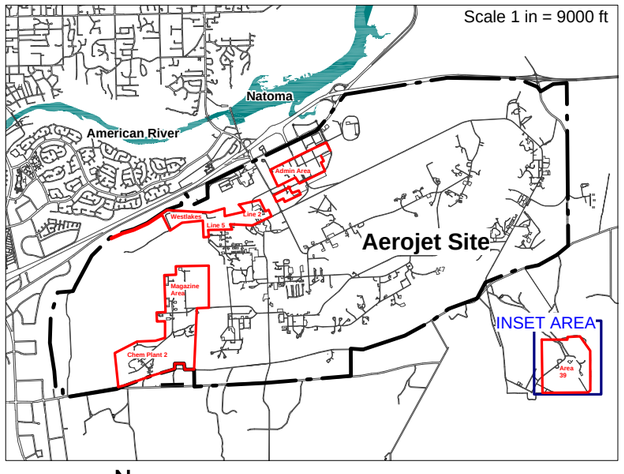
Explanation

03D-SP29 (61.3)	Grab Groundwater Sample Location and Concentration (ug/L)
645 (61.3)	Monitoring Well, ID and Concentration (ug/L)
	* - well partially screened in the FWBZ

Note: -- = not sampled. "J" = Estimated Concentration

Iso-Concentration Contour (ug/L)
- lines dashed where inferred

29B Source Area IDs



N

0 400 800
feet

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Figure 3.4-6
Perched Groundwater
TCE Iso-Concentration Contours October 2005 to June 2008
Area 39 - Boundary Operable Unit (OU-6)

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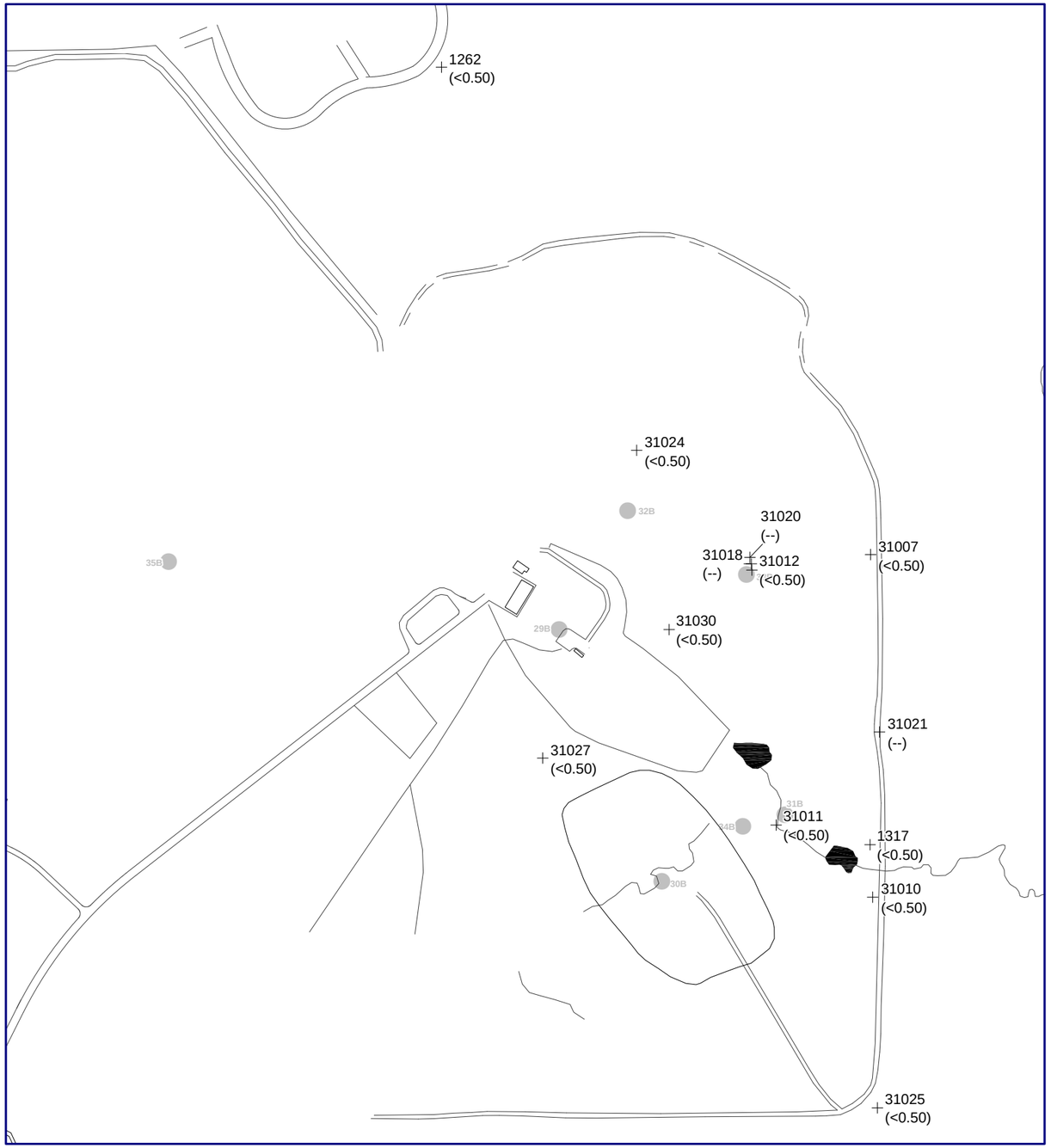
CENTRAL VALLEY ENVIRONMENTAL, INC.

SR10130190

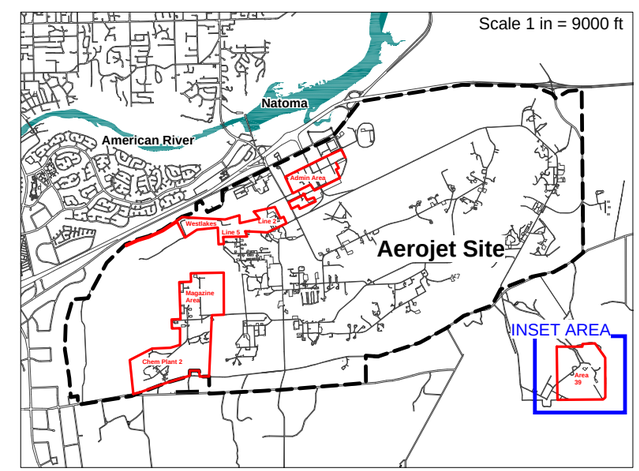


Explanation

645 (61.3) — Monitoring Well, ID and Concentration (ug/L)

Note: -- = not sampled. "J" = Estimated Concentration

29B — Source Area IDs



N

0 500 1,000
feet

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Environmental Remediation

Figure 3.4-7
First Water-Bearing Zone
TCE Iso-Concentration Contours October 2005 to June 2008
Area 39 - Boundary Operable Unit (OU-6)

Figure created on behalf of Aerojet by: CVEI
CENTRAL VALLEY ENVIRONMENTAL, INC.

SR10130190

4.0 DATA EVALUATION

A comprehensive review of all historical data, as well as existing and newly acquired RI data, was conducted to identify COPCs in sampled media (i.e., soil, sediment, soil vapor, surface water, and groundwater). As part of the RI, data were compiled for individual potential source areas, and are discussed in this HHERA separately for each of the MAs identified above. The following elements were incorporated into the data evaluation component:

- Validation, usability, and data grouping considerations, including:
  - Data validation and minimum quality criteria;
  - Temporal grouping; and
  - Concentration grouping: NAPL and soil saturation considerations.
- Data screening to identify COPCs:
  - Detected analyte screening based on essential nutrient status;
  - Concentration-toxicity screen using the CHHSLs developed by Cal-EPA (2005a), Public Health Goals developed by Cal-EPA, and PRGs developed by USEPA Region 9 (2004b), as outlined in the Human Health Risk Assessment White Paper (HHRA White Paper [Appendix A], Aerojet, 2007a);
  - Detected analyte screening based on frequency of detection (FOD);
  - Concentration-toxicity screen using Ecological Screening Levels (ESLs) as outlined in the *Ecological Risk Assessment White Paper* (ERA White Paper, Aerojet, 2007b); and
  - Comparisons to background concentrations for inorganic chemicals in soil using statistical analyses that are consistent with USEPA guidance (2002d).

The temporal grouping element focused on identifying the time periods over which data could be grouped for data evaluation. This is further discussed in Section 4.1. The rest of the elements outlined under the first bullet are discussed in Section 4.5.

The overall approach used for data screening is presented in Section 4.5. The results of this process for each MA are discussed separately in Sections 4.5.1 through 4.5.8.

4.1 DATA IDENTIFICATION AND ACQUISITION

The data for the BOU HHERA were obtained from two Aerojet databases, the BOU database and the Historical database. The BOU database contains analytical data for soil, sediment, soil vapor, surface water, and groundwater samples collected from the areas within the BOU between July 2005 and April 2007. The Historical database contains analytical data for soil, soil vapor, and groundwater samples collected during site investigations between January 1990 and June 2006. Due to age of the historical soil vapor data and because the analyses included only a selected number of VOCs with detection limits much higher than present, the BOU RI included re-sampling of soil vapor for VOCs. The VOC soil vapor data collected during the BOU RI are more representative and accurate than the historical soil vapor data and, therefore, only soil vapor data collected during the BOU RI are evaluated in this HHERA. Data considered and/or utilized in the HHRA are presented in Appendix B.

The data validation process identified valid results to be used for each analyte, each sample, and each method run. These primary results identified by the data validation process were selected for use in the HHERA. However, during the data validation process, the presence of two types of duplicate data were identified: field duplicate samples collected as a function of the data quality program, and analytical duplicates resulting from several analytes being analyzed for utilizing several (overlapping) analytical methods. Therefore, further evaluation was needed in selecting data for the BOU HHERA. For samples that had multiple results due to field duplicate or multiple method analyses, results were selected utilizing the following protocol: for detected analytes, the maximum detected concentration was used; and for non-detected results, the lowest reporting limit was selected.

4.2 DATA USABILITY EVALUATION

The primary objective of the data review and usability evaluation was to identify appropriate data for use in the risk assessment. The analytical data were reviewed for applicability and usability following procedures in the *Guidance for Data Usability in Risk Assessment (Part A)* (USEPA, 1992a and USEPA, 1989). According to the USEPA Data Usability Guidance, there are six principal evaluation criteria by which data are judged for usability in risk assessment. The six criteria are:

- Availability of information associated with site data;

- Documentation;
- Data sources;
- Analytical methods and detection limits;
- Data review; and
- Data quality indicators (DQIs), including precision, accuracy, representativeness, comparability, and completeness.

A summary of these six criteria for determining data usability in the HHERA is provided below. These criteria are evaluated as a function of the standard operating procedure for the data validation process applied to data for the BOU RI, as outlined in the *Quality Assurance Project Plan* (Aerojet, 2006a).

4.2.1 *Criterion I – Availability of Information Associated with Site Data*

The usability analysis of the site characterization data requires the availability of sufficient data for review. The required information is available from documentation associated with the site data and data collection efforts. The following lists the information sources and the availability of such information for the data usability process associated with this HHERA:

- A site description provided in the BOU RI Report (ERM, 2008) and summarized in Section 3.0 of this report identify the locations and features of the Source Areas and site-specific characteristics;
- Site maps with sample locations are provided in the BOU RI Report and in Section 3.0 of this HHERA; and
- Analytical results and detection limits are provided in the appendices of the BOU RI Report.

4.2.2 *Criterion II – Documentation Review*

The objective of the documentation review is to confirm that the analytical results provided are associated with a specific sample location and collection procedure, using available documentation. As part of the data validation process, the chain-of-custody forms prepared in the field were reviewed and compared to the analytical data results provided by the laboratory to 1) ensure completeness of the dataset, and 2) that all samples analyzed by the laboratory were correlated to the correct geographic location at the site(s). Sample collection forms were also reviewed to

ensure field procedures included documentation of sample times, dates, and locations; and other sample-specific information such as depth bgs were also recorded. Information from field forms generated during sample collection activities was imported into the project database.

4.2.3 *Criterion III – Data Sources*

As part of the data validation process, the review of data sources was performed to determine whether the analytical techniques used in the site characterization process are appropriate to identify the COPCs in this HHERA.

4.2.4 *Criterion IV – Analytical Methods and Detection Limits*

In addition to the appropriateness of the analytical techniques evaluated as part of Criterion III, it is necessary to evaluate whether the analytical methods used appropriately identify COPCs and whether the detection limits are low enough to allow adequate characterization of risks. At a minimum, this data usability criterion can be met through the determination that routine USEPA reference analytical methods were used in analyzing samples collected from the site.

4.2.5 *Criterion V – Data Review*

The data review portion of the data usability process focuses primarily on the quality of the analytical data received from the laboratory. All site data that are used in the HHERA must be evaluated on the basis of completeness, precision (based on duplicates), and accuracy (based on laboratory spikes). In addition, the laboratory data results are reviewed for blank contamination.

4.2.6 *Criterion VI – Data Quality Indicators*

DQIs are used to verify that sampling and analytical systems used in support of project activities are in control and the quality of the data generated for this project is appropriate for making decisions affecting future activities. The DQIs address the field and analytical data quality aspects as they affect uncertainties in the data collected for site characterization and the HHERA. The DQIs include precision, accuracy, representativeness, comparability, and completeness. Each of these factors is described below.

4.2.6.1 *Precision*

Precision is a measure of the degree of agreement between replicate measurements of the same source or sample. Precision is expressed by the relative percent difference (RPD) between replicate measurements. Replicate measurements can be made on the same sample or on two samples from the same source. Precision is generally assessed using a subset of the measurements made.

4.2.6.2 *Accuracy*

Accuracy measures the level of bias that an analytical method or measurement exhibits. To measure accuracy, a standard or reference material containing a known concentration is analyzed or measured and the result is compared to the known value. The following quality control parameters are used to evaluate the accuracy of reported analytical results:

- Holding times and sample temperatures;
- Laboratory control spike percent recovery;
- Matrix spike/matrix spike duplicate percent recovery (organics);
- Spike sample recovery (inorganics);
- Surrogate spike recovery; and
- Blank sample results.

4.2.6.3 *Representativeness*

Representativeness is the degree to which data accurately and precisely represent a characteristic of the population at a sampling point or an environmental condition. There is no standard method or formula for evaluating representativeness, which is a qualitative term. Representativeness is achieved through selection of sampling locations that are appropriate relative to the objective of the specific sampling task, and by collection of an adequate number of samples from the relevant types of locations. As discussed in Section 2.0, the site characterization was developed to allow collection of samples that are representative of the media to which the receptors may be exposed at the site.

4.2.6.4 *Completeness*

Completeness is commonly expressed as a percentage of measurements that are valid and usable relative to the total number of measurements made. Analytical completeness is a measure of the number of overall accepted analytical results, including estimated values, compared to the total number of analytical results requested on samples submitted for analysis after review of the analytical data. All of the analytical data collected were used in the HHERA.

4.2.6.5 *Comparability*

Comparability is a qualitative characteristic expressing the confidence with which one dataset can be compared with another. The analytical methods are generally consistent with those used in previous investigations of the site. The comparability goal is achieved through using standard techniques to collect and analyze representative samples and reporting analytical results in appropriate units.

4.3 *CHEMICALS OF POTENTIAL CONCERN*

COPCs are site-related constituents that may adversely affect receptors of concern. COPCs do not necessarily signify a risk; rather, they are merely constituents that have been identified for advancement to further analyses.

Where appropriate, COPCs were identified at each MA for the following media of interest:

- Soil (0 to 6 feet bgs) for ecological risk;
- Soil (0 to 12 feet bgs) for human health risk;
- Sediment (0 to 1 foot bgs);
- Soil vapor;
- Surface water; and
- Groundwater.

As discussed in the BOU RI Report, the classes of chemicals identified in soil, soil vapor, sediment, surface water, and groundwater within the BOU include the following:

- Metals;
- VOCs;
- Polycyclic aromatic hydrocarbons (PAHs) and other SVOCs;
- Chlorinated pesticides;
- PCBs/Aroclors;
- Dioxins and furans; and
- Other constituents (e.g., perchlorate, NDMA).

To screen for COPCs in a particular medium of interest, all samples within the MA for that medium were considered and the maximum concentration for each constituent was identified.

4.3.1 *Essential Nutrient Evaluation*

Consistent with the *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual, Part A* (USEPA RAGS, Part A; USEPA, 1989) and the Source Area Final RI/FS Work Plan (Aerojet, 2005c), essential human and ecological nutrients were not quantitatively addressed in this HHERA for the BOU. As indicated in the HHRA White Paper (See Appendix A; Aerojet, 2007a), calcium, magnesium, potassium, and sodium naturally occur in Aerojet soils and are considered essential nutrients for human health. From the ERA White Paper (Aerojet, 2007b), calcium, magnesium, potassium, sodium, and iron naturally occur in Aerojet soils and are considered essential ecological health nutrients.

4.3.2 *Concentration-Toxicity Evaluation*

In this screening step, maximum detected concentrations were compared with toxicity-based values developed by USEPA and Cal-EPA. The toxicity-based values were developed using the following:

- For HH SVSLs, residential CHHSLs multiplied by 0.1. For chemicals without CHHSLs, a screening level was calculated by using the CHHSL methodology and multiplying by 0.1. The HH SVSLs are presented on Table 4.3-1.
- For HH SSLs, the lowest of either the residential PRG or the CHHSLs, multiplied by 0.1. The HH SSLs are presented on Table 4.3-2.

- For HH groundwater and surface water, the lower of either the tap water PRG or the California Public Health Goal multiplied by 0.1. The HH water screening levels are presented on Table 4.3-3.
- For ecological SVSLs, risk-based levels from Edwards Air Force Base (provided by DTSC, no date included). The ecological SVSLs are presented on Table 4.3-4.
- For ecological SSLs, risk-based levels from the USEPA ecological SSL methodology and model equations presented in Attachment 4-1 from *Guidance for Developing Ecological Soil Screening Levels* (Eco-SSLs) (USEPA, 2005a, revised April 2007) were used first, followed by ESLs from other listed sources, as presented in table footnotes. The Eco-SSLs are presented on Tables 4.3-5 and 4.3-6.
- For ecological SWSLs, water quality standards from the *California Toxics Rule* (USEPA, 2000); *National Recommended Water Quality Criteria* (USEPA, 2006); *Recommended Numerical Water Quality Objectives* (RWQCB, 2007); and toxicity benchmarks. The ecological SWSLs, along with their source, are presented on Table 4.3-7.
- For ecological sediment screening levels, risk-based levels were selected from multiple available sources. Primarily screening levels were selected from consensus-based sediment quality guidelines (McDonald, et al., 2000). Additional screening levels were selected from a variety of published sources. The ecological sediment screening levels and their source are presented on Table 4.3-8.

Inorganic chemicals present in soil at concentrations greater than screening levels were additionally evaluated through a background analysis, as described in Section 4.3.3. Organic chemicals present at concentrations below screening levels were additionally evaluated through FOD analysis described below. Constituents for which no screening values were available are also identified as COPCs. COPCs lacking screening values are discussed as part of the Uncertainty Analysis (Section 7.0).

4.3.3 Background Evaluation

For those metals in soil that exceeded screening values and where greater than eight soil samples were collected, concentrations in soil at each MA

were compared to facility-specific background concentrations[1] using the two two-population statistical tests listed below. Studies (and consistent with USEPA 2009b recommendations) have shown that a minimum of eight samples are needed to perform a statistically meaningful comparison.

- Gehan test; and
- Quantile test.

Comparisons to background using these statistical tests are consistent with USEPA's (2002d) *Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites* and were performed using USEPA's ProUCL Version 4.0.1 software. If either the Gehan or the Quantile test found that the concentrations of a particular metal were greater than background concentrations, the metal was identified as a COPC.

If less than eight samples were available, the maximum concentration of the samples was screened against the background threshold value (BTV). Details on the methods used to establish the background concentration dataset for metals and background comparisons are presented in Appendix C.

The data screening evaluation for each MA is presented in the discussions for each MA in Section 5.0.

4.3.4 *Frequency of Detection Evaluation*

The final step for COPC selection is to evaluate the FOD of each compound. Chemicals below risk-based screening levels with a FOD less than 5 percent are excluded as COPCs, provided that 1) the chemical is not related to source-area operations; 2) is not closely related to others detected in the medium; 3) has adequate detection limits; and 4) is not a degradation product of other chemicals detected in the same medium. Chemicals having maximum concentrations less than screening levels <u>and</u> a FOD less than 5 percent are excluded as COPCs.

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[1] Aerojet reported background (non-anthropogenic) trace metals concentrations in surface soils for the Aerojet site in the report entitled *Background Metals in Xerorthents and Redding-Corning-Red Bluff Surface Soils at the Aerojet Superfund Site Main Plant, Sacramento, California* (Aerojet 1997).

Chemicals excluded as COPCs based on these criteria, but having one or more elevated detection limits, are noted in the COPC selection tables and discussed in the uncertainty section. It should be noted that Aerojet conducted a rigorous evaluation of laboratories prior to procuring the laboratory for this investigation. One of the main selection criteria was having detection limits below the screening levels. In many cases (*e.g.*, NDMA), even the most refined laboratory analytical methods are not capable of accurately detecting some of the chemicals down to the screening level. Additionally, when one compound (*e.g.*, TCE) was present at very high concentrations, the sample had to be diluted to obtain an accurate quantification of the TCE. As a result, the detection limits for all other VOCs in the sample were elevated. Despite these laboratory analysis limitations, Aerojet has made every effort to obtain the lowest detection limits possible for use in this risk assessment.

Table 4.3-1 Soil Vapor and Air Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Ambient Air PRG ($\mu g/m^3$)	Calculated CHHSL for Shallow Soil Vapor ($\mu g/m^3$)[a]	CHHSL for Shallow Soil Vapor ($\mu g/m^3$)	Soil Vapor Screening Level ($\mu g/m^3$)[b]
75-07-0	Acetaldehyde	8.7 E-1	3.8 E+2		3.8 E+1
67-64-1	Acetone	3.3 E+3	1.5 E+5		1.5 E+4
75-05-8	Acetonitrile	6.2 E+1	2.6 E+4		2.6 E+3
107-02-8	Acrolein	2.1 E-2	8.5 E+0		8.5 E-1
107-13-1	Acrylonitrile	6.7 E-3	3.6 E+0		3.6 E-1
309-00-2	Aldrin	3.9 E-4	2.8 E-1		2.8 E-2
100-52-7	Benzaldehyde	3.7 E+2	1.6 E+5		1.6 E+4
71-43-2	Benzene	2.5 E-1		3.6 E+1	3.6 E+0
100-44-7	Benzyl chloride	4.0 E-2	2.2 E+1		2.2 E+0
92-52-4	1,1-Biphenyl	1.8 E+2	8.4 E+4		8.4 E+3
111-44-4	Bis(2-chloroethyl)ether	6.1 E-3	1.5 E+0		1.5 E-1
542-88-1	Bis(chloromethyl)ether	3.1 E-5	1.7 E-2		1.7 E-3
75-27-4	Bromodichloromethane	1.1 E-1	3.1 E+1		3.1 E+0
75-25-2	Bromoform (tribromomethane)	1.7 E+0	1.2 E+3		1.2 E+2
74-83-9	Bromomethane (Methyl bromide)	5.2 E+0	2.3 E+3		2.3 E+2
106-99-0	1,3-Butadiene	1.1 E-2	5.9 E+0		5.9 E-1
71-36-3	1-Butanol	9.5 E+0	4.6 E+3		4.6 E+2
104-51-8	n-Butylbenzene	1.5 E+2	6.5 E+4		6.5 E+3
135-9-88	sec-Butylbenzene	1.5 E+2	6.5 E+4		6.5 E+3
98-06-6	tert-Butylbenzene	1.5 E+2	6.5 E+4		6.5 E+3
75-15-0	Carbon disulfide	7.3 E+2	3.1 E+5		3.1 E+4
56-23-5	Carbon tetrachloride	1.3 E-1		2.5 E+1	2.5 E+0
12789-03-6	Chlordane (technical)	1.9 E-2	4.2 E+0		4.2 E-1
108-90-7	Chlorobenzene	6.2 E+1	4.5 E+5		4.5 E+4
126-99-8	2-Chloro-1,3-butadiene	7.3 E+0	3.1 E+3		3.1 E+2
109-69-3	1-Chlorobutane	1.5 E+3	6.3 E+5		6.3 E+4
75-45-6	Chlorodifluoromethane	5.1 E+4	2.2 E+7		2.2 E+6
75-00-3	Chloroethane	2.3 E+0	1.2 E+3		1.2 E+2
67-66-3	Chloroform	8.3 E-2	2.0 E+2		2.0 E+1
74-87-3	Chloromethane (methyl chloride)	9.5 E+1	1.0 E+3		1.0 E+2
95-57-8	2-Chlorophenol	1.8 E+1	8.2 E+3		8.2 E+2
75-29-6	2-Chloropropane	1.0 E+2	4.6 E+4		4.6 E+3
107-05-1	3-Chloropropene (allyl chloride)	1.0 E+0	1.7 E+2		1.7 E+1
123-73-9	Crotonaldehyde	3.5 E-3	1.9 E+0		1.9 E-1
98-82-8	Cumene (isopropylbenzene)	4.0 E+2	1.8 E+5		1.8 E+4
110-82-7	Cyclohexane	6.2 E+3	2.7 E+6		2.7 E+5
99-87-6	p-Cymene	1.1 E+2		3.2 E+5	3.2 E+4
72-55-9	DDE	2.0 E-2	1.4 E+1		1.4 E+0
132-64-9	Dibenzofuran	7.3 E+0	6.2 E+3		6.2 E+2
124-48-1	Dibromochloromethane	8.0 E-2	4.6 E+1		4.6 E+0
96-12-8	1,2-Dibromo-3-chloropropane	9.6 E-4	6.5 E-1		6.5 E-2
106-93-4	1,2-Dibromoethane (EDB)	3.4 E-3	1.7 E+1		1.7 E+0
95-50-1	1,2-Dichlorobenzene	2.1 E+2	9.1 E+4		9.1 E+3
541-73-1	1,3-Dichlorobenzene	1.1 E+2	4.8 E+4		4.8 E+3
106-46-7	1,4-Dichlorobenzene	3.1 E-1	9.7 E+1		9.7 E+0
75-71-8	Dichlorodifluoromethane	2.1 E+2	9.1 E+4		9.1 E+3
75-34-3	1,1-Dichloroethane	1.2 E+0	6.6 E+2		6.6 E+1
107-06-2	1,2-Dichloroethane (EDC)	7.4 E-2		5.0 E+1	5.0 E+0
75-35-4	1,1-Dichloroethylene	2.1 E+2	3.1 E+4		3.1 E+3
156-59-2	1,2-Dichloroethylene (cis)	3.7 E+1		1.6 E+4	1.6 E+3
156-60-5	1,2-Dichloroethylene (trans)	7.3 E+1		3.2 E+4	3.2 E+3
78-87-5	1,2-Dichloropropane	9.9 E-2	1.1 E+2		1.1 E+1
542-75-6	1,3-Dichloropropene	4.8 E-1	6.7 E+1		6.7 E+0
10061-01-5	cis-1,3-Dichloropropene	4.8 E-1	6.7 E+1		6.7 E+0
10061-02-6	trans-1,3-Dichloropropene	4.8 E-1	6.7 E+1		6.7 E+0
563-58-6	1,1-Dichloropropene	4.8 E-1	6.7 E+1		6.7 E+0
60-57-1	Dieldrin	4.2 E-4	3.0 E-1		3.0 E-2
123-91-1	1,4-Dioxane	6.1 E-1	1.4 E+2		1.4 E+1

Table 4.3-1 Soil Vapor and Air Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Ambient Air PRG ($\mu g/m^3$)	Calculated CHHSL for Shallow Soil Vapor ($\mu g/m^3$)[a]	CHHSL for Shallow Soil Vapor ($\mu g/m^3$)	Soil Vapor Screening Level ($\mu g/m^3$)[b]
115-29-7	Endosulfan	2.2 E+1	1.3 E+4		1.3 E+3
64-17-5	Ethanol	1.8 E+3	7.9 E+5		7.9 E+4
141-78-6	Ethyl acetate	3.3 E+3	1.4 E+6		1.4 E+5
100-41-4	Ethylbenzene	1.1 E+3	4.2 E+2		4.2 E+1
75-21-8	Ethylene oxide	1.9 E-2	1.2 E+1		1.2 E+0
60-29-7	Ethyl ether	7.3 E+2	3.2 E+5		3.2 E+4
97-63-2	Ethyl methacrylate	3.3 E+2	1.4 E+5		1.4 E+4
622-96-8	4-Ethyltoluene	1.1 E+2		3.2 E+5	3.2 E+4
76-13-1	Freon 113	3.1 E+4	1.4 E+7		1.4 E+6
76-14-2	Freon 114	3.1 E+4	1.4 E+7		1.4 E+6
110-00-9	Furan	3.7 E+0	1.6 E+3		1.6 E+2
76-44-8	Heptachlor	1.5 E-3	9.0 E-1		9.0 E-2
1024-57-3	Heptachlor epoxide	7.4 E-4	2.1 E+0		2.1 E-1
142-82-5	Heptane	2.1 E+2	8.7 E+4		8.7 E+3
87-68-3	Hexachlorobutadiene	8.6 E-2	4.9 E+1		4.9 E+0
319-84-6	HCH (alpha)	1.1 E-3	1.7 E+0		1.7 E-1
58-89-9	HCH (gamma) Lindane	5.2 E-3	4.3 E+0		4.3 E-1
77-47-4	Hexachlorocyclopentadiene	2.1 E-1	1.1 E+2		1.1 E+1
67-72-1	Hexachloroethane	4.8 E-1	2.8 E+2		2.8 E+1
591-78-6	2-Hexanone	3.1 E+3	3.6 E+4		3.6 E+3
110-54-3	n-Hexane	2.1 E+2	8.7 E+4		8.7 E+3
74-90-8	Hydrogen cyanide	3.1 E+0	1.3 E+3		1.3 E+2
78-83-1	Isobutanol	1.1 E+3	4.7 E+5		4.7 E+4
7439-97-6	Mercury (elemental)	3.1 E-1		4.5 E+1	4.5 E+0
126-98-7	Methacrylonitrile	7.3 E-1	3.1 E+2		3.1 E+1
67-56-1	Methanol	1.8 E+3	7.9 E+5		7.9 E+4
72-43-5	Methoxychlor	1.8 E+1	9.8 E+3		9.8 E+2
79-20-9	Methyl acetate	3.7 E+3	1.6 E+6		1.6 E+5
96-33-3	Methyl acrylate	1.1 E+2	4.7 E+4		4.7 E+3
108-87-2	Methylcyclohexane	3.1 E+3	1.4 E+6		1.4 E+5
74-95-3	Methylene bromide	3.7 E+1	1.7 E+4		1.7 E+3
75-09-2	Methylene chloride	4.1 E+0	1.0 E+3		1.0 E+2
78-93-3	Methyl ethyl ketone (2-Butanone)	5.1 E+3	2.3 E+6		2.3 E+5
108-10-1	Methyl isobutyl ketone	3.1 E+3	3.6 E+4		3.6 E+3
80-62-6	Methyl methacrylate	7.3 E+2	3.2 E+5		3.2 E+4
1634-04-4	Methyl tertbutyl ether (MTBE)	7.4 E+0		4.0 E+3	4.0 E+2
98-95-3	Nitrobenzene	2.1 E+0	9.1 E+2		9.1 E+1
79-46-9	2-Nitropropane	7.2 E-4	3.9 E-1		3.9 E-2
88-72-2	o-Nitrotoluene	2.9 E-2	1.6 E+4		1.6 E+3
205-99-2	Benzo[b]fluoranthene	9.2 E-3	1.1 E+1		1.1 E+0
218-01-9	Chrysene	1.7 E-1	1.1 E+2		1.1 E+1
86-73-7	Fluorene	1.5 E+2	6.8 E+4		6.8 E+3
91-20-3	Naphthalene	5.6 E-2		3.2 E+1	3.2 E+0
129-00-0	Pyrene	1.1 E+2	5.3 E+4		5.3 E+3
67-63-0	2-Propanol	9.5 E+0	4.6 E+3		4.6 E+2
103-65-1	n-Propylbenzene	1.5 E+2	6.4 E+4		6.4 E+3
100-42-5	Styrene	1.1 E+3	4.1 E+5		4.1 E+4
630-20-6	1,1,1,2-Tetrachloroethane	2.6 E-1	1.4 E+2		1.4 E+1
79-34-5	1,1,2,2-Tetrachloroethane	3.3 E-2	1.8 E+1		1.8 E+0
127-18-4	Tetrachloroethylene (PCE)	3.2 E-1		1.8 E+2	1.8 E+1
109-99-9	Tetrahydrofuran	9.9 E-1	5.3 E+2		5.3 E+1
108-88-3	Toluene	4.0 E+2		1.4 E+5	1.4 E+4
120-82-1	1,2,4-Trichlorobenzene	3.7 E+0	9.9 E+4		9.9 E+3
71-55-6	1,1,1-Trichloroethane	2.3 E+3		9.9 E+5	9.9 E+4
79-00-5	1,1,2-Trichloroethane	1.2 E-1	6.6 E+1		6.6 E+0
79-01-6	Trichloroethylene (TCE)	1.7 E-2		5.3 E+2	5.3 E+1
75-69-4	Trichlorofluoromethane	7.3 E+2	3.1 E+5		3.1 E+4
96-18-4	1,2,3-Trichloropropane	3.4 E-3	1.9 E+0		1.9 E-1

Table 4.3-1 Soil Vapor and Air Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Ambient Air PRG ($\mu g/m^3$)	Calculated CHHSL for Shallow Soil Vapor ($\mu g/m^3$)[a]	CHHSL for Shallow Soil Vapor ($\mu g/m^3$)	Soil Vapor Screening Level ($\mu g/m^3$)[b]
95-63-6	1,2,4-Trimethylbenzene	6.2 E+0	2.7 E+3		2.7 E+2
108-67-8	1,3,5-Trimethylbenzene	6.2 E+0	2.7 E+3		2.7 E+2
540-84-1	2,2,4-Trimethylpentane	1.1 E+2		3.2 E+5	3.2 E+4
108-05-4	Vinyl acetate	2.1 E+2	9.0 E+4		9.0 E+3
75-01-4	Vinyl chloride (child/adult)	1.1 E-1		1.3 E+1	1.3 E+0
1330-20-7	Xylenes	1.1 E+2		3.2 E+5	3.2 E+4

Key:
a = CHHSLs calculated based on equations and parameters in the guidance manual, and the most recent version of the Johnson & Ettinger model.
b = Soil vapor screening level is one-tenth the CHHSL if available. If no CHHSL is available, then the soil vapor screening level is one tenth the calculated CHHSL.
c = The indoor air screening level is one-tenth the CHHSL if available.
$\mu g/m^3$ = Micrograms per cubic meter

Sources:
USEPA Region 9 Preliminary Remediation Goals (PRGs), Version 9, October 2004.
Stanford J. Smucker Ph.D., EPA Region IX.
Technical Support Section (SFD-8-4), 75 Hawthorne Street, San Francisco, CA 94105-3901.
Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, California Environmental Protection Agency, January 2005.

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Residential PRG for Soil (mg/kg)	CHHSL for Soil (mg/kg)	Human Health Screening Level for Soil (mg/kg)	Soil Screening Level Protective of Groundwater (mg/kg)
30560-19-1	Acephate	5.6 E+1		5.6 E+0	7.7 E+0
75-07-0	Acetaldehyde	1.1 E+1		1.1 E+0	1.7 E+0
34256-82-1	Acetochlor	1.2 E+3		1.2 E+2	7.3 E+1
67-64-1	Acetone	1.4 E+4		1.4 E+3	5.5 E+2
75-86-5	Acetone cyanohydrin	4.9 E+1		4.9 E+0	2.9 E+0
75-05-8	Acetonitrile	4.2 E+2		4.2 E+1	1.0 E+1
107-02-8	Acrolein	1.0 E-1		1.0 E-2	4.2 E-3
79-06-1	Acrylamide	1.1 E-1		1.1 E-2	1.5 E-2
79-10-7	Acrylic acid	2.9 E+4		2.9 E+3	1.8 E+3
107-13-1	Acrylonitrile [a]	5.5 E-2		5.5 E-3	1.1 E-2
15972-60-8	Alachlor	6.0 E+0		6.0 E-1	8.4 E-1
1596-84-5	Alar	9.2 E+3		9.2 E+2	5.5 E+2
116-06-3	Aldicarb	6.1 E+1		6.1 E+0	3.6 E+0
1646-88-4	Aldicarb sulfone	6.1 E+1		6.1 E+0	3.6 E+0
309-00-2	Aldrin	2.9 E-2	3.3 E-2	2.9 E-3	4.0 E-3
74223-64-6	Ally	1.5 E+4		1.5 E+3	9.1 E+2
107-18-6	Allyl alcohol	3.1 E+2		3.1 E+1	1.8 E+1
107-05-1	Allyl chloride	1.7 E+1		1.7 E+0	1.0 E+0
7429-90-5	Aluminum	7.6 E+4		7.6 E+3	3.6 E+4
20859-73-8	Aluminum phosphide	3.1 E+1		3.1 E+0	1.5 E+1
67485-29-4	Amdro	1.8 E+1		1.8 E+0	1.1 E+0
834-12-8	Ametryn	5.5 E+2		5.5 E+1	3.3 E+1
1321-12-6	Aminodinitrotoluene	1.2 E+1		1.2 E+0	7.3 E-1
591-27-5	m-Aminophenol	4.3 E+3		4.3 E+2	2.6 E+2
504-24-5	4-Aminopyridine	1.2 E+0		1.2 E-1	7.3 E-2
33089-61-1	Amitraz	1.5 E+2		1.5 E+1	9.1 E+0
7773-06-0	Ammonium sulfamate	1.2 E+4		1.2 E+3	7.3 E+2
62-53-3	Aniline	8.5 E+1		8.5 E+0	1.2 E+1
7440-36-0	Antimony and compounds	3.1 E+1	3.0 E+1	3.0 E+0	1.5 E+1
74115-24-5	Apollo	7.9 E+2		7.9 E+1	4.7 E+1
140-57-8	Aramite	1.9 E+1		1.9 E+0	2.7 E+0
7440-38-2	Arsenic [a]	6.2 E-2	7.0 E-2	6.2 E-3	7.1 E-2
76578-14-8	Assure	5.5 E+2		5.5 E+1	3.3 E+1
3337-71-1	Asulam	3.1 E+3		3.1 E+2	1.8 E+2
1912-24-9	Atrazine	2.2 E+0		2.2 E-1	3.0 E-1
71751-41-2	Avermectin B1	2.4 E+1		2.4 E+0	1.5 E+0
103-33-3	Azobenzene	4.4 E+0		4.4 E-1	6.1 E-1
7440-39-3	Barium and compounds	5.4 E+3	5.2 E+3	5.2 E+2	2.6 E+3
114-26-1	Baygon	2.4 E+2		2.4 E+1	1.5 E+1
43121-43-3	Bayleton	1.8 E+3		1.8 E+2	1.1 E+2
68359-37-5	Baythroid	1.5 E+3		1.5 E+2	9.1 E+1
1861-40-1	Benefin	1.8 E+4		1.8 E+3	1.1 E+3
17804-35-2	Benomyl	3.1 E+3		3.1 E+2	1.8 E+2
25057-89-0	Bentazon	1.8 E+3		1.8 E+2	1.1 E+2
100-52-7	Benzaldehyde	6.1 E+3		6.1 E+2	3.6 E+2
71-43-2	Benzene	6.4 E-1		6.4 E-2	3.5 E-1
92-87-5	Benzidine	2.1 E-3		2.1 E-4	2.9 E-4
65-85-0	Benzoic acid	1.0 E+5		1.0 E+4	1.5 E+4
98-07-7	Benzotrichloride	3.7 E-2		3.7 E-3	5.2 E-3
100-51-6	Benzyl alcohol	1.8 E+4		1.8 E+3	1.1 E+3
100-44-7	Benzyl chloride	8.9 E-1		8.9 E-2	6.6 E-2
7440-41-7	Beryllium and compounds	1.5 E+2	1.5 E+2	1.5 E+1	4.0 E+1
141-66-2	Bidrin	6.1 E+0		6.1 E-1	3.6 E-1
82657-04-3	Biphenthrin (Talstar)	9.2 E+2		9.2 E+1	5.5 E+1
92-52-4	1,1-Biphenyl	3.0 E+3		3.0 E+2	3.0 E+1
111-44-4	Bis(2-chloroethyl)ether	2.2 E-1		2.2 E-2	1.0 E-2
108-60-1	Bis(2-chloroisopropyl)ether	2.9 E+0		2.9 E-1	2.7 E-1
542-88-1	Bis(chloromethyl)ether	1.9 E-4		1.9 E-5	5.2 E-5
108-60-1	Bis(2-chloro-1-methylethyl)ether	2.9 E+0		2.9 E-1	2.7 E-1
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	3.5 E+1		3.5 E+0	4.8 E+0
80-05-7	Bisphenol A	3.1 E+3		3.1 E+2	1.8 E+2
7440-42-8	Boron	1.6 E+4		1.6 E+3	7.3 E+3
15541-45-4	Bromate	6.9 E-1		6.9 E-2	9.6 E-2
108-86-1	Bromobenzene	2.8 E+1		2.8 E+0	2.0 E+0
75-27-4	Bromodichloromethane	8.2 E-1		8.2 E-2	1.8 E-1
75-25-2	Bromoform (tribromomethane)	6.2 E+1		6.2 E+0	8.5 E+0
74-83-9	Bromomethane (Methyl bromide)	3.9 E+0		3.9 E-1	8.7 E-1
2104-96-3	Bromophos	3.1 E+2		3.1 E+1	1.8 E+1

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
1689-84-5	Bromoxynil	1.2 E+3		1.2 E+2	7.3 E+1
1689-99-2	Bromoxynil octanoate	1.2 E+3		1.2 E+2	7.3 E+1
106-99-0	1,3-Butadiene [a]	1.1 E-2		1.1 E-3	1.9 E-2
71-36-3	1-Butanol	6.1 E+3		6.1 E+2	3.6 E+2
2008-41-5	Butylate	3.1 E+3		3.1 E+2	1.8 E+2
104-51-8	n-Butylbenzene	2.4 E+2		2.4 E+1	2.4 E+1
135-9-88	sec-Butylbenzene	2.2 E+2		2.2 E+1	2.4 E+1
98-06-6	tert-Butylbenzene	3.9 E+2		3.9 E+1	2.4 E+1
85-68-7	Butyl benzyl phthalate	1.2 E+4		1.2 E+3	7.3 E+2
85-70-1	Butylphthalyl butylglycolate	6.1 E+4		6.1 E+3	3.6 E+3
7440-43-9	Cadmium and compounds	3.7 E+1	1.7 E+0	1.7 E-1	1.8 E+1
105-60-2	Caprolactam	3.1 E+4		3.1 E+3	1.8 E+3
2425-06-1	Captafol	5.7 E+1		5.7 E+0	7.8 E+0
133-06-2	Captan	1.4 E+2		1.4 E+1	1.9 E+1
63-25-2	Carbaryl	6.1 E+3		6.1 E+2	3.6 E+2
86-74-8	Carbazole	2.4 E+1		2.4 E+0	3.4 E+0
1563-66-2	Carbofuran	3.1 E+2		3.1 E+1	1.8 E+1
75-15-0	Carbon disulfide	3.6 E+2		3.6 E+1	1.0 E+2
56-23-5	Carbon tetrachloride	2.5 E-1		2.5 E-2	1.7 E-1
55285-14-8	Carbosulfan	6.1 E+2		6.1 E+1	3.6 E+1
5234-68-4	Carboxin	6.1 E+3		6.1 E+2	3.6 E+2
133-90-4	Chloramben	9.2 E+2		9.2 E+1	5.5 E+1
118-75-2	Chloranil	1.2 E+0		1.2 E-1	1.7 E-1
12789-03-6	Chlordane (technical)	1.6 E+0	4.3 E-1	4.3 E-2	1.9 E-1
90982-32-4	Chlorimuron-ethyl	1.2 E+3		1.2 E+2	7.3 E+1
79-11-8	Chloroacetic acid	1.2 E+2		1.2 E+1	7.3 E+0
532-27-4	2-Chloroacetophenone	3.3 E-2		3.3 E-3	5.2 E-3
106-47-8	4-Chloroaniline	2.4 E+2		2.4 E+1	1.5 E+1
108-90-7	Chlorobenzene	1.5 E+2		1.5 E+1	1.1 E+1
510-15-6	Chlorobenzilate	1.8 E+0		1.8 E-1	2.5 E-1
74-11-3	p-Chlorobenzoic acid	1.2 E+4		1.2 E+3	7.3 E+2
98-56-6	4-Chlorobenzotrifluoride	1.2 E+3		1.2 E+2	7.3 E+1
126-99-8	2-Chloro-1,3-butadiene	3.6 E+0		3.6 E-1	1.4 E+0
109-69-3	1-Chlorobutane	4.8 E+2		4.8 E+1	2.4 E+2
75-68-3	1-Chloro-1,1-difluoroethane (HCFC-142b)	3.4 E+2		3.4 E+1	8.7 E+3
75-45-6	Chlorodifluoromethane	3.4 E+2		3.4 E+1	8.5 E+3
75-00-3	Chloroethane	3.0 E+0		3.0 E-1	4.6 E+0
67-66-3	Chloroform	9.4 E-1		9.4 E-2	1.7 E-1
74-87-3	Chloromethane (methyl chloride)	4.7 E+1		4.7 E+0	1.6 E+1
95-69-2	4-Chloro-2-methylaniline	8.4 E-1		8.4 E-2	1.2 E-1
3165-93-3	4-Chloro-2-methylaniline hydrochloride	1.1 E+0		1.1 E-1	1.5 E-1
91-58-7	beta-Chloronaphthalene	4.9 E+3		4.9 E+2	4.9 E+1
88-73-3	o-Chloronitrobenzene	1.4 E+0		1.4 E-1	1.5 E-2
100-00-5	p-Chloronitrobenzene	1.0 E+1		1.0 E+0	1.2 E-1
95-57-8	2-Chlorophenol	6.3 E+1		6.3 E+0	3.0 E+0
75-29-6	2-Chloropropane	1.7 E+2		1.7 E+1	1.7 E+1
1897-45-6	Chlorothalonil	4.4 E+1		4.4 E+0	6.1 E+0
95-49-8	o-Chlorotoluene	1.6 E+2		1.6 E+1	1.2 E+1
101-21-3	Chlorpropham	1.2 E+4		1.2 E+3	7.3 E+2
2921-88-2	Chlorpyrifos	1.8 E+2		1.8 E+1	1.1 E+1
5598-13-0	Chlorpyrifos-methyl	6.1 E+2		6.1 E+1	3.6 E+1
64902-72-3	Chlorsulfuron	3.1 E+3		3.1 E+2	1.8 E+2
60238-56-4	Chlorthiophos	4.9 E+1		4.9 E+0	2.9 E+0
	Total Chromium (1:6 ratio Cr VI:Cr III)	2.1 E+2		2.1 E+1	
16065-83-1	Chromium III	1.0 E+5	1.0 E+5	1.0 E+4	1.0 E+3
18540-29-9	Chromium VI	3.0 E+1	1.7 E+1	1.7 E+0	1.1 E+2
7440-48-4	Cobalt	9.0 E+2	6.6 E+2	6.6 E+1	7.3 E+2
7440-50-8	Copper and compounds	3.1 E+3	3.0 E+3	3.0 E+2	1.5 E+3
123-73-9	Crotonaldehyde	5.3 E-3		5.3 E-4	5.9 E-3
98-82-8	Cumene (isopropylbenzene)	1.6 E+2		1.6 E+1	6.6 E+1
21725-46-2	Cyanazine	5.8 E-1		5.8 E-2	8.0 E-2
57-12-5	Cyanide (free)	1.2 E+3		1.2 E+2	7.3 E+1
74-90-8	Cyanide (hydrogen)	1.1 E+1		1.1 E+0	6.2 E-1
460-19-5	Cyanogen	1.3 E+2		1.3 E+1	2.4 E+1
506-68-3	Cyanogen bromide	2.9 E+2		2.9 E+1	5.5 E+1
506-77-4	Cyanogen chloride	1.6 E+2		1.6 E+1	3.0 E+1
110-82-7	Cyclohexane	1.4 E+2		1.4 E+1	1.0 E+3
108-94-1	Cyclohexanone	1.0 E+5		1.0 E+4	1.8 E+4
108-91-8	Cyclohexylamine	1.2 E+4		1.2 E+3	7.3 E+2

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
68085-85-8	Cyhalothrin/Karate	3.1 E+2		3.1 E+1	1.8 E+1
52315-07-8	Cypermethrin	6.1 E+2		6.1 E+1	3.6 E+1
66215-27-8	Cyromazine	4.6 E+2		4.6 E+1	2.7 E+1
1861-32-1	Dacthal	6.1 E+2		6.1 E+1	3.6 E+1
75-99-0	Dalapon	1.8 E+3		1.8 E+2	1.1 E+2
39515-41-8	Danitol	1.5 E+3		1.5 E+2	9.1 E+1
72-54-8	DDD	2.4 E+0	2.3 E+0	2.3 E-1	2.8 E-1
72-55-9	DDE	1.7 E+0	1.6 E+0	1.6 E-1	2.0 E-1
50-29-3	DDT	1.7 E+0	1.6 E+0	1.6 E-1	2.0 E-1
1163-19-5	Decabromodiphenyl ether	6.1 E+2		6.1 E+1	3.6 E+1
8065-48-3	Demeton	2.4 E+0		2.4 E-1	1.5 E-1
2303-16-4	Diallate	8.0 E+0		8.0 E-1	1.1 E+0
333-41-5	Diazinon	5.5 E+1		5.5 E+0	3.3 E+0
132-64-9	Dibenzofuran	1.5 E+2		1.5 E+1	1.2 E+0
106-37-6	1,4-Dibromobenzene	6.1 E+2		6.1 E+1	3.6 E+1
124-48-1	Dibromochloromethane	1.1 E+0		1.1 E-1	1.3 E-1
96-12-8	1,2-Dibromo-3-chloropropane (DBCP) [a]	3.0 E-2		3.0 E-3	1.6 E-3
106-93-4	1,2-Dibromoethane (EDB)	3.2 E-2		3.2 E-3	5.6 E-3
84-74-2	Dibutyl phthalate	6.1 E+3		6.1 E+2	3.6 E+2
1918-00-9	Dicamba	1.8 E+3		1.8 E+2	1.1 E+2
95-50-1	1,2-Dichlorobenzene	6.0 E+2		6.0 E+1	3.7 E+1
541-73-1	1,3-Dichlorobenzene	5.3 E+2		5.3 E+1	1.8 E+1
106-46-7	1,4-Dichlorobenzene	3.4 E+0		3.4 E-1	5.0 E-1
91-94-1	3,3-Dichlorobenzidine	1.1 E+0		1.1 E-1	1.5 E-1
90-98-2	4,4'-Dichlorobenzophenone	1.8 E+3		1.8 E+2	1.1 E+2
764-41-0	1,4-Dichloro-2-butene	7.9 E-3		7.9 E-4	1.2 E-3
75-71-8	Dichlorodifluoromethane	9.4 E+1		9.4 E+0	3.9 E+1
75-34-3	1,1-Dichloroethane [a]	2.8 E+0		2.8 E-1	2.0 E+0
107-06-2	1,2-Dichloroethane (EDC)	2.8 E-1		2.8 E-2	1.2 E-1
75-35-4	1,1-Dichloroethylene	1.2 E+2		1.2 E+1	7.0 E+0
156-59-2	1,2-Dichloroethylene (cis)	4.3 E+1		4.3 E+0	6.1 E+0
156-60-5	1,2-Dichloroethylene (trans)	6.9 E+1		6.9 E+0	1.2 E+1
120-83-2	2,4-Dichlorophenol	1.8 E+2		1.8 E+1	1.1 E+1
94-82-6	4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	4.9 E+2		4.9 E+1	2.9 E+1
94-75-7	2,4-Dichlorophenoxyacetic Acid (2,4-D)	6.9 E+2	6.9 E+2	6.9 E+1	3.6 E+1
78-87-5	1,2-Dichloropropane	3.4 E-1		3.4 E-2	1.6 E-1
142-28-9	1,3-Dichloropropane	1.0 E+2		1.0 E+1	1.2 E+1
542-75-6	1,3-Dichloropropene	7.8 E-1		7.8 E-2	4.0 E-1
616-23-9	2,3-Dichloropropanol	1.8 E+2		1.8 E+1	1.1 E+1
62-73-7	Dichlorvos	1.7 E+0		1.7 E-1	2.3 E-1
115-32-2	Dicofol	1.1 E+0		1.1 E-1	1.5 E-1
77-73-6	Dicyclopentadiene	5.4 E-1		5.4 E-2	4.2 E-2
60-57-1	Dieldrin	3.0 E-2	3.5 E-2	3.0 E-3	4.2 E-3
112-34-5	Diethylene glycol, monobutyl ether	6.1 E+2		6.1 E+1	3.6 E+1
111-90-0	Diethylene glycol, monoethyl ether	3.7 E+3		3.7 E+2	2.2 E+2
617-84-5	Diethylformamide	2.4 E+1		2.4 E+0	1.5 E+0
103-23-1	Di(2-ethylhexyl)adipate	4.1 E+2		4.1 E+1	5.6 E+1
84-66-2	Diethyl phthalate	4.9 E+4		4.9 E+3	2.9 E+3
56-53-1	Diethylstilbestrol	1.0 E-4		1.0 E-5	1.4 E-5
43222-48-6	Difenzoquat (Avenge)	4.9 E+3		4.9 E+2	2.9 E+2
35367-38-5	Diflubenzuron	1.2 E+3		1.2 E+2	7.3 E+1
28553-12-0	Diisononyl phthalate	1.2 E+3		1.2 E+2	7.3 E+1
1445-75-6	Diisopropyl methylphosphonate	4.9 E+3		4.9 E+2	2.9 E+2
55290-64-7	Dimethipin	1.2 E+3		1.2 E+2	7.3 E+1
60-51-5	Dimethoate	1.2 E+1		1.2 E+0	7.3 E-1
119-90-4	3,3'-Dimethoxybenzidine	3.5 E+1		3.5 E+0	4.8 E+0
124-40-3	Dimethylamine	6.7 E-2		6.7 E-3	3.5 E-3
121-69-7	N-N-Dimethylaniline	1.2 E+2		1.2 E+1	7.3 E+0
95-68-1	2,4-Dimethylaniline	6.5 E-1		6.5 E-2	9.0 E-2
21436-96-4	2,4-Dimethylaniline hydrochloride	8.4 E-1		8.4 E-2	1.2 E-1
119-93-7	3,3'-Dimethylbenzidine	2.1 E-1		2.1 E-2	2.9 E-2
68-12-2	N,N-Dimethylformamide	6.1 E+3		6.1 E+2	3.6 E+2
122-09-8	Dimethylphenethylamine	6.1 E+1		6.1 E+0	3.6 E+0
105-67-9	2,4-Dimethylphenol	1.2 E+3		1.2 E+2	7.3 E+1
576-26-1	2,6-Dimethylphenol	3.7 E+1		3.7 E+0	2.2 E+0
95-65-8	3,4-Dimethylphenol	6.1 E+1		6.1 E+0	3.6 E+0
131-11-3	Dimethyl phthalate	1.0 E+5		1.0 E+4	3.6 E+4
120-61-6	Dimethyl terephthalate	6.1 E+3		6.1 E+2	3.6 E+2
534-52-1	4,6-Dinitro-o-cresol	6.1 E+0		6.1 E-1	3.6 E-1

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
131-89-5	4,6-Dinitro-o-cyclohexyl phenol	1.2 E+2		1.2 E+1	7.3 E+0
528-29-0	1,2-Dinitrobenzene	6.1 E+0		6.1 E-1	3.6 E-1
99-65-0	1,3-Dinitrobenzene	6.1 E+0		6.1 E-1	3.6 E-1
100-25-4	1,4-Dinitrobenzene	6.1 E+0		6.1 E-1	3.6 E-1
51-28-5	2,4-Dinitrophenol	1.2 E+2		1.2 E+1	7.3 E+0
25321-14-6	Dinitrotoluene mixture	7.2 E-1		7.2 E-2	9.9 E-2
121-14-2	2,4-Dinitrotoluene	1.2 E+2		1.2 E+1	7.3 E+0
606-20-2	2,6-Dinitrotoluene	6.1 E+1		6.1 E+0	3.6 E+0
88-85-7	Dinoseb	6.1 E+1		6.1 E+0	3.6 E+0
117-84-0	di-n-Octyl phthalate	2.4 E+3		2.4 E+2	1.5 E+2
123-91-1	1,4-Dioxane	4.4 E+1	1.8 E+1	1.8 E+0	6.1 E+0
1746-01-6	Dioxin (2,3,7,8-TCDD)	3.9 E-6	4.6 E-6	3.9 E-7	4.5 E-7
957-51-7	Diphenamid	1.8 E+3		1.8 E+2	1.1 E+2
122-39-4	Diphenylamine	1.5 E+3		1.5 E+2	9.1 E+1
74-31-7	N,N-Diphenyl-1,4 benzenediamine (DPPD)	1.8 E+1		1.8 E+0	1.1 E+0
122-66-7	1,2-Diphenylhydrazine	6.1 E-1		6.1 E-2	8.4 E-2
127-63-9	Diphenyl sulfone	1.8 E+2		1.8 E+1	1.1 E+1
85-00-7	Diquat	1.3 E+2		1.3 E+1	8.0 E+0
1937-37-7	Direct black 38	5.7 E-2		5.7 E-3	7.8 E-3
2602-46-2	Direct blue 6	6.0 E-2		6.0 E-3	8.3 E-3
16071-86-6	Direct brown 95	5.2 E-2		5.2 E-3	7.2 E-3
298-04-4	Disulfoton	2.4 E+0		2.4 E-1	1.5 E-1
505-29-3	1,4-Dithiane	6.1 E+2		6.1 E+1	3.6 E+1
330-54-1	Diuron	1.2 E+2		1.2 E+1	7.3 E+0
2439-10-3	Dodine	2.4 E+2		2.4 E+1	1.5 E+1
7429-91-6	Dysprosium	7.8 E+3		7.8 E+2	3.6 E+2
115-29-7	Endosulfan	3.7 E+2		3.7 E+1	2.2 E+1
145-73-3	Endothall	1.2 E+3		1.2 E+2	7.3 E+1
72-20-8	Endrin	1.8 E+1	2.1 E+1	1.8 E+0	1.1 E+0
106-89-8	Epichlorohydrin[a]	1.3 E+0		1.3 E-1	1.4 E-2
106-88-7	1,2-Epoxybutane	3.5 E+2		3.5 E+1	2.1 E+1
759-94-4	EPTC (S-Ethyl dipropylthiocarbamate)	1.5 E+3		1.5 E+2	9.1 E+1
16672-87-0	Ethephon (2-chloroethyl phosphonic acid)	3.1 E+2		3.1 E+1	1.8 E+1
563-12-2	Ethion	3.1 E+1		3.1 E+0	1.8 E+0
110-80-5	2-Ethoxyethanol	2.4 E+4		2.4 E+3	1.5 E+3
111-15-9	2-Ethoxyethanol acetate	1.8 E+4		1.8 E+3	1.1 E+3
141-78-6	Ethyl acetate	1.9 E+4		1.9 E+3	5.5 E+2
140-88-5	Ethyl acrylate	2.1 E-1		2.1 E-2	2.3 E-1
100-41-4	Ethylbenzene	4.0 E+2		4.0 E+1	1.3 E+2
75-00-3	Ethyl chloride	3.0 E+0		3.0 E-1	4.6 E+0
109-78-4	Ethylene cyanohydrin	1.8 E+4		1.8 E+3	1.1 E+3
107-15-3	Ethylene diamine	5.5 E+3		5.5 E+2	3.3 E+2
107-21-1	Ethylene glycol	1.0 E+5		1.0 E+4	7.3 E+3
111-76-2	Ethylene glycol, monobutyl ether	3.1 E+4		3.1 E+3	1.8 E+3
75-21-8	Ethylene oxide	1.4 E-1		1.4 E-2	2.4 E-2
96-45-7	Ethylene thiourea (ETU)	4.4 E+0		4.4 E-1	6.1 E-1
60-29-7	Ethyl ether	1.8 E+3		1.8 E+2	1.2 E+2
97-63-2	Ethyl methacrylate	1.4 E+2		1.4 E+1	5.5 E+1
2104-64-5	Ethyl p-nitrophenyl phenylphosphorothioate	6.1 E-1		6.1 E-2	3.6 E-2
84-72-0	Ethylphthalyl ethyl glycolate	1.0 E+5		1.0 E+4	1.1 E+4
101200-48-0	Express	4.9 E+2		4.9 E+1	2.9 E+1
22224-92-6	Fenamiphos	1.5 E+1		1.5 E+0	9.1 E-1
2164-17-2	Fluometuron	7.9 E+2		7.9 E+1	4.7 E+1
16984-48-8	Fluorine (soluble fluoride)	3.7 E+3	4.6 E+3	3.7 E+2	2.2 E+3
59756-60-4	Fluoridone	4.9 E+3		4.9 E+2	2.9 E+2
56425-91-3	Flurprimidol	1.2 E+3		1.2 E+2	7.3 E+1
66332-96-5	Flutolanil	3.7 E+3		3.7 E+2	2.2 E+2
69409-94-5	Fluvalinate	6.1 E+2		6.1 E+1	3.6 E+1
133-07-3	Folpet	1.4 E+2		1.4 E+1	1.9 E+1
72178-02-0	Fomesafen	2.6 E+0		2.6 E-1	3.5 E-1
944-22-9	Fonofos	1.2 E+2		1.2 E+1	7.3 E+0
50-00-0	Formaldehyde	9.2 E+3		9.2 E+2	5.5 E+2
64-18-6	Formic Acid	1.0 E+5		1.0 E+4	7.3 E+3
39148-24-8	Fosetyl-al	1.0 E+5		1.0 E+4	1.1 E+4
76-13-1	Freon 113	5.6 E+3		5.6 E+2	5.9 E+3
110-00-9	Furan	2.5 E+0		2.5 E-1	6.1 E-1
67-45-8	Furazolidone	1.3 E-1		1.3 E-2	1.8 E-2
98-01-1	Furfural	1.8 E+2		1.8 E+1	1.1 E+1
531-82-8	Furium	9.7 E-3		9.7 E-4	1.3 E-3

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
60568-05-0	Furmecyclox	1.6 E+1		1.6 E+0	2.2 E+0
77182-82-2	Glufosinate-ammonium	2.4 E+1		2.4 E+0	1.5 E+0
765-34-4	Glycidaldehyde	2.4 E+1		2.4 E+0	1.5 E+0
1071-83-6	Glyphosate	6.1 E+3		6.1 E+2	3.6 E+2
69806-40-2	Haloxyfop-methyl	3.1 E+0		3.1 E-1	1.8 E-1
79277-27-3	Harmony	7.9 E+2		7.9 E+1	4.7 E+1
76-44-8	Heptachlor	1.1 E-1	1.3 E-1	1.1 E-2	1.5 E-2
1024-57-3	Heptachlor epoxide	5.3 E-2		5.3 E-3	7.4 E-3
87-82-1	Hexabromobenzene	1.2 E+2		1.2 E+1	7.3 E+0
118-74-1	Hexachlorobenzene	3.0 E-1		3.0 E-2	4.2 E-2
87-68-3	Hexachlorobutadiene	6.2 E+0		6.2 E-1	8.6 E-1
319-84-6	HCH (alpha)	9.0 E-2		9.0 E-3	1.1 E-2
319-85-7	HCH (beta)	3.2 E-1		3.2 E-2	3.7 E-2
58-89-9	HCH (gamma) Lindane	4.4 E-1	5.0 E-1	4.4 E-2	5.2 E-2
608-73-1	HCH-technical	3.2 E-1		3.2 E-2	3.7 E-2
77-47-4	Hexachlorocyclopentadiene	3.7 E+2		3.7 E+1	2.2 E+1
67-72-1	Hexachloroethane	3.5 E+1		3.5 E+0	4.8 E+0
70-30-4	Hexachlorophene	1.8 E+1		1.8 E+0	1.1 E+0
121-82-4	Hexahydro-1,3,5-trinitro-1,3,5-triazine	4.4 E+0		4.4 E-1	6.1 E-1
822-06-0	1,6-Hexamethylene diisocyanate	1.7 E-1		1.7 E-2	1.0 E-2
110-54-3	n-Hexane	1.1 E+2		1.1 E+1	4.2 E+1
51235-04-2	Hexazinone	2.0 E+3		2.0 E+2	1.2 E+2
2691-41-0	HMX	3.1 E+3		3.1 E+2	1.8 E+2
302-01-2	Hydrazine, hydrazine sulfate	1.6 E-1		1.6 E-2	2.2 E-2
60-34-4	Hydrazine, monomethyl	1.6 E-1		1.6 E-2	2.2 E-2
57-14-7	Hydrazine, dimethyl	1.6 E-1		1.6 E-2	2.2 E-2
74-90-8	Hydrogen cyanide	1.1 E+1		1.1 E+0	6.2 E-1
123-31-9	p-Hydroquinone	8.7 E+0		8.7 E-1	1.2 E+0
35554-44-0	Imazalil	7.9 E+2		7.9 E+1	4.7 E+1
81335-37-7	Imazaquin	1.5 E+4		1.5 E+3	9.1 E+2
36734-19-7	Iprodione	2.4 E+3		2.4 E+2	1.5 E+2
7439-89-6	Iron	2.3 E+4		2.3 E+3	1.1 E+4
78-83-1	Isobutanol	1.3 E+4		1.3 E+3	1.8 E+2
78-59-1	Isophorone	5.1 E+2		5.1 E+1	7.1 E+1
33820-53-0	Isopropalin	9.2 E+2		9.2 E+1	5.5 E+1
1832-54-8	Isopropyl methyl phosphonic acid	6.1 E+3		6.1 E+2	3.6 E+2
82558-50-7	Isoxaben	3.1 E+3		3.1 E+2	1.8 E+2
143-50-0	Kepone	6.1 E-2	3.5 E-2	3.5 E-3	8.4 E-3
77501-63-4	Lactofen	1.2 E+2		1.2 E+1	7.3 E+0
7439-92-1	Lead [a]	1.5 E+2	1.5 E+2	1.5 E+1	1.5 E+2
78-00-2	Lead (tetraethyl)	6.1 E-3		6.1 E-4	3.6 E-4
330-55-2	Linuron	1.2 E+2		1.2 E+1	7.3 E+0
7439-93-2	Lithium	1.6 E+3		1.6 E+2	7.3 E+3
83055-99-6	Londax	1.2 E+4		1.2 E+3	7.3 E+2
121-75-5	Malathion	1.2 E+3		1.2 E+2	7.3 E+1
108-31-6	Maleic anhydride	6.1 E+3		6.1 E+2	3.6 E+2
123-33-1	Maleic hydrazide	1.7 E+3		1.7 E+2	3.0 E+2
109-77-3	Malononitrile	6.1 E+0		6.1 E-1	3.6 E-1
8018-01-7	Mancozeb	1.8 E+3		1.8 E+2	1.1 E+2
12427-38-2	Maneb	8.1 E+0		8.1 E-1	1.1 E+0
7439-96-5	Manganese and compounds	1.8 E+3		1.8 E+2	8.8 E+2
950-10-7	Mephosfolan	5.5 E+0		5.5 E-1	3.3 E-1
24307-26-4	Mepiquat chloride	1.8 E+3		1.8 E+2	1.1 E+2
149-30-4	2-Mercaptobenzothiazole	1.7 E+1		1.7 E+0	2.3 E+0
7487-94-7	Mercury and compounds	2.3 E+1	1.8 E+1	1.8 E+0	1.1 E+1
22967-92-6	Mercury (methyl)	6.1 E+0		6.1 E-1	3.6 E-1
150-50-5	Merphos	1.8 E+0		1.8 E-1	1.1 E-1
78-48-8	Merphos oxide	1.8 E+0		1.8 E-1	1.1 E-1
57837-19-1	Metalaxyl	3.7 E+3		3.7 E+2	2.2 E+2
126-98-7	Methacrylonitrile	2.1 E+0		2.1 E-1	1.0 E-1
10265-92-6	Methamidophos	3.1 E+0		3.1 E-1	1.8 E-1
67-56-1	Methanol	3.1 E+4		3.1 E+3	1.8 E+3
950-37-8	Methidathion	6.1 E+1		6.1 E+0	3.6 E+0
16752-77-5	Methomyl	4.4 E+1		4.4 E+0	1.5 E+1
72-43-5	Methoxychlor	3.1 E+2	3.4 E+2	3.1 E+1	1.8 E+1
109-86-4	2-Methoxyethanol	6.1 E+1		6.1 E+0	3.6 E+0
110-49-6	2-Methoxyethanol acetate	1.2 E+2		1.2 E+1	7.3 E+0
99-59-2	2-Methoxy-5-nitroaniline	1.1 E+1		1.1 E+0	1.5 E+0
79-20-9	Methyl acetate	2.2 E+4		2.2 E+3	6.1 E+2

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
96-33-3	Methyl acrylate	7.0 E+1		7.0 E+0	1.8 E+1
95-53-4	2-Methylaniline (o-toluidine)	2.0 E+0		2.0 E-1	2.8 E-1
636-21-5	2-Methylaniline hydrochloride	2.7 E+0		2.7 E-1	3.7 E-1
94-74-6	2-Methyl-4-chlorophenoxyacetic acid	3.1 E+1		3.1 E+0	1.8 E+0
94-81-5	4-(2-Methyl-4-chlorophenoxy) butyric acid	6.1 E+2		6.1 E+1	3.6 E+1
93-65-2	2-(2-Methyl-4-chlorophenoxy) propionic acid	6.1 E+1		6.1 E+0	3.6 E+0
16484-77-8	2-(2-Methyl-1,4-chlorophenoxy) propionic acid	6.1 E+1		6.1 E+0	3.6 E+0
108-87-2	Methylcyclohexane	2.6 E+3		2.6 E+2	5.2 E+2
101-77-9	4,4'-Methylenebisbenzeneamine	1.9 E+0		1.9 E-1	2.7 E-1
101-14-4	4,4'-Methylene bis(2-chloroaniline)	3.7 E+0		3.7 E-1	5.2 E-1
101-61-1	4,4'-Methylene bis(N,N'-dimethyl)aniline	1.1 E+1		1.1 E+0	1.5 E+0
74-95-3	Methylene bromide	6.7 E+1		6.7 E+0	6.1 E+0
75-09-2	Methylene chloride	9.1 E+0		9.1 E-1	4.3 E+0
101-68-8	4,4'-Methylene diphenyl diisocyanate	1.0 E+1		1.0 E+0	6.2 E-1
78-93-3	Methyl ethyl ketone (2-Butanone)	2.2 E+4		2.2 E+3	7.0 E+2
108-10-1	Methyl isobutyl ketone	5.3 E+3		5.3 E+2	2.0 E+2
74-93-1	Methyl Mercaptan	3.5 E+1		3.5 E+0	2.1 E+0
80-62-6	Methyl methacrylate	2.2 E+3		2.2 E+2	1.4 E+2
99-55-8	2-Methyl-5-nitroaniline	1.5 E+1		1.5 E+0	2.0 E+0
298-00-0	Methyl parathion	1.5 E+1		1.5 E+0	9.1 E-1
95-48-7	2-Methylphenol	3.1 E+3		3.1 E+2	1.8 E+2
108-39-4	3-Methylphenol	3.1 E+3		3.1 E+2	1.8 E+2
106-44-5	4-Methylphenol	3.1 E+2		3.1 E+1	1.8 E+1
993-13-5	Methyl phosphonic acid	1.2 E+3		1.2 E+2	7.3 E+1
25013-15-4	Methyl styrene (mixture)	1.3 E+2		1.3 E+1	6.0 E+0
98-83-9	Methyl styrene (alpha)	6.8 E+2		6.8 E+1	4.3 E+1
1634-04-4	Methyl tertbutyl ether (MTBE)	1.7 E+1		1.7 E+0	1.1 E+1
51218-45-2	Metolaclor (Dual)	9.2 E+3		9.2 E+2	5.5 E+2
21087-64-9	Metribuzin	1.5 E+3		1.5 E+2	9.1 E+1
2385-85-5	Mirex	2.7 E-1	3.1 E-2	3.1 E-3	3.7 E-2
2212-67-1	Molinate	1.2 E+2		1.2 E+1	7.3 E+0
7439-98-7	Molybdenum	3.9 E+2	3.8 E+2	3.8 E+1	1.8 E+2
10599-90-3	Monochloramine	6.1 E+3		6.1 E+2	3.6 E+2
300-76-5	Naled	1.2 E+2		1.2 E+1	7.3 E+0
15299-99-7	Napropamide	6.1 E+3		6.1 E+2	3.6 E+2
7440-02-0	Nickel (soluble salts)	1.6 E+3	1.6 E+3	1.6 E+2	7.3 E+2
88-74-4	2-Nitroaniline	1.8 E+2		1.8 E+1	1.1 E+1
99-09-2	3-Nitroaniline	1.8 E+1		1.8 E+0	3.2 E+0
100-01-6	4-Nitroaniline	2.3 E+1		2.3 E+0	3.2 E+0
98-95-3	Nitrobenzene	2.0 E+1		2.0 E+0	3.4 E-1
67-20-9	Nitrofurantoin	4.3 E+3		4.3 E+2	2.6 E+2
59-87-0	Nitrofurazone	3.2 E-1		3.2 E-2	4.5 E-2
55-63-0	Nitroglycerin	3.5 E+1		3.5 E+0	4.8 E+0
556-88-7	Nitroguanidine	6.1 E+3		6.1 E+2	3.6 E+2
924-16-3	N-Nitrosodi-n-butylamine	2.4 E-2		2.4 E-3	2.0 E-3
1116-54-7	N-Nitrosodiethanolamine	1.7 E-1		1.7 E-2	2.4 E-2
55-18-5	N-Nitrosodiethylamine	3.2 E-3		3.2 E-4	4.5 E-4
62-75-9	N-Nitrosodimethylamine	9.5 E-3		9.5 E-4	1.3 E-3
86-30-6	N-Nitrosodiphenylamine	9.9 E+1		9.9 E+0	1.4 E+1
621-64-7	N-Nitroso di-n-propylamine	6.9 E-2		6.9 E-3	9.6 E-3
10595-95-6	N-Nitroso-N-methylethylamine	2.2 E-2		2.2 E-3	3.1 E-3
930-55-2	N-Nitrosopyrrolidine	2.3 E-1		2.3 E-2	3.2 E-2
99-08-1	m-Nitrotoluene	7.3 E+2		7.3 E+1	1.2 E+1
88-72-2	o-Nitrotoluene	8.8 E-1		8.8 E-2	4.9 E-2
99-99-0	p-Nitrotoluene	1.2 E+1		1.2 E+0	6.6 E-1
27314-13-2	Norflurazon	2.4 E+3		2.4 E+2	1.5 E+2
85509-19-9	NuStar	4.3 E+1		4.3 E+0	2.6 E+0
32536-52-0	Octabromodiphenyl ether	1.8 E+2		1.8 E+1	1.1 E+1
152-16-9	Octamethylpyrophosphoramide	1.2 E+2		1.2 E+1	7.3 E+0
19044-88-3	Oryzalin	3.1 E+3		3.1 E+2	1.8 E+2
19666-30-9	Oxadiazon	3.1 E+2		3.1 E+1	1.8 E+1
23135-22-0	Oxamyl	1.5 E+3		1.5 E+2	9.1 E+1
42874-03-3	Oxyfluorfen	1.8 E+2		1.8 E+1	1.1 E+1
76738-62-0	Paclobutrazol	7.9 E+2		7.9 E+1	4.7 E+1
4685-14-7	Paraquat	2.7 E+2		2.7 E+1	1.6 E+1
56-38-2	Parathion	3.7 E+2		3.7 E+1	2.2 E+1
1114-71-2	Pebulate	3.1 E+3		3.1 E+2	1.8 E+2
40487-42-1	Pendimethalin	2.4 E+3		2.4 E+2	1.5 E+2
87-84-3	Pentabromo-6-chloro cyclohexane	2.1 E+1		2.1 E+0	2.9 E+0

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Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
32534-81-9	Pentabromodiphenyl ether	1.2 E+2		1.2 E+1	7.3 E+0
608-93-5	Pentachlorobenzene	4.9 E+1		4.9 E+0	2.9 E+1
82-68-8	Pentachloronitrobenzene	1.9 E+0		1.9 E-1	2.6 E-1
87-86-5	Pentachlorophenol	3.0 E+0	4.4 E+0	3.0 E-1	5.6 E-1
7601-90-3	Perchlorate	7.8 E+0		7.8 E-1	3.6 E+0
52645-53-1	Permethrin	3.1 E+3		3.1 E+2	1.8 E+2
13684-63-4	Phenmedipham	1.5 E+4		1.5 E+3	9.1 E+2
108-95-2	Phenol	1.8 E+4		1.8 E+3	1.1 E+3
92-84-2	Phenothiazine	1.2 E+2		1.2 E+1	7.3 E+0
108-45-2	m-Phenylenediamine	3.7 E+2		3.7 E+1	2.2 E+1
95-54-5	o-Phenylenediamine	1.0 E+1		1.0 E+0	1.4 E+0
106-50-3	p-Phenylenediamine	1.2 E+4		1.2 E+3	6.9 E+2
62-38-4	Phenylmercuric acetate	4.9 E+0		4.9 E-1	2.9 E-1
90-43-7	2-Phenylphenol	2.5 E+2		2.5 E+1	3.5 E+1
298-02-2	Phorate	1.2 E+1		1.2 E+0	7.3 E-1
732-11-6	Phosmet	1.2 E+3		1.2 E+2	7.3 E+1
7803-51-2	Phosphine	1.8 E+1		1.8 E+0	1.1 E+0
7723-14-0	Phosphorus (white)	1.6 E+0		1.6 E-1	7.3 E-1
100-21-0	p-Phthalic acid	6.1 E+4		6.1 E+3	3.6 E+3
85-44-9	Phthalic anhydride	1.0 E+5		1.0 E+4	7.3 E+3
1918-02-1	Picloram	4.3 E+3		4.3 E+2	2.6 E+2
29232-93-7	Pirimiphos-methyl	6.1 E+2		6.1 E+1	3.6 E+1
	Polybrominated biphenyls	5.5 E-2		5.5 E-3	7.6 E-3
	Polychlorinated biphenyls (PCBs, see IRIS)	2.2 E-1	8.9 E-2	8.9 E-3	
12674-11-2	PCBs (unspeciated mixture, low risk, e.g. Aroclor 1016)	3.9 E+0		3.9 E-1	5.0 E-1
11097-69-1	PCBs (unspeciated mixture, high risk, e.g. Aroclor 1254)	2.2 E-1		2.2 E-2	3.4 E-2
61788-33-8	Polychlorinated terphenyls	1.1 E-1		1.1 E-2	1.5 E-2
83-32-9	Acenaphthene	3.7 E+3		3.7 E+2	3.7 E+1
120-12-7	Anthracene	2.2 E+4		2.2 E+3	1.8 E+2
56-55-3	Benz[a]anthracene	6.2 E-1		6.2 E-2	9.2 E-2
205-99-2	Benzo[b]fluoranthene	6.2 E-1		6.2 E-2	9.2 E-2
207-08-9	Benzo[k]fluoranthene [a]	3.8 E-1		3.8 E-2	5.6 E-2
50-32-8	Benzo[a]pyrene	6.2 E-2	3.8 E-2	3.8 E-3	9.2 E-3
218-01-9	Chrysene [a]	3.8 E+0		3.8 E-1	5.6 E-1
53-70-3	Dibenz[ah]anthracene	6.2 E-2		6.2 E-3	9.2 E-3
206-44-0	Fluoranthene	2.3 E+3		2.3 E+2	1.5 E+2
86-73-7	Fluorene	2.7 E+3		2.7 E+2	2.4 E+1
193-39-5	Indeno[1,2,3-cd]pyrene	6.2 E-1		6.2 E-2	9.2 E-2
91-20-3	Naphthalene [a]	1.7 E+0		1.7 E-1	9.3 E-2
129-00-0	Pyrene	2.3 E+3		2.3 E+2	1.8 E+1
67747-09-5	Prochloraz	3.2 E+0		3.2 E-1	4.5 E-1
26399-36-0	Profluralin	3.7 E+2		3.7 E+1	2.2 E+1
1610-18-0	Prometon	9.2 E+2		9.2 E+1	5.5 E+1
7287-19-6	Prometryn	2.4 E+2		2.4 E+1	1.5 E+1
23950-58-5	Pronamide	4.6 E+3		4.6 E+2	2.7 E+2
1918-16-7	Propachlor	7.9 E+2		7.9 E+1	4.7 E+1
709-98-8	Propanil	3.1 E+2		3.1 E+1	1.8 E+1
2312-35-8	Propargite	1.2 E+3		1.2 E+2	7.3 E+1
107-19-7	Propargyl alcohol	1.2 E+2		1.2 E+1	7.3 E+0
139-40-2	Propazine	1.2 E+3		1.2 E+2	7.3 E+1
122-42-9	Propham	1.2 E+3		1.2 E+2	7.3 E+1
60207-90-1	Propiconazole	7.9 E+2		7.9 E+1	4.7 E+1
103-65-1	n-Propylbenzene	2.4 E+2		2.4 E+1	2.4 E+1
57-55-6	Propylene glycol	3.0 E+4		3.0 E+3	1.8 E+3
52125-53-8	Propylene glycol, monoethyl ether	4.3 E+4		4.3 E+3	2.6 E+3
107-98-2	Propylene glycol, monomethyl ether	4.3 E+4		4.3 E+3	2.6 E+3
75-56-9	Propylene oxide	1.9 E+0		1.9 E-1	2.2 E-1
81335-77-5	Pursuit	1.5 E+4		1.5 E+3	9.1 E+2
51630-58-1	Pydrin	1.5 E+3		1.5 E+2	9.1 E+1
110-86-1	Pyridine	6.1 E+1		6.1 E+0	3.6 E+0
13593-03-8	Quinalphos	3.1 E+1		3.1 E+0	1.8 E+0
91-22-5	Quinoline	1.6 E-1		1.6 E-2	2.2 E-2
121-82-4	RDX (Cyclonite)	4.4 E+0		4.4 E-1	6.1 E-1
10453-86-8	Resmethrin	1.8 E+3		1.8 E+2	1.1 E+2
299-84-3	Ronnel	3.1 E+3		3.1 E+2	1.8 E+2
83-79-4	Rotenone	2.4 E+2		2.4 E+1	1.5 E+1
78587-05-0	Savey	1.5 E+3		1.5 E+2	9.1 E+1
7783-00-8	Selenious Acid	3.1 E+2		3.1 E+1	1.8 E+2
7782-49-2	Selenium	3.9 E+2	3.8 E+2	3.8 E+1	1.8 E+2

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
630-10-4	Selenourea	3.1 E+2		3.1 E+1	1.8 E+1
74051-80-2	Sethoxydim	5.5 E+3		5.5 E+2	3.3 E+2
7440-22-4	Silver and compounds	3.9 E+2	3.8 E+2	3.8 E+1	1.8 E+2
122-34-9	Simazine	4.1 E+0		4.1 E-1	5.6 E-1
148-18-5	Sodium diethyldithiocarbamate	1.8 E+0		1.8 E-1	2.5 E-1
62-74-8	Sodium fluoroacetate	1.2 E+0		1.2 E-1	7.3 E-2
13718-26-8	Sodium metavanadate	6.1 E+1		6.1 E+0	3.6 E+1
7440-24-6	Strontium, stable	4.7 E+4		4.7 E+3	2.2 E+4
57-24-9	Strychnine	1.8 E+1		1.8 E+0	1.1 E+0
100-42-5	Styrene	1.7 E+3		1.7 E+2	1.0 E+2
80-07-9	1,1'-Sulfonylbis (4-chlorobenzene)	3.9 E+2		3.9 E+1	1.8 E+1
88671-89-0	Systhane	1.5 E+3		1.5 E+2	9.1 E+1
1746-01-6	2,3,7,8-TCDD (dioxin)	3.9 E-6		3.9 E-7	4.5 E-7
34014-18-1	Tebuthiuron	4.3 E+3		4.3 E+2	2.6 E+2
3383-96-8	Temephos	1.2 E+3		1.2 E+2	7.3 E+1
5902-51-2	Terbacil	7.9 E+2		7.9 E+1	4.7 E+1
13071-79-9	Terbufos	1.5 E+0		1.5 E-1	9.1 E-2
886-50-0	Terbutryn	6.1 E+1		6.1 E+0	3.6 E+0
95-94-3	1,2,4,5-Tetrachlorobenzene	1.8 E+1		1.8 E+0	1.1 E+0
630-20-6	1,1,1,2-Tetrachloroethane	3.2 E+0		3.2 E-1	4.3 E-1
79-34-5	1,1,2,2-Tetrachloroethane [a]	5.5 E-2		5.5 E-3	5.5 E-2
127-18-4	Tetrachloroethylene (PCE)	4.8 E-1		4.8 E-2	1.0 E-1
58-90-2	2,3,4,6-Tetrachlorophenol	1.8 E+3		1.8 E+2	1.1 E+2
5216-25-1	p,a,a,a-Tetrachlorotoluene	2.4 E-2		2.4 E-3	3.4 E-3
961-11-5	Tetrachlorovinphos	2.0 E+1		2.0 E+0	2.8 E+0
3689-24-5	Tetraethyldithiopyrophosphate	3.1 E+1		3.1 E+0	1.8 E+0
109-99-9	Tetrahydrofuran	9.4 E+0		9.4 E-1	1.6 E+0
7440-28-0	Thallium and compounds	5.2 E+0	5.0 E+0	5.0 E-1	2.4 E+0
28249-77-6	Thiobencarb	6.1 E+2		6.1 E+1	3.6 E+1
N/A	Thiocyanate	3.1 E+3		3.1 E+2	1.8 E+2
39196-18-4	Thiofanox	1.8 E+1		1.8 E+0	1.1 E+0
23564-05-8	Thiophanate-methyl	4.9 E+3		4.9 E+2	2.9 E+2
137-26-8	Thiram	3.1 E+2		3.1 E+1	1.8 E+1
7440-31-5	Tin (inorganic, also see tributyltin oxide)	4.7 E+4		4.7 E+3	2.2 E+4
7440-32-6	Titanium	1.0 E+5		1.0 E+4	1.5 E+5
108-88-3	Toluene	5.2 E+2		5.2 E+1	7.2 E+1
95-80-7	Toluene-2,4-diamine	1.5 E-1		1.5 E-2	2.1 E-2
95-70-5	Toluene-2,5-diamine	3.7 E+4		3.7 E+3	2.2 E+3
823-40-5	Toluene-2,6-diamine	1.2 E+4		1.2 E+3	7.3 E+2
106-49-0	p-Toluidine	2.6 E+0		2.6 E-1	3.5 E-1
8001-35-2	Toxaphene	4.4 E-1	4.6 E-1	4.4 E-2	6.1 E-2
66841-25-6	Tralomethrin	4.6 E+2		4.6 E+1	2.7 E+1
2303-17-5	Triallate	7.9 E+2		7.9 E+1	4.7 E+1
82097-50-5	Triasulfuron	6.1 E+2		6.1 E+1	3.6 E+1
615-54-3	1,2,4-Tribromobenzene	3.1 E+2		3.1 E+1	1.8 E+1
126-73-8	Tributyl phosphate	5.3 E+1		5.3 E+0	7.3 E+0
56-35-9	Tributyltin oxide (TBTO)	1.8 E+1		1.8 E+0	1.1 E+0
634-93-5	2,4,6-Trichloroaniline	1.4 E+1		1.4 E+0	2.0 E+0
33663-50-2	2,4,6-Trichloroaniline hydrochloride	1.7 E+1		1.7 E+0	2.3 E+0
120-82-1	1,2,4-Trichlorobenzene	6.2 E+1		6.2 E+0	7.2 E-1
71-55-6	1,1,1-Trichloroethane	1.2 E+3		1.2 E+2	2.0 E+2
79-00-5	1,1,2-Trichloroethane	7.3 E-1		7.3 E-2	2.0 E-1
79-01-6	Trichloroethylene (TCE) [a]	2.9 E+0		2.9 E-1	2.8 E-2
75-69-4	Trichlorofluoromethane	3.9 E+2		3.9 E+1	1.3 E+2
95-95-4	2,4,5-Trichlorophenol	6.1 E+3		6.1 E+2	3.6 E+2
88-06-2	2,4,6-Trichlorophenol	6.1 E+0		6.1 E-1	9.6 E-2
93-76-5	2,4,5-Trichlorophenoxyacetic Acid (2,4,5-T)	6.1 E+2	5.5 E+2	5.5 E+1	3.6 E+1
93-72-1	2-(2,4,5-Trichlorophenoxy) propionic acid	4.9 E+2		4.9 E+1	2.9 E+1
598-77-6	1,1,2-Trichloropropane	7.1 E+1		7.1 E+0	3.0 E+0
96-18-4	1,2,3-Trichloropropane	3.4 E-2		3.4 E-3	5.6 E-3
96-19-5	1,2,3-Trichloropropene	5.2 E+0		5.2 E-1	2.2 E-1
58138-08-2	Tridiphane	1.8 E+2		1.8 E+1	1.1 E+1
121-44-8	Triethylamine	2.3 E+1		2.3 E+0	1.2 E+0
1582-09-8	Trifluralin	6.3 E+1		6.3 E+0	8.7 E+0
552-30-7	Trimellitic Anhydride (TMAN)	8.6 E+0		8.6 E-1	5.1 E+0
95-63-6	1,2,4-Trimethylbenzene	5.2 E+1		5.2 E+0	1.2 E+0
108-67-8	1,3,5-Trimethylbenzene	2.1 E+1		2.1 E+0	1.2 E+0
512-56-1	Trimethyl phosphate	1.3 E+1		1.3 E+0	1.8 E+0
99-35-4	1,3,5-Trinitrobenzene	1.8 E+3		1.8 E+2	1.1 E+2

Table 4.3-2 Soil Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Residential PRG for Soil	CHHSL for Soil	Human Health Screening Level for Soil	Soil Screening Level Protective of Groundwater
479-45-8	Trinitrophenylmethylnitramine	6.1 E+2		6.1 E+1	3.6 E+1
118-96-7	2,4,6-Trinitrotoluene	1.6 E+1		1.6 E+0	2.2 E+0
791-28-6	Triphenylphosphine oxide	1.2 E+3		1.2 E+2	7.3 E+1
115-96-8	Tris(2-chloroethyl) phosphate	3.5 E+1		3.5 E+0	4.8 E+0
78-42-2	Tris(2-ethylhexyl) phosphate	1.5 E+2		1.5 E+1	2.1 E+1
7440-61-1	Uranium (chemical toxicity only)	1.6 E+1		1.6 E+0	7.3 E+0
7440-62-2	Vanadium and compounds	7.8 E+1	5.3 E+0	5.3 E-1	3.6 E+1
1929-77-7	Vernam	6.1 E+1		6.1 E+0	3.6 E+0
50471-44-8	Vinclozolin	1.5 E+3		1.5 E+2	9.1 E+1
108-05-4	Vinyl acetate	4.3 E+2		4.3 E+1	4.1 E+1
593-60-2	Vinyl bromide (bromoethene)	1.9 E-1		1.9 E-2	1.0 E-1
75-01-4	Vinyl chloride (child/adult)	7.9 E-2		7.9 E-3	2.0 E-2
81-81-2	Warfarin	1.8 E+1		1.8 E+0	1.1 E+0
1330-20-7	Xylenes	2.7 E+2		2.7 E+1	2.1 E+1
7440-66-6	Zinc	2.3 E+4	2.3 E+4	2.3 E+3	1.1 E+4
1314-84-7	Zinc phosphide	2.3 E+1		2.3 E+0	1.1 E+0
12122-67-7	Zineb	3.1 E+3		3.1 E+2	1.8 E+2

Key:
Screening levels are one-tenth the lower of the residential land use CHHSL, or carcinogenic or non-carcinogenic PRG.
If a California Modified PRG was identified for a compound, the lower of the Cal-modified PRG or standard PRG was used.
For TCE, the California Modified PRG was selected.
Soil screening levels protective of groundwater were developed after the *Designated Level Methodology for Waste Classification and Cleanup Level Determination (RWQCB, 1989)* using an attenuation factor of 100 and a leachability factor of 10 for organics and 100 for inorganics.

[a] = Indicates the California Modified PRG was used to develop the screening value.
CHHSL = California Human Health Screening Level
COPC = Chemical of potential concern
mg/kg = Milligrams per kilogram
RWQCB = Regional Water Quality Control Board

Sources:
United States Environmental Protection Agency (USEPA) Region 9 Preliminary Remediation Goals (PRGs), Version 9, October 2004.
Stanford J. Smucker Ph.D., USEPA Region IX, Technical Support Section (SFD-8-4), 75 Hawthorne Street, San Francisco, CA 94105-3901.
Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, California Environmental Protection Agency, January 2005.

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
30560-19-1	Acephate	7.7 E+0		7.7 E-1	7.7 E-1
75-07-0	Acetaldehyde	1.7 E+0		1.7 E-1	1.7 E-1
34256-82-1	Acetochlor	7.3 E+2		7.3 E+1	7.3 E+1
67-64-1	Acetone	5.5 E+3		5.5 E+2	5.5 E+2
75-86-5	Acetone cyanohydrin	2.9 E+1		2.9 E+0	2.9 E+0
75-05-8	Acetonitrile	1.0 E+2		1.0 E+1	1.0 E+1
107-02-8	Acrolein	4.2 E-2		4.2 E-3	4.2 E-3
79-06-1	Acrylamide	1.5 E-2		1.5 E-3	1.5 E-3
79-10-7	Acrylic acid	1.8 E+4		1.8 E+3	1.8 E+3
107-13-1	Acrylonitrile [a]	1.1 E-2		1.1 E-3	1.1 E-3
15972-60-8	Alachlor	8.4 E-1	4.0 E+0	8.4 E-2	8.4 E-2
1596-84-5	Alar	5.5 E+3		5.5 E+2	5.5 E+2
116-06-3	Aldicarb	3.6 E+1		3.6 E+0	3.6 E+0
1646-88-4	Aldicarb sulfone	3.6 E+1		3.6 E+0	3.6 E+0
309-00-2	Aldrin	4.0 E-3		4.0 E-4	4.0 E-4
74223-64-6	Ally	9.1 E+3		9.1 E+2	9.1 E+2
107-18-6	Allyl alcohol	1.8 E+2		1.8 E+1	1.8 E+1
107-05-1	Allyl chloride	1.0 E+1		1.0 E+0	1.0 E+0
7429-90-5	Aluminum	3.6 E+4	6.0 E+2	6.0 E+1	6.0 E+1
20859-73-8	Aluminum phosphide	1.5 E+1		1.5 E+0	1.5 E+0
67485-29-4	Amdro	1.1 E+1		1.1 E+0	1.1 E+0
834-12-8	Ametryn	3.3 E+2		3.3 E+1	3.3 E+1
1321-12-6	Aminodinitrotoluene	7.3 E+0		7.3 E-1	7.3 E-1
591-27-5	m-Aminophenol	2.6 E+3		2.6 E+2	2.6 E+2
504-24-5	4-Aminopyridine	7.3 E-1		7.3 E-2	7.3 E-2
33089-61-1	Amitraz	9.1 E+1		9.1 E+0	9.1 E+0
7773-06-0	Ammonium sulfamate	7.3 E+3		7.3 E+2	7.3 E+2
62-53-3	Aniline	1.2 E+1		1.2 E+0	1.2 E+0
7440-36-0	Antimony and compounds	1.5 E+1	2.0 E+1	1.5 E+0	1.5 E+0
74115-24-5	Apollo	4.7 E+2		4.7 E+1	4.7 E+1
140-57-8	Aramite	2.7 E+0		2.7 E-1	2.7 E-1
7440-38-2	Arsenic [a]	7.1 E-3	4.0 E-3	4.0 E-4	4.0 E-4
76578-14-8	Assure	3.3 E+2		3.3 E+1	3.3 E+1
3337-71-1	Asulam	1.8 E+3		1.8 E+2	1.8 E+2
1912-24-9	Atrazine	3.0 E-1	1.5 E-1	1.5 E-2	1.5 E-2
71751-41-2	Avermectin B1	1.5 E+1		1.5 E+0	1.5 E+0
103-33-3	Azobenzene	6.1 E-1		6.1 E-2	6.1 E-2
7440-39-3	Barium and compounds	2.6 E+3	2.0 E+3	2.0 E+2	2.0 E+2
114-26-1	Baygon	1.5 E+2		1.5 E+1	1.5 E+1
43121-43-3	Bayleton	1.1 E+3		1.1 E+2	1.1 E+2
68359-37-5	Baythroid	9.1 E+2		9.1 E+1	9.1 E+1
1861-40-1	Benefin	1.1 E+4		1.1 E+3	1.1 E+3
17804-35-2	Benomyl	1.8 E+3		1.8 E+2	1.8 E+2
25057-89-0	Bentazon	1.1 E+3	2.0 E+2	2.0 E+1	2.0 E+1
100-52-7	Benzaldehyde	3.6 E+3		3.6 E+2	3.6 E+2
71-43-2	Benzene	3.5 E-1	1.5 E-1	1.5 E-2	1.5 E-2
92-87-5	Benzidine	2.9 E-4		2.9 E-5	2.9 E-5
65-85-0	Benzoic acid	1.5 E+5		1.5 E+4	1.5 E+4
98-07-7	Benzotrichloride	5.2 E-3		5.2 E-4	5.2 E-4
100-51-6	Benzyl alcohol	1.1 E+4		1.1 E+3	1.1 E+3
100-44-7	Benzyl chloride	6.6 E-2		6.6 E-3	6.6 E-3
7440-41-7	Beryllium and compounds	7.3 E+1	1.0 E+0	1.0 E-1	1.0 E-1
141-66-2	Bidrin	3.6 E+0		3.6 E-1	3.6 E-1
82657-04-3	Biphenthrin (Talstar)	5.5 E+2		5.5 E+1	5.5 E+1
92-52-4	1,1-Biphenyl	3.0 E+2		3.0 E+1	3.0 E+1
111-44-4	Bis(2-chloroethyl)ether	1.0 E-2		1.0 E-3	1.0 E-3
108-60-1	Bis(2-chloroisopropyl)ether	2.7 E-1		2.7 E-2	2.7 E-2
542-88-1	Bis(chloromethyl)ether	5.2 E-5		5.2 E-6	5.2 E-6
108-60-1	Bis(2-chloro-1-methylethyl)ether	2.7 E-1		2.7 E-2	2.7 E-2
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	4.8 E+0	1.2 E+1	4.8 E-1	4.8 E-1
80-05-7	Bisphenol A	1.8 E+3		1.8 E+2	1.8 E+2
7440-42-8	Boron	7.3 E+3		7.3 E+2	7.3 E+2
15541-45-4	Bromate	9.6 E-2		9.6 E-3	9.6 E-3
108-86-1	Bromobenzene	2.0 E+1		2.0 E+0	2.0 E+0
75-27-4	Bromodichloromethane	1.8 E-1		1.8 E-2	1.8 E-2
75-25-2	Bromoform (tribromomethane)	8.5 E+0		8.5 E-1	8.5 E-1

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
74-83-9	Bromomethane (Methyl bromide)	8.7 E+0		8.7 E-1	8.7 E-1
2104-96-3	Bromophos	1.8 E+2		1.8 E+1	1.8 E+1
1689-84-5	Bromoxynil	7.3 E+2		7.3 E+1	7.3 E+1
1689-99-2	Bromoxynil octanoate	7.3 E+2		7.3 E+1	7.3 E+1
106-99-0	1,3-Butadiene [a]	1.9 E-2		1.9 E-3	1.9 E-3
71-36-3	1-Butanol	3.6 E+3		3.6 E+2	3.6 E+2
2008-41-5	Butylate	1.8 E+3		1.8 E+2	1.8 E+2
104-51-8	n-Butylbenzene	2.4 E+2		2.4 E+1	2.4 E+1
135-9-88	sec-Butylbenzene	2.4 E+2		2.4 E+1	2.4 E+1
98-06-6	tert-Butylbenzene	2.4 E+2		2.4 E+1	2.4 E+1
85-68-7	Butyl benzyl phthalate	7.3 E+3		7.3 E+2	7.3 E+2
85-70-1	Butylphthalyl butylglycolate	3.6 E+4		3.6 E+3	3.6 E+3
7440-43-9	Cadmium and compounds	1.8 E+1	4.0 E-2	4.0 E-3	4.0 E-3
105-60-2	Caprolactam	1.8 E+4		1.8 E+3	1.8 E+3
2425-06-1	Captafol	7.8 E+0		7.8 E-1	7.8 E-1
133-06-2	Captan	1.9 E+1		1.9 E+0	1.9 E+0
63-25-2	Carbaryl	3.6 E+3		3.6 E+2	3.6 E+2
86-74-8	Carbazole	3.4 E+0		3.4 E-1	3.4 E-1
1563-66-2	Carbofuran	1.8 E+2	1.7 E+0	1.7 E-1	1.7 E-1
75-15-0	Carbon disulfide	1.0 E+3		1.0 E+2	1.0 E+2
56-23-5	Carbon tetrachloride	1.7 E-1	1.0 E-1	1.0 E-2	1.0 E-2
55285-14-8	Carbosulfan	3.6 E+2		3.6 E+1	3.6 E+1
5234-68-4	Carboxin	3.6 E+3		3.6 E+2	3.6 E+2
133-90-4	Chloramben	5.5 E+2		5.5 E+1	5.5 E+1
118-75-2	Chloranil	1.7 E-1		1.7 E-2	1.7 E-2
12789-03-6	Chlordane (technical)	1.9 E-1	3.0 E-2	3.0 E-3	3.0 E-3
90982-32-4	Chlorimuron-ethyl	7.3 E+2		7.3 E+1	7.3 E+1
79-11-8	Chloroacetic acid	7.3 E+1		7.3 E+0	7.3 E+0
532-27-4	2-Chloroacetophenone	5.2 E-2		5.2 E-3	5.2 E-3
106-47-8	4-Chloroaniline	1.5 E+2		1.5 E+1	1.5 E+1
108-90-7	Chlorobenzene	1.1 E+2	2.0 E+2	1.1 E+1	1.1 E+1
510-15-6	Chlorobenzilate	2.5 E-1		2.5 E-2	2.5 E-2
74-11-3	p-Chlorobenzoic acid	7.3 E+3		7.3 E+2	7.3 E+2
98-56-6	4-Chlorobenzotrifluoride	7.3 E+2		7.3 E+1	7.3 E+1
126-99-8	2-Chloro-1,3-butadiene	1.4 E+1		1.4 E+0	1.4 E+0
109-69-3	1-Chlorobutane	2.4 E+3		2.4 E+2	2.4 E+2
75-68-3	1-Chloro-1,1-difluoroethane (HCFC-142b)	8.7 E+4		8.7 E+3	8.7 E+3
75-45-6	Chlorodifluoromethane	8.5 E+4		8.5 E+3	8.5 E+3
75-00-3	Chloroethane	4.6 E+0		4.6 E-1	4.6 E-1
67-66-3	Chloroform	1.7 E-1		1.7 E-2	1.7 E-2
74-87-3	Chloromethane (methyl chloride)	1.6 E+2		1.6 E+1	1.6 E+1
95-69-2	4-Chloro-2-methylaniline	1.2 E-1		1.2 E-2	1.2 E-2
3165-93-3	4-Chloro-2-methylaniline hydrochloride	1.5 E-1		1.5 E-2	1.5 E-2
91-58-7	beta-Chloronaphthalene	4.9 E+2		4.9 E+1	4.9 E+1
88-73-3	o-Chloronitrobenzene	1.5 E-1		1.5 E-2	1.5 E-2
100-00-5	p-Chloronitrobenzene	1.2 E+0		1.2 E-1	1.2 E-1
95-57-8	2-Chlorophenol	3.0 E+1		3.0 E+0	3.0 E+0
75-29-6	2-Chloropropane	1.7 E+2		1.7 E+1	1.7 E+1
1897-45-6	Chlorothalonil	6.1 E+0		6.1 E-1	6.1 E-1
95-49-8	o-Chlorotoluene	1.2 E+2		1.2 E+1	1.2 E+1
101-21-3	Chlorpropham	7.3 E+3		7.3 E+2	7.3 E+2
2921-88-2	Chlorpyrifos	1.1 E+2		1.1 E+1	1.1 E+1
5598-13-0	Chlorpyrifos-methyl	3.6 E+2		3.6 E+1	3.6 E+1
64902-72-3	Chlorsulfuron	1.8 E+3		1.8 E+2	1.8 E+2
60238-56-4	Chlorthiophos	2.9 E+1		2.9 E+0	2.9 E+0
16065-83-1	Chromium III	5.5 E+4		5.5 E+3	5.5 E+3
18540-29-9	Chromium VI	1.1 E+2		1.1 E+1	1.1 E+1
7440-48-4	Cobalt	7.3 E+2		7.3 E+1	7.3 E+1
7440-50-8	Copper and compounds	1.5 E+3	1.7 E+2	1.7 E+1	1.7 E+1
123-73-9	Crotonaldehyde	5.9 E-3		5.9 E-4	5.9 E-4
98-82-8	Cumene (isopropylbenzene)	6.6 E+2		6.6 E+1	6.6 E+1
21725-46-2	Cyanazine	8.0 E-2		8.0 E-3	8.0 E-3
57-12-5	Cyanide (free)	7.3 E+2	1.5 E+2	1.5 E+1	1.5 E+1
74-90-8	Cyanide (hydrogen)	6.2 E+0		6.2 E-1	6.2 E-1
460-19-5	Cyanogen	2.4 E+2		2.4 E+1	2.4 E+1
506-68-3	Cyanogen bromide	5.5 E+2		5.5 E+1	5.5 E+1

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
506-77-4	Cyanogen chloride	3.0 E+2		3.0 E+1	3.0 E+1
110-82-7	Cyclohexane	1.0 E+4		1.0 E+3	1.0 E+3
108-94-1	Cyclohexanone	1.8 E+5		1.8 E+4	1.8 E+4
108-91-8	Cyclohexylamine	7.3 E+3		7.3 E+2	7.3 E+2
68085-85-8	Cyhalothrin/Karate	1.8 E+2		1.8 E+1	1.8 E+1
52315-07-8	Cypermethrin	3.6 E+2		3.6 E+1	3.6 E+1
66215-27-8	Cyromazine	2.7 E+2		2.7 E+1	2.7 E+1
1861-32-1	Dacthal	3.6 E+2		3.6 E+1	3.6 E+1
75-99-0	Dalapon	1.1 E+3	7.9 E+2	7.9 E+1	7.9 E+1
39515-41-8	Danitol	9.1 E+2		9.1 E+1	9.1 E+1
72-54-8	DDD	2.8 E-1		2.8 E-2	2.8 E-2
72-55-9	DDE	2.0 E-1		2.0 E-2	2.0 E-2
50-29-3	DDT	2.0 E-1		2.0 E-2	2.0 E-2
1163-19-5	Decabromodiphenyl ether	3.6 E+2		3.6 E+1	3.6 E+1
8065-48-3	Demeton	1.5 E+0		1.5 E-1	1.5 E-1
2303-16-4	Diallate	1.1 E+0		1.1 E-1	1.1 E-1
333-41-5	Diazinon	3.3 E+1		3.3 E+0	3.3 E+0
132-64-9	Dibenzofuran	1.2 E+1		1.2 E+0	1.2 E+0
106-37-6	1,4-Dibromobenzene	3.6 E+2		3.6 E+1	3.6 E+1
124-48-1	Dibromochloromethane	1.3 E-1		1.3 E-2	1.3 E-2
96-12-8	1,2-Dibromo-3-chloropropane (DBCP) [a]	1.6 E-3	1.7 E-3	1.6 E-4	1.6 E-4
106-93-4	1,2-Dibromoethane (EDB)	5.6 E-3	1.0 E-2	5.6 E-4	5.6 E-4
84-74-2	Dibutyl phthalate	3.6 E+3		3.6 E+2	3.6 E+2
1918-00-9	Dicamba	1.1 E+3		1.1 E+2	1.1 E+2
95-50-1	1,2-Dichlorobenzene	3.7 E+2	6.0 E+2	3.7 E+1	3.7 E+1
541-73-1	1,3-Dichlorobenzene	1.8 E+2		1.8 E+1	1.8 E+1
106-46-7	1,4-Dichlorobenzene	5.0 E-1	6.0 E+0	5.0 E-2	5.0 E-2
91-94-1	3,3-Dichlorobenzidine	1.5 E-1		1.5 E-2	1.5 E-2
90-98-2	4,4'-Dichlorobenzophenone	1.1 E+3		1.1 E+2	1.1 E+2
764-41-0	1,4-Dichloro-2-butene	1.2 E-3		1.2 E-4	1.2 E-4
75-71-8	Dichlorodifluoromethane	3.9 E+2		3.9 E+1	3.9 E+1
75-34-3	1,1-Dichloroethane [a]	2.0 E+0	3.0 E+0	2.0 E-1	2.0 E-1
107-06-2	1,2-Dichloroethane (EDC)	1.2 E-1	4.0 E-1	1.2 E-2	1.2 E-2
75-35-4	1,1-Dichloroethylene	3.4 E+2	1.0 E+1	1.0 E+0	1.0 E+0
156-59-2	1,2-Dichloroethylene (cis)	6.1 E+1	1.0 E+2	6.1 E+0	6.1 E+0
156-60-5	1,2-Dichloroethylene (trans)	1.2 E+2	6.0 E+1	6.0 E+0	6.0 E+0
120-83-2	2,4-Dichlorophenol	1.1 E+2		1.1 E+1	1.1 E+1
94-82-6	4-(2,4-Dichlorophenoxy)butyric Acid (2,4-DB)	2.9 E+2		2.9 E+1	2.9 E+1
94-75-7	2,4-Dichlorophenoxyacetic Acid (2,4-D)	3.6 E+2	7.0 E+1	7.0 E+0	7.0 E+0
78-87-5	1,2-Dichloropropane	1.6 E-1	5.0 E-1	1.6 E-2	1.6 E-2
142-28-9	1,3-Dichloropropane	1.2 E+2		1.2 E+1	1.2 E+1
542-75-6	1,3-Dichloropropene	4.0 E-1	2.0 E-1	2.0 E-2	2.0 E-2
616-23-9	2,3-Dichloropropanol	1.1 E+2		1.1 E+1	1.1 E+1
62-73-7	Dichlorvos	2.3 E-1		2.3 E-2	2.3 E-2
115-32-2	Dicofol	1.5 E-1		1.5 E-2	1.5 E-2
77-73-6	Dicyclopentadiene	4.2 E-1		4.2 E-2	4.2 E-2
60-57-1	Dieldrin	4.2 E-3		4.2 E-4	4.2 E-4
112-34-5	Diethylene glycol, monobutyl ether	3.6 E+2		3.6 E+1	3.6 E+1
111-90-0	Diethylene glycol, monoethyl ether	2.2 E+3		2.2 E+2	2.2 E+2
617-84-5	Diethylformamide	1.5 E+1		1.5 E+0	1.5 E+0
103-23-1	Di(2-ethylhexyl)adipate	5.6 E+1	2.0 E+2	5.6 E+0	5.6 E+0
84-66-2	Diethyl phthalate	2.9 E+4		2.9 E+3	2.9 E+3
56-53-1	Diethylstilbestrol	1.4 E-5		1.4 E-6	1.4 E-6
43222-48-6	Difenzoquat (Avenge)	2.9 E+3		2.9 E+2	2.9 E+2
35367-38-5	Diflubenzuron	7.3 E+2		7.3 E+1	7.3 E+1
75-37-6	1,1-Difluoroethane	6.9 E+4		6.9 E+3	6.9 E+3
28553-12-0	Diisononyl phthalate	7.3 E+2		7.3 E+1	7.3 E+1
1445-75-6	Diisopropyl methylphosphonate	2.9 E+3		2.9 E+2	2.9 E+2
55290-64-7	Dimethipin	7.3 E+2		7.3 E+1	7.3 E+1
60-51-5	Dimethoate	7.3 E+0		7.3 E-1	7.3 E-1
119-90-4	3,3'-Dimethoxybenzidine	4.8 E+0		4.8 E-1	4.8 E-1
124-40-3	Dimethylamine	3.5 E-2		3.5 E-3	3.5 E-3
121-69-7	N-N-Dimethylaniline	7.3 E+1		7.3 E+0	7.3 E+0
95-68-1	2,4-Dimethylaniline	9.0 E-2		9.0 E-3	9.0 E-3
21436-96-4	2,4-Dimethylaniline hydrochloride	1.2 E-1		1.2 E-2	1.2 E-2
119-93-7	3,3'-Dimethylbenzidine	2.9 E-2		2.9 E-3	2.9 E-3

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
68-12-2	N,N-Dimethylformamide	3.6 E+3		3.6 E+2	3.6 E+2
122-09-8	Dimethylphenethylamine	3.6 E+1		3.6 E+0	3.6 E+0
105-67-9	2,4-Dimethylphenol	7.3 E+2		7.3 E+1	7.3 E+1
576-26-1	2,6-Dimethylphenol	2.2 E+1		2.2 E+0	2.2 E+0
95-65-8	3,4-Dimethylphenol	3.6 E+1		3.6 E+0	3.6 E+0
131-11-3	Dimethyl phthalate	3.6 E+5		3.6 E+4	3.6 E+4
120-61-6	Dimethyl terephthalate	3.6 E+3		3.6 E+2	3.6 E+2
534-52-1	4,6-Dinitro-o-cresol	3.6 E+0		3.6 E-1	3.6 E-1
131-89-5	4,6-Dinitro-o-cyclohexyl phenol	7.3 E+1		7.3 E+0	7.3 E+0
528-29-0	1,2-Dinitrobenzene	3.6 E+0		3.6 E-1	3.6 E-1
99-65-0	1,3-Dinitrobenzene	3.6 E+0		3.6 E-1	3.6 E-1
100-25-4	1,4-Dinitrobenzene	3.6 E+0		3.6 E-1	3.6 E-1
51-28-5	2,4-Dinitrophenol	7.3 E+1		7.3 E+0	7.3 E+0
25321-14-6	Dinitrotoluene mixture	9.9 E-2		9.9 E-3	9.9 E-3
121-14-2	2,4-Dinitrotoluene (also see Dinitrotoluene mixture)	7.3 E+1		7.3 E+0	7.3 E+0
606-20-2	2,6-Dinitrotoluene (also see Dinitrotoluene mixture)	3.6 E+1		3.6 E+0	3.6 E+0
88-85-7	Dinoseb	3.6 E+1	1.4 E+1	1.4 E+0	1.4 E+0
117-84-0	di-n-Octyl phthalate	1.5 E+3		1.5 E+2	1.5 E+2
123-91-1	1,4-Dioxane	6.1 E+0		6.1 E-1	6.1 E-1
1746-01-6	Dioxin (2,3,7,8-TCDD)	4.5 E-7		4.5 E-8	4.5 E-8
957-51-7	Diphenamid	1.1 E+3		1.1 E+2	1.1 E+2
122-39-4	Diphenylamine	9.1 E+2		9.1 E+1	9.1 E+1
74-31-7	N,N-Diphenyl-1,4 benzenediamine (DPPD)	1.1 E+1		1.1 E+0	1.1 E+0
122-66-7	1,2-Diphenylhydrazine	8.4 E-2		8.4 E-3	8.4 E-3
127-63-9	Diphenyl sulfone	1.1 E+2		1.1 E+1	1.1 E+1
85-00-7	Diquat	8.0 E+1	1.5 E+1	1.5 E+0	1.5 E+0
1937-37-7	Direct black 38	7.8 E-3		7.8 E-4	7.8 E-4
2602-46-2	Direct blue 6	8.3 E-3		8.3 E-4	8.3 E-4
16071-86-6	Direct brown 95	7.2 E-3		7.2 E-4	7.2 E-4
298-04-4	Disulfoton	1.5 E+0		1.5 E-1	1.5 E-1
505-29-3	1,4-Dithiane	3.6 E+2		3.6 E+1	3.6 E+1
330-54-1	Diuron	7.3 E+1		7.3 E+0	7.3 E+0
2439-10-3	Dodine	1.5 E+2		1.5 E+1	1.5 E+1
7429-91-6	Dysprosium	3.6 E+3		3.6 E+2	3.6 E+2
115-29-7	Endosulfan	2.2 E+2		2.2 E+1	2.2 E+1
145-73-3	Endothall	7.3 E+2	5.8 E+2	5.8 E+1	5.8 E+1
72-20-8	Endrin	1.1 E+1	1.8 E+0	1.8 E-1	1.8 E-1
106-89-8	Epichlorohydrin [a]	1.4 E-1		1.4 E-2	1.4 E-2
106-88-7	1,2-Epoxybutane	2.1 E+2		2.1 E+1	2.1 E+1
759-94-4	EPTC (S-Ethyl dipropylthiocarbamate)	9.1 E+2		9.1 E+1	9.1 E+1
16672-87-0	Ethephon (2-chloroethyl phosphonic acid)	1.8 E+2		1.8 E+1	1.8 E+1
563-12-2	Ethion	1.8 E+1		1.8 E+0	1.8 E+0
110-80-5	2-Ethoxyethanol	1.5 E+4		1.5 E+3	1.5 E+3
111-15-9	2-Ethoxyethanol acetate	1.1 E+4		1.1 E+3	1.1 E+3
141-78-6	Ethyl acetate	5.5 E+3		5.5 E+2	5.5 E+2
140-88-5	Ethyl acrylate	2.3 E-1		2.3 E-2	2.3 E-2
100-41-4	Ethylbenzene	1.3 E+3	3.0 E+2	3.0 E+1	3.0 E+1
75-00-3	Ethyl chloride	4.6 E+0		4.6 E-1	4.6 E-1
109-78-4	Ethylene cyanohydrin	1.1 E+4		1.1 E+3	1.1 E+3
107-15-3	Ethylene diamine	3.3 E+3		3.3 E+2	3.3 E+2
107-21-1	Ethylene glycol	7.3 E+4		7.3 E+3	7.3 E+3
111-76-2	Ethylene glycol, monobutyl ether	1.8 E+4		1.8 E+3	1.8 E+3
75-21-8	Ethylene oxide	2.4 E-2		2.4 E-3	2.4 E-3
96-45-7	Ethylene thiourea (ETU)	6.1 E-1		6.1 E-2	6.1 E-2
60-29-7	Ethyl ether	1.2 E+3		1.2 E+2	1.2 E+2
97-63-2	Ethyl methacrylate	5.5 E+2		5.5 E+1	5.5 E+1
2104-64-5	Ethyl p-nitrophenyl phenylphosphorothioate	3.6 E-1		3.6 E-2	3.6 E-2
84-72-0	Ethylphthalyl ethyl glycolate	1.1 E+5		1.1 E+4	1.1 E+4
101200-48-0	Express	2.9 E+2		2.9 E+1	2.9 E+1
22224-92-6	Fenamiphos	9.1 E+0		9.1 E-1	9.1 E-1
2164-17-2	Fluometuron	4.7 E+2		4.7 E+1	4.7 E+1
16984-48-8	Fluorine (soluble fluoride)	2.2 E+3	1.0 E+3	1.0 E+2	1.0 E+2
59756-60-4	Fluoridone	2.9 E+3		2.9 E+2	2.9 E+2
56425-91-3	Flurprimidol	7.3 E+2		7.3 E+1	7.3 E+1
66332-96-5	Flutolanil	2.2 E+3		2.2 E+2	2.2 E+2
69409-94-5	Fluvalinate	3.6 E+2		3.6 E+1	3.6 E+1

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
133-07-3	Folpet	1.9 E+1		1.9 E+0	1.9 E+0
72178-02-0	Fomesafen	3.5 E-1		3.5 E-2	3.5 E-2
944-22-9	Fonofos	7.3 E+1		7.3 E+0	7.3 E+0
50-00-0	Formaldehyde	5.5 E+3		5.5 E+2	5.5 E+2
64-18-6	Formic Acid	7.3 E+4		7.3 E+3	7.3 E+3
39148-24-8	Fosetyl-al	1.1 E+5		1.1 E+4	1.1 E+4
76-13-1	Freon 113	5.9 E+4	4.0 E+3	4.0 E+2	4.0 E+2
110-00-9	Furan	6.1 E+0		6.1 E-1	6.1 E-1
67-45-8	Furazolidone	1.8 E-2		1.8 E-3	1.8 E-3
98-01-1	Furfural	1.1 E+2		1.1 E+1	1.1 E+1
531-82-8	Furium	1.3 E-3		1.3 E-4	1.3 E-4
60568-05-0	Furmecyclox	2.2 E+0		2.2 E-1	2.2 E-1
77182-82-2	Glufosinate-ammonium	1.5 E+1		1.5 E+0	1.5 E+0
765-34-4	Glycidaldehyde	1.5 E+1		1.5 E+0	1.5 E+0
1071-83-6	Glyphosate	3.6 E+3	9.0 E+2	9.0 E+1	9.0 E+1
69806-40-2	Haloxyfop-methyl	1.8 E+0		1.8 E-1	1.8 E-1
79277-27-3	Harmony	4.7 E+2		4.7 E+1	4.7 E+1
76-44-8	Heptachlor	1.5 E-2	8.0 E-3	8.0 E-4	8.0 E-4
1024-57-3	Heptachlor epoxide	7.4 E-3	6.0 E-3	6.0 E-4	6.0 E-4
87-82-1	Hexabromobenzene	7.3 E+1		7.3 E+0	7.3 E+0
118-74-1	Hexachlorobenzene	4.2 E-2	3.0 E-2	3.0 E-3	3.0 E-3
87-68-3	Hexachlorobutadiene	8.6 E-1		8.6 E-2	8.6 E-2
319-84-6	HCH (alpha)	1.1 E-2		1.1 E-3	1.1 E-3
319-85-7	HCH (beta)	3.7 E-2		3.7 E-3	3.7 E-3
58-89-9	HCH (gamma) Lindane	5.2 E-2	3.2 E-2	3.2 E-3	3.2 E-3
608-73-1	HCH-technical	3.7 E-2		3.7 E-3	3.7 E-3
77-47-4	Hexachlorocyclopentadiene	2.2 E+2	5.0 E+1	5.0 E+0	5.0 E+0
67-72-1	Hexachloroethane	4.8 E+0		4.8 E-1	4.8 E-1
70-30-4	Hexachlorophene	1.1 E+1		1.1 E+0	1.1 E+0
121-82-4	Hexahydro-1,3,5-trinitro-1,3,5-triazine	6.1 E-1		6.1 E-2	6.1 E-2
822-06-0	1,6-Hexamethylene diisocyanate	1.0 E-1		1.0 E-2	1.0 E-2
110-54-3	n-Hexane	4.2 E+2		4.2 E+1	4.2 E+1
51235-04-2	Hexazinone	1.2 E+3		1.2 E+2	1.2 E+2
2691-41-0	HMX	1.8 E+3		1.8 E+2	1.8 E+2
302-01-2	Hydrazine, hydrazine sulfate	2.2 E-2		2.2 E-3	2.2 E-3
60-34-4	Hydrazine, monomethyl	2.2 E-2		2.2 E-3	2.2 E-3
57-14-7	Hydrazine, dimethyl	2.2 E-2		2.2 E-3	2.2 E-3
74-90-8	Hydrogen cyanide	6.2 E+0		6.2 E-1	6.2 E-1
7783-06-4	Hydrogen sulfide	1.1 E+2		1.1 E+1	1.1 E+1
123-31-9	p-Hydroquinone	1.2 E+0		1.2 E-1	1.2 E-1
35554-44-0	Imazalil	4.7 E+2		4.7 E+1	4.7 E+1
81335-37-7	Imazaquin	9.1 E+3		9.1 E+2	9.1 E+2
36734-19-7	Iprodione	1.5 E+3		1.5 E+2	1.5 E+2
7439-89-6	Iron	1.1 E+4		1.1 E+3	1.1 E+3
78-83-1	Isobutanol	1.8 E+3		1.8 E+2	1.8 E+2
78-59-1	Isophorone	7.1 E+1		7.1 E+0	7.1 E+0
33820-53-0	Isopropalin	5.5 E+2		5.5 E+1	5.5 E+1
1832-54-8	Isopropyl methyl phosphonic acid	3.6 E+3		3.6 E+2	3.6 E+2
82558-50-7	Isoxaben	1.8 E+3		1.8 E+2	1.8 E+2
143-50-0	Kepone	8.4 E-3		8.4 E-4	8.4 E-4
77501-63-4	Lactofen	7.3 E+1		7.3 E+0	7.3 E+0
7439-92-1	Lead	0.0 E+0	2.0 E+0	0.0 E+0	0.0 E+0
78-00-2	Lead (tetraethyl)	3.6 E-3		3.6 E-4	3.6 E-4
330-55-2	Linuron	7.3 E+1		7.3 E+0	7.3 E+0
7439-93-2	Lithium	7.3 E+2		7.3 E+1	7.3 E+1
83055-99-6	Londax	7.3 E+3		7.3 E+2	7.3 E+2
121-75-5	Malathion	7.3 E+2		7.3 E+1	7.3 E+1
108-31-6	Maleic anhydride	3.6 E+3		3.6 E+2	3.6 E+2
123-33-1	Maleic hydrazide	3.0 E+3		3.0 E+2	3.0 E+2
109-77-3	Malononitrile	3.6 E+0		3.6 E-1	3.6 E-1
8018-01-7	Mancozeb	1.1 E+3		1.1 E+2	1.1 E+2
12427-38-2	Maneb	1.1 E+0		1.1 E-1	1.1 E-1
7439-96-5	Manganese and compounds	8.8 E+2		8.8 E+1	8.8 E+1
950-10-7	Mephosfolan	3.3 E+0		3.3 E-1	3.3 E-1
24307-26-4	Mepiquat chloride	1.1 E+3		1.1 E+2	1.1 E+2
149-30-4	2-Mercaptobenzothiazole	2.3 E+0		2.3 E-1	2.3 E-1

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
7487-94-7	Mercury and compounds	1.1 E+1	1.2 E+0	1.2 E-1	1.2 E-1
22967-92-6	Mercury (methyl)	3.6 E+0		3.6 E-1	3.6 E-1
150-50-5	Merphos	1.1 E+0		1.1 E-1	1.1 E-1
78-48-8	Merphos oxide	1.1 E+0		1.1 E-1	1.1 E-1
57837-19-1	Metalaxyl	2.2 E+3		2.2 E+2	2.2 E+2
126-98-7	Methacrylonitrile	1.0 E+0		1.0 E-1	1.0 E-1
10265-92-6	Methamidophos	1.8 E+0		1.8 E-1	1.8 E-1
67-56-1	Methanol	1.8 E+4		1.8 E+3	1.8 E+3
950-37-8	Methidathion	3.6 E+1		3.6 E+0	3.6 E+0
16752-77-5	Methomyl	1.5 E+2		1.5 E+1	1.5 E+1
72-43-5	Methoxychlor	1.8 E+2	3.0 E+1	3.0 E+0	3.0 E+0
109-86-4	2-Methoxyethanol	3.6 E+1		3.6 E+0	3.6 E+0
110-49-6	2-Methoxyethanol acetate	7.3 E+1		7.3 E+0	7.3 E+0
99-59-2	2-Methoxy-5-nitroaniline	1.5 E+0		1.5 E-1	1.5 E-1
79-20-9	Methyl acetate	6.1 E+3		6.1 E+2	6.1 E+2
96-33-3	Methyl acrylate	1.8 E+2		1.8 E+1	1.8 E+1
95-53-4	2-Methylaniline (o-toluidine)	2.8 E-1		2.8 E-2	2.8 E-2
636-21-5	2-Methylaniline hydrochloride	3.7 E-1		3.7 E-2	3.7 E-2
94-74-6	2-Methyl-4-chlorophenoxyacetic acid	1.8 E+1		1.8 E+0	1.8 E+0
94-81-5	4-(2-Methyl-4-chlorophenoxy) butyric acid	3.6 E+2		3.6 E+1	3.6 E+1
93-65-2	2-(2-Methyl-4-chlorophenoxy) propionic acid	3.6 E+1		3.6 E+0	3.6 E+0
16484-77-8	2-(2-Methyl-1,4-chlorophenoxy) propionic acid	3.6 E+1		3.6 E+0	3.6 E+0
108-87-2	Methylcyclohexane	5.2 E+3		5.2 E+2	5.2 E+2
101-77-9	4,4'-Methylenebisbenzeneamine	2.7 E-1		2.7 E-2	2.7 E-2
101-14-4	4,4'-Methylene bis(2-chloroaniline)	5.2 E-1		5.2 E-2	5.2 E-2
101-61-1	4,4'-Methylene bis(N,N'-dimethyl)aniline	1.5 E+0		1.5 E-1	1.5 E-1
74-95-3	Methylene bromide	6.1 E+1		6.1 E+0	6.1 E+0
75-09-2	Methylene chloride	4.3 E+0	4.0 E+0	4.0 E-1	4.0 E-1
101-68-8	4,4'-Methylene diphenyl diisocyanate	6.2 E+0		6.2 E-1	6.2 E-1
78-93-3	Methyl ethyl ketone (2-Butanone)	7.0 E+3		7.0 E+2	7.0 E+2
108-10-1	Methyl isobutyl ketone	2.0 E+3		2.0 E+2	2.0 E+2
74-93-1	Methyl Mercaptan	2.1 E+1		2.1 E+0	2.1 E+0
80-62-6	Methyl methacrylate	1.4 E+3		1.4 E+2	1.4 E+2
99-55-8	2-Methyl-5-nitroaniline	2.0 E+0		2.0 E-1	2.0 E-1
298-00-0	Methyl parathion	9.1 E+0		9.1 E-1	9.1 E-1
95-48-7	2-Methylphenol	1.8 E+3		1.8 E+2	1.8 E+2
108-39-4	3-Methylphenol	1.8 E+3		1.8 E+2	1.8 E+2
106-44-5	4-Methylphenol	1.8 E+2		1.8 E+1	1.8 E+1
993-13-5	Methyl phosphonic acid	7.3 E+2		7.3 E+1	7.3 E+1
25013-15-4	Methyl styrene (mixture)	6.0 E+1		6.0 E+0	6.0 E+0
98-83-9	Methyl styrene (alpha)	4.3 E+2		4.3 E+1	4.3 E+1
1634-04-4	Methyl tertbutyl ether (MTBE)	1.1 E+1	1.3 E+1	1.1 E+0	1.1 E+0
51218-45-2	Metolaclor (Dual)	5.5 E+3		5.5 E+2	5.5 E+2
21087-64-9	Metribuzin	9.1 E+2		9.1 E+1	9.1 E+1
2385-85-5	Mirex	3.7 E-2		3.7 E-3	3.7 E-3
2212-67-1	Molinate	7.3 E+1		7.3 E+0	7.3 E+0
7439-98-7	Molybdenum	1.8 E+2		1.8 E+1	1.8 E+1
10599-90-3	Monochloramine	3.6 E+3		3.6 E+2	3.6 E+2
300-76-5	Naled	7.3 E+1		7.3 E+0	7.3 E+0
15299-99-7	Napropamide	3.6 E+3		3.6 E+2	3.6 E+2
7440-02-0	Nickel (soluble salts)	7.3 E+2	1.2 E+1	1.2 E+0	1.2 E+0
14797-55-8	Nitrate	1.0 E+4	1.0 E+4	1.0 E+3	1.0 E+3
14797-65-0	Nitrite	1.0 E+3	1.0 E+3	1.0 E+2	1.0 E+2
88-74-4	2-Nitroaniline	1.1 E+2		1.1 E+1	1.1 E+1
99-09-2	3-Nitroaniline	3.2 E+0		3.2 E-1	3.2 E-1
100-01-6	4-Nitroaniline	3.2 E+0		3.2 E-1	3.2 E-1
98-95-3	Nitrobenzene	3.4 E+0		3.4 E-1	3.4 E-1
67-20-9	Nitrofurantoin	2.6 E+3		2.6 E+2	2.6 E+2
59-87-0	Nitrofurazone	4.5 E-2		4.5 E-3	4.5 E-3
55-63-0	Nitroglycerin	4.8 E+0		4.8 E-1	4.8 E-1
556-88-7	Nitroguanidine	3.6 E+3		3.6 E+2	3.6 E+2
79-46-9	2-Nitropropane	1.2 E-3		1.2 E-4	1.2 E-4
924-16-3	N-Nitrosodi-n-butylamine	2.0 E-3		2.0 E-4	2.0 E-4
1116-54-7	N-Nitrosodiethanolamine	2.4 E-2		2.4 E-3	2.4 E-3
55-18-5	N-Nitrosodiethylamine	4.5 E-4		4.5 E-5	4.5 E-5
62-75-9	N-Nitrosodimethylamine	1.3 E-3	3.0 E-3	1.3 E-4	1.3 E-4

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
86-30-6	N-Nitrosodiphenylamine	1.4 E+1		1.4 E+0	1.4 E+0
621-64-7	N-Nitroso di-n-propylamine	9.6 E-3		9.6 E-4	9.6 E-4
10595-95-6	N-Nitroso-N-methylethylamine	3.1 E-3		3.1 E-4	3.1 E-4
930-55-2	N-Nitrosopyrrolidine	3.2 E-2		3.2 E-3	3.2 E-3
99-08-1	m-Nitrotoluene	1.2 E+2		1.2 E+1	1.2 E+1
88-72-2	o-Nitrotoluene	4.9 E-2		4.9 E-3	4.9 E-3
99-99-0	p-Nitrotoluene	6.6 E-1		6.6 E-2	6.6 E-2
27314-13-2	Norflurazon	1.5 E+3		1.5 E+2	1.5 E+2
85509-19-9	NuStar	2.6 E+1		2.6 E+0	2.6 E+0
32536-52-0	Octabromodiphenyl ether	1.1 E+2		1.1 E+1	1.1 E+1
152-16-9	Octamethylpyrophosphoramide	7.3 E+1		7.3 E+0	7.3 E+0
19044-88-3	Oryzalin	1.8 E+3		1.8 E+2	1.8 E+2
19666-30-9	Oxadiazon	1.8 E+2		1.8 E+1	1.8 E+1
23135-22-0	Oxamyl	9.1 E+2	5.0 E+1	5.0 E+0	5.0 E+0
42874-03-3	Oxyfluorfen	1.1 E+2		1.1 E+1	1.1 E+1
76738-62-0	Paclobutrazol	4.7 E+2		4.7 E+1	4.7 E+1
4685-14-7	Paraquat	1.6 E+2		1.6 E+1	1.6 E+1
56-38-2	Parathion	2.2 E+2		2.2 E+1	2.2 E+1
1114-71-2	Pebulate	1.8 E+3		1.8 E+2	1.8 E+2
40487-42-1	Pendimethalin	1.5 E+3		1.5 E+2	1.5 E+2
87-84-3	Pentabromo-6-chloro cyclohexane	2.9 E+0		2.9 E-1	2.9 E-1
32534-81-9	Pentabromodiphenyl ether	7.3 E+1		7.3 E+0	7.3 E+0
608-93-5	Pentachlorobenzene	2.9 E+1		2.9 E+0	2.9 E+0
82-68-8	Pentachloronitrobenzene	2.6 E-1		2.6 E-2	2.6 E-2
87-86-5	Pentachlorophenol	5.6 E-1	4.0 E-1	4.0 E-2	4.0 E-2
7601-90-3	Perchlorate	3.6 E+0	6.0 E+0	3.6 E-1	3.6 E-1
52645-53-1	Permethrin	1.8 E+3		1.8 E+2	1.8 E+2
13684-63-4	Phenmedipham	9.1 E+3		9.1 E+2	9.1 E+2
108-95-2	Phenol	1.1 E+4		1.1 E+3	1.1 E+3
92-84-2	Phenothiazine	7.3 E+1		7.3 E+0	7.3 E+0
108-45-2	m-Phenylenediamine	2.2 E+2		2.2 E+1	2.2 E+1
95-54-5	o-Phenylenediamine	1.4 E+0		1.4 E-1	1.4 E-1
106-50-3	p-Phenylenediamine	6.9 E+3		6.9 E+2	6.9 E+2
62-38-4	Phenylmercuric acetate	2.9 E+0		2.9 E-1	2.9 E-1
90-43-7	2-Phenylphenol	3.5 E+1		3.5 E+0	3.5 E+0
298-02-2	Phorate	7.3 E+0		7.3 E-1	7.3 E-1
732-11-6	Phosmet	7.3 E+2		7.3 E+1	7.3 E+1
7803-51-2	Phosphine	1.1 E+1		1.1 E+0	1.1 E+0
7723-14-0	Phosphorus (white)	7.3 E-1		7.3 E-2	7.3 E-2
100-21-0	p-Phthalic acid	3.6 E+4		3.6 E+3	3.6 E+3
85-44-9	Phthalic anhydride	7.3 E+4		7.3 E+3	7.3 E+3
1918-02-1	Picloram	2.6 E+3	5.0 E+2	5.0 E+1	5.0 E+1
29232-93-7	Pirimiphos-methyl	3.6 E+2		3.6 E+1	3.6 E+1
	Polybrominated biphenyls	7.6 E-3		7.6 E-4	7.6 E-4
12674-11-2	PCBs (unspeciated mixture, low risk)	9.6 E-1	9.0 E-2	9.0 E-3	9.0 E-3
11097-69-1	PCBs (unspeciated mixture, high risk)	3.4 E-2	9.0 E-2	3.4 E-3	3.4 E-3
61788-33-8	Polychlorinated terphenyls	1.5 E-2		1.5 E-3	1.5 E-3
83-32-9	Acenaphthene	3.7 E+2		3.7 E+1	3.7 E+1
120-12-7	Anthracene	1.8 E+3		1.8 E+2	1.8 E+2
56-55-3	Benz[a]anthracene	9.2 E-2		9.2 E-3	9.2 E-3
205-99-2	Benzo[b]fluoranthene	9.2 E-2		9.2 E-3	9.2 E-3
207-08-9	Benzo[k]fluoranthene [a]	5.6 E-2		5.6 E-3	5.6 E-3
50-32-8	Benzo[a]pyrene	9.2 E-3	4.0 E-3	4.0 E-4	4.0 E-4
218-01-9	Chrysene [a]	5.6 E-1		5.6 E-2	5.6 E-2
53-70-3	Dibenz[ah]anthracene	9.2 E-3		9.2 E-4	9.2 E-4
206-44-0	Fluoranthene	1.5 E+3		1.5 E+2	1.5 E+2
86-73-7	Fluorene	2.4 E+2		2.4 E+1	2.4 E+1
193-39-5	Indeno[1,2,3-cd]pyrene	9.2 E-2		9.2 E-3	9.2 E-3
91-20-3	Naphthalene [a]	9.3 E-2		9.3 E-3	9.3 E-3
129-00-0	Pyrene	1.8 E+2		1.8 E+1	1.8 E+1
67747-09-5	Prochloraz	4.5 E-1		4.5 E-2	4.5 E-2
26399-36-0	Profluralin	2.2 E+2		2.2 E+1	2.2 E+1
1610-18-0	Prometon	5.5 E+2		5.5 E+1	5.5 E+1
7287-19-6	Prometryn	1.5 E+2		1.5 E+1	1.5 E+1
23950-58-5	Pronamide	2.7 E+3		2.7 E+2	2.7 E+2
1918-16-7	Propachlor	4.7 E+2		4.7 E+1	4.7 E+1

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
709-98-8	Propanil	1.8 E+2		1.8 E+1	1.8 E+1
2312-35-8	Propargite	7.3 E+2		7.3 E+1	7.3 E+1
107-19-7	Propargyl alcohol	7.3 E+1		7.3 E+0	7.3 E+0
139-40-2	Propazine	7.3 E+2		7.3 E+1	7.3 E+1
122-42-9	Propham	7.3 E+2		7.3 E+1	7.3 E+1
60207-90-1	Propiconazole	4.7 E+2		4.7 E+1	4.7 E+1
103-65-1	n-Propylbenzene	2.4 E+2		2.4 E+1	2.4 E+1
57-55-6	Propylene glycol	1.8 E+4		1.8 E+3	1.8 E+3
52125-53-8	Propylene glycol, monoethyl ether	2.6 E+4		2.6 E+3	2.6 E+3
107-98-2	Propylene glycol, monomethyl ether	2.6 E+4		2.6 E+3	2.6 E+3
75-56-9	Propylene oxide	2.2 E-1		2.2 E-2	2.2 E-2
81335-77-5	Pursuit	9.1 E+3		9.1 E+2	9.1 E+2
51630-58-1	Pydrin	9.1 E+2		9.1 E+1	9.1 E+1
110-86-1	Pyridine	3.6 E+1		3.6 E+0	3.6 E+0
13593-03-8	Quinalphos	1.8 E+1		1.8 E+0	1.8 E+0
91-22-5	Quinoline	2.2 E-2		2.2 E-3	2.2 E-3
121-82-4	RDX (Cyclonite)	6.1 E-1		6.1 E-2	6.1 E-2
10453-86-8	Resmethrin	1.1 E+3		1.1 E+2	1.1 E+2
299-84-3	Ronnel	1.8 E+3		1.8 E+2	1.8 E+2
83-79-4	Rotenone	1.5 E+2		1.5 E+1	1.5 E+1
78587-05-0	Savey	9.1 E+2		9.1 E+1	9.1 E+1
7783-00-8	Selenious Acid	1.8 E+2		1.8 E+1	1.8 E+1
7782-49-2	Selenium	1.8 E+2		1.8 E+1	1.8 E+1
630-10-4	Selenourea	1.8 E+2		1.8 E+1	1.8 E+1
74051-80-2	Sethoxydim	3.3 E+3		3.3 E+2	3.3 E+2
7440-22-4	Silver and compounds	1.8 E+2		1.8 E+1	1.8 E+1
122-34-9	Simazine	5.6 E-1	4.0 E+0	5.6 E-2	5.6 E-2
148-18-5	Sodium diethyldithiocarbamate	2.5 E-1		2.5 E-2	2.5 E-2
62-74-8	Sodium fluoroacetate	7.3 E-1		7.3 E-2	7.3 E-2
13718-26-8	Sodium metavanadate	3.6 E+1		3.6 E+0	3.6 E+0
7440-24-6	Strontium, stable	2.2 E+4		2.2 E+3	2.2 E+3
57-24-9	Strychnine	1.1 E+1		1.1 E+0	1.1 E+0
100-42-5	Styrene	1.6 E+3		1.6 E+2	1.6 E+2
80-07-9	1,1'-Sulfonylbis (4-chlorobenzene)	1.8 E+2		1.8 E+1	1.8 E+1
88671-89-0	Systhane	9.1 E+2		9.1 E+1	9.1 E+1
1746-01-6	2,3,7,8-TCDD (dioxin)	4.5 E-7	1.0 E-6	4.5 E-8	4.5 E-8
34014-18-1	Tebuthiuron	2.6 E+3		2.6 E+2	2.6 E+2
3383-96-8	Temephos	7.3 E+2		7.3 E+1	7.3 E+1
5902-51-2	Terbacil	4.7 E+2		4.7 E+1	4.7 E+1
13071-79-9	Terbufos	9.1 E-1		9.1 E-2	9.1 E-2
886-50-0	Terbutryn	3.6 E+1		3.6 E+0	3.6 E+0
95-94-3	1,2,4,5-Tetrachlorobenzene	1.1 E+1		1.1 E+0	1.1 E+0
630-20-6	1,1,1,2-Tetrachloroethane	4.3 E-1		4.3 E-2	4.3 E-2
79-34-5	1,1,2,2-Tetrachloroethane	5.5 E-2	1.0 E-1	5.5 E-3	5.5 E-3
127-18-4	Tetrachloroethylene (PCE)	1.0 E-1	6.0 E-2	6.0 E-3	6.0 E-3
58-90-2	2,3,4,6-Tetrachlorophenol	1.1 E+3		1.1 E+2	1.1 E+2
5216-25-1	p,a,a,a-Tetrachlorotoluene	3.4 E-3		3.4 E-4	3.4 E-4
961-11-5	Tetrachlorovinphos	2.8 E+0		2.8 E-1	2.8 E-1
3689-24-5	Tetraethyldithiopyrophosphate	1.8 E+1		1.8 E+0	1.8 E+0
109-99-9	Tetrahydrofuran	1.6 E+0		1.6 E-1	1.6 E-1
7440-28-0	Thallium and compounds	2.4 E+0	1.0 E-1	1.0 E-2	1.0 E-2
28249-77-6	Thiobencarb	3.6 E+2	7.0 E+1	7.0 E+0	7.0 E+0
N/A	Thiocyanate	1.8 E+3		1.8 E+2	1.8 E+2
39196-18-4	Thiofanox	1.1 E+1		1.1 E+0	1.1 E+0
23564-05-8	Thiophanate-methyl	2.9 E+3		2.9 E+2	2.9 E+2
137-26-8	Thiram	1.8 E+2		1.8 E+1	1.8 E+1
7440-31-5	Tin (inorganic, also see tributyltin oxide)	2.2 E+4		2.2 E+3	2.2 E+3
7440-32-6	Titanium	1.5 E+5		1.5 E+4	1.5 E+4
108-88-3	Toluene	7.2 E+2	1.5 E+2	1.5 E+1	1.5 E+1
95-80-7	Toluene-2,4-diamine	2.1 E-2		2.1 E-3	2.1 E-3
95-70-5	Toluene-2,5-diamine	2.2 E+4		2.2 E+3	2.2 E+3
823-40-5	Toluene-2,6-diamine	7.3 E+3		7.3 E+2	7.3 E+2
106-49-0	p-Toluidine	3.5 E-1		3.5 E-2	3.5 E-2
8001-35-2	Toxaphene	6.1 E-2	3.0 E-2	3.0 E-3	3.0 E-3
66841-25-6	Tralomethrin	2.7 E+2		2.7 E+1	2.7 E+1
2303-17-5	Triallate	4.7 E+2		4.7 E+1	4.7 E+1

Table 4.3-3 Groundwater and Surface Water Human Health COPC Screening Levels
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

CAS No.	Chemical	Tap Water PRG (µg/L)	OEHHA Public Health Goal (µg/L)	Direct Ground-water Exposure Human Health Screening Level (µg/L)	Human Health Screening Level Including Vapor Intrusion (µg/L)
82097-50-5	Triasulfuron	3.6 E+2		3.6 E+1	3.6 E+1
615-54-3	1,2,4-Tribromobenzene	1.8 E+2		1.8 E+1	1.8 E+1
126-73-8	Tributyl phosphate	7.3 E+0		7.3 E-1	7.3 E-1
56-35-9	Tributyltin oxide (TBTO)	1.1 E+1		1.1 E+0	1.1 E+0
634-93-5	2,4,6-Trichloroaniline	2.0 E+0		2.0 E-1	2.0 E-1
33663-50-2	2,4,6-Trichloroaniline hydrochloride	2.3 E+0		2.3 E-1	2.3 E-1
120-82-1	1,2,4-Trichlorobenzene	7.2 E+0	5.0 E+0	5.0 E-1	5.0 E-1
71-55-6	1,1,1-Trichloroethane	3.2 E+3	1.0 E+3	1.0 E+2	1.0 E+2
79-00-5	1,1,2-Trichloroethane	2.0 E-1	3.0 E-1	2.0 E-2	2.0 E-2
79-01-6	Trichloroethylene (TCE)	2.8 E-2	8.0 E-1	2.8 E-3	2.8 E-3
75-69-4	Trichlorofluoromethane	1.3 E+3	7.0 E+2	7.0 E+1	7.0 E+1
95-95-4	2,4,5-Trichlorophenol	3.6 E+3		3.6 E+2	3.6 E+2
88-06-2	2,4,6-Trichlorophenol [a]	9.6 E-1		9.6 E-2	9.6 E-2
93-76-5	2,4,5-Trichlorophenoxyacetic Acid	3.6 E+2		3.6 E+1	3.6 E+1
93-72-1	2-(2,4,5-Trichlorophenoxy) propionic acid	2.9 E+2	2.5 E+1	2.5 E+0	2.5 E+0
598-77-6	1,1,2-Trichloropropane	3.0 E+1		3.0 E+0	3.0 E+0
96-18-4	1,2,3-Trichloropropane	5.6 E-3		5.6 E-4	5.6 E-4
96-19-5	1,2,3-Trichloropropene	2.2 E+0		2.2 E-1	2.2 E-1
58138-08-2	Tridiphane	1.1 E+2		1.1 E+1	1.1 E+1
121-44-8	Triethylamine	1.2 E+1		1.2 E+0	1.2 E+0
1582-09-8	Trifluralin	8.7 E+0		8.7 E-1	8.7 E-1
552-30-7	Trimellitic Anhydride (TMAN)	5.1 E+0		5.1 E-1	5.1 E-1
95-63-6	1,2,4-Trimethylbenzene	1.2 E+1		1.2 E+0	1.2 E+0
108-67-8	1,3,5-Trimethylbenzene	1.2 E+1		1.2 E+0	1.2 E+0
512-56-1	Trimethyl phosphate	1.8 E+0		1.8 E-1	1.8 E-1
99-35-4	1,3,5-Trinitrobenzene	1.1 E+3		1.1 E+2	1.1 E+2
479-45-8	Trinitrophenylmethylnitramine	3.6 E+2		3.6 E+1	3.6 E+1
118-96-7	2,4,6-Trinitrotoluene	2.2 E+0		2.2 E-1	2.2 E-1
791-28-6	Triphenylphosphine oxide	7.3 E+2		7.3 E+1	7.3 E+1
115-96-8	Tris(2-chloroethyl) phosphate	4.8 E+0		4.8 E-1	4.8 E-1
78-42-2	Tris(2-ethylhexyl) phosphate	2.1 E+1		2.1 E+0	2.1 E+0
7440-61-1	Uranium (chemical toxicity only)	7.3 E+0	5.0 E-1	5.0 E-2	5.0 E-2
7440-62-2	Vanadium and compounds	3.6 E+1		3.6 E+0	3.6 E+0
1929-77-7	Vernam	3.6 E+1		3.6 E+0	3.6 E+0
50471-44-8	Vinclozolin	9.1 E+2		9.1 E+1	9.1 E+1
108-05-4	Vinyl acetate	4.1 E+2		4.1 E+1	4.1 E+1
593-60-2	Vinyl bromide (bromoethene)	1.0 E-1		1.0 E-2	1.0 E-2
75-01-4	Vinyl chloride (child/adult)	2.0 E-2	5.0 E-2	2.0 E-3	2.0 E-3
81-81-2	Warfarin	1.1 E+1		1.1 E+0	1.1 E+0
1330-20-7	Xylenes	2.1 E+2	1.8 E+3	2.1 E+1	2.1 E+1
7440-66-6	Zinc	1.1 E+4		1.1 E+3	1.1 E+3
1314-84-7	Zinc phosphide	1.1 E+1		1.1 E+0	1.1 E+0
12122-67-7	Zineb	1.8 E+3		1.8 E+2	1.8 E+2

Key:

Screening levels are one-tenth the lower of the carcinogenic PRG, non-carcinogenic PRG, or public health goal.

If a California Modified PRG was identified for a compound, the lower of the Cal-modified PRG or standard PRG was used.

[a] = Indicates the California Modified PRG was used to develop the screening value.
P = Pending results of the Johnson and Ettinger model calibration study.
COPC = Chemical of potential concern
µg/L = Micrograms per liter
OEHHA = Office of Environmental Health Hazard Assessment

Sources:

United States Environmental Protection Agency (USEPA) Region 9 Preliminary Remediation Goals (PRGs), Version 9, October 2004.
Stanford J. Smucker Ph.D., USEPA Region IX, Technical Support Section (SFD-8-4), 75 Hawthorne Street, San Francisco, CA 94105-3901.
OEHHA Public Health Goals (PHGs), http://www.oehha.ca.gov/water/phg/allphgs.html

Table 4.3-4 *Soil Vapor COPEC Screening Values*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	(mg/m^3)	(µg/m^3)
2-Butanone (MEK)	860	860,000
2-Hexanone	4.9	4,880
Acetone	1305	1,305,000
Benzene	0.57	571
Carbon Disulfide	1.2	1,200
Carbon Tetrachloride	6.3	6,290
Chloroethane	992	992,050
Chloroform	1.2	1,200
Cumene	23	23,232
Dichloroethane, 1,1-	181	180,500
Dichloroethane, 1,2-	42	42,167
Dichloroethene, 1,1-	6.0	5,950
Dichloroethene, cis-1,2-	19	18,880
Dichloroethene, trans-1,2-	19	18,880
Ethylbenzene	23	23,232
Freon 11	88	88,400
Freon 12	88	88,400
Freon 113	88	88,400
Methyl tert-butyl ether (MTBE)	258	257,500
Methylene Chloride	8.7	8,700
Styrene	192	191,650
Tetrachloroethene	24	24,250
Toluene	0.084	84
Trichloroethane, 1,1,1-	191	191,000
Trichloroethane, 1,1,2-	5.7	5,675
Trichloroethene	6.4	6,429
Trimethylbenzene, 1,2,4-	16	15,500
Trimethylbenzene, 1,3,5-	16	15,500
Vinyl Chloride	0.56	557
Xylene, o-	16	15,500
Xylenes, m,p-	16	15,500
Xylenes, total	16	15,500

Source Notes:

See Appendix A Risk Assessment White Papers

Source : DTSC soil vapor ESLs for Edwards Air Force Base

ESLs were sought from readily-available sources for detected chemicals; however, if no readily-available ESL was found, the chemical is not listed. A further evaluation of those chemicals without ESLs is presented in the Uncertainty Section (Section 7.3).

Table 4.3-5 *Organic Soil COPEC Screening Values*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source	Receptor
Organics (ug/kg)			
2-Methylnaphthalene	29000	c, 5	SI
4,4'-DDD	21	c	MC
4,4'-DDE	21	c	MC
4,4'-DDT	21	c	MC
Acenaphthene	29000	c, 5	SI
Acenaphthylene	29000	c, 5	SI
Aldrin	8.247	a	MI
alpha-BHC	356	a	AI
Anthracene	29000	c, 5	SI
Aroclor 1016	10.1	a, 1	AI
Aroclor 1221	10.1	a, 1	AI
Aroclor 1232	10.1	a, 1	AI
Aroclor 1242	10.1	a, 1	AI
Aroclor 1248	10.1	a, 1	AI
Aroclor 1254	10.1	a, 1	AI
Aroclor 1260	10.1	a, 1	AI
Benzo (a) anthracene	1100	c, 6	MI
Benzo (a) pyrene	1100	c, 6	MI
Benzo (b & k) fluoranthene (total)	1100	c, 6	MI
Benzo (b) fluoranthene	1100	c, 6	MI
Benzo (ghi) perylene	1100	c, 6	MI
Benzo (k) fluoranthene	1100	c, 6	MI
Benzyl butyl phthalate	12.5	a, 2	AI
beta-BHC	315	a	MI
Bis(2-ethylhexyl)phthalate	40	a	AI
Chrysene	1100	c, 6	MI
delta-BHC	346	a	AI
Dibenz (a,h) anthracene	1100	c, 6	MI
Dieldrin	4.9	c	MI
Dimethyl phthalate	12.5	a, 2	AI
Di-n-butyl phthalate	12.5	a	AI
Di-n-octyl phthalate	12.5	a, 2	AI
Endosulfan I	63.3	a	MI
Endosulfan II	63.3	a	MI
Endosulfan sulfate	63.3	a, 3	MI
Endrin	3.163	a	AI
Endrin aldehyde	5.284	a	AI
Fluoranthene	1100	c, 6	MI
Fluorene	29000	c, 5	SI
gamma-BHC (Lindane)	29.281	a	MI
Heptachlor	3.394	a	MI
Heptachlor epoxide	363	a, 4	MI
Indeno (1,2,3-cd) pyrene	1100	c, 6	MI
Methoxychlor	5742	a	MI
Naphthalene	29000	c, 5	SI
PCBs	10.1	a, 1	AI
Pendimethalin (Prowl)	624	a	MI
Pentachlorophenol	2100	c	AI
Phenanthrene	29000	c, 5	SI
Phenol	30000	b	SI
Pyrene	1100	c, 6	MI
2,3,7,8-TCDD	0.00014	a	MI

Source Notes:

a - Benchmark derived based on USEPA Eco-SSL methodology and model equations presented in Attachment 4-1 from *Guidance for Developing Ecological Soil Screening Levels (Eco-SSLs)* (revised April 2007). http://www.epa.gov/ecotox/ecossl/SOPs.htm

1 - The PCB screening level was used as a surrogate for all PCBs/Aroclors.

2 - The di-n-butylphthalate screening level was used as a surrogate for all phthalates for which TRVs were not available.

3 - The endosulfan screening level was used as a surrogate for endosulfan sulfate.

4 - The heptachlor screening level was used as a surrogate for heptachlor epoxide.

b - Toxicological Benchmarks for Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision (Efroymson et al., 1997). http://www.hsrd.ornl.gov/ecorisk/tm126r21.pdf

c - USEPA Ecological Soil Screening Levels (Eco-SSL). http://www.epa.gov/ecotox/ecossl/index.html.

5 - Eco-SSL for low molecular weight PAHs

6 - Eco-SSL for high molecular weight PAHs

Table 4.3-5 *Organic Soil COPEC Screening Values*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Receptor Notes:
MI = Mammalian Insectivore (Short-tailed Shrew)
MC = Mammalian Carnivore (Long-tailed Weasel)
AI = Avian Insectivore (Am Woodcock)
AC = Avian Carnivore (Red-tailed Hawk)
SI = Soil Invertebrate

Table 4.3-6 *Inorganic Soil COPEC Screening Values*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source	Receptor
Inorganics (mg/kg)			
Antimony	0.27	a	MW
Arsenic	18	a	Plants
Barium	330	a	SI
Beryllium	21	a	MW
Boron	0.5	c	
Cadmium	0.36	a	MW
Chromium	26	a, e	AW
Chromium VI	81	a	MW
Cobalt	13	a	Plants
Copper	28	a	AW
Lead	11	a	AW
Lithium	2	c	Plants
Manganese	220	a	Plants
Mercury	0.00051	c	AW
Molybdenum	2	c	Plants
Nickel	38	a	Plants
Perchlorate	1.17	d	SI
Selenium	0.52	a	Plants
Silver	4.2	a	AW
Thallium	1	c	Plants
Titanium	-	-	
Vanadium	7.8	a	AW
Zinc	46	b	AW

Source Notes:

a - USEPA Ecological Soil Screening Levels (Eco-SSL). http://www.epa.gov/ecotox/ecossl/index.html.

b - Benchmark derived based on USEPA Eco-SSL methodology and model equations presented in Attachment 4-1 from Guidance for Developing Ecological Soil Screening Levels (Eco-SSLs) (revised April 2007). http://www.epa.gov/ecotox/ecossl/SOPs.htm

c - Preliminary Remediation Goals for Ecological Endpoints (Efroymson et al., 1997) http://www.esd.ornl.gov/programs/ecorisk/documents/tm162r2.pdf

d - Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization. External Review Draft (January 2002). http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=24002

e - The EcoSSL value of 81 mg/kg for Cr VI is from USEPA (2005) for mammals; however this EcoSSL was revised in USEPA (2008) to 130 mg/kg. As the Eco While Paper was prepared prior to 2008, the original EcoSSL for Cr VI was conservatively used in the BOU SLERA.

Receptor Notes:

SI = Soil Invertebrate
MW = Mammalian Wildlife
AW = Avian Wildlife

Table 4.3-7 *Surface Water COPEC Screening Values*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source
Organics ug/L		
4-Methylphenol	N/A	
Aldrin	3	c
alpha-BHC	2.2	f, 7
Bis(2-ethylhexyl)phthalate	3	d
Bromodichloromethane	N/A	
Bromoform	N/A	
Chloroform	1240	c
delta-BHC	2.2	f, 7
Dibromochloromethane	N/A	
Diesel Range Organics (C10-C28)	N/A	
Endrin aldehyde	0.036	e
gamma-BHC (Lindane)	0.08	c
Heptachlor	0.0038	a
Heptachlor epoxide	0.0038	a
Hexadecanoic acid	N/A	
Methoxychlor	0.03	b
Methylene chloride	2200	f
Motor Oil Range Organics (C16-C36)	N/A	
Nitroguanidine-DISS	N/A	
N-Nitrosodimethylamine	40	g
Pendimethalin (Prowl)	5.2	i
Tetrachloroethene	840	c
Trichlorofluoromethane	N/A	
Inorganics mg/L		
Aluminum	0.087	b, 4
Antimony	0.61	c
Arsenic	0.15	a, 1
Barium	0.004	d
Beryllium	0.0053	c
Bicarbonate Alkalinity	N/A	
Boron	0.0016	f
Cadmium	0.0022	a, 1, 2
Calcium	N/A	
Carbonate Alkalinity	N/A	
Chloride	230	b
Chromium	0.18	a, 1, 2
Cobalt	0.023	f
Copper	0.009	a, 1, 2
Dissolved Organic Carbon	N/A	
Fluoride	N/A	
Hexavalent Chromium	0.011	a, 1
Iron	1	b
Lead	0.0025	a, 1, 2
Lithium	0.014	f
Magnesium	N/A	
Manganese	0.12	f
Mercury	0.00077	b, 5, 6
Molybdenum	0.37	f
Nickel	0.052	a, 1, 2
Nitrate as NO3	N/A	
Nitrite as NO2	N/A	
Perchlorate	9.3	h
Phosphate	N/A	
Potassium	N/A	
Selenium	0.005	a, 3
Silver	0.00012	d
Sodium	N/A	
Strontium	1.5	f
Sulfate as SO4	N/A	
Thallium	0.02	c
Titanium	N/A	
Total Alkalinity	N/A	
Total Cyanide	0.0052	a
Vanadium	0.02	f
Zinc	0.12	a, 1, 2

Table 4.3-7 *Surface Water COPEC Screening Values*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

N/A = Not available.

Source Notes:

a - California Toxic Rule (CTR) Water Quality Standards, Federal Register 40 CFR Part 131, May 18, 2000.
1 - dissolved value used
2 - hardness dependant - A hardness of 100 mg/L was assumed
3 - total recoverable metal

b - USEPA National Recommended Water Quality Criteria. 2006.
http://www.epa.gov/waterscience/criteria/wqcriteria.html
Freshwater Criterion Continuous Concentration (CCC) values used
4 - pH dependant
5 - hardness dependant - A hardness of 100 mg/L was assumed
6 - inorganic mercury II value used

c - California Environmental Protection Agency. Central Valley Regional Water Quality Control Board.
Recommended Numerical Limits to Translate Water Quality Objectives. 9 July 2007.
http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_standards_limits/index.html
Aquatic life values used

d - USEPA Region 6. Toxicity Reference Values. Screening Level Ecological Risk Assessment Protocol.
August 1999. http://www.epa.gov/earth1r6/6pd/rcra_c/protocol/appe-all.pdf
Table E-1, TRV values used

e - Buchman, M. F., 1999. NOAA Screening Quick Reference Tables, NOAA HAZMAT Report 99-1, Seattle WA, Coastal Protection and Restoration Division, National Oceanic and Atmospheric Administration, 12 pages. http://response.restoration.noaa.gov/book_shelf/122_squirt_cards.pdf
Freshwater CCC Endrin value used

f - Suter, G.W. II, and C.L. Tsao. 1996. Toxicological Benchmarks for Screening of Potential Contaminants of Concern for Effects on Aquatic Biota on Oak Ridge Reservation: 1996 Revision. Oak Ridge National Laboratory, Oak Ridge, TN. 104 pp. ES/ER/TM-96/R2.
http://www.esd.ornl.gov/programs/ecorisk/documents/tm96r2.pdf
Tier II Chronic values used
7 - BHC (other) value used

g - World Health Organization, Geneva, 2002. Concise International Chemical Assessment (CICADS) Document 38. http://www.inchem.org/documents/cicads/cicads/cicad38.htm
Estimated No-Effects value used

h - Development of Freshwater Water-Quality Criteria for Perchlorate. Dean et al. Environmental Toxicology and Chemistry, Vol. 23, No. 6, pp. 1441-1451, 2004.
CCC value used

Table 4.3-8 *Sediment COPEC Screening Values*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source
Organics (ug/kg)		
4,4'-DDE	3.16	a, 1
4,4'-DDT	4.16	a, 1
Aldrin	2	b
alpha-BHC	6	b
Anthracene	57.2	a, 1
Benzo (a) anthracene	108	a, 1
Benzo (a) pyrene	150	a, 1
Benzo (b & k) fluoranthene (total)	240	b
Benzo (ghi) perylene	170	b
Benzyl butyl phthalate	11000	c, 4
Bis(2-ethylhexyl)phthalate	890000	c, 4
Chrysene	166	a, 1
delta-BHC	3	b
Dibenz (a,h) anthracene	33	a, 1
Dieldrin	1.9	a, 1
Endosulfan I	2.9	d
Endosulfan II	14	d
Endrin	2.22	a, 1
Fluoranthene	423	a, 1
gamma-BHC (Lindane)	2.37	a, 1
Heptachlor	2.47	a, 1, 3
Heptachlor epoxide	2.47	a, 1
Indeno (1,2,3-cd) pyrene	78	c, 5
Methylene chloride	1316	c, 4
PCB-1248	59.8	a, 1
PCB-1254	59.8	a, 1
PCB-1260	59.8	a, 1
Pendimethalin (Prowl)	370	h
Pentachlorophenol	360	c, 6
Phenanthrene	204	a, 1
Phenol	420	c, 6
Pyrene	195	a, 1
Toluene	53	c, 4
Inorganics (mg/kg)		
Antimony	2	f
Arsenic	9.79	a, 1
Cadmium	0.99	a, 1
Chromium	43.4	a, 1
Copper	31.6	a, 1
Lead	35.8	a, 1
Manganese	460	b
Mercury	0.18	a, 1
Nickel	16	b
Selenium	2	g
Silver	1	f
Zinc	121	a, 1

Source Notes:

a - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. "Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems." Archives of Environmental Contamination and Toxicology. Volume 39. Pages 20 through 31.

1 - Value shown is a Threshold Effect Concentration

2 - Value shown is a Probable Effect Concentration

3 - Heptachlor epoxide was used as a toxicological surrogate for heptachlor.

b - Persaud, D., Jaagumagi, R., and Hayton, A. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. ISBN 0-7729-9248-7. Ontario Ministry of the Environment, Ottawa, Ontario.

c - Jones, D.S., G.W. Suter II, and R.N. Hull. 1997. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision.
4 - Equilibrium Partitioning (EqP)-derived screening level based on a secondary chronic value (Table 3).
5 - Assessment and Remediation of Contaminated Sediments (ARCS) Program Threshold Effect Concentration (TEC) (Table 4).
6 - Washington State sediment quality standards for ionizable organic compounds (Table 2).

d - Sediment Quality Advisory Levels/Sediment Quality Criteria (values are lower limit of 95% confidence limit). USEPA, 1997.
e - Apparent Effects Threshold-High (Barrick et al., 1988).

f - Long, E.R., MacDonald, D.D., Smith, S.L., and Calder, F.D. 1995. "Incidence of Adverse Biological Effects within ranges of Chemical Concentrations in marine and estuarine Sediments". Environmental Management Vol. 19, No. 1. pp.81-97.

g - Lemley, A.D. 2002. Selenium assessment in aquatic ecosystems. US Forest Service, Blacksburg, VA.

h - See Table A-7 for derivation and calculation of screening level.
http://www.epa.gov/waterscience/criteria/wqcriteria.html
Freshwater Criterion Continuous Concentration (CCC) values used
4 - pH dependant
5 - hardness dependant - A hardness of 100 mg/L was assumed
6 - inorganic mercury II value used

c - California Environmental Protection Agency. Central Valley Regional Water Quality Control Board. Recommended Numerical Limits to Translate Water Quality Objectives. 9 July 2007.
http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_standards_limits/index.html
Aquatic life values used

d - USEPA Region 6. Toxicity Reference Values. Screening Level Ecological Risk Assessment Protocol. August 1999. http://www.epa.gov/earth1r6/6pd/rcra_c/protocol/appe-all.pdf
Table E-1, TRV values used

e - Buchman, M. F., 1999. NOAA Screening Quick Reference Tables, NOAA HAZMAT Report 99-1, Seattle WA, Coastal Protection and Restoration Division, National Oceanic and Atmospheric Administration, 12 pages. http://response.restoration.noaa.gov/book_shelf/122_squirt_cards.pdf
Freshwater CCC Endrin value used

f - Suter, G.W. II, and C.L. Tsao. 1996. Toxicological Benchmarks for Screening of Potential Contaminants of Concern for Effects on Aquatic Biota on Oak Ridge Reservation: 1996 Revision. Oak Ridge National Laboratory, Oak Ridge, TN. 104 pp. ES/ER/TM-96/R2.
http://www.esd.ornl.gov/programs/ecorisk/documents/tm96r2.pdf
Tier II Chronic values used
7 - BHC (other) value used

g - World Health Organization, Geneva, 2002. Concise International Chemical Assessment (CICADS) Document 38. http://www.inchem.org/documents/cicads/cicads/cicad38.htm
Estimated No-Effects value used

h - Development of Freshwater Water-Quality Criteria for Perchlorate. Dean et al. Environmental Toxicology and Chemistry, Vol. 23, No. 6, pp. 1441-1451, 2004.
CCC value used

i - See Table A-7 for derivation and calculation of screening level.

5.0 HUMAN HEALTH RISK ASSESSMENT

This HHRA was conducted in accordance with the risk assessment methodologies and assumptions developed by USEPA and DTSC, following the scope of work outlined in the Final RI/FS Work Plan (Aerojet, 2005c), as well as the HHRA White Paper (Aerojet, 2007a). Regulatory guidance utilized to develop this HHRA included the following:

- *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual, Part A* (USEPA, 1989);
- *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual, Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments* (USEPA, 2001a);
- *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment* (USEPA, 2004a);
- *Superfund Exposure Assessment Manual* (USEPA, 1988);
- Region 9 PRGs 2004 Update (USEPA, 2004b);
- *Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils* (Vapor Intrusion Guidance; USEPA, 2002b);
- *Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities* (DTSC, 1996); and
- *Preliminary Endangerment Assessment Guidance Manual* (DTSC, 1994).

Consistent with current risk assessment guidance developed by USEPA and DTSC, this HHRA includes the following steps:

- Selection of COPCs;
- Exposure assessment;
- Toxicity assessment; and
- Risk characterization.

The selection of COPCs is discussed in Section 4.0 of this HHERA. The remaining three steps are each discussed in the following sections. A discussion of the uncertainties associated with the HHRA process, and specifically with this HHRA, is presented in Section 7.0.

5.1 OVERVIEW OF HUMAN HEALTH RISK ASSESSMENT

An overview of the HHRA process is provided below.

5.1.1 Conceptual Site Model

The CSM is a tool used in risk assessment to describe relationships between chemicals and potentially exposed human receptor populations, thereby delineating the relationships between the suspected sources of chemicals identified at the site, the mechanisms by which the chemicals might be released and transported in the environment, and the means by which the receptors could come in contact with the chemicals. The CSM provides a basis for defining DQOs and developing exposure scenarios.

The HHRA evaluates current and potential future land-use conditions. Currently, the site is commercial/industrial property. Current receptors potentially present at the property include current on-site commercial workers and construction workers involved in site improvements or repairs, and also recreational users of outlying areas of the property such as Area 39, which is currently used as an off-road vehicle recreation area. The CSM also considers other future land-uses. For example, the CSM includes future potential land development for commercial and residential use and, therefore, receptors could include residents, commercial workers, and construction workers, as well as future recreators post development in areas such as Buffalo Creek and Area 39. All potential transfer pathways were included in the CSM. Facility-wide human health CSMs for the Aerojet Superfund Site are presented in Figures 5.1-1a and 5.1-1b.

Numerous release mechanisms influence chemical behavior in environmental media. Under both current and future land use conditions at the site, the principle release mechanisms involved are:

- Fugitive dust generation and transport;
- Vapor emission and transport into outdoor and indoor air; and
- Uptake by plants.

Those primary release mechanisms quantitatively evaluated for particular receptors at each MA assessed are presented below.

5.1.1.1 *Assessed Environmental Media*

Environmental media at the site consist of seven categories: surface soil, subsurface soil, sediment, soil vapor, surface water, groundwater, and ambient outdoor air. Samples representative of site baseline conditions have been collected for soil, sediment, soil vapor, surface water, and groundwater. Generally, soil and groundwater are the potential sources of chemical exposures for other media at the site.

5.1.1.2 *Inter-Media Transfers*

Exposure to site chemicals may be direct, as in the case of surface soil, or indirect following inter-media transfers. These transfers can be primary or secondary, with soil as the initial source. For example, volatilization of chemicals from subsurface soil into ambient or indoor air represents a primary transfer.

These inter-media transfers represent the potential migration pathways transporting chemicals to a location where a human receptor could be exposed. Discussions of each of the identified potential transfer pathways are presented below. Figures 5.1-1a and 5.1-1b present conceptualized diagrams of the inter-media transfers and fate and transport modeling for the site.

Five initial transfer pathways for which chemicals can migrate from soil to other media have been identified. The first of these pathways is volatilization from soil and upward migration into ambient (outdoor and indoor) air. Migration of chemicals in soil vapor to ambient air is also a potential transfer pathway. While volatilization from groundwater into outdoor and indoor air is captured as part of this transfer (as the potential sources to soil vapor can include both soil and groundwater), it is assessed separately. The third primary transfer pathway is migration of soil-adsorbed COPCs into ambient air via fugitive dust. The fourth primary transfer pathway is downward migration of chemicals from soil to groundwater. Finally, chemicals can be translocated from soil to plants grown on the site via root uptake. While a potentially complete pathway, homegrown produce is not quantitatively evaluated, as significant land preparation, including the addition of topsoil/amendments, would be required for backyard gardening (Aerojet, 2007a).

5.1.1.3 *Identification of Potential Receptors*

As described in Section 1.0, the Aerojet site is currently used for industrial purposes and activities are confined to specific manufacturing areas within the property. With the exception of these well-defined manufacturing areas, large parcels of the property serve as buffer lands and are not currently used. Future use of these areas may involve either residential or industrial activities, depending on existing or potential future environmental restrictions identified as the result of risk assessments.

Land use is mixed adjacent to the Aerojet site. Areas north of the site are characterized by both residential and commercial development. To the south and east, the Aerojet site is bordered largely by undeveloped land. These areas could be developed in the future as either residential or industrial purposes.

Under current land use conditions, commercial/industrial (industrial and maintenance/utility workers) and construction workers, as well as recreators (off-road traffic in areas such as Area 39), could be present. Under realistic future use conditions, on- and off-site populations may include industrial workers, construction workers, maintenance/utility workers, residents (adults and children), commercial workers, and patrons of commercial establishments (e.g., shoppers or other visitors), as well as post development recreators in such areas as Buffalo Creek (waders) and Area 39 (off-road vehicle users). Of these populations, residents, commercial receptors, and construction workers are the most likely to have the greatest opportunity for exposure. Furthermore, where proposed site redevelopment includes a recreational development component, assessment of these receptors was considered on a site-specific basis. Therefore, this HHRA focused on the evaluation of potential risks for these receptors for most areas, except in areas where recreational uses currently exist (Area 39) or could reasonably exist (Buffalo Creek).

5.1.1.4 *Identification of Potential Exposure Pathways*

An exposure pathway is made up of the following elements:

- A source and mechanism for chemical release (e.g., volatilization of chemicals from soil and groundwater);
- An environmental transport medium (i.e., air, soil);

- A point of potential human contact with the medium; and
- A route of exposure (e.g., inhalation, ingestion, dermal contact).

Exposure pathways for soil, sediment, surface water, and groundwater are identified below.

Soil

Potential soil exposure pathways may include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil and soil vapor into ambient (outdoor and indoor) air.

Sediment

Potential sediment exposure pathways may include:

- Dermal contact with sediment during recreational (wading) activity; and
- Incidental ingestion of sediment during recreational (wading) activity.

Surface Water

Potential surface water exposure pathways may include:

- Dermal contact with surface water during recreational activity; and
- Incidental ingestion of surface water during recreational activity.

While surface waters within the BOU are predominantly governed by intermittent flows that are seasonal in nature, exposures to surface water (via direct contact) are assumed to be potentially complete and are assessed quantitatively for future recreational receptors. The lower portion of Buffalo Creek near the Westlakes Retention Basins receives treated water from GET E/F and the American River GET and therefore has a low, but continuous flow of water throughout the year. With the exception of the lower portion of Buffalo Creek, water flow in surface water bodies throughout the BOU are intermittent and unlikely to be of sufficient volume and duration to sustain fish populations to constitute a viable recreational fishery. Therefore, ingestion of fish from surface

waters within the BOU is not considered a complete exposure pathway and is not evaluated.

Groundwater

Potential groundwater exposure pathways may include:

- Use of groundwater for future hypothetical residential water supply;
- Migration of VOCs from groundwater through the unsaturated zone into either indoor or ambient air; and
- Contact with groundwater during excavation or other intrusive activities.

Exposure pathway information for human receptors is summarized in CSM Figures 5.1-1a and 5.1-1b.

5.1.2 Exposure Assessment

The objective of the exposure assessment is to evaluate potential human exposures to the constituents in surface and subsurface soil, soil vapor, groundwater, surface water, and sediment. The exposure assessment step of an HHRA combines information regarding impacted media at a site with assumptions about the people who could come into contact with these media. The result is an estimation of a person's potential rate of contact with impacted media from the site. The intake rates are evaluated in the risk characterization step to estimate the risks they could pose.

In this section, assumptions regarding people's activities, such as the frequency with which a person could come into contact with impacted media, are discussed. Finally, the daily doses at the points of potential human contact were estimated using these assumptions and the chemical concentrations identified in previous sections.

5.1.2.1 Estimation of Exposure Point Concentrations

Estimation of exposure point concentrations for soil, soil vapor, outdoor (ambient) air, indoor air, surface water, groundwater, and fate and transport modeling are described below.

Soil

Analytical results for soil from 0 to 12 feet bgs were utilized as potential exposure point concentrations. Because one of the goals of the risk assessment is to understand the areal extent of potential risk and to create maps of these potential risks, part of this HHRA methodology was to calculate risk estimates based upon the chemical results at each sampling location. This was conducted because there is high potential variability in the exposure units by which future receptors could be exposed, as a development plan has not yet been formally established for the site. Therefore, grouping sample locations into manageable and predictable exposure units would not be realistic or defensible. Additionally, since risk assessments are typically conducted over an area to account for receptor movement, a point by point risk assessment is considered conservative and likely results in selection of more areas to be evaluated in the FS.

To facilitate these point-by-point calculations, "unit concentrations" (i.e., 1 mg/kg, 1 µg/L or 1 µg/m^3) were applied to the risk paradigm (equations, models, toxicity assessment, and risk characterization models) to develop a quantitative estimate of risk and hazard associated with this unit concentration, called "unit hazards" and "unit risks," for each COPC. By then applying these COPC-specific unit risks and hazards to location measurements for each COPC, one can calculate location-specific hazard indices (HIs) and incremental (excess) lifetime cancer risks (ILCRs).

For each selected COPC, the detected concentration at each location and depth was utilized in the calculation of estimated hazards and incremental cancer risks.

Soil Vapor

Soil vapor analytical results from 10 to 40 feet bgs were utilized as potential fate and transport model inputs for deriving ambient (indoor and outdoor) air exposure point concentrations. As stated above, risk estimates were calculated on a sample-by-sample basis by utilizing the individual sample results for each location depth as an input concentration.

Outdoor Air

Concentrations in outdoor air were based upon modeling of individual location-depth concentrations from bulk soil and soil vapor measurements (discussed below).

Indoor Air

Concentrations in indoor air were based upon modeling of individual location-depth concentrations from soil vapor and groundwater measurements (discussed below).

Surface Water

Risk estimates associated with direct contact with surface water were calculated on a sample–by-sample basis by utilizing the individual sample results for each location as an input concentration.

Groundwater

Risk estimates associated with direct contact with groundwater, and model inputs associated with estimating indirect exposures to groundwater were calculated on a sample-by-sample basis by utilizing the individual sample results for each location as an input concentration.

As identified in the facility-wide CSM, potentially complete and significant groundwater pathways include presumed domestic use by future on-site residents, passive volatilization into indoor air and inhalation by residents or workers, and dermal contact during construction work.

Complicating evaluation of groundwater pathways at the site is the presence of multiple groundwater layers, which include perched groundwater; the FWBZ; and one or more, deeper groundwater zones. All pathways (direct and indirect) were evaluated for COPCs in perched groundwater and the FWBZ, but not for the deeper groundwater layers.

Direct contact was assessed for all layers, including the deeper groundwater zones. Where chemicals are present in a deeper water-bearing zone and a shallow water-bearing zone is present, passive volatilization was not evaluated for the deeper zones. The shallower zones are considered potential barriers to vapor contributions from deeper zones, and potential contributions from the deeper zones are captured by evaluation of soil vapor samples. Also, it is not appropriate to use the same attenuation factor (AF) for groundwater at substantial depth (e.g., greater than 80 feet bgs) as is assumed for shallower zones (e.g., 20 feet bgs). Risks were not mixed across zones since remediation will likely address specific zones. Therefore, data were kept separate for different zones.

Fate and Transport Modeling

Fate and transport models used to estimate the inhalation of fugitive dust and the volatilization of VOCs from soil and soil vapor into indoor and outdoor air are described below. Results of the fate and transport calculations are presented for each MA.

Fugitive Dust. Fugitive dust emissions from soil were estimated utilizing USEPA Region 9 guidance (USEPA, 2004b), which includes use of the default particulate emission factor of 1.3×10^9 cubic meters per kilogram (m^3/kg) for residential and commercial land use receptors. For the construction worker, a particulate emission factor of 2×10^6 m^3/kg was applied in the absence of detailed knowledge about future construction activities (Aerojet, 2007a).

Volatilization from Soil into Outdoor Air - Bulk Soil. Volatilization from soil (bulk media) was estimated utilizing USEPA Region 9 guidance (USEPA, 2004b), which includes a derived volatilization factor for each chemical expressed in m^3/kg.

Volatilization from Soil into Outdoor Air - Soil Vapor. Volatilization from soil vapor to outdoor air was estimated utilizing basic equations (Equation 2-3) from the *Superfund Exposure Assessment Manual* (USEPA, 1988), which conservatively estimates vapor flux at soil surface from a simplified Farmer equation. This emission rate is then coupled with a traditional box model for dilution of mass flux emissions to determine air concentrations.

Vapor Intrusion into Indoor Air. The indoor air AF represents the ratio of the indoor air concentration (Cbuilding) to the source concentration (Csource). That is,

$$AF = Cbuilding/Csource.$$

Indoor air concentrations were estimated using conservative, but site-specific, AFs derived for both soil vapor and groundwater based upon work completed for the Aerojet site (2007a). These conservative values were determined for soil vapor and groundwater utilizing Cal-EPA's *Vapor Intrusion Guidance Document* (2005b) and running the model with site-specific parameters for depth to source, water-filled and air-filled porosity, and default assumptions for all other inputs. The parameters and assumptions used in the models are presented on Table 5.1-1. The models are presented in Appendix D.

5.1.2.2 *Quantification of Exposure*

The concentrations of COPCs at the points of potential human exposure are combined with assumptions about the behavior of the populations potentially at risk in order to estimate the average daily dose (ADD) (intake). Later, in the risk characterization step of the assessment, the estimated doses are combined with toxicity parameters for COPCs to estimate whether the calculated intake levels pose a threat to human health.

To estimate the intake of chemicals, exposure equations and (generally) conservative exposure parameters were selected for the commercial worker, resident (adult and child), construction worker, and maintenance worker receptors. Under the USEPA RAGS (1989) paradigm, exposure (or intake/dose) is defined as the mass of the chemical taken in by a receptor per unit body weight per unit time. The general equation for intake is:

$$\text{Intake (mg/kg-day)} = C \times CR \times EF \times ED \times CV \times (1/BW) \times (1/AT)$$

where:

- C = Exposure point concentration (mg/kg or mg/L)
- CR = Contact rate (liters/day, m^3/day)
- EF = Exposure frequency (day/year)
- ED = Exposure duration (year)
- CV = Conversion factors (kilogram/milligram, for example)
- BW = Body weight (kilogram)
- AT = Averaging time (days)

For this HHRA, the general equation was modified specifically for each pathway (i.e., ingestion, dermal contact, inhalation of fugitive dust, inhalation of VOCs in ambient air, and inhalation of VOCs in indoor air). The equations used to estimate exposures incorporated age-adjusted intake factors consistent with USEPA guidance for carcinogenic ingestion and inhalation intakes (USEPA, 2004b), and for dermal carcinogenic intakes (*Risk Assessment Guidance for Superfund/Volume I: Human Health Evaluation Manual -Part E* [USEPA, 2004a]). The complete equations are presented in Appendix E, and input parameters are presented on Tables 5.1-2 through 5.1-6 for each of the exposure scenarios. Calculations for the dermal penetration efficiency (DA_{event}) of water-borne COPCs (groundwater and surface water) are presented in Appendix F.

Not all exposure assumptions were available for two exposure scenarios: direct contact with surface water and domestic use of perched groundwater. Except for Buffalo Creek, surface water features are not perennial, which effectively limits exposure potential. Also, once the planned land transfers occur, swimming will not be possible in any of the surface water features in this operable unit (e.g., Westlakes ponds will be drained). Since swimming is not a potentially complete pathway, dermal contact (wading) represents the primary exposure pathway.

The wading exposure scenario would most likely include exposure to the feet, legs, hands, and arms; however, default exposure assumptions have not been developed by USEPA or Cal-EPA for the "wading" scenario. Therefore, because wading is less contact intensive than the approach used by USEPA (1997a) for swimming, incidental ingestion of surface water would be very minor, and likely would be less than the value of 50 milliliters per day (mL/day) identified by USEPA for the swimming scenario. In the absence of more scenario-specific assumptions, the value of 50 ml/day was also conservatively assumed for this pathway.

Inhalation of vapors from surface water reflects an ephemeral, insignificant pathway. In addition, while flux from these shallow water bodies is considered likely to be minimal, dispersion into outdoor air from these shallow water bodies will further reduce any potential exposures to VOCs to negligible levels. Therefore, this exposure pathway was not quantitatively addressed in this risk assessment.

The second exposure scenario requiring site-specific assumptions is domestic use of perched groundwater. The perched nature of the groundwater source indicates a limited recharge source, and subsequently precludes sustainable yields for domestic water use. Therefore, the only potentially foreseeable complete exposure pathway is passive volatilization of VOCs. However, in response to the Agencies' expectations and requests, hypothetical domestic use of perched water as a bounding exercise was also included in this HHRA.

Lead-Specific Considerations

Quantifying lead exposure is done differently than for other COPCs. Unlike for other chemicals, substantial evidence has been compiled allowing correlation of cause-and-effect relationships in humans with blood concentrations of lead. Therefore, estimation of human blood lead concentrations associated with an exposure situation is currently the preferred risk assessment approach for lead. Several approaches are

available for estimating blood lead levels, including USEPA's Integrated Exposure Uptake Biokinetic model for children (USEPA, 1994) and DTSC's Lead Risk Assessment Spreadsheet model for both children and adults (Cal-EPA, 1999).

DTSC's Lead Risk Assessment Spreadsheet model (Version 7) was incorporated into this assessment. The Lead Risk Assessment Spreadsheet model is a spreadsheet-based blood lead program that combines DTSC's blood lead slope factors, which relate levels of lead intake with blood levels for various environmental media (e.g., soil, air). The model also incorporates assumptions about background lead levels in air, water, and food to which receptors are simultaneously exposed in order to develop a total blood lead level estimate from all exposure pathways. Default lead spreadsheet model exposure parameters (e.g., soil ingestion, skin surface area) were changed to reflect the exposure assessment for other chemicals as presented on Tables 5.1-2 through 5.1-6.

"Unit Risk" and "Unit Hazard" Procedure

Because one of the goals of the risk assessment is to understand the areal extent of potential risk and to create maps of these potential risks, part of this HHRA methodology was to calculate risk estimates based upon the chemical results at each sampling location. This "point-by-point" approach was followed because a development plan has not yet been formally established for the site, and there is high potential variability in the exposure units by which future receptors could be exposed. Grouping sample locations into manageable and predictable exposure units would not be realistic or defensible.

To facilitate point-by-point calculations, "unit risks" and "unit hazards" values were created. These values were created for each COPC, for each receptor, and for each media and pathway by applying a unit concentration (i.e., 1 mg/kg, 1 µg/L or 1 µg/m^3) to the risk assessment paradigm, which includes all relevant exposure equations, the toxicity assessment, and risk characterization methodologies. The result was the development of a quantitative estimate of risk and hazard associated with a unit concentration; for example, an estimate of "risk per mg/kg COPC in soil," or an estimate of "risk per µg/m^3 COPC in soil vapor." The resulting values were termed "unit hazards" and "unit risks," for each COPC. By then applying these COPC-specific unit risks and hazards to location-specific measurements for each COPC, one can calculate location-specific HIs and incremental (excess) ILCRs. The calculation of these unit risks and unit hazards is developed in Appendix F.

For soils, fate and transport calculations (particulate emission and passive volatilization) are included in the unit risk and unit hazard calculations because they are independent of depth. For estimates of exposure from COPCs in soil vapor and groundwater to indoor and outdoor air, fate and transport modeling takes into consideration depth to source related information. In these cases, the unit risk and unit hazard calculated is per unit concentration in the exposure media (i.e., risk per $\mu g/m^3$ in indoor and outdoor air). Fate and transport considerations related to depth-dependent calculations are applied through the use of depth-specific soil vapor and groundwater to ambient (indoor and/or outdoor) air, which also is a unit air concentration per unit soil vapor or groundwater concentration (i.e., $\mu g/m^3$ indoor air per $\mu g/m^3$ soil vapor). Depth-specific attenuation factors have been developed and are presented for each relevant media for each MA (e.g., Table 5.2-11 Residential Soil Vapor to Indoor Air Attenuation Factors – Administration Area East MA). These attenuation factors are also then applied in the same manner to sample specific COPC measurements to derive location and media-specific exposure point concentrations. For example, an estimate of risk for a future residential receptor for soil vapor in indoor air would include:

> COPC "Y" concentration in soil vapor at depth "A" × Soil vapor to indoor air attenuation factor for COPC "Y" at depth "A" × Inhalation unit risk for COPC "Y" = Indoor Air ILCR for COPC "Y".

5.1.2.3 *Total Petroleum Hydrocarbons*

At the time of the data collection and draft version of this HHRA, neither Cal-EPA nor USEPA had quantitative guidance for evaluating risks associated with TPH mixtures. Subsequently, TPH measurements were not selected as COPCs as part of the HHRA. Recently, DTSC has issued interim guidance on evaluating human health risks from TPH (DTSC, 2009). The intent of this guidance was to provide 1) data collection recommendations, and 2) quantitative risk assessment calculation guidance for the most toxic TPH-related components (as well as carbon range-specific information). Where appropriate, the sampling and analysis of soil vapor and soil samples for the BOU included and targeted quantification of the most toxic TPH-related compounds (e.g. PAHs and VOCs) and these data were included in the present risk analysis. Subsequently, the BOU HHRA has quantified risks associated with areas containing detected TPH concentrations in a manner that is consistent with the spirit of the recent DTSC guidance. DTSC's guidance will be considered during preparation of HHRAs for subsequent operable units.

5.1.3 *Toxicity Assessment*

This section describes the toxicity information used in the HHRA. Consistent with USEPA and DTSC guidance, this HHRA evaluates non-carcinogenic and carcinogenic risks separately, with each evaluation requiring different measures of toxicity. Specifically, the evaluation of non-carcinogenic risk relies on reference doses (RfDs) developed by USEPA, and the evaluation of carcinogenic risk used carcinogenic slope factors developed by USEPA and the Cal-EPA (Office of Environmental Health Hazard Assessment [OEHHA]).

Toxicity values, when available, are published by the USEPA in the on-line *Integrated Risk Information System* (IRIS; USEPA 2008) and the *Health Effects Assessment Summary Tables* (HEAST; USEPA 1997b). Cancer slope factors (CSFs) are also published by the Cal-EPA (2008). CSFs are chemical-specific, experimentally derived potency values used to calculate the risk of cancer resulting from exposure to carcinogenic chemicals. A higher value implies a more potent carcinogen. RfDs are experimentally derived "no effect" values used to quantify the extent of adverse non-cancer health effects from exposure to chemicals. Here, a lower RfD implies a more potent toxicant. These criteria are generally developed by USEPA risk assessment work groups and listed in USEPA risk assessment guidance documents and databases. The following sources for selecting toxicity criteria were used and the USEPA (2003a) hierarchy was generally followed:

1. Cal-EPA OEHHA Toxicity Criteria Database;
2. IRIS;
3. USEPA's Provisional Peer Reviewed Toxicity Values;
4. National Center for Environmental Assessment (NCEA, or other current USEPA sources);
5. HEAST;
6. USEPA criteria documents (e.g., drinking water criteria documents, drinking water Health Advisory summaries, ambient water quality criteria documents, and air quality criteria documents);
7. Agency for Toxic Substances and Disease Registry (ATSDR) toxicological profiles;
8. USEPA's Environmental Criteria and Assessment Office; and
9. Peer-reviewed scientific literature.

The exception to the hierarchy would be, as per the HHRA White Paper (Aerojet, 2007a), if both Cal-EPA and USEPA toxicity criteria exist for a given COPC, the most conservative value was utilized.

Although USEPA has developed toxicity criteria for the oral and inhalation routes of exposure, it has not developed toxicity criteria for the dermal route of exposure. USEPA has proposed a method for extrapolating oral toxicity criteria to the dermal route in the recently released *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment)* (USEPA, 2004a). USEPA stated that the adjustment of the oral toxicity factor for dermal exposures is necessary only when the oral-gastrointestinal absorption efficiency of the chemical of interest is less than 50 percent (due to the variability inherent in absorption studies).

5.1.3.1 *Non-Carcinogenic Health Effects*

For non-carcinogenic health effects, USEPA assumes that a dose threshold exists, below which adverse effects are not expected to occur. A chronic RfD of a chemical is an estimate of a lifetime daily dose to humans that is likely to be without appreciable deleterious non-carcinogenic health effects. To derive an RfD, a series of professional judgments are made to assess the quality and relevance of the human or animal data and to identify the critical study and the most critical toxic effect. Data typically used in developing the RfD are the highest no-observable-adverse-effect-levels (NOAELs) for the critical studies and effects of the non-carcinogen. For each factor representing a specific area of uncertainty inherent in the extrapolation from the available data, an uncertainty factor is applied. Uncertainty factors generally consist of multiples of 10, although values less than 10 are sometimes used.

Four major types of uncertainty factors are typically applied to NOAELs in the derivation of RfDs. Uncertainty factors of 10 are used to (1) account for the variability between humans; (2) extrapolate from animals to humans; (3) account for a NOAEL based on a subchronic study instead of a chronic study; and (4) extrapolate from a lowest-observed-adverse-effect-level (LOAEL) to a NOAEL, if necessary. In addition, a modifying factor can be used to account for adequacy of the database. Typically, the modifying factor is set equal to one.

To obtain the RfD, all uncertainty factors associated with the NOAEL are multiplied together, and the NOAEL is divided by the total uncertainty factor. Therefore, each uncertainty factor adds a degree of conservatism

(usually one order of magnitude) to the RfD. An understanding of the uncertainties associated with RfDs is important in evaluating the significance of the HIs calculated in the risk characterization portion of the risk assessment. While it is reasonable to use available sub-chronic RfDs to evaluate construction worker exposures, as a conservative assessment tool, only chronic RfDs were utilized. The COPCs in this assessment with USEPA-established oral/dermal and inhalation RfDs are presented on Table 5.1-7.

5.1.3.2 *Carcinogenic Health Effects*

USEPA and Cal-EPA develop CSFs from chronic animal studies or, where possible, epidemiological data. Because animal studies use much higher doses over shorter periods of time than the exposures generally expected for humans, the data from these studies are adjusted, typically using a linearized multi-stage (LMS) mathematical model. To ensure protectiveness, CSFs are typically derived from the upper 95th percentile confidence limit of the slope, and thus the actual risks are unlikely to be higher than those predicted using the CSF, and may be considerably lower. The COPCs in this assessment with USEPA-established oral/dermal and inhalation CSFs are presented on Table 5.1-8.

5.1.3.3 *Lead-Specific Considerations*

Extensive information regarding the health effects of exposure to lead is available. There is convincing evidence that lead exposure resulting in blood lead levels greater than 30 micrograms of lead per deciliter of blood (µg lead/dL blood) can result in toxic effects on the nervous system, the cardio-vascular system, and the kidneys. Evidence also suggests that children and infants are more susceptible than adults to lead, and that deleterious effects may be caused by blood lead levels upwards of 10 to 15 micrograms per deciliter (µg/dL). In addition, children frequently exhibit behavioral patterns that facilitate the intake of environmental lead (for example, pica, the craving for unnatural food, such as soil; ATSDR 1999; USEPA 1986, 1990a). Severe lead toxicity is characterized by symptoms of irritability, short attention span, loss of memory, headaches, muscle tremor, peripheral neuropathy, abdominal pain, and hallucinations. In adults, these symptoms may occur at blood lead levels in the range of 40 to 60 µg/dL (USEPA, 1986, 1990a).

Lead has consistently tested negative for mutagenicity in microbial systems, although the USEPA has concluded that these systems are not sufficiently developed to demonstrate mutagenicity for metals that are

Lead has consistently tested negative for mutagenicity in microbial systems, although the USEPA has concluded that these systems are not sufficiently developed to demonstrate mutagenicity for metals that are known carcinogens. There is some evidence that lead has an effect on chromosomes in human and other mammalian species. The USEPA has concluded that lead is clearly carcinogenic in animals, but that the data are insufficient for quantitative assessment. Epidemiological data at present do not allow for an assessment of the carcinogenicity of lead in humans (ATSDR, 1999).

As applied to toxicity criteria, neither USEPA nor Cal-EPA has developed traditional RfD toxicity criteria for risk assessment purposes. The primary reason is that a threshold for toxic effects in mammals has not been established. In the absence of RfDs, USEPA and Cal-EPA apply a blood level of 10 µg/dL as a basis for risk-based decision making. For example, 10 µg/dL has been used by USEPA for setting lead standards in paint, dust, and soil (USEPA, 2001b).

5.1.4 *Risk Characterization*

Consistent with regulatory guidance, both carcinogenic and non-carcinogenic risks associated with conditions at the site will be estimated. To assess non-carcinogenic risks, ADDs will be compared to RfDs for each chemical in a ratio called a hazard quotient (HQ). Compounds considered being non-carcinogens and potential carcinogens known to exhibit non-carcinogenic effects will be treated in this manner.

In accordance with USEPA guidance (1989), HQs will be summed across exposure pathways for the same chemical. In addition, chemicals that have similar toxic endpoints will also be summed. The sum of HQs is called an HI. If the HI exceeds one, the chemicals will be subdivided according to their toxicological effects, and the risk for each endpoint will be considered separately (USEPA, 1989). An HI is calculated using the following equations:

$$HQ = \frac{ADD}{RfD}$$

where:

ADD = Average daily dose (mg/kg-day)

RfD = Reference dose (mg/kg-day)

$$\textit{Hazard Index} = \sum \textit{Hazard Quotients}$$

For chemicals that have the potential to cause cancer, upper-bound lifetime ILCRs will be estimated. The lifetime average daily dose (LADD) of a carcinogen will be taken to be the cumulative dose received during the period of exposure, averaged over the lifetime of the exposed individual. The following equations will be used to calculate chemical-specific and total risks:

$$\text{Chemical – Specific Risk} = \text{LADD} \times \text{CSF}$$

where:

LADD = Lifetime average daily dose (mg/kg-d)

CSF = Cancer slope factor $(\text{mg/kg d})^{-1}$

$$\textit{Total Carcinogenic Risk} = \sum \textit{Chemical Specific Risk}$$

It will be assumed that cancer risks from various exposure routes and from simultaneous exposure to all chemicals are additive.

Risk estimates are values that have associated uncertainties. These uncertainties, which arise at every step of a risk assessment, will be evaluated to provide an indication of the relative degree of uncertainty associated with the risk estimates. Consistent with USEPA (1989) guidance, a qualitative discussion of the uncertainties associated with the estimation of risks for the site will be presented in this risk assessment report. The uncertainty analysis will discuss uncertainties associated with each step of the risk assessment, including site characterization data, data usability, selection of COPCs, exposure point concentrations, fate and transport modeling, exposure assessment, toxicity assessment, and risk characterization. For both non-carcinogens and carcinogens, the 'driver' COPCs and pathways will be identified.

USEPA and Cal-EPA have both defined a range of cumulative risk of $1\text{x}10^{-6}$ to $1\text{x}10^{-4}$ that may be considered acceptable in accordance with the requirements of the *National Oil and Hazardous Substances Pollution Contingency Plan* (USEPA, 1990b). This risk range is hereafter referred to as the acceptable risk range.

To aid the reader in reviewing the samples contributing to the basis for the estimated risks and hazards for each MA, cross-reference Table 5.1-9 lists RI, HHRA, and SLERA sections for each MA, so that text, tables, and figures associated with each MA may be reviewed for a more complete understanding of sampling and associated risks.

Section 9 presents a graphical summary of the human health, ecological, and protection of groundwater risk assessments. The areas shown on the figures in Section 9 are the areas that will be brought forward to the feasibility study, where they will be further evaluated to determine if remedial action is necessary.

5.1.5 Application of the "Unit Risk" and "Unit Hazard"

To develop COPC, media, pathway and receptor specific estimates of risk and hazard on a point-by-point basis, the developed unit risks and unit hazards described above were applied to measured concentrations of COPCs in each relevant media and pathway for each MA sample location. Several example calculations are provided below to demonstrate this process.

Example 1 - Development of Residential HI and ILCR estimates for Aroclor 1260 (PCB-1260) in Soils at Administration Area East

From Table 5.2-29, we see that a "unit concentration" of 1 mg/kg of PCB-1260 has been applied to the direct contact risk assessment paradigm for future hypothetical residential receptors for each COPC. The result is a child unit hazard of 0.89 per mg/kg PCB-1260 and age-adjusted unit risk of 1E-5 per mg/kg PCB-1260.

As shown on Table 5.2-31 (page 2, fourth row), sample 03D-SB20 at 5 feet bgs has a measured PCB-1260 concentration of 0.011 mg/kg. The unit risk and unit hazards for the future hypothetical residential receptor are also listed in this table (directly below the COPC). For a sample-specific estimate of hazard and risk from PCB-1260 at 03D-SB20 at 5 feet, the concentration of 0.011 mg/kg PCB-1260 is combined with the child unit hazard value of 0.89 per mg/kg and the unit risk value of 1E-5 (1.1E-5 at 2 significant figures listed on this table). The result is an estimated residential child HI of 9.8E-3 (page 8, row 4 of Table 5.2-31) and an estimated age-adjusted ILCR of 1E-7 (page 20, row 4 of Table 5.2-31).

Example 2 - Development of Residential HI and ILCR estimates for Benzene in Soil Vapor at Administration Area East.

From Table 5.2-30, we see that a "unit concentration" of 1 milligram per cubic meter (mg/m^3) of benzene was applied to the inhalation risk assessment paradigm for future hypothetical residential receptors for each COPC. The result is a child unit hazard of 7.4E+1 per mg/m^3 benzene and age-adjusted unit risk of 1E-2 per mg/m^3 benzene.

As shown on Table 5.2-32 (page 1, row 10), sample 03D-SP106 at 15 feet bgs has a measured benzene concentration of 32 $\mu g/m^3$. The unit risk and unit hazards for the future hypothetical residential receptor are also listed on this table (directly below the COPC). As shown on Table 5.2-11, the residential soil vapor to indoor air attenuation factor for benzene at 15 feet bgs is 3.7E-4.

For a sample-specific estimate of hazard and risk from benzene at 03D-SP106 at 15 feet bgs, the concentration of 32 µg/m^3 benzene (converted to mg/m^3 by dividing by 1,000 µg/mg to be consistent with the unit risk/unit hazard) is combined with the benzene residential soil vapor to indoor air attenuation factor (at 15 feet bgs) and the child unit hazard value of 7.4E+1 per mg/m^3 and the unit risk value of 1E-2 (1.5E-2 at 2 significant figures listed on this table). The result is an estimated residential child HI of 8.7E-4 (page 9, row 10 of Table 5.2-32) and an estimated age-adjusted ILCR of 1.7E-7 (page 25, row 10 of Table 5.2-32). Please note that because the unit hazards/risks and attenuation factors have been reported to two significant figures; some rounding differences may occur in the values calculated in the HHRA support spreadsheets versus running the numbers as reported above by hand.

5.2 *ADMINISTRATION AREA*

The HHRA for the Administration Area is presented below. To facilitate the discussion, and for continuity with the BOU RI Report, the Administration Area is divided into Administration Area East and Administration Area West.

5.2.1 *Receptors of Concern*

Recreational redevelopment is not anticipated for the Administration Area; therefore, the potentially exposed receptors within the Administration Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.2.2 *Constituents of Potential Concern*

COPCs identified in groundwater and surface water within the Administration Area and COPCs in soil vapor and soil within Administration Area East and Administration Area West are presented below.

5.2.2.1 *Administration Area*

The only primary media assessed for the Administration Area as a whole included groundwater and surface water, as well as secondary media potentially influenced by these primary media. All other primary media (soil and soil vapor) were assessed for Administration Area East and Administration Area West individually.

<u>Groundwater</u>

The results of the groundwater COPC selection for human health are presented on Table 5.2-1. VOCs, SVOCs, PCBs, and metals were detected in at least one of the seven (A through F) hydrostratigraphic layers,

including perched groundwater (Layer Y) and the FWBZ (Layer S). Hydrostratigraphic layers are defined in Sections 3.1.1.6 and 3.1.1.7.

Eight of the organic chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent (and therefore are included as COPCs; see Section 4.3.4). Results of the concentration/toxicity screen and FOD analyses indicated that the following analytes were COPCs for groundwater:

- Metals – Aluminum, antimony, arsenic, barium, beryllium, cadmium, cobalt, hexavalent chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, thallium, titanium, vanadium, and zinc.
- VOCs – 1,1,2,2-Tetrachloroethane (1,1,2,2-PCA); 1,1,2-TCA; 1,1-DCA; 1,1-DCE; 1,2,4-trimethylbenzene (1,2,4-TMB); 1,2-DCA; 1,2-DCE; 1,4-dichlorobenzene (1,4-DCB); benzene; BDCM; CCL; chloroform; cis-1,2-DCE; Freon 113; methylene chloride; o-xylene; p-isopropyltoluene; PCE; TCE; vinyl chloride; xylenes (total); 1,2-dichlorobenzene; dichlorodifluoromethane; m-xylene; n-butylbenzene; p-xylene; sec-butylbenzene; toluene; and trans-1,2-DCE.
- Nitrate as NO_3 and nitrite as NO_2.
- Perchlorate.
- PCB Aroclor 1254.
- B(a)A, phenanthrene, 2-methylnaphthalene; NAP.
- 1,4-Dioxane; B(2-EH)P; and NDMA.

As discussed in Section 5.1.2.3, petroleum mixtures are complex and the toxic constituents are being evaluated individually. Therefore, although they are relevant for site characterization purposes, diesel-range and motor oil-range organics were not identified as COPCs.

Surface Water

Based upon comparison to human health screening criteria, the results of the surface water COPC selection for human health is presented on Table 5.2-2. SVOCs and metals were detected. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for surface water:

- Metals – Aluminum, antimony, arsenic, beryllium, cadmium, copper, iron, lead, manganese, nickel, thallium, vanadium, and zinc.

- BDCM, bromoform, chloroform, DBCM, and PCE.
- Nitrate as NO_3.

5.2.2.2 *Administration Area East*

The COPCs selected for soil vapor and soil within Administration Area East are presented below.

Soil Vapor

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.2-3. Seventeen of the detected chemicals in soil vapor had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore they were included as COPCs (see Section 4.3.4). Of the VOCs detected in soil vapor from 10 to 30 feet bgs at the site, the following VOCs were selected as COPCs for further evaluation:

- 1,1-DCA; 1,1-DCE; 1,2-DCA; 1,4-dioxane; 2-propanol; benzene; BDCM; CCL; chloroform; cis-1,2-DCE; ethylbenzene; Freon 113; Freon 12; heptane; hexane; methylene chloride; PCE; THF; trans-1,2-DCE; TCE; vinyl chloride; 1,1,1-trichloroethane (1,1,1-TCA); 1,2,4-TMB; 2,2,4-trimethylpentane (2,2,4-TMP); 2-butanone (methyl ethyl ketone [MEK]); 4-ethyltoluene; 4-methyl-2-pentanone (4-M-2-P); acetone; carbon disulfide; cumene; cyclohexane; ethanol; Freon 11; m,p-xylene; o-xylene; propylbenzene; styrene; and toluene.

Many of the chemicals detected, but screened out as COPCs, have at least one nondetected result with a detection limit greater than the screening criteria (Table 4.3-1). The effect the presence of these elevated detection limits may have on the risk results is described in the Uncertainty Analysis (Section 7.0).

Soil

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.2-4. SVOCs, PCBs, and metals were detected. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals – Aluminum, arsenic, cadmium, hexavalent chromium, iron, lead, manganese, mercury, molybdenum, thallium, and vanadium.
- PAHs – B(a)A; B(a)P; B(b)F; benzo(k)fluoranthene [B(k)F]; chrysene; D(a,h)A; I(1,2,3-cd)P; B(b&k)F (total); phenol; phenanthrene; fluoranthene; di-n-butyl phthalate; NAP; and pyrene.
- PCB Aroclors 1248, 1254, and 1260.
- 1,1,2,2-PCA.

Five of these chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, they were included as COPCs (see Section 4.3.4). Results of the background screening demonstrated that five of the metals (aluminum, arsenic, manganese, thallium, and vanadium) are statistically comparable to background (Appendix C). The other metals (cadmium, hexavalent chromium, iron, lead, mercury, molybdenum, and vanadium) were identified as COPCs in soil within Administration Area East. The organic chemicals listed above were also identified as COPCs in soil within Administration Area East. The final list of COPCs for soil included:

- Metals – Cadmium, hexavalent chromium, iron, lead, mercury, and molybdenum.
- PAHs – B(a)A; B(a)P; B(b)F; B(k)F; chrysene; D(a,h)A; I(1,2,3-cd)P; B(b&k)F (total); phenol; phenanthrene; fluoranthene; di-n-butyl phthalate; NAP; and pyrene.
- PCB Aroclors 1248, 1254, and 1260.
- 1,1,2,2-PCA.

A summary of the COPCs selected for Administration Area East is presented on Table 5.2-5.

5.2.2.3 *Administration Area West*

The COPCs selected for soil and soil vapor at Administration Area West are presented below.

<u>Soil Vapor</u>

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on

Table 5.2-6. Twenty-one of the chemicals detected had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, they were included as COPCs. Of the VOCs detected in soil vapor from 10 to 40 feet bgs at the site, the following were selected as COPCs for further evaluation:

- 1,1-DCA; 1,4-DCB; 1,4-dioxane; benzene; BDCM; CCL; chloroform; hexachlorobutadiene; PCE; THF; TCE; vinyl chloride; 1,1,1-TCA; 1,2,4-TMB; 2,2,4-TMP; 2-butanone; 2-propanol; 4-ethyltoluene; 4-M-2-P; acetone; carbon disulfide; cis-1,2-DCE; cyclohexane; ethanol; ethylbenzene; Freon 11; Freon 113; heptane; hexane; m,p-xylene; o-xylene; styrene; and toluene.

Soil

Data were available for Administration Area West in soil and sediment media. During the RI, samples collected within ditches were labeled as sediment samples. However, upon further review, these samples were characterized as surface soil samples because they are:

1) Exposed (i.e., not covered by water);
2) Dry (i.e., unsaturated);
3) Sufficiently fine-grained such that they may become airborne; and
4) Will be mixed with shallow soil during site grading.

Based upon comparison to human health screening criteria, the results of the soil COPC selection for human health is presented on Table 5.2-7. SVOCs, metals, PCBs, and perchlorate were detected. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals – Aluminum, antimony, arsenic, cadmium, chromium, hexavalent chromium, copper, iron, lead, manganese, mercury, molybdenum, nickel, silver, thallium, vanadium, and zinc.
- PAHs – B(a)A; B(a)P; B(b)F; chrysene; D(a,h)A; and B(b&k)F (total).
- PCB Aroclors 1254 and 1260.
- 1,1,2,2-PCA and perchlorate.

Results of the background screening demonstrated that 5 of the 17 metals (aluminum, arsenic, manganese, thallium, and vanadium) are statistically comparable to background (Appendix C). The other metals (antimony,

cadmium, chromium, copper, hexavalent chromium, iron, lead, mercury, molybdenum, nickel, silver, and zinc) were identified as COPCs in soil within Administration Area West. The 10 organic chemicals listed above were also identified as COPCs in soil within Administration Area West. The final list of COPCs for soil within Administration Area West included:

- Metals – Antimony, cadmium, chromium, hexavalent chromium, copper, iron, lead, mercury, molybdenum, nickel, silver, and zinc.
- PAHs – B(a)A; B(a)P; B(b)F; chrysene; D(a,h)A; and B(b&k)F (total).
- PCB Aroclors 1254 and 1260.
- 1,1,2,2-PCA and perchlorate.

Petroleum mixtures are complex and the toxic constituents are being evaluated individually. Therefore, although they are relevant for site characterization purposes, diesel- and motor oil-range organics were not identified as COPCs.

A summary of the COPCs selected for Administration Area West (soil) and Administration Area (groundwater and surface water) is presented on Table 5.2-8.

5.2.3 Exposure Scenarios

Exposure scenarios for the Administration Area and for Administration Area East and Administration Area West are described below.

5.2.3.1 Administration Area

The only media of interest for the Administration Area as a "whole" are groundwater and surface water. Therefore, only pathways associated with direct and indirect contact with groundwater and surface water are assessed for the Administration Area. These pathways include:

- Ingestion of groundwater as a potable water source (hypothetical future residents only);
- Dermal contact with groundwater during domestic use (e.g., showering, future residents only);
- Inhalation of VOCs from groundwater during domestic use (future residents only);

- Volatilization of VOCs from groundwater, migration of vapors through the vadose zone, and into indoor and ambient air (future residents and future commercial workers only);
- Ingestion of surface water during recreational use (future residents only); and
- Dermal contact with surface water during recreational use (future residents only).

5.2.3.2 *Administration Areas East and West*

For Administration Area East and Administration Area West, the media of interest include soil and soil vapor. Therefore, the pathways associated with direct and indirect contact with soil and soil vapor COPCs are assessed for both Administration Area East and Administration Area West. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air).

5.2.4 *Fate and Transport Results*

Outdoor air modeling results for Administration Area East and Administration Area West are presented on Tables 5.2-9 and 5.2-10, respectively.

A summary of the soil vapor AFs for indoor and outdoor air are presented on Tables 5.2-11 through 5.2-13 for Administration Area East; and Tables 5.2-14 through 5.2-16 for Administration Area West. Groundwater AFs are presented on Tables 5.2-17 and 5.2-18 for each of the VOCs at each depth interval calculated using the models.

5.2.5 *Risk Summary*

This section presents the conservative results of this HHRA. The calculated theoretical upper-bound ILCRs were compared to the *de minimus* cumulative risk level (10^{-6}). In addition, USEPA and Cal-EPA have both defined a range of cumulative risk of 1×10^{-6} to 1×10^{-4} that may be considered acceptable (referred to hereafter as the "acceptable risk range" in accordance with the requirements of the *National Oil and*

Hazardous Substances Pollution Contingency Plan (USEPA, 1990b). The non-carcinogenic health effects were compared to a target HI of 1.0. The results of the risk assessment for the COPCs in soil and groundwater at the property, by receptor and pathway, are summarized below.

5.2.5.1 *Administration Area*

The only primary media assessed for the Administration Area as a "whole" included groundwater and surface water, as well as secondary media potentially influenced by these primary media.

The HHRA location-specific risk results for surface water and groundwater under residential and commercial/industrial use scenarios for the Administration Area are presented below.

<u>Residential Scenario</u>

Surface Water

The Administration Area surface water HHRA unit hazard/risk results are presented on Table 5.2-19. Location-specific results are presented on Table 5.2-20, and summarized on Table 5.2-21. The range of residential child receptor estimated HIs included a minimum of 0.000043, a median of 0.0021, and a maximum of 0.015, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.0000097, a median of 0.00058, and a maximum of 0.0043, which are all less than the target HI of 1.0.

The range of residential blood lead incremental increase estimates for children included a minimum of 1.7 µg/dL, a median of 1.8 µg/dL, and a maximum of 2.0 µg/dL; and for adults included a minimum of 0.77 µg/dL, a median of 0.78 µg/dL, and a maximum of 0.85 µg/dL. These incremental increases are small, and less than the target of 10 µg/dL.

The estimated residential ILCRs ranged from a minimum of 4×10^{-8}, a median of 2×10^{-7}, and a maximum of 3×10^{-7}. These estimated ILCRs are less than the *de minimus* risk of 1×10^{-6}.

Groundwater

The Administration Area groundwater HHRA unit hazard/risk results are presented on Tables 5.2-22 and 5.2-23 for residents and Table 5.2-24 for commercial/industrial workers. Location-specific results are presented on Tables 5.2-25 through 5.2-27, and are summarized on Table 5.2-28.

Domestic Use – Perched Groundwater (Layer Y)

The range of residential child receptor estimated HIs included a minimum of 3.6, a median of 28, and a maximum of 4,700, which is greater than the target HI of 1.0. While numerous chemicals contributed to these estimates, 1,2,4-TMB, dichloroethenes (DCEs), aluminum, antimony, arsenic, barium, beryllium, cadmium, chloroform, cobalt, copper, iron, manganese, NAP, nickel, nitrate, zinc, PCBs, thallium, PCE, TCE, vanadium, and perchlorate were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 1.5, a median of 12, and a maximum of 2,100, which is greater than the target HI of 1.0.

The range of residential blood lead incremental increase estimates for children included a minimum of 40 µg/dL, a median of 59 µg/dL, and a maximum of 1,400 µg/dL; and for adults included a minimum of 20 µg/dL, a median of 30 µg/dL, and a maximum of 720 µg/dL. Blood lead estimates greater than 10 µg/dL were estimated for all seven locations.

The estimated residential ILCRs ranged from a minimum of 6×10^{-5}, a median of 1×10^{-3}, and a maximum of 1×10^{-1}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for all nine locations. While numerous chemicals contributed to these estimates, 1,1,2,2-PCA; 1,4-DCB; BDCM; PCBs; PCE; TCE; chloroform; CCL; B(2-EH)P; arsenic; benzene; B(a)A; NDMA; 1,2-DCA; 1,1-DCA; NAP; and vinyl chloride are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 1.0, a median of 26, and a maximum of 770, which is greater than the target HI of 1.0 for 100 percent of the 20 groundwater samples. While numerous chemicals contributed to these estimates, DCEs, arsenic,

hexavalent chromium, iron, manganese, NAP, nitrate/nitrite, zinc, PCE, TCE, vanadium, and perchlorate were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 0.45, a median of 11, and a maximum of 330, which overlaps the target HI of 1.0.

The range of residential blood lead incremental increase estimates for children included a minimum of 1.8 µg/dL, a median of 2.3 µg/dL, and a maximum of 97 µg/dL; and for adults included a minimum of 0.85 µg/dL, a median of 1.1 µg/dL, and a maximum of 49 µg/dL. Blood lead estimates greater than 10 µg/dL were estimated for two locations.

The estimated residential ILCRs ranged from a minimum of 1×10^{-6}, a median of 4×10^{-4}, and a maximum of 7×10^{-2}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 94 percent (29 locations) of the 31 samples. While numerous chemicals contributed to these estimates, 1,1,2,2-PCA; 1,1,2-TCA; PCE; TCE; chloroform; CCL; B(2-EH)P; arsenic; benzene; B(a)A; NDMA; 1,2-DCA; 1,1-DCA; and vinyl chloride are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer C

The range of residential child receptor estimated HIs included a minimum of 0.48, a median of 160, and a maximum of 2,100, which overlaps the target HI of 1.0. Estimated hazards were greater than the target HI of 1.0 for 83 percent (10 samples) of the 12 groundwater samples. While numerous chemicals contributed to these estimates, CCL, DCEs, dichloroethanes, arsenic, iron, nitrate/nitrite, zinc, TCE, PCE, vanadium, and perchlorate were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 0.21, a median of 70, and a maximum of 910, which overlaps the target HI of 1.0.

The range of residential blood lead incremental increase estimates for children included a minimum of 1.9 µg/dL, a median of 3.3 µg/dL, and a maximum of 48 µg/dL; and for adults included a minimum of 0.9 µg/dL, a median of 1.6 µg/dL, and a maximum of 24 µg/dL. Blood lead estimates greater than 10 µg/dL were estimated for 29 percent (two locations) of the seven groundwater samples.

The estimated residential ILCRs ranged from a minimum of 5×10^{-7}, a median of 7×10^{-4}, and a maximum of 4×10^{-3}. Estimated ILCRs overlap the acceptable risk range, and were greater than the *de minimus* risk of 1×10^{-6} for 91 percent (10 locations) of the 11 samples. While numerous chemicals contributed to these estimates, PCBs; PCE; TCE; NDMA; chloroform; CCL; B(2-EH)P; arsenic; 1,2-DCA; methylene chloride; 1,4-dioxane; 1,1,2-TCA; and 1,1-DCA are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer D

The range of residential child receptor estimated HIs included a minimum of 0.004, a median of 0.60, and a maximum of 930, which overlaps the target HI of 1.0. Estimated hazards were greater than the target HI of 1.0 for 42 percent (5 samples) of the 12 groundwater samples. While numerous chemicals contributed to these estimates, 1,2-DCA; DCEs; arsenic; hexavalent chromium; iron; zinc; nitrate; PCE; TCE; vanadium; and perchlorate were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 0.0017, a median of 0.25, and a maximum of 400, which overlaps the target HI of 1.0.

The range of residential blood lead incremental increase estimates for children included a minimum of 93 µg/dL, a median of 140 µg/dL, and a maximum of 190 µg/dL; and for adults included a minimum of 46 µg/dL, a median of 71 µg/dL, and a maximum of 96 µg/dL. Blood lead estimates greater than 10 µg/dL were estimated for 100 percent (two locations) of the two groundwater samples.

The estimated residential ILCRs ranged from a minimum of 6×10^{-7}, a median of 6×10^{-5}, and a maximum of 2×10^{-3}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 86 percent (six locations) of the seven samples. While numerous chemicals contributed to these estimates, PCE; TCE; chloroform; CCL; B(2-EH)P; arsenic; 1,2-DCA; and 1,1-DCA are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer E

The range of residential child receptor estimated HIs included a minimum of 0.012, a median of 0.13, and a maximum of 5.8, which overlaps the

target HI of 1.0. Estimated hazards were greater than the target HI of 1.0 for 29 percent (two samples) of the seven groundwater samples. While numerous chemicals contributed to these estimates, DCEs, manganese, nitrate, and TCE were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 0.0052, a median of 0.055, and a maximum of 2.5, which overlaps the target HI of 1.0.

Only one of the seven samples had an estimated residential ILCR of 2×10^{-5}, which is within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6}. TCE was the only contributor to the ILCR greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer F

The residential child receptor estimated HI was 0.004, which is less than the target HI of 1.0. The residential adult receptor estimated HI was 0.0017, which is less than the target HI of 1.0.

No lead or carcinogenic compounds were detected in these samples.

Vapor Intrusion – Perched Groundwater (Layer Y)

The range of residential child receptor estimated HIs included a minimum of 0.035, a median of 0.57, and a maximum of 30. These values overlap the target HI of 1.0, and were greater than the target for 25 percent (two samples) of the eight samples.

The range of residential adult receptor estimated HIs included a minimum of 0.015, a median of 0.25, and a maximum of 13.0. These values overlap the target HI of 1.0, and were greater than the target for 13 percent (one sample) of the eight samples.

The estimated residential ILCRs ranged from a minimum of 8×10^{-6}, a median of 3×10^{-5}, and a maximum of 1×10^{-3}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for eight of the nine samples.

Vapor Intrusion – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 0.01, a median of 0.47, and a maximum of 46. These values are greater

than the target HI of 1.0 for 39 percent (7 samples) of the 18 samples. DCEs, Freon 113, PCE, and TCE are the main contributors.

The range of residential adult receptor estimated HIs included a minimum of 0.0043, a median of 0.2, and a maximum of 20. These values are greater than the target HI of 1.0 for 17 percent (3 samples) of the 18 samples.

The estimated residential ILCRs ranged from a minimum of 1×10^{-7}, a median of 3×10^{-5}, and a maximum of 3×10^{-3}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 17 of the 20 locations. While a number of chemicals contributed to these estimates, PCE and vinyl chloride are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

<u>Commercial Scenario</u>

Vapor Intrusion – Perched Groundwater (Layer Y)

The range of commercial worker receptor estimated HIs included a minimum of 0.0053, a median of 0.088, and a maximum of 4.6. These values overlap the target HI of 1.0, and are greater than the target HI of 1 for one of the eight sample locations. DCEs and PCE are the main contributors.

The estimated commercial ILCRs ranged from a minimum of 4×10^{-7}, a median of 8×10^{-6}, and a maximum of 3×10^{-4}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for seven of the nine locations.

Vapor Intrusion – First Water Bearing Zone (Layer S)

The range of commercial worker receptor estimated HIs included a minimum of 0.0015, a median of 0.072, and a maximum of 7.0. These values overlap the target HI of 1.0, and are above the target HI of 1.0 for 3 of the 18 locations.

The estimated commercial ILCRs ranged from a minimum of 3×10^{-8}, a median of 6×10^{-6}, and a maximum of 8×10^{-4}. Estimated ILCRs were above the *de minimus* risk of 1×10^{-6} for 15 of the 20 locations. While a number of chemicals contributed to these estimates, PCE and vinyl chloride are the primary contributors.

5.2.5.2 *Administration Area East*

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for Administration Area East are presented below.

Residential Scenario

The Administration Area East soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.2-29 and 5.2-30, respectively. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual soil and soil vapor sampling locations with chemicals greater than screening levels are provided on Tables 5.2-31 through 5.2-33. Adult/child HIs and total estimated ILCRs for all media at individual sampling locations are presented in Figures 5.2-1 and 5.2-2, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.000044, a median of 0.01, and a maximum of 42, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 4 percent (13 samples) of the 334 soil samples. PCBs and iron are the primary contributors to the elevated HIs relative to the target HI. With iron contributing substantially to HIs, it is important to note the substantial amount of uncertainty associated with the NCEA provisional iron reference dose in that it is based upon mean dietary intakes. The uncertainty associated with the iron reference dose is further discussed in Section 7.0.

The range of residential adult receptor estimated HIs included a minimum of 0.000051, a median of 0.0012, and a maximum of 5, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for only 1 percent (3 samples) of the 334 soil samples. PCBs are the primary contributors to the HIs elevated relative to the target HI.

The range of residential blood lead estimates for children included a minimum of 4.7 µg/dL, a median of 4.9 µg/dL, and a maximum of 21 µg/dL. Child resident blood lead greater than 10 µg/dL was estimated for only 1 percent (3 samples) of the 334 soil samples. Blood lead estimates for adults were much lower, with a maximum of 5.4 µg/dL, which is less than the target of 10 µg/dL.

The estimated residential ILCRs ranged from a minimum of 3×10^{-10}, a median of 3×10^{-8}, and a maximum of 2×10^{-3}. Estimated ILCRs overlap the acceptable risk range, but were greater than the *de minimus* risk of 1×10^{-6} for 10 percent (35 samples) of the 334 soil samples. PCBs; PAHs; and 1,1,2,2-PCA are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of residential child receptor estimated HIs included a minimum of 0.00026, a median of 0.017, and a maximum of 860, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 13 percent (25 samples) of the 197 soil vapor samples. 1,1-DCE; 2-propanol; cis-1,2-DCE; Freon 113; PCE; TCE; and vinyl chloride are the primary contributors to the HIs elevated relative to the target HI.

The range of residential adult receptor estimated HIs included a minimum of 0.00011, a median of 0.0074, and a maximum of 370, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 9 percent (18 samples) of the 197 soil vapor samples. 2-Propanol, Freon 113, PCE, TCE, and vinyl chloride are the primary contributors to the HIs elevated relative to the target HI.

The estimated residential ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 9×10^{-7}, and a maximum of 4×10^{-2}. Estimated ILCRs overlap the acceptable risk range, but were greater than the *de minimus* risk of 1×10^{-6} for 43 percent (84 samples) of the 197 soil vapor samples. 1,1-DCA; benzene; chloroform; PCE; TCE; and vinyl chloride are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

While in some cases the estimated theoretical hazards and risks for outdoor air exceeded *de minimus* risk metrics (HI = 1.0, ILCR = 10^{-6}), in all cases where both indoor and outdoor air pathways were assessed, the relative contributions to risks from theoretical indoor air exposures were greater than the relative outdoor contributions by more than 1 to 2 orders of magnitude.

<u>Construction Worker</u>

The Administration Area East soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.2-34 and 5.2-35, respectively. Risk characterization results for construction worker

ingestion, dermal contact, and inhalation for individual samples with chemicals greater than screening levels are provided on Tables 5.2-36 and 5.2-37 for soil and soil vapor. HIs and estimated ILCRs for all media at individual samples locations are presented in Figures 5.2-3 and 5.2-4, respectively.

Soil

The range of construction worker receptor estimated HIs included a minimum of 0.000013, a median of 0.020, and a maximum of 11, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for only 1 percent (4 samples) of the 334 soil samples. PCBs and iron are the primary contributors to the HIs elevated relative to the target HI. With iron accounting for HIs greater than 1.0, it is important to note the substantial amount of uncertainty associated with the NCEA provisional iron reference dose in that it is based upon mean dietary intakes. The uncertainty associated with the iron reference dose is further discussed in Section 7.0.

The range of construction worker blood lead estimates included a minimum of 3.3 µg/dL, a median of 3.4 µg/dL, and a maximum of 8.1 µg/dL. None of the blood lead estimates were greater than the target level of 10 µg/dL.

The estimated construction worker ILCRs ranged from a minimum of 7×10^{-11}, a median of 2×10^{-7}, and a maximum of 7×10^{-5}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for only 2 percent (6 samples) of the 334 soil samples. PCBs and PAHs are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of construction worker receptor estimated HIs included a minimum of 0.0000005, a median of 0.000066, and a maximum of 3.4, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for only 1 percent (1 sample) of the 197 soil vapor samples. 1,1-DCE; 2-propanol; cis-1,2-DCE; Freon 113; PCE; TCE; and vinyl chloride are the primary contributors to the HIs elevated relative to the target HI.

The estimated construction worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 2×10^{-10}, and a maximum of 1×10^{-5}. Estimated ILCRs overlap the acceptable risk

range, but were greater than the *de minimus* risk of 1×10^{-6} for only 1 percent (1 sample) of the 197 soil vapor samples. PCE is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Commercial/Industrial Worker

The Administration Area East soil and soil vapor HHRA unit hazard/risk results for commercial/industrial workers are presented on Tables 5.2-38 and 5.2-39, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.2-40 through 5.2-42. HIs and estimated ILCRs for all media at individual samples are presented in Figures 5.2-5 and 5.2-6, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.0000043, a median of 0.00087, and a maximum of 4.4, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for only 1 percent (2 samples) of the 334 soil samples. PCBs are the primary contributors to the HIs elevated relative to the target HI.

The range of commercial/industrial worker blood lead estimates included a minimum of 3.3 µg/dL, a median of 3.3 µg/dL, and a maximum of 4.8 µg/dL. None of the blood lead estimates were greater than the target level of 10 µg/dL.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 1×10^{-10}, a median of 1×10^{-8}, and a maximum of 7×10^{-4}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 6 percent (21 samples) of the 334 soil samples. PCBs, PAHs, and 1,1,2,2-PCA are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.000045, a median of 0.0027, and a maximum of 130, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 6 percent (12 samples) of the 197 soil vapor samples. 1,1-DCE, 2-propanol, cis-1,2-DCE, Freon 113, PCE, TCE, and vinyl

chloride are the primary contributors to the HIs elevated relative to the target HI.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 2×10^{-7}, and a maximum of 1×10^{-2}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 28 percent (56 samples) of the 197 soil vapor samples. 1,1-DCA, benzene, chloroform, PCE, TCE, and vinyl chloride are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

A summary of risks for each receptor assessed in Administration Area East for soil and soil vapor is presented on Tables 5.2-43 and 5.2-44. Based upon the risk evaluation, the contoured areas shown in Figures 5.2-1 through 5.2-6 are recommended for further evaluation in the FS.

5.2.5.3 *Administration Area West*

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for Administration Area West are presented below.

Residential Scenario

The Administration Area West soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.2-45 and 5.2-46, respectively. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.2-47 through 5.2-49. Adult/child HIs and total estimated ILCRs for all media at individual samples are presented in Figures 5.2-7 and 5.2-8, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.0000016, a median of 0.076, and a maximum of 4.3, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 5 percent (15 samples) of the 281 soil samples. Antimony, cadmium, hexavalent chromium, mercury, nickel, PCBs, and iron are the primary contributors to the HIs elevated relative to the target HI. It is important to note the

substantial amount of uncertainty associated with the NCEA provisional iron reference dose, as addressed in the uncertainty analysis (Section 7.0).

The range of residential adult receptor estimated HIs included a minimum of 0.00000019, a median of 0.0087, and a maximum of 0.48, which are all less than the target HI of 1.0.

The range of residential blood lead estimates for children included a minimum of 4.6 µg/dL, a median of 5.0 µg/dL, and a maximum of 32 µg/dL. Child resident blood lead greater than 10 µg/dL was estimated for 4 percent (11 samples) of the 281 soil samples. Blood lead estimates for adults were much lower, with a maximum of 6.8 µg/dL, which is less than the target of 10 µg/dL.

The estimated residential ILCRs ranged from a minimum of 2×10^{-10}, a median of 2×10^{-8}, and a maximum of 4×10^{-5}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 5 percent (14 samples) of the 281 soil samples. PCBs, PAHs, 1,1,2,2-PCA, and hexavalent chromium are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of residential child receptor estimated HIs included a minimum of 0.000016, a median of 0.0028, and a maximum of 0.03. All of these values are less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.0000067, a median of 0.0012, and a maximum of 0.013. All of these values are less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 3×10^{-9}, a median of $2 \times 10^{-7,}$ and a maximum of 5×10^{-6}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 5 percent (4 samples) of the 81 soil vapor samples. Benzene, chloroform, and TCE are the main contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

<u>Construction Worker Scenario</u>

The Administration Area West soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.2-50 and 5.2-51, respectively. Risk characterization results for construction

worker ingestion, dermal contact, and dust inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.2-52 and 5.2-53. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.2-9 and 5.2-10, respectively.

Soil

The range of construction worker receptor estimated HIs included a minimum of 0.00000041, a median of 0.28, and a maximum of 33, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for only 6 percent (18 samples) of the 281 soil samples. Hexavalent chromium, mercury, nickel, and PCBs are the primary contributors to the HIs elevated relative to the target HI.

The range of construction worker blood lead estimates included a minimum of 3.3 µg/dL, a median of 3.4 µg/dL, and a maximum of 11 µg/dL. Only a single location was greater than the target level of 10 µg/dL.

The estimated construction worker ILCRs ranged from a minimum of 3×10^{-11}, a median of 2×10^{-7}, and a maximum of 5×10^{-4}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 6 percent (18 samples) of the 281 soil samples. Cadmium and hexavalent chromium are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of construction worker receptor estimated HIs included a minimum of 0.000000057, a median of 0.00001, and a maximum of 0.00012. All of these values are less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 2×10^{-11}, a median of 1×10^{-9}, and a maximum of 3×10^{-8}. All of these values are less than the *de minimus* risk of 1×10^{-6}.

<u>Commercial/Industrial Worker Scenario</u>

The Administration Area West soil and soil vapor HHRA unit hazard/risk results for commercial/industrial workers are presented on Tables 5.2-54 and 5.2-55, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and dust

inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.2-56 through 5.2-58. HIs and estimated ILCRs for all media at individual samples are presented in Figures 5.2-11 and 5.2-12, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.00000016, a median of 0.0063, and a maximum of 0.34, which is less than the target HI of 1.0.

The range of commercial/industrial worker blood lead estimates included a minimum of 3.3 µg/dL, a median of 3.3 µg/dL, and a maximum of 5.8 µg/dL. None of the blood lead estimates were greater than the target level of 10 µg/dL.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 8×10^{-11}, a median of 9×10^{-9}, and a maximum of 2×10^{-5}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for only 2 percent (7 samples) of the 281 soil samples. PCBs, PAHs, and hexavalent chromium are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of commercial/industrial worker receptor estimated HIs included a minimum 0.0000024, a median of 0.00043, and a maximum of 0.0047. All of these values are less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 7×10^{-10}, a median of 4×10^{-8}, and a maximum of 1×10^{-6}. All estimated ILCRs were less than or consistent with *de minimus* risk of 1×10^{-6}.

A summary of risks for each receptor assessed in Administration Area West for soil and soil vapor is presented on Tables 5.2-59 and 5.2-60, respectively. Based upon the risk evaluation, the contoured areas shown in Figures 5.2-7 through 5.2-12 are recommended for further evaluation in the FS.

5.3 LINE 02

The HHRA for the Line 02 Area soil and soil vapor is presented below. The HHRA for surface water and groundwater for the Line 02 Area is presented in Section 5.12.

5.3.1 Receptors of Concern

Recreational redevelopment is not anticipated for the Line 02 Area; therefore, the potentially exposed receptors within the Line 02 Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.3.2 Constituents of Potential Concern

COPCs identified in soil vapor and soils within the Line 02 Area are presented below.

5.3.2.1 Soil Vapor

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.3-1. Twenty-two chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those compounds were included as COPCs. Of the VOCs detected in soil vapor from 10 to 40 feet bgs at the site, the following VOCs were selected as COPCs for further evaluation:

- 1,1,1-TCA; 1,1-DCA; 1,1-DCE; 1,2,4-TMB; 1,2-DCA; 1,3,5-trimethylbenzene (1,3,5-TMB); 1,4-dioxane; 2,2,4-TMP; 2-butanone (MEK); 2-hexanone; 2-propanol; 4-ethyltoluene; 4-M-2-P; acetone; benzene; BDCM; carbon disulfide; CCL; chloroform; cis-1,2-DCE; cyclohexane; ethanol; ethylbenzene; Freon 11; Freon 113; Freon 12; heptane; hexane; m,p-xylene; o-xylene; PCE; THF; toluene; TCE; and vinyl chloride.

Two of the five chemicals detected, but screened out as COPCs (chloroethane and chloromethane), have at least one nondetected result with a detection limit greater than the screening criteria (Table 4.3-1). The effect the presence of these elevated detection limits may have on the risk results is described in the Uncertainty Analysis (Section 7.0).

5.3.2.2 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.3-2. SVOCs, metals, and perchlorate were detected. Six of these chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, they were included as COPCs. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, antimony, arsenic, cadmium, iron, lead, manganese, mercury, molybdenum, nickel, perchlorate, thallium, vanadium, and zinc.
- SVOCs – B(a)A, B(a)P, B(b)F, B(b&k)F (total), benzo(g,h,i)perylene [B(ghi)P], chrysene, D(a,h)A, di-n-butyl phthalate, fluoranthene, pentachlorophenol, phenol, phenanthrene, and pyrene.

Results of the preliminary background screening demonstrated that five of the metals (cadmium, lead, manganese, mercury, and vanadium) are statistically comparable to background (Appendix C). The other metals (aluminum, antimony, arsenic, iron, molybdenum, nickel, and thallium) were not initially identified as consistent with background concentrations within Line 02.

While arsenic and thallium did not pass the initial conservative background screening, there is no historical information to support their presence at the site. To further evaluate whether these chemicals may be present at concentrations consistent with background, additional analyses and lines of evidence were explored.

Historical site use information does not indicate past use of arsenic or thallium at Line 02 (ICF Technology, Inc., 1989). Additionally, there are no apparent visual/qualitative indications of spatial patterns at the MA that might indicate a potential source, no topographic features that might influence areal arsenic and thallium concentrations (e.g., low lying areas where runoff might accumulate), and no apparent relationship between arsenic and lead concentrations that support the conclusion that arsenic is present from historical use of lead arsenical pesticides.

In addition, sample location 59E-SB03 at 11 feet bgs was one of the few samples with nondetect results, and also had the greatest detection limit

(<7.4 mg/kg). The presence of this nondetected value in the site concentration dataset prevented the completion of the quantile test as a comparison. To determine what effect this sample may have had on the comparison, the quantile test was repeated by removing the sample from the dataset, and also assuming arsenic was detected at half the detection limit. Both treatments of the data yielded quantile test results that indicated no statistical differences in the right tails of the on-site and background arsenic concentration distributions.

With respect to thallium, evidence from previous site investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Therefore, while the inability to complete a single statistical test (quantile) did not support an initial conclusion that arsenic was consistent with background, other lines of evidence are suggestive that detected arsenic concentrations are not clearly site-related. Furthermore, previous site investigations have lead experts to conclude that thallium at the site is not related to historical activities. Subsequently, it is concluded that arsenic and thallium at Line 02 risks are not COPCs. The final list of COPCs for soil included:

- Metals/Inorganics – Aluminum, antimony, iron, molybdenum, nickel, perchlorate, and zinc.

  SVOCs – B(a)A, B(a)P, B(b)F, B(b&k)F (total), B(ghi)P, chrysene, D(a,h)A, di-n-butyl phthalate, fluoranthene, pentachlorophenol, phenol, phenanthrene, and pyrene.

A summary of the COPCs selected for Line 02 is presented on Table 5.3-3.

5.3.3 Exposure Scenarios

For Line 02, the media of interest include soil and soil vapor. Therefore, the pathways associated with direct and indirect contact with soil and soil vapor COPCs are assessed for Line 02. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air).

5.3.4 *Fate and Transport Results*

Outdoor air modeling results for Line 02 are presented on Table 5.3-4.

A summary of the chemical- and depth-specific soil vapor AFs for indoor and outdoor air for Line 02 are presented on Tables 5.3-5, 5.3-6, and 5.3-7.

5.3.5 *Risk Summary*

This section presents the conservative results of this HHRA for Line 02. The calculated theoretical upper-bound ILCRs were compared to the *de minimus* cumulative risk level (10^{-6}). In addition, USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for Line 02 are presented below.

5.3.5.1 *Residential Scenario*

The Line 02 soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.3-8 and 5.3-9, respectively. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual soil and soil vapor sampling locations with chemicals greater than screening levels are provided on Tables 5.3-10 through 5.3-12. Adult/child HIs and total estimated ILCRs for all media at individual sampling locations are presented in Figures 5.3-1 and 5.3-2, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.0000011, a median of 0.28, and a maximum of 1.3, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 2 percent (3 samples) of the 165 soil samples. Aluminum and iron are the primary contributors to the elevated HIs relative to the target HI. With iron contributing substantially to HIs, it is important to note the substantial amount of uncertainty associated with the NCEA provisional iron reference dose in that it is based upon mean dietary intakes. The uncertainty associated with the iron reference dose is further discussed in Section 7.0.

The range of residential adult receptor estimated HIs included a minimum of 0.00000013, a median of 0.032, and a maximum of 0.14. All of these values are less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 1×10^{-9}, a median of 6×10^{-8}, and a maximum of 1×10^{-5}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 1 percent (1 sample) of the 165 soil samples. B(a)A, B(b&k)F (total), and D(a,h)A are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of residential child receptor estimated HIs included a minimum of 0.000012, a median of 0.0058, and a maximum of 43, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 2 percent (2 samples) of the 126 soil vapor samples. 2-Propanol, cis-1,2-DCE, PCE, and TCE are the primary contributors to the HIs elevated relative to the target HI.

The range of residential adult receptor estimated HIs included a minimum of 0.0000053, a median of 0.0025, and a maximum of 18, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 2 percent (2 samples) of the 126 soil vapor samples. 2-Propanol, cis-1,2-DCE, PCE, and TCE are the primary contributors to the HIs elevated relative to the target HI.

The estimated residential ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 5×10^{-7}, and a maximum of 6×10^{-3}. Estimated ILCRs overlap the acceptable risk range, but were greater than the *de minimus* risk of 1×10^{-6} for 26 percent (33 samples) of the 126 soil vapor samples. Benzene, CCL, chloroform, PCE, and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

While in some cases the estimated theoretical hazards and risks for outdoor air exceeded *de minimus* risk metrics (HI = 1.0, ILCR = 10^{-6}), in all cases where both indoor and outdoor air pathways were assessed, the relative contributions to risks from theoretical indoor air exposures were greater than the relative outdoor contributions by more than 1 to 2 orders of magnitude.

5.3.5.2 *Construction Worker*

The Line 02 soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.3-13 and 5.3-14, respectively. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.3-15 and 5.3-16. HIs and estimated ILCRs for all media at individual samples are presented in Figures 5.3-3 and 5.3-4, respectively.

Soil

The range of construction worker receptor estimated HIs included a minimum of 0.00000029, a median of 0.68, and a maximum of 3.0, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 18 percent (29 samples) of the 165 soil samples. Aluminum and nickel are the primary contributors to the HIs elevated relative to the target HI.

The estimated construction worker ILCRs ranged from a minimum of 4×10^{-11}, a median of 2×10^{-9}, and a maximum of 4×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all of the 165 soil samples.

Soil Vapor

The range of construction worker receptor estimated HIs included a minimum of 0.000000044, a median of 0.000021, and a maximum of 0.17. These are all less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 1×10^{-10}, and a maximum of 2×10^{-6}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for only 1 percent (1 sample) of the 126 soil vapor samples. TCE is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

5.3.5.3 *Commercial/Industrial Worker*

The Line 02 soil and soil vapor HHRA unit hazard/risk results for commercial workers are presented on Tables 5.3-17 and 5.3-18, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.3-19 through 5.3-21. HIs and estimated ILCRs for all

media at individual soil samples are presented in Figures 5.3-5 and 5.3-6, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.00000011, a median of 0.023, and a maximum of 0.1, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 4×10^{-10}, a median of 2×10^{-8}, and a maximum of 4×10^{-6}. Estimated ILCRs within the acceptable risk range, but were greater than the *de minimus* risk of 1×10^{-6} for 1 percent (1 sample) of the 165 soil samples. B(b&k)F (total) is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.0000019, a median of 0.00094, and a maximum of 6.7, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 2 percent (2 samples) of the 126 soil vapor samples. 2-Propanol, cis-1,2-DCE, PCE, and TCE are the primary contributors to the HIs elevated relative to the target HI.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 1×10^{-7}, and a maximum of 1×10^{-3}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 12 percent (15 samples) of the 126 soil vapor samples. Benzene, CCL, chloroform, PCE, and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

A summary of risks for each receptor assessed in Line 02 for soil and soil vapor is presented on Tables 5.3-22 and 5.3-23. Based upon the risk evaluation, the areas shown in Figures 5.3-1 through 5.3-6 are recommended for further evaluation in the FS.

5.4 *LINE 05 NORTH*

The HHRA for the Line 05 North Area soil and soil vapor is presented below. The HHRA for surface water and groundwater for the Line 05 North Area is presented in Section 5.12.

5.4.1 *Receptors of Concern*

Recreational redevelopment is not anticipated for the Line 05 North Area; therefore, the potentially exposed receptors within the Line 05 North Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.4.2 *Constituents of Potential Concern*

COPCs identified in soil vapor and soils within Line 05 North are presented below.

5.4.2.1 *Soil Vapor*

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.4-1. Fifteen chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Those compounds were therefore included as COPCs. Of the VOCs detected in soil vapor from 10 to 30 feet bgs at the site, the following VOCs were selected as COPCS for further evaluation:

- 1,4-Dioxane; 2-propanol; benzene; chloroform; Freon 113; heptane; hexane; PCE; THF; TCE; 1,2,4-TMB; 2,2,4-TMP; 2-butanone (MEK); 4-ethyltoluene; 4-M-2-P; acetone; carbon disulfide; cyclohexane; ethanol; m,p-xylene; and toluene.

5.4.2.2 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.4-2. SVOCs, metals, and perchlorate were detected. Seven of these chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Those compounds were therefore included as COPCs. Results of the concentration/toxicity screen

indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, cadmium, copper, lead, manganese, mercury, perchlorate, thallium, and vanadium.
- SVOCs – B(a)A; B(a)P; B(b&k)F (total); chrysene; D(a,h)A; fluoranthene; NAP; phenol; phenanthrene; and pyrene.

Results of the background screening demonstrated that eight of the metals (aluminum, arsenic, copper, lead, manganese, mercury, thallium, and vanadium) are statistically comparable to background (Appendix C). Cadmium was identified as a COPC in soil within Line 05 North. The final list of COPCs for soil included:

- Metals/Inorganics – Cadmium and perchlorate.
- SVOCs – B(a)A; B(a)P; B(b&k)F (total); chrysene; D(a,h)A; fluoranthene; NAP; phenol; phenanthrene; and pyrene.

A summary of the COPCs selected for Line 05 North is presented on Table 5.4-3.

5.4.3 *Exposure Scenarios*

For Line 05 North, the media of interest include soil and soil vapor. Therefore, the pathways associated with direct and indirect contact with soil and soil vapor COPCs are assessed for Line 05 North. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air).

5.4.4 *Fate and Transport Results*

Outdoor air modeling results for Line 05 North are presented on Table 5.4-4.

A summary of the chemical- and depth-specific soil vapor AFs for indoor and outdoor air are presented on Tables 5.4-5, 5.4-6, and 5.4-7 for Line 05 North.

5.4.5 *Risk Summary*

This section presents the conservative results of this HHERA for Line 05 North. The calculated theoretical upper-bound ILCRs were compared to *de minimus* cumulative risk level (10^{-6}). In addition, the USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for Line 05 North are presented below.

5.4.5.1 *Residential Scenario*

The Line 05 North soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.4-8 and 5.4-9, respectively. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual soil and soil vapor sampling locations with chemicals greater than screening levels are provided on Tables 5.4-10 through 5.4-12. Adult/child HIs and total estimated ILCRs for all media at individual sampling locations are presented in Figures 5.4-1 and 5.4-2, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.00027, a median of 0.006, and a maximum of 0.068, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.000029, a median of 0.00068, and a maximum of 0.0077. All of these values are less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 2×10^{-10}, a median of 7×10^{-10}, and a maximum of 5×10^{-6}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 1 percent (1 sample) of the 78 soil samples. B(a)P is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of residential child receptor estimated HIs included a minimum of 0.000076, a median of 0.00095, and a maximum of 0.063, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.000033, a median of 0.00041, and a maximum of 0.027, which are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 6×10^{-9} a median of 9×10^{-8}, and a maximum of 9×10^{-6}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 7 percent (2 samples) of the 29 soil vapor samples. PCE and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

5.4.5.2 Construction Worker

The Line 05 North soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.4-13 and 5.4-14, respectively. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.4-15 and 5.4-16. HIs and estimated ILCRs for all media at individual samples are presented in Figures 5.4-3 and 5.4-4, respectively.

Soil

The range of construction worker receptor estimated HIs included a minimum of 0.000069, a median of 0.0016, and a maximum of 0.018, which are all less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 2×10^{-9}, a median of 9×10^{-9}, and a maximum of 2×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all samples.

Soil Vapor

The range of construction worker receptor estimated HIs included a minimum of 0.00000028, a median of 0.0000038, and a maximum of 0.00023. These are all less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 1×10^{-12}, a median of 2×10^{-11}, and a maximum of 2×10^{-9}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} in all samples.

5.4.5.3 Commercial/Industrial Worker

The Line 05 North soil and soil vapor HHRA unit hazard/risk results for commercial/industrial workers are presented on Tables 5.4-17 and 5.4-18, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.4-19 through 5.4-21. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.4-5 and 5.4-6, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.000021, a median of 0.00053, and a maximum of 0.006, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 8×10^{-11}, a median of 3×10^{-10}, and a maximum of 1×10^{-6}. Estimated ILCRs were less than or consistent with the *de minimus* risk of 1×10^{-6} for all samples.

Soil Vapor

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.000012, a median of 0.00015, and a maximum of 0.0098, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 1×10^{-9}, a median of 2×10^{-8}, and a maximum of 2×10^{-6}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 3 percent (1 sample) of the 29 soil vapor samples. PCE and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

A summary of risks for each receptor assessed in Line 05 North for soil and soil vapor is presented on Tables 5.4-22 and 5.4-23. Based upon the risk evaluation, the areas shown in Figures 5.4-1 through 5.4-6 are recommended for further evaluation in the FS.

5.5 *WESTLAKES*

The HHRA for the Westlakes Area soil is presented below. No soil vapor samples were collected during the RI for the Westlakes Area due to the presence of wet conditions in the vadose zone. The HHRA for surface water and groundwater for the Westlakes Area is presented in Section 5.12.

5.5.1 *Receptors of Concern*

Recreational redevelopment is not anticipated for the Westlakes Area; therefore, the potentially exposed receptors within the Westlakes Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.5.2 *Constituents of Potential Concern*

COPCs identified in soils within Westlakes are presented below.

5.5.2.1 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.5-1. SVOCs, metals, organochlorine pesticides, and perchlorate were detected. Nine chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those nine compounds were included as COPCs. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, cadmium, lead, manganese, perchlorate, thallium, and vanadium.
- SVOCs – B(a)P, B(b&k)F (total), B(ghi)P, chrysene, fluoranthene, PCB-1260, phenanthrene, and pyrene.
- Pesticides - 4,4'-DDE; 4,4'-DDT; delta-BHC; and heptachlor epoxide.

Results of the background screening demonstrated that all of the metals are statistically comparable to background (Appendix C). Therefore, the final list of soil COPCs for Westlakes included:

- Metals/Inorganics – Perchlorate.

- SVOCs – B(a)P, B(b&k)F (total), fluoranthene, PCB-1260, phenanthrene, and pyrene.
- Pesticides – 4,4'-DDE; 4,4'-DDT; delta-BHC; dieldrin; and Heptachlor epoxide.

As soils are the only media investigated at Westlakes, the summary of the COPCs selected for Westlakes is presented on Table 5.5-1.

5.5.3 *Exposure Scenarios*

For the Westlakes, the media of interest is soil. Therefore, the pathways associated with direct and indirect contact with soil COPCs are assessed for Westlakes. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact); and
- Inhalation of fugitive dust.

5.5.4 *Fate and Transport Results*

The outdoor air modeling results for Westlakes are presented on Table 5.5-2.

5.5.5 *Risk Summary*

This section presents the conservative results of this HHRA for the Westlakes. The calculated theoretical upper-bound ILCRs were compared to *de minimus* cumulative risk level (10^{-6}). In addition, the USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil under residential, construction, and commercial/industrial use scenarios for Westlakes are presented below.

5.5.5.1 *Residential Scenario*

The Westlakes soil HHRA unit hazard/risk results for residents are presented on Table 5.5-3. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual sampling locations with chemicals greater than screening levels are provided on

Table 5.5-4. Adult/child HIs and total estimated ILCRs at individual soil sampling locations are presented in Figures 5.5-1 and 5.5-2, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.00000092, a median of 0.00054, and a maximum of 0.034, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.00000011, a median of 0.000061, and a maximum of 0.0043. All of these values are less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 1×10^{-9}, a median of 3×10^{-7}, and a maximum of 5×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all samples.

5.5.5.2 Construction Worker

The Westlakes soil HHRA unit hazard/risk results for construction workers are presented on Table 5.5-5. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual samples with chemicals greater than screening levels are provided on Table 5.5-6. HIs and estimated ILCRs at individual soil samples are presented in Figures 5.5-3 and 5.5-4, respectively.

Soil

The range of construction worker receptor estimated HIs included a minimum of 0.00000024, a median of 0.00014, and a maximum of 0.009, which are all less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 4×10^{-11}, a median of 1×10^{-8}, and a maximum of 1×10^{-8}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all samples.

5.5.5.3 Commercial/Industrial Worker

The Westlakes soil HHRA unit hazard/risk results for commercial/industrial workers are presented on Table 5.5-7. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual samples with chemicals greater than screening levels are provided on Table 5.5-8. HIs and

estimated ILCRs at individual soil samples are presented in Figures 5.5-5 and 5.5-6, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.000000095, a median of 0.000047, and a maximum of 0.0036, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 3×10^{-10}, a median of 1×10^{-7}, and a maximum of 1×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all samples.

A summary of risks for each receptor assessed in Westlakes for soil is presented on Tables 5.5-9. Based upon the risk evaluation, the areas shown in Figures 5.5-1 through 5.5-6 are recommended for further evaluation in the FS.

5.6 CHEMICAL PLANT 2

The HHRA for the Chemical Plant 2 Area (including the Dredge Pit and Eastern Basin) soil and soil vapor is presented below. The HHRA for surface water and groundwater for the Chemical Plant 2 Area is presented in Section 5.13.

5.6.1 Receptors of Concern

Recreational redevelopment is not anticipated for the Chemical Plant 2 Area; therefore, the potentially exposed receptors within the Chemical Plant 2 Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.6.2 Constituents of Potential Concern

COPCs identified in soil vapor and soils at Chemical Plant 2 are presented below.

5.6.2.1 *Soil Vapor*

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.6-1. Eighteen chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Those compounds were therefore retained as COPCs. Of the VOCs detected in soil vapor from 10 to 40 feet bgs at the site, the following VOCs were selected as COPCS for further evaluation:

- 1,1-DCE; 1,2,4-TMB; 1,2-DCA; 1,3,5-TMB; 1,4-dioxane; 2,2,4-TMP; 2-butanone (MEK); 2-propanol; 4-ethyltoluene; 4-M-2-P; acetone; benzene; BDCM; carbon disulfide; CCL; chloroethane; chloroform; cumene; cyclohexane; ethanol; ethylbenzene; Freon 11; Freon 113; heptane; hexane; m,p-xylene; o-xylene; methyl tert-butyl ether; propylbenzene; PCE; THF; toluene; TCE; and vinyl chloride.

Five of the eight chemicals detected, but screened out as COPCs, have at least one nondetected result with a detection limit greater than the screening criteria (Table 4.3-1); but none of these chemicals are typically risk drivers at other sites. The effect the presence of these elevated detection limits may have on the risk results is described in the Uncertainty Analysis (Section 7.0).

5.6.2.2 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.6-2. SVOCs, metals, pesticides, and perchlorate were detected. Twelve organic chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those compounds were retained as COPCs. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, antimony, arsenic, barium, cadmium, iron, lead, manganese, mercury, molybdenum, nickel, perchlorate, thallium, and vanadium.
- SVOCs – B(a)A; B(a)P; B(b)F; B(b&k)F (total); B(k)F; B(ghi)P; chrysene; D(a,h)A; di-n-butyl phthalate; fluoranthene; hexanedioic acid;

dioctylester; I(1,2,3-cd)P; pentachlorophenol; phenol; phenanthrene; PCB-1248; PCB-1254; and pyrene.

- Pesticides – 4,4'-DDE; 4,4'-DDD; 4,4'-DDT; aldrin; delta-BHC; dieldrin; endosulfan II; Endrin; heptachlor epoxide; and pendimethalin (Prowl).

Results of the preliminary background screening demonstrated that two of the metals (manganese and vanadium) are statistically comparable to background (Appendix C). The other metals (aluminum, antimony, arsenic, barium, cadmium, iron, lead, mercury, molybdenum, nickel, and thallium) were not initially identified as consistent with background concentrations within Chemical Plant 2.

While aluminum, arsenic, and thallium did not pass the initial conservative background screening, there is no historical information to support their presence due to site related activities. To further evaluate whether these chemicals may be present at concentrations consistent with background, additional analyses and lines of evidence were explored.

Historical site use information does not document past use of aluminum, arsenic, or thallium at the MA (ICF Technology, Inc., 1989). Additionally, there are no apparent visual/qualitative indications of spatial patterns at the MA that might indicate a potential source, no topographic features that might influence areal concentrations (e.g., low lying areas where runoff might accumulate), and no apparent relationship between arsenic and lead concentrations that support the conclusion that arsenic is present a result of historical use of lead arsenical pesticides.

Several different soil types (Xerorthents and Redding Corning-Red Bluff [RCRB]) were identified at the Chemical Plant 2 MA, and subsequently background comparisons for COPC selection were completed (independently) utilizing background datasets representative of both soil types (Xerorthents and RCRB). Three of the four median and right-tail comparative statistics for both arsenic and aluminum supported the conclusion that the datasets were comparable (Gehan and quantile comparison to Xerorthents data, and quantile comparison to RCRB data). Only the median tests (Gehan) for RCRB (aluminum and arsenic) data did not support this conclusion.

Receptor behavior-based exposure considerations warranted further examination of the data. While background comparison tests were conducted upon a site dataset containing results from two soil types, these data were compared to background datasets indicative of only single soil

types independently (Xerorthents and RCRB separately). While this is a conservative procedure, receptors are not exposed to a single soil type at a site, whether site-related or background-related. Rather, receptor behavior is more likely to result in exposure to some combination of soil types; therefore, background comparisons (and COPC selections) should also be explored based upon a combined dataset of background.

Subsequently, background comparison statistics were conducted based upon evaluation of site aluminum and arsenic data to a combined Xerorthents and RCRB background dataset. Results of these background comparison tests support the conclusion that measured aluminum and arsenic in site soils are comparable to those measured in background.

For thallium, a detailed evaluation of data collected during previous site investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Therefore, while the results of a single statistical comparison test (of four conducted) for one soil type did not support an initial conclusion that aluminum and arsenic at Chemical Plant 2 were consistent with background, other lines of evidence suggest that detected aluminum and arsenic concentrations are clearly not site-related. Furthermore, previous site investigations lead experts to conclude that thallium at the site is also not site related. Subsequently, it is concluded that aluminum, arsenic, and thallium at Chemical Plant 2 are not COPCs.

Therefore, the final list of COPCs in soil within Chemical Plant 2 included:

- Metals/Inorganics – Antimony, barium, cadmium, iron, lead, mercury, molybdenum and perchlorate.
- SVOCs – B(a)A; B(a)P; B(b)F; B(b&k)F (total); B(k)F; B(ghi)P; chrysene; D(a,h)A; di-n-butyl phthalate; fluoranthene; hexanedioic acid-dioctylester; I(1,2,3-cd)P; pentachlorophenol; phenol; phenanthrene; PCB-1248; PCB-1254; and pyrene.
- Pesticides – 4,4'-DDE; 4,4'-DDD; 4,4'-DDT; aldrin; delta-BHC; dieldrin; endosulfan II; Endrin; heptachlor epoxide; and pendimethalin (Prowl).

A summary of the COPCs selected for Chemical Plant 2 is presented on Table 5.6-3.

5.6.3 *Exposure Scenarios*

For Chemical Plant 2, the media of interest include soil and soil vapor. Therefore, the pathways associated with direct and indirect contact with soil and soil vapor COPCs are assessed for Chemical Plant 2. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air).

5.6.4 *Fate and Transport Results*

Outdoor air modeling results for Chemical Plant 2 are presented on Table 5.6-4.

A summary of the chemical- and depth-specific soil vapor AFs for indoor and outdoor air are presented on Tables 5.6-5, 5.6-6, and 5.6-7 for Chemical Plant 2.

5.6.5 *Risk Summary*

This section presents the conservative results of this HHRA for Chemical Plant 2. The calculated theoretical upper-bound ILCRs were compared to *de minimus* cumulative risk level (10^{-6}). In addition, the USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for Chemical Plant 2 are presented below.

5.6.5.1 *Residential Scenario*

The Chemical Plant 2 soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.6-8 and 5.6-9, respectively. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual soil and soil vapor sampling locations with chemicals greater than screening levels are provided on Tables 5.6-10 through 5.6-12. Adult/child HIs and total estimated ILCRs for all media

at individual sampling locations are presented in Figures 5.6-1 and 5.6-2, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.00000087, a median of 0.033, and a maximum of 110, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 4 percent (11 samples) of the 295 soil samples. Iron, mercury, PCBs and pendimethalin are the primary contributors to the elevated HIs relative to the target HI. With iron contributing substantially to HIs, it is important to note the substantial amount of uncertainty associated with the NCEA provisional iron reference dose in that it is based upon mean dietary intakes. The uncertainty associated with the iron reference dose is further discussed in Section 7.0.

The range of residential adult receptor estimated HIs included a minimum of 0.0000001, a median of 0.0037, and a maximum of 13, which overlaps the target HI of 1.0.

The range of residential blood lead estimates for children included a minimum of 4.7 µg/dL, a median of 4.9 µg/dL, and a maximum of 17 µg/dL. Child resident blood lead greater than 10 µg/dL was estimated for 1 percent (3 samples) of the 295 soil samples. Blood lead estimates for adults were much lower, with a maximum of 4.9 µg/dL, which is less than the target of 10 µg/dL.

The estimated residential ILCRs ranged from a minimum of 3×10^{-10}, a median of 5×10^{-9}, and a maximum of 1×10^{-3}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 9 percent (26 samples) of the 295 soil samples. B(a)P, B(b&k)F (total), DDD, BHC, and PCBs are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of residential child receptor estimated HIs included a minimum of 0.000017, a median of 0.0052, and a maximum of 1,300, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 13 percent (14 samples) of the 104 soil vapor samples. Vinyl chloride, chloroform, and 1,2-DCA are the primary contributors to the HIs elevated relative to the target HI.

The range of residential adult receptor estimated HIs included a minimum of 0.0000074, a median of 0.0023, and a maximum of 560, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 12 percent (12 samples) of the 104 soil vapor samples. Vinyl chloride, chloroform, and 1,2-DCA are the primary contributors to the HIs elevated relative to the target HI.

The estimated residential ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 2×10^{-7}, and a maximum of 4×10^{-2}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 26 percent (27 samples) of the 104 soil vapor samples. CCL, chloroform, 1,2-DCA, and vinyl chloride are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

While in some cases the estimated theoretical hazards and risks for outdoor air exceeded *de minimus* risk metrics (HI = 1.0, ILCR = 10^{-6}), in all cases where both indoor and outdoor air pathways were assessed, the relative contributions to risks from theoretical indoor air exposures were greater than the relative outdoor contributions by more than 1 to 2 orders of magnitude.

5.6.5.2 *Construction Worker*

The Chemical Plant 2 soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.6-13 and 5.6-14, respectively. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.6-15 and 5.6-16. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.6-3 and 5.6-4, respectively.

<u>Soil</u>

The range of construction worker receptor estimated HIs included a minimum of 0.00000023, a median of 0.095, and a maximum of 28, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for only 1 percent (4 samples) of the 295 soil samples. Barium, iron, mercury, PCBs and pendimethalin are the primary contributors to the HIs elevated relative to the target HI.

The range of construction worker blood lead estimates included a minimum of 3.3 µg/dL, a median of 3.4 µg/dL, and a maximum of 7.0 µg/dL, which are all less than the target of 10 µg/dL.

The estimated construction worker ILCRs ranged from a minimum of 2×10^{-11}, a median of 1×10^{-8}, and a maximum of 4×10^{-5}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 1 percent (2 samples) of the 295 soil samples. PCBs are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of construction worker receptor estimated HIs included a minimum of 0.000000076, a median of 0.000021, and a maximum of 5, which overlaps the target HI of 1.0. Only 1 sample of 104 samples is above the target HI of 1.0. 1,2-DCA is the primary contributor to the HI elevated relative to the target HI.

The estimated construction worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 3×10^{-11}, and a maximum of 9×10^{-6}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for only 1 percent (1 sample) of the 104 soil vapor samples. 1,2-DCA is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

5.6.5.3 *Commercial/Industrial Worker*

The Chemical Plant 2 soil and soil vapor HHRA unit hazard/risk results for commercial workers are presented on Tables 5.6-17 and 5.6-18, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.6-19 through 5.6-21. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.6-5 and 5.6-6, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.000000085, a median of 0.0026, and a maximum of 11, which overlaps the target HI of 1.0. PCBs and pendimethalin are the primary contributors to the elevated HIs relative to the target HI.

The range of commercial worker blood lead estimates included a minimum of 3.3 µg/dL, a median of 3.3 µg/dL, and a maximum of 4.5 µg/dL, which are all less than the target of 10 µg/dL.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 2×10^{-10}, a median of 1×10^{-9}, and a maximum of 4×10^{-4}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 4 percent (12 samples) of the 295 soil samples. B(a)P and PCBs are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.0000027, a median of 0.0008, and a maximum of 200, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 9 percent (9 samples) of the 104 soil vapor samples. Vinyl chloride, chloroform, and 1,2-DCA are the primary contributors to the HIs elevated relative to the target HI.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 4×10^{-8}, and a maximum of 1×10^{-2}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 17 percent (18 samples) of the 104 soil vapor samples. CCL, chloroform, 1,2-DCA, and vinyl chloride are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

A summary of risks for each receptor assessed in Chemical Plant 2 for soil and soil vapor is presented on Tables 5.6-22 and 5.6-23. Based upon the risk evaluation, the areas shown in Figures 5.6-1 through 5.6-6 are recommended for further evaluation in the FS.

5.7 MAGAZINE AREA

The HHRA for the Magazine Area soil and soil vapor is presented below. The HHRA for surface water and groundwater for the Magazine Area is presented in Section 5.13.

5.7.1 *Receptors of Concern*

Recreational redevelopment is not anticipated for the Magazine Area; therefore, the potentially exposed receptors within the Magazine Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.7.2 *Constituents of Potential Concern*

COPCs identified in soil vapor and soil within the Magazine Area are presented below.

5.7.2.1 *Soil Vapor*

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.7-1. Twelve chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those compounds were retained as COPCs. Of the VOCs detected in soil vapor from 10 to 40 feet bgs at the site, the following VOCs were selected as COPCS for further evaluation:

- 1,4-Dioxane; 2-butanone (MEK); 2-propanol; 4-M-2-P; acetone; benzene; carbon disulfide; CCL; cyclohexane; ethanol; Freon 113; heptane; hexane; m,p-xylene; PCE; THF; toluene; and TCE.

5.7.2.2 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.7-2. SVOCs, metals, and perchlorate were detected. All of the organic chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but several had detection frequencies greater than 5 percent. Therefore, all organic compounds were retained as COPCs. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, cadmium, lead, manganese, thallium, and vanadium.
- SVOCs – B(a)A, phenol, and phenanthrene.

Results of the background screening demonstrated that all metals are statistically comparable to background (Appendix C). Therefore, none of the detected metals were identified as COPCs in soil within the Magazine Area. COPCs in soil within the Magazine Area included only the following SVOCs: B(a)A, phenol, and phenanthrene.

A summary of the COPCs selected for the Magazine Area is presented on Table 5.7-3.

5.7.3 *Exposure Scenarios*

For the Magazine Area, the media of interest include soil and soil vapor. Therefore, the pathways associated with direct and indirect contact with soil and soil vapor COPCs are assessed for the Magazine Area. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air).

5.7.4 *Fate and Transport Results*

Outdoor air modeling results for the Magazine Area are presented on Table 5.7-4.

A summary of the chemical- and depth-specific soil vapor AFs for indoor and outdoor air are presented on Tables 5.7-5 through 5.7-7 for the Magazine Area.

5.7.5 *Risk Summary*

This section presents the conservative results of this HHRA for the Magazine Area. The calculated theoretical upper-bound ILCRs were compared to *de minimus* cumulative risk level (10^{-6}). In addition, the USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for the Magazine Area are presented below.

5.7.5.1 *Residential Scenario*

The Magazine Area soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.7-8 and 5.7-9, respectively. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual soil and soil vapor sampling locations with chemicals greater than screening levels are provided on Tables 5.7-10 through 5.7-12. Adult/child HIs and total estimated ILCRs for all media at individual sampling locations are presented in Figures 5.7-1 and 5.7-2, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.0000028, a median of 0.000037, and a maximum of 0.000068, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.00000033, a median of 0.0000043, and a maximum of 0.000008, which are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 2×10^{-9}, a median of 8×10^{-9}, and a maximum of 9×10^{-9}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil samples.

Soil Vapor

The range of residential child receptor estimated HIs included a minimum of 0.000013, a median of 0.00068, and a maximum of 0.053, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.0000057, a median of 0.00029, and a maximum of 0.023, which are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 6×10^{-8}, and a maximum of 3×10^{-6}. Estimated ILCRs were within the acceptable risk range, but were greater than the *de minimus* risk of 1×10^{-6} for 4 percent (1 sample) of the 27 soil vapor samples. PCE is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

5.7.5.2 *Construction Worker*

The Magazine Area soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.7-13 and 5.7-14, respectively. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.7-15 and 5.7-16. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.7-3 and 5.7-4, respectively.

Soil

The range of construction worker receptor estimated HIs included a minimum of 0.00000073, a median of 0.000011, and a maximum of 0.000019, which are all less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 7×10^{-11}, a median of 2×10^{-10}, and a maximum of 3×10^{-10}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil samples.

Soil Vapor

The range of construction worker receptor estimated HIs included a minimum of 0.000000063, a median of 0.000003, and a maximum of 0.00021, which are all less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 2×10^{-11}, and a maximum of 7×10^{-10}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil vapor samples.

5.7.5.3 *Commercial/Industrial Worker*

The Magazine Area soil and soil vapor HHRA unit hazard/risk results for commercial/industrial workers are presented on Tables 5.7-17 and 5.7-18, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.7-19 through 5.7-21. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.7-5 and 5.7-6, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.00000029, a median of 0.000037, and a maximum of 0.0000068, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 7×10^{-10}, a median of 2×10^{-9}, and a maximum of 3×10^{-9}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil samples.

Soil Vapor

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.0000021, a median of 0.00011, and a maximum of 0.0082, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 1×10^{-8}, and a maximum of 7×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil vapor samples.

A summary of risks for each receptor assessed in the Magazine Area for soil and soil vapor is presented on Tables 5.7-22 and 5.7-23. Based upon the human health risk evaluation, no action is recommended for Magazine Area soils and soil vapor.

5.8 *OPEN SPACE AREAS 1, 2, 3, AND 4*

The HHRA for the OS Areas 1, 2, 3, and 4 Area soil and soil vapor is presented below. The HHRA for surface water and groundwater for OS Areas 1, 2, 3, and 4 is presented in Section 5.13.

5.8.1 *Receptors of Concern*

Recreational redevelopment is not anticipated for OS Areas 1, 2, 3, and 4; therefore, the potentially exposed receptors within OS Areas 1, 2, 3, and 4 include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.8.2 *Constituents of Potential Concern*

COPCs identified in soil vapor and soil within OS Areas 1, 2, 3, and 4 are presented below.

5.8.2.1 *Soil Vapor*

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.8-1. Twenty-three chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those compounds were retained as COPCs. Of the VOCs detected in soil vapor from 10 to 20 feet bgs at the site, the following VOCs were selected as COPCS for further evaluation:

- 1,2,4-TMB; 1,3,5-TMB; 2-propanol; 2,2,4-TMP; 2-butanone (MEK); 2-hexanone; 2-propanol; 4-ethyltoluene; 4-M-2-P; acetone; benzene; carbon disulfide; chloroethane; cyclohexane; ethanol; ethylbenzene; Freon 113; heptane; hexane; m,p-xylene; o-xylene; styrene; PCE; THF; toluene; and TCE.

5.8.2.2 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.8-2. SVOCs and metals were detected. Phenol had a maximum detected concentration that was less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Phenol was therefore included as a COPC. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, cadmium, manganese, and vanadium.
- SVOCs – Phenol.

Results of the background screening demonstrated that the metals (aluminum, arsenic, cadmium, manganese, and vanadium) are statistically comparable to background (Appendix C). Phenol was the only compound identified as a COPC in soil within OS Areas 1, 2, 3, and 4.

A summary of the COPCs selected for OS Areas 1, 2, 3, and 4 is presented on Table 5.8-3.

5.8.3 *Exposure Scenarios*

For OS Areas 1, 2, 3, and 4, the media of interest include soil and soil vapor. Therefore, the pathways associated with direct and indirect contact with soil and soil vapor COPCs are assessed for OS Areas 1, 2, 3, and 4. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air).

5.8.4 *Fate and Transport Results*

Outdoor air modeling results for OS Areas 1, 2, 3, and 4 are presented on Table 5.8-4.

A summary of the chemical- and depth-specific soil vapor AFs for indoor and outdoor air are presented on Tables 5.8-5, 5.8-6, and 5.8-7 for OS Areas 1, 2, 3, and 4.

5.8.5 *Risk Summary*

This section presents the conservative results of this HHRA for OS Areas 1, 2, 3, and 4. The calculated theoretical upper-bound ILCRs were compared to *de minimus* cumulative risk level (10^{-6}). In addition, the USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for OS Areas 1, 2, 3, and 4 are presented below.

5.8.5.1 *Residential Scenario*

The OS Areas 1, 2, 3, and 4 soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.8-8 and 5.8-9, respectively. Risk characterization results for residential ingestion, dermal contact, and

inhalation for individual soil and soil vapor sampling locations with chemicals greater than screening levels are provided on Tables 5.8-10 through 5.8-12. Adult/child HIs and total estimated ILCRs for all media at individual sampling locations are presented in Figures 5.8-1 and 5.8-2, respectively.

Soil

The maximum residential child receptor estimated HI was 0.00015, which is less than the target HI of 1.0. The maximum residential adult receptor estimated HI was 0.000017, which is less than the target HI of 1.0.

As there were no carcinogenic COPCs, no ILCRs were estimated for soils.

Soil Vapor

The maximum residential child receptor estimated HI was 0.013, which is less than the target HI of 1.0. The maximum residential adult receptor estimated HI was 0.0058, which is less than the target HI of 1.0.

The maximum estimated residential ILCR was 7×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil vapor samples.

5.8.5.2 Construction Worker

The OS Areas 1, 2, 3, and 4 soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.8-13 and 5.8-14, respectively. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.8-15 and 5.8-16. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.8-3 and 5.8-4, respectively.

Soil

The maximum construction worker receptor estimated HI was 0.000045, which is less than the target HI of 1.0.

As there were no carcinogenic COPCs, no ILCRs were estimated for soils.

Soil Vapor

The maximum construction worker receptor estimated HI was 0.000054, which is less than the target HI of 1.0.

The maximum estimated construction worker ILCR was 2×10^{-10}, which is less than the *de minimus* risk of 1×10^{-6}.

5.8.5.3 Commercial/Industrial Worker

The OS Areas 1, 2, 3, and 4 soil and soil vapor HHRA unit hazard/risk results for commercial/industrial workers are presented on Tables 5.8-17 and 5.8-18, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.8-19 through 5.8-21. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.8-5 and 5.8-6, respectively.

Soil

The maximum commercial/industrial worker receptor estimated HI was 0.000015, which is less than the target HI of 1.0.

As there were no carcinogenic COPCs, no ILCRs were estimated for soils.

Soil Vapor

The maximum commercial/industrial worker receptor estimated HI was 0.0021, which is less than the target HI of 1.0.

The maximum estimated commercial/industrial worker ILCR was 2×10^{-7}, which is less than the *de minimus* risk of 1×10^{-6}.

A summary of risks for each receptor assessed in OS Areas 1, 2, 3, and 4 for soil and soil vapor is presented on Tables 5.8-22 and 5.8-23. Based upon the human health risk evaluation, no action is recommended for OS Areas 1, 2, 3, and 4 soils and soil vapor.

5.9 *OPEN SPACE AREAS 5 AND 7*

The HHRA for OS Areas 5 and 7 soil and soil vapor is presented below. The HHRA for surface water and groundwater for OS Areas 5 and 7 is presented in Section 5.12.

5.9.1 *Receptors of Concern*

Recreational redevelopment is not anticipated for OS Areas 5 and 7; therefore, the potentially exposed receptors within the OS Areas 5 and 7 include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.9.2 *Constituents of Potential Concern*

COPCs identified in soil vapor and soil within OS Areas 5 and 7 are presented below.

5.9.2.1 *Soil Vapor*

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.9-1. Fourteen chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. These compounds were therefore retained as COPCs. Of the VOCs detected in soil vapor from 10 to 20 feet bgs at the site, the following VOCs were selected as COPCS for further evaluation:

- 1,2-DCA; 1,4-dioxane; 2-butanone (MEK); 2-propanol; acetone; benzene; carbon disulfide; chloroform; cyclohexane; ethanol; Freon 113; heptane; hexane; m,p-xylene; methylene chloride; PCE; THF; toluene; and TCE.

5.9.2.2 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.9-2. SVOCs and metals were detected. Phenol had a maximum detected concentration that was less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Phenol was therefore retained as a COPC. Results of the

concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, manganese, and vanadium.
- SVOCs – Phenol.

Results of the background screening demonstrated that the metals (aluminum, arsenic, manganese, and vanadium) are statistically comparable to background (Appendix C). Phenol was the only chemical identified as a COPC in soil within OS Areas 5 and 7.

A summary of the COPCs selected for OS Areas 5 and 7 is presented on Table 5.9-3.

5.9.3 Exposure Scenarios

For OS Areas 5 and 7, the media of interest include soil and soil vapor. Therefore, the pathways associated with direct and indirect contact with soil and soil vapor COPCs are assessed for OS Areas 5 and 7. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust; and
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air).

5.9.4 Fate and Transport Results

Outdoor air modeling results for OS Areas 5 and 7 are presented on Table 5.9-4.

A summary of the chemical- and depth-specific soil vapor AFs for indoor and outdoor air for OS Areas 5 and 7 are presented on Tables 5.9-5, 5.9-6, and 5.9-7.

5.9.5 Risk Summary

This section presents the conservative results of this HHRA for OS Areas 5 and 7. The calculated theoretical upper-bound ILCRs were compared to *de minimus* cumulative risk level (10^{-6}). In addition, the USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as

defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil and soil vapor under residential, construction, and commercial/industrial use scenarios for OS Areas 5 and 7 are presented below.

5.9.5.1 *Residential Scenario*

The OS Areas 5 and 7 soil and soil vapor HHRA unit hazard/risk results for residents are presented on Tables 5.9-8 and 5.9-9, respectively. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual soil and soil vapor sampling locations with chemicals greater than screening levels are provided on Tables 5.9-10 through 5.9-12. Adult/child HIs and total estimated ILCRs for all media at individual sampling locations are presented in Figures 5.9-1 and 5.9-2, respectively.

<u>Soil</u>

The maximum residential child receptor estimated HI was 0.0001, which is less than the target HI of 1.0. The maximum residential adult receptor estimated HI was 0.000012, which is less than the target HI of 1.0.

As there were no carcinogenic COPCs, no ILCRs were estimated for soils.

<u>Soil Vapor</u>

The maximum residential child receptor estimated HI was 0.016, which is less than the target HI of 1.0. The maximum residential adult receptor estimated HI was 0.0067, which is less than the target HI of 1.0.

The maximum estimated residential ILCR was 6×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil vapor samples.

5.9.5.2 *Construction Worker*

The OS Areas 5 and 7 soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.9-13 and 5.9-14, respectively. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.9-15 and 5.9-16. HIs and estimated ILCRs for all media at

individual soil samples are presented in Figures 5.9-3 and 5.9-4, respectively.

Soil

The maximum construction worker receptor estimated HI was 0.00003, which is less than the target HI of 1.0.

As there were no carcinogenic COPCs, no ILCRs were estimated for soils.

Soil Vapor

The maximum construction worker receptor estimated HI was 0.000067, which is less than the target HI of 1.0.

The maximum estimated construction worker ILCR was 2×10^{-10}, which is less than the *de minimus* risk of 1×10^{-6}.

5.9.5.3 Commercial/Industrial Worker

The OS Areas 5 and 7 soil and soil vapor HHRA unit hazard/risk results for commercial/industrial workers are presented on Tables 5.9-17 and 5.9-18, respectively. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.9-19 through 5.9-21. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.9-5 and 5.9-6, respectively.

Soil

The maximum commercial/industrial worker receptor estimated HI was 0.00001, which is less than the target HI of 1.0.

As there were no carcinogenic COPCs, no ILCRs were estimated for soils.

Soil Vapor

The maximum commercial/industrial worker receptor estimated HI was 0.0024, which is less than the target HI of 1.0.

The maximum estimated commercial/industrial worker ILCR was 1×10^{-7}, which is less than the *de minimus* risk of 1×10^{-6}.

A summary of risks for each receptor assessed in OS Areas 5 and 7 for soil and soil vapor is presented on Tables 5.9-22 and 5.9-23. Based upon the human health risk evaluation, no action is recommended for OS Areas 5 and 7 soils and soil vapor.

5.10 AREA 39

The HHRA for Area 39 is presented below.

5.10.1 Receptors of Concern

The potentially exposed receptors within the Area 39 include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children). Additionally, Area 39 is also used for off-road recreational motor sport traffic (ATVs, dirt bikes) and, therefore, recreational exposures may occur for adults (ages 7+ years). Therefore, a recreational receptor is included.

5.10.2 Constituents of Potential Concern

COPCs identified in soil vapor, soil, groundwater, and surface water at Area 39 are presented below.

5.10.2.1 Soil Vapor

Based upon comparison to human health screening criteria and FOD, the results of the soil vapor COPC selection for human health is presented on Table 5.10-1. Nineteen of these chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those compounds were retained as COPCs. Of the VOCs detected in soil vapor from 10 to 40 feet bgs at the site, the following VOCs were selected as COPCs for further evaluation:

- 1,1-DCE; 1,1,2-TCA; 1,2,4-TMB; 1,2-DCA; 1,3,5-TMB; 1,4-dioxane; 2,2,4-TMP; 2-butanone (MEK); 2-propanol; 4-ethyltoluene; 4-M-2-P; acetone; benzene; BDCM; carbon disulfide; CCL; chloroform; cis-1,2-DCE; cyclohexane; ethanol; ethylbenzene; DBCM; Freon 113; heptane; hexane; m,p-xylene; o-xylene; propylbenzene; styrene; PCE; THF; toluene; TCE; and vinyl chloride.

Three of the nine chemicals detected, but screened out as COPCs, have at least one nondetected result with a detection limit greater than the screening criteria (Table 4.3-1). However, none of these chemicals are typically risk drivers at other sites. The effect the presence of these elevated detection limits may have on the risk results is described in the Uncertainty Analysis (Section 7.0).

5.10.2.2 *Soil*

Based upon comparison to human health screening criteria and detection frequency, the results of the soil COPC selection for human health is presented on Table 5.10-2. SVOCs, metals, dioxins, and perchlorate were detected. Several phthalates had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those compounds were retained as COPCs. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, cadmium, chromium, manganese, perchlorate, thallium, and vanadium.
- SVOCs – B(2-EH)P, di-n-butyl phthalate, and dioxin (TCDD).

Results of the initial background screening demonstrated that three of the metals (arsenic, chromium, and manganese) are statistically comparable to background (Appendix C). The other metals (aluminum, cadmium, thallium, and vanadium) were not initially identified as being consistent with background concentrations.

While aluminum and thallium did not pass the initial conservative background screening, there is no historical information to support their presence at the site due to site related activities. To further evaluate whether these chemicals may be present at concentrations consistent with background, additional analyses and lines of evidence were explored.

Historical site use information does not document past use of aluminum or thallium at the MA (ICF Technology, Inc., 1989). Additionally, there are no apparent visual/qualitative indications of spatial patterns at the MA that might indicate a potential source and no topographic features that might influence areal concentrations (e.g., low lying areas where runoff might accumulate).

A sample collected at location 32B-SB04 at 5 feet bgs was the only sample to contain aluminum at concentrations outside the background range. However, samples collected above (32B-SB04 at 1.5 feet bgs) and below (32B-SB04 at 11.5 feet bgs) at a depth of 5 feet bgs at this location are consistent with the concentrations in background samples. To determine what effect this sample may have had on the background comparison tests, the sample results were removed from the dataset and the tests were repeated. After removal of the data point, the data yielded both Gehan and quantile test results that indicated no statistical differences in the on-site and background aluminum concentration distributions. This is suggestive that aluminum concentrations at the site are consistent with background conditions, and those observed in soils at 32B-SB04 (at 5 feet) are potential outliers, are anomalous, and may not be a result of site activity.

While the results of a single statistical test resulted in selection of aluminum as a COPC at Area 39, other lines of evidence are suggestive that detected aluminum concentrations are not clearly site-related. Subsequently, aluminum is not considered a COPC for Area 39 with one exception. Because the concentrations at 32B-SB04 (at 5 feet) are outside the range of detected aluminum concentrations in background and are above the BTV, hazards associated with aluminum in this sample are quantified.

For thallium, detailed evaluation of data from previous site investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Therefore, the list of chemicals identified as COPCs in soil within Area 39 included:

- Metals/Inorganics – Aluminum (32B-SB04 at 5 feet only), cadmium, perchlorate, and vanadium.
- SVOCs – B(2-EH)P, di-n-butyl phthalate, and dioxin (TCDD).

Mammalian World Health Organization Toxic Equivalency Factors (TEFs) (Van den Berg et al. 2005) were applied to the dioxin and furan congeners to determine a TEQ concentration, which was then compared to the 2,3,7,8-TCDD screening benchmark. Conversion of congener-specific measurements to TEQs is conceptually completed utilizing the following formula:

$$\text{Congener TEQ} = C_{congener} \times \text{TEF}$$

where:

$C_{congener}$ = Concentration of 2,3,7,8-dioxin/furan congener

TEF = Toxic Equivalency Factor for the 2,3,7,8-dioxin/furan congener

$$Total\ Dioxin\ TEQ = \sum 2,3,7,8\text{ - Congener Specific TEQ}$$

The conversion of Area 39 dioxin congener data to a TEQ is presented in Appendix B.

5.10.2.3 Groundwater

The results of the groundwater COPC selection for human health are presented on Table 5.10-3. VOCs, SVOCs, metals, perchlorate, and TCDD were detected. Three of the organic chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore those three organic compounds were included as COPCs. Results of the concentration/toxicity screen and FOD analyses indicated that the following analytes were COPCs for groundwater:

- Metals – Aluminum, antimony, arsenic, barium, beryllium, cadmium, cobalt, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, strontium, thallium, titanium, vanadium, and zinc.
- VOCs – 1,1,2-TCA; 1,1-DCE; 1,2-DCA; 1,2-DCE; chloroform; chloromethane; cis-1,2-DCE; Freon 113; toluene; TCE; and trans-1,2-DCE.
- Nitrate as NO_3 and nitrite as NO_2.
- Perchlorate.
- TCDD.
- B(2-EH)P and NAP.

As discussed in Section 5.1.2.3, petroleum mixtures are complex and the toxic constituents are being evaluated individually. Therefore, although they are relevant for site characterization purposes, diesel-range and motor oil-range organics were not identified as COPCs.

5.10.2.4 Surface Water

Based upon comparison to human health screening criteria, the results of the surface water COPC selection for human health is presented on

Table 5.10-4. Metals and nitrogen compounds were detected. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for surface water:

- Metals - Aluminum, arsenic, barium, beryllium, cadmium, iron, lead, manganese, nickel, and vanadium.
- Nitrate as NO_3.

A summary of the COPCs selected for Area 39 is presented on Table 5.10-5.

5.10.3 Exposure Scenarios

For Area 39, the media of interest include soil, soil vapor, surface water, and groundwater. Therefore, the pathways associated with direct and indirect contact with COPCs in soil, soil vapor, surface water, and groundwater are assessed for Area 39. These pathways (for all receptors) include:

- Direct contact with soil (incidental ingestion and dermal contact);
- Inhalation of fugitive dust;
- Volatilization of COPCs from soil vapor into ambient air (outdoor and indoor air);
- Ingestion of groundwater as a potable water source (future residents only);
- Dermal contact with groundwater during domestic use (e.g., showering, future residents only);
- Inhalation of VOCs from groundwater during domestic use (future residents only);
- Volatilization of VOCs from groundwater, migration of vapors through the vadose zone, and into indoor and ambient air (future residents and future commercial workers only);
- Ingestion of surface water during recreational use (future residents only); and
- Dermal contact with surface water during recreational use (future residents only).

5.10.4 *Fate and Transport Results*

Outdoor air modeling results for Area 39 are presented on Table 5.10-6.

A summary of the chemical- and depth-specific soil vapor AFs for indoor and outdoor air for Area 39 are presented on Tables 5.10-7, 5.10-8, 5.10-9. A summary of the chemical- and depth-specific groundwater to indoor air AFs are presented on Tables 5.10-10 and 5.10-11 for Area 39.

5.10.5 *Risk Summary*

This section presents the conservative results of this HHRA for Area 39. The calculated theoretical upper-bound ILCRs were compared to the *de minimus* cumulative risk level (10^{-6}). In addition, USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The results of the risk assessment for the COPCs at Area 39, by receptor and media, are presented below.

5.10.5.1 *Residential Scenario*

The results of the future hypothetical residential HHRA for Area 39 are presented below.

The Area 39 HHRA unit hazard/risk results for residents are presented on Tables 5.10-12 (soil), 5.10-13 (soil vapor), 5.10-17 (surface water), and 5.10-20 and 5.10-21 (groundwater). Risk characterization results for residential ingestion, dermal contact, and inhalation for individual sampling locations with chemicals greater than screening levels are provided on Tables 5.10-14, 5.10-15, and 5.10-16 for soil and soil vapor, Table 5.10-18 for surface water, and Tables 5.10-22 and 5.10-23 for groundwater. Adult/child HIs and total estimated ILCRs for all media at individual sampling locations are presented in Figures 5.10-1 and 5.10-2, respectively.

<u>Soil</u>

The range of residential child receptor estimated HIs included a minimum of 0.00011, a median of 0.19, and a maximum of 1.3, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 1 percent (1

sample) of the 131 soil samples. Aluminum and vanadium are the primary contributors to the elevated HIs relative to the target HI.

The range of residential adult receptor estimated HIs included a minimum of 0.000013, a median of 0.021, and a maximum of 0.14, which are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 3×10^{-10}, a median of 1×10^{-9}, and a maximum of 8×10^{-5}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 9 percent (12 samples) of the 131 soil samples. TCDD is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of residential child receptor estimated HIs included a minimum of 0.000013, a median of 0.0029, and a maximum of 4.3, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 6 percent (4 samples) of the 63 soil vapor samples. TCE and 1,1,2-TCA are the primary contributors to the HIs elevated relative to the target HI.

The range of residential adult receptor estimated HIs included a minimum of 0.0000055, a median of 0.0012, and a maximum of 1.8, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for 5 percent (3 samples) of the 63 soil vapor samples. TCE and 1,1,2-TCA are the primary contributors to the HIs elevated relative to the target HI.

The estimated residential ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 4×10^{-7}, and a maximum of 9×10^{-4}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 22 percent (14 samples) of the 63 soil vapor samples. Benzene, CCL, chloroform, and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

While in some cases the estimated theoretical hazards and risks for outdoor air exceeded *de minimus* risk metrics (HI = 1.0, ILCR = 10^{-6}), in all cases where both indoor and outdoor air pathways were assessed, the relative contributions to risks from theoretical indoor air exposures were greater than the relative outdoor contributions by more than 1 to 2 orders of magnitude.

Surface Water

The maximum residential child and adult receptor estimated HIs were 0.017 and 0.0048, respectively, which are less than the target HI of 1.0.

The maximum residential child and adult blood lead levels were 1.9 and 0.82, which are less than the target blood lead level of 10 µg/dL.

The maximum residential ILCRs ranged was 3×10^{-7}, which is less than the *de minimus* risk of 1×10^{-6}.

Groundwater

Domestic Use – Perched Water (Layer Y)

The range of residential child receptor estimated HIs included a minimum of 0.84, a median of 25, and a maximum of 500, which overlaps the target HI of 1.0. Estimated HIs were above the target of 1.0 for 54 percent (7 samples) of the 13 groundwater samples. Aluminum, arsenic, manganese, mercury, nickel, perchlorate, thallium, TCE, and vanadium were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 0.36, a median of 11, and a maximum of 210, which overlaps the target HI of 1.0.

The range of residential blood lead incremental increase estimate for children included a minimum of 2.0 µg/dL, a median of 7.0 µg/dL, and a maximum of 97 µg/dL, respectively. The range of residential blood lead incremental increase estimate for adults included a minimum of 0.97 µg/dL, a median of 3.5 µg/dL, and a maximum of 49 µg/dL, respectively. Blood lead estimates greater than 10 µg/dL were estimated for 33 percent (3 samples) of 9 samples.

The estimated residential ILCRs ranged from a minimum of 2×10^{-6}, a median of 5×10^{-4}, and a maximum of 1×10^{-3}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for all seven samples. 1,1,2-TCA; 1,2-DCA; 2,3,7,8-TCDD (TEQ); arsenic; chloroform; and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 0.063, a median of 3.3, and a maximum of 24, which overlaps the target HI of 1.0. Estimated HIs were above the target of 1.0 for 56 percent (five samples) of the nine groundwater samples. Zinc, vanadium, iron, aluminum, arsenic, perchlorate, cadmium, and manganese were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 0.027, a median of 1.4, and a maximum of 10, which overlaps the target HI of 1.0.

The range of residential blood lead incremental increase estimate for children included a minimum of 2.4 µg/dL, a median of 3.6 µg/dL, and a maximum of 110 µg/dL, respectively. The range of residential blood lead incremental increase estimate for adults included a minimum of 1.2 µg/dL, a median of 1.8 µg/dL, and a maximum of 56 µg/dL, respectively. Blood lead estimates greater than 10 µg/dL were estimated for one location.

The estimated residential ILCRs ranged from a minimum of 1×10^{-5}, a median of 5×10^{-4}, and a maximum of 1×10^{-3}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for all six samples. Arsenic, B(2-EH)P, chloroform, NAP, and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Vapor Intrusion – Perched Zone (Layer Y)

The range of residential child receptor estimated HIs included a minimum of 0.00089 and a maximum of 0.22. These values are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.00038 and a maximum of 0.094. These values are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 0 and a maximum of 4×10^{-5}. These estimated ILCRs are less than the *de minimus* risk of 1×10^{-6} for all locations except one.

Vapor Intrusion – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 0.00061 and a maximum of 0.0059. These values are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.00026 and a maximum of 0.0025. These values are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 0 and a maximum of 1×10^{-7}. These estimated ILCRs are less than the *de minimus* risk of 1×10^{-6} for all locations.

5.10.5.2 Construction Worker

The Area 39 soil and soil vapor HHRA unit hazard/risk results for construction workers are presented on Tables 5.10-24 and 5.10-25. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual soil and soil vapor samples with chemicals greater than screening levels are provided on Tables 5.10-26 and 5.10-27. HIs and estimated ILCRs for all media at individual sample locations are presented in Figures 5.10-3 and 5.10-4, respectively.

<u>Soil</u>

The range of construction worker receptor estimated HIs included a minimum of 0.00003, a median of 0.05, and a maximum of 1.9, which overlaps the target HI of 1.0. HIs greater than 1.0 were estimated for only 1 percent (1 sample) of the 131 soil samples. Aluminum is the primary contributor to the elevated HIs relative to the target HI.

The estimated construction worker ILCRs ranged from a minimum of 1×10^{-11}, a median of 1×10^{-8}, and a maximum of 2×10^{-6}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for one soil sample. TCDD is the primary contributor to the ILCR greater than the *de minimus* risk of 1×10^{-6}.

<u>Soil Vapor</u>

The range of construction worker receptor estimated HIs included a minimum of 0.000000049, a median of 0.000011, and a maximum of 0.017, which are all less than the target HI of 1.0.

The estimated construction worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 9×10^{-11}, and a maximum of 2×10^{-7}, which are all less than the *de minimus* risk of 1×10^{-6}.

5.10.5.3 Commercial/Industrial Worker

The Area 39 soil and soil vapor HHRA unit hazard/risk results for commercial/industrial workers are presented on Tables 5.10-28 and 5.10-29. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual samples with chemicals greater than screening levels are provided on Tables 5.10-30, 5.10-31, and 5.10-32. HIs and estimated ILCRs for all media at individual samples are presented in Figures 5.10-5 and 5.10-6, respectively.

Soil

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.000011, a median of 0.015, and a maximum of 0.1, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 1×10^{-10}, a median of 5×10^{-10}, and a maximum of 2×10^{-5}. Estimated ILCRs were within the acceptable risk range, but greater than the *de minimus* risk of 1×10^{-6} for 8 percent (11 samples) of the 131 soil samples. TCDD is the primary contributor to the ILCR greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.000002, a median of 0.00045, and a maximum of 0.67, which are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 9×10^{-8}, and a maximum of 2×10^{-4}. Estimated ILCRs overlap the acceptable risk range and were greater than the *de minimus* risk of 1×10^{-6} for 16 percent (10 samples) of the 63 soil vapor samples. Benzene, CCL, chloroform, and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Groundwater

Area 39 groundwater HHRA unit hazard/risk results for commercial/ industrial workers are presented on Table 5.10-33, and risk characterization results for vapor inhalation for individual sampling locations with chemicals greater than screening levels are provided on Table 5.10-34.

Vapor Intrusion – Perched Zone (Layer Y)

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.00012 and a maximum of 0.041. These values are all less than the target HI of 1.0.

The estimated commercial/industrial worker ILCRs ranged from a minimum of 0 and a maximum of 8×10^{-6}. These estimated ILCRs are less than the *de minimus* risk of 1×10^{-6} for all locations except one.

Vapor Intrusion – First Water-Bearing Zone (Layer S)

The range of commercial/industrial worker receptor estimated HIs included a minimum of 0.00009 and a maximum of 0.0009. These values are all less than the target HI of 1.0.

The estimated commercial ILCRs ranged from a minimum of 0 and a maximum of 1×10^{-7}. These estimated ILCRs are less than the *de minimus* risk of 1×10^{-6} for all locations.

5.10.5.4 Recreational Scenario

The results of the recreational adult use scenario HHRA are presented below.

The Area 39 soil HHRA unit hazard/risk results for recreational adults are presented on Tables 5.10-35 and 5.10-36. Risk characterization results for recreational ingestion, dermal contact, and inhalation for individual sampling locations with chemicals greater than screening levels are provided on Tables 5.10-37 and 5.10-38. HIs and estimated ILCRs for all media at individual sampling locations are presented in Figures 5.10-7 and 5.10-8, respectively.

Soil

The range of recreational receptor estimated HIs included a minimum of 0.0000019, a median of 0.0029, and a maximum of 0.021, which are all less than the target HI of 1.0.

The estimated recreational ILCRs ranged from a minimum of 2×10^{-11}, a median of 1×10^{-10}, and a maximum of 2×10^{-6}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for one sample. TCDD is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Soil Vapor

The range of recreational receptor estimated HIs included a minimum of 0.000000068, a median of 0.000015, and a maximum of 0.024, which are all less than the target HI of 1.0.

The estimated recreational ILCRs ranged from a minimum of 0 (no carcinogenic compounds of interest in a sample), a median of 5×10^{-9}, and a maximum of 1×10^{-5}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 6 percent (4 samples) of the 63 soil vapor samples. Benzene, CCL, chloroform, and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

While conducting the risk assessment on a point-by-point basis is a conservative procedure, recreational receptors are not exposed to concentrations from a single location for the entire duration of their exposure period, especially in the case of outdoor air exposures. Recreational receptor behavior is more likely to result in a composite exposure to multiple locations and chemical concentrations. While estimated location-specific cancer risks were above the *de minimus* risk for four samples, it is important to note that these risks are likely overestimated for this receptor (recreational off-road vehicle users) and receptor behavior-based exposures should be considered. As most of the locations (94 percent) do not have risk estimates in excess of *de minimus* and median risk estimates are three orders of magnitude lower by comparison (10^{-9}), it is considered unlikely that recreational exposures would result in risk estimates of concern.

A summary of risks for each receptor assessed in Area 39 for soil, soil vapor, and groundwater are presented on Tables 5.10-39, 5.10-40, and

5.10-41. Based upon the risk evaluation, the areas shown in Figures 5.10-1 through 5.10-6 are recommended for further evaluation in the FS.

Adult/child HIs and total estimated ILCRs at individual soil, surface water, and groundwater sampling locations are presented in Figures 5.10-1 through 5.10-6. As discussed above, the summary of risks assessed in Area 39 for surface water is presented on Table 5.10-18.

5.11 BUFFALO CREEK

The HHRA for the Buffalo Creek Area soil and sediment is presented below. No soil vapor samples were collected during the RI for the Buffalo Creek Area due to the likelihood of encountering wet soil.

5.11.1 Receptors of Concern

The potentially exposed receptors within the Buffalo Creek Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children). Additionally, the Creek may be used for incidental recreational wading by children/young adults (ages 7-14 years). Therefore, a recreational wading receptor is included.

5.11.2 Constituents of Potential Concern

COPCs identified in soil and sediment in Buffalo Creek are presented below.

5.11.2.1 Soil

Based upon comparison to human health screening criteria and FOD, the results of the soil COPC selection for human health is presented on Table 5.11-1. Metals, pesticides, and SVOCs were detected. A number of organics had maximum detected concentrations less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Those compounds were therefore included as COPCs). Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, cadmium, lead, manganese, silver, thallium, and vanadium.

- Pesticides – DDD, DDT, DDE, aldrin, alpha-chlordane, delta BHC, dieldrin, endosulfan I, endosulfan II, endrin, gamma-chlordane, heptachlor, and heptachlor epoxide.
- SVOCs – Fluoranthene, PCB-1254, phenol, and pyrene.

Results of the background screening demonstrated that aluminum, arsenic, cadmium, thallium, and vanadium are statistically comparable to background (Appendix C). The remaining metals (lead, manganese, and silver) were selected as COPCs. Therefore, the list of chemicals identified as COPCs in soil within Buffalo Creek included:

- Metals/Inorganics – Lead, manganese, and silver.
- Pesticides – DDD, DDT, DDE, aldrin, alpha-chlordane, delta BHC, dieldrin, endosulfan I, endosulfan II, endrin, gamma-chlordane, heptachlor, and heptachlor epoxide.
- SVOCs – Fluoranthene, PCB-1254, phenol, and pyrene.

5.11.2.2 *Sediment*

Metals, pesticides, and SVOCs were detected. Eleven chemicals had maximum detected concentrations less than the screening level (one-tenth of a health-based level; Table 5.11-2), but had detection frequencies greater than 5 percent. Those compounds were therefore are included as COPCs). Results of the concentration/toxicity and detection frequency screen indicated that the following analytes were above the screening levels developed for soil:

- Metals/Inorganics – Aluminum, arsenic, cadmium, chromium, hexavalent chromium, lead, manganese, silver, thallium, and vanadium.
- Pesticides –DDE, delta-BHC, gamma-BHC, and heptachlor epoxide.
- SVOCs – B(a)A; B(a)P; B(b&k)F (total); B(ghi)P; chrysene; D(a,h)A; fluoranthene; I(1,2,3-cd)P; PCB-1254; PCB-1260; phenanthrene; pyrene; and THF.

As no background dataset is available for inorganics in site sediments, no background comparison was conducted, and the inorganics identified above were selected as sediment COPCs with one exception. Because it has been determined from other studies that thallium in soils cannot be site related (Section 5.3.2.2 above), and the only feasible source of thallium in sediment should be eroded soils from the site, thallium is not selected

as a COPC in sediments. The organics presented above were also identified as COPCs in sediment within Buffalo Creek.

A summary of the COPCs selected for Buffalo Creek is presented on Table 5.11-3.

5.11.3 Exposure Scenarios

For Buffalo Creek, the media of interest include soil and sediment. Therefore, the pathways associated with direct and indirect contact with soil and sediment COPCs are assessed for Buffalo Creek. These pathways include:

- Direct contact with soil (incidental ingestion and dermal contact residents and workers only);
- Direct contact with sediment (incidental ingestion and dermal contact; recreators only); and
- Inhalation of fugitive dust (soil only).

5.11.4 Fate and Transport Results

Outdoor air modeling results (soil only) for Buffalo Creek are presented on Table 5.11-4.

5.11.5 Risk Summary

This section presents the conservative results of this HHRA for Buffalo Creek. The calculated theoretical upper-bound ILCRs were compared to the *de minimus* cumulative risk level (10-6). In addition, USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The HHRA unit hazard risk results for soil and sediment under residential, construction, commercial/industrial, and recreational wading use (sediment only) scenarios for Buffalo Creek are presented below.

5.11.5.1 Residential Scenario

The Buffalo Creek soil HHRA unit hazard/risk results for residents are presented on Table 5.11-5. Risk characterization results for residential ingestion, dermal contact, and inhalation for individual sampling

locations with chemicals greater than screening levels are provided on Tables 5.11-6. Adult/child HIs and total estimated ILCRs at individual soil sampling locations are presented in Figures 5.11-1 and 5.11-2, respectively.

Soil

The range of residential child receptor estimated HIs included a minimum of 0.00036, a median of 0.15, and a maximum of 1.0, which are all less than or equal to the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.000038, a median of 0.018, and a maximum of 0.12, which are all less than the target HI of 1.0.

The range of residential child blood lead estimates included a minimum of 4.9 µg/dL, a median of 5.2 µg/dL, and a maximum of 7.7 µg/dL, which are all less than the target of 10 µg/dL.

The range of estimated residential ILCRs included a minimum of 3×10^{-10}, a median of 9×10^{-7}, and a maximum of 1×10^{-5}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 22 percent (4 samples) of the 18 soil samples. PCB is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

5.11.5.2 Construction Worker

The Buffalo Creek soil HHRA unit hazard/risk results for construction workers are presented on Table 5.11-7. Risk characterization results for construction worker ingestion, dermal contact, and inhalation for individual samples with chemicals greater than screening levels are provided on Table 5.11-8. HIs and estimated ILCRs at individual soil samples are presented in Figures 5.11-3 and 5.11-4, respectively.

Soil

The range of construction worker receptor estimated HIs included a minimum of 0.000093, a median of 0.056, and a maximum of 11, which overlaps the target HI of 1.0. HIs greater than the target of 1.0 were estimated for 28 percent (5 samples) of the 18 soil samples. The primary contributor to the HIs greater than the target of 1.0 was manganese.

The range of construction worker blood lead estimates included a minimum of 3.4 µg/dL, a median of 3.5 µg/dL, and a maximum of 4.2 µg/dL, which are all less than the target of 10 µg/dL.

The range of estimated construction worker ILCRs included a minimum of 8×10^{-12}, a median of 3×10^{-8}, and a maximum of 4×10^{-7}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all soil samples.

5.11.5.3 Commercial/Industrial Worker

The Buffalo Creek soil HHRA unit hazard/risk results for commercial/industrial workers are presented on Table 5.11-9. Risk characterization results for commercial/industrial worker ingestion, dermal contact, and inhalation for individual samples with chemicals greater than screening levels are provided on Table 5.11-10. HIs and estimated ILCRs at individual soil samples are presented in Figures 5.11-5 and 5.11-6, respectively.

<u>Soil</u>

The range of commercial/industrial worker receptor estimated HI included a minimum of 0.000027, a median of 0.014, and a maximum of 0.11, which are all less than the target HI of 1.0.

The range of commercial worker blood lead estimates included a minimum of 3.3 µg/dL, a median of 3.4 µg/dL, and a maximum of 3.6 µg/dL, which are all less than the target of 10 µg/dL.

The range of estimated commercial worker ILCRs included a minimum of 6×10^{-11}, a median of 3×10^{-7}, and a maximum of 4×10^{-6}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 11 percent (2 samples) of the 18 soil samples. PCBs are the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

5.11.5.4 Recreator Scenario

The Buffalo Creek sediment HHRA unit hazard/risk results for recreators are presented on Table 5.11-11. Risk characterization results for recreator ingestion, dermal contact, and inhalation for individual samples with chemicals greater than screening levels are provided on Table 5.11-12. HIs and estimated ILCRs at individual sediment samples are presented in Figures 5.11-5 and 5.11-6, respectively.

Sediment

The range of recreator (wading) receptor estimated HI included a minimum of 0.000000032, a median of 0.082, and a maximum of 0.14, which are all less than the target HI of 1.0.

The range of recreator (wading) blood lead estimates included a minimum of 4.9 µg/dL, a median of 5.5 µg/dL, and a maximum of 6.3 µg/dL, which are all less than the target of 10 µg/dL.

The range of estimated recreator (wading) ILCRs included a minimum of 6×10^{-6}, a median of 9×10^{-6}, and a maximum of 2×10^{-5}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 80 percent (12 samples) of the 15 soil samples. Arsenic and PCBs are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Given arsenic is the primary ILCR driver, it is relevant to note that because no background dataset is available for sediments, it can not be determined statistically if the detected concentrations of arsenic in sediments are related to site conditions or are naturally occurring. However, it can be presumed that the main source of sediments in Buffalo Creek is from soils in the surrounding watershed, which includes soils from the site, as well as from background areas. Arsenic concentrations in site soils range from 0.89 to 37 mg/kg, which overlaps the range of detected arsenic concentrations in Buffalo Creek sediment.

For arsenic, ILCRs associated with background range from a minimum of 4×10^{-6}, a median of 2×10^{-5}, and a maximum of 1×10^{-4}. These overlap the range of estimated risks for sediment arsenic concentrations. Therefore, the risks associated with arsenic in background soils and MA sediments may be relatively difficult to distinguish.

The risks associated with non-arsenic COPCs range from 1×10^{-7} to 2×10^{-6}, and are predominantly due to detected PCB concentrations.

A summary of risks for each receptor assessed in Buffalo Creek for soil and sediment is presented on Table 5.11-13. Based upon the risk evaluation, the areas shown in Figures 5.11-1 through 5.11-6 are recommended for further evaluation in the FS.

5.12 *WESTLAKES, LINE 02, LINE 05 NORTH AREA SURFACE WATER AND GROUNDWATER*

The HHRA for surface water and groundwater within and beneath the Westlakes; Line 02; Line 05 North; and OS Areas 5, 6, and 7 (referred to hereafter as the WLLO Area) is presented below.

5.12.1 *Receptors of Concern*

Recreational redevelopment is not anticipated for the WLLO Area; therefore, the potentially exposed receptors within the WLLO Area include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.12.2 *Constituents of Potential Concern*

COPCs identified in groundwater and surface water within the WLLO Area are presented below.

The only primary media assessed for the WLLO Area included groundwater and surface water, as well as secondary media potentially influenced by these primary media.

5.12.2.1 *Groundwater*

The results of the groundwater COPC selection for human health are presented on Table 5.12-1. VOCs, SVOCs, and metals were detected. Four organic- and nitrate-related chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Those compounds were therefore are included as COPCs. Results of the concentration/toxicity screen and FOD analyses indicated that the following analytes were COPCs for groundwater:

- Metals – Aluminum, antimony, arsenic, barium, beryllium, boron, cobalt, chromium, copper, iron, lead, manganese, molybdenum, nickel, titanium, vanadium, and zinc.
- VOCs – 1,1-DCA; 1,1-DCE; 1,2-DCA; 1,2-DCE; CCL; chloroform; cis-1,2-DCE; Freon 113; methylene chloride; NAP; NDMA; PCE; TCE; and trichlorofluoromethane.
- SVOCs - B(a)A and phenanthrene.
- Nitrate as NO_3 and nitrite as NO_2.

- Perchlorate.

5.12.2.2 *Surface Water*

Based upon comparison to human health screening criteria, the results of the surface water COPC selection for human health is presented on Table 5.12-2. SVOCs, metals, perchlorate, and nitrate were detected. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for surface water:

- Metals - Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, hexavalent chromium, iron, lead, manganese, mercury, nickel, silver, strontium, thallium, titanium, vanadium, and zinc.
- SVOCs - B(2-EH)P, NDMA, and trichlorofluoromethane.
- Perchlorate.
- Nitrate as NO_3.

A summary of selected COPCs for the WLLO Area surface water and groundwater is presented on Table 5.12-3.

5.12.3 *Exposure Scenarios*

Pathways associated with direct and indirect contact with groundwater and surface water are assessed for the WLLO Area. These pathways include:

- Ingestion of groundwater as a potable water source (future residents only);
- Dermal contact with groundwater during domestic use (e.g., showering, future residents only);
- Inhalation of VOCs from groundwater during domestic use (future residents only);
- Volatilization of VOCs from groundwater, migration of vapors through the vadose zone, and into indoor and ambient air (future residents and future commercial workers only);
- Ingestion of surface water during recreational use (future residents only); and
- Dermal contact with surface water during recreational use (future residents only).

5.12.4 *Fate and Transport Results*

A summary of the soil vapor AFs for indoor and outdoor air within the WLLO Area for each of the VOCs at each depth interval calculated using the models are presented on Tables 5.12-4 and 5.12-5.

5.12.5 *Risk Summary*

This section presents the conservative results of this HHRA for surface water and groundwater within the WLLO Area. The calculated theoretical upper-bound ILCRs were compared to the *de minimus* cumulative risk level (10^{-6}). In addition, USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The results of the risk assessment for the COPCs in surface water and groundwater within the WLLO Area, by receptor and pathway, are summarized below.

5.12.5.1 *Residential Scenario*

<u>Surface Water</u>

The WLLO Area surface water HHRA unit hazard/risk results are presented on Table 5.12-6. Location-specific results are presented on Table 5.12-7, and are summarized on Table 5.12-8. Based upon the risk evaluation, the areas shown in Figures 5.12-1 through 5.12-4 are recommended for further evaluation in the FS. The range of residential child receptor estimated HIs included a minimum of 0.0024, a median of 0.0033, and a maximum of 0.044, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.00064, a median of 0.00091, and a maximum of 0.015, which are all less than the target HI of 1.0.

The range of residential blood lead incremental increase estimates for children included a minimum of 1.7 µg/dL, a median of 1.7 µg/dL, and a maximum of 5 µg/dL; and for adults included a minimum of 0.77 µg/dL, a median of 0.77 µg/dL, and a maximum of 1.6 µg/dL. These incremental increases are less than the target of 10 µg/dL.

The estimated residential ILCRs ranged from a minimum of 8×10^{-9}, a median of 2×10^{-8}, and a maximum of 2×10^{-6}. These estimated ILCRs were above the *de minimus* risk of 1×10^{-6} for only 1 sample out of 11. B(2-EH)P is the principal contributor to the ILCR above the *de minimus* level.

Groundwater

The WLLO Area groundwater HHRA unit hazard/risk results for residents are presented on Tables 5.12-9 and 5.12-10 and for commercial/industrial workers on Table 5.12-13. Location-specific results are presented on Tables 5.12-11, 5.12-12, and 5.12-14; and summarized on Table 5.12-15. Based upon the risk evaluation, the areas shown in Figures 5.12-1 through 5.12-4 are recommended for further evaluation in the FS.

Domestic Use – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 3, a median of 36, and a maximum of 740, all of which are greater than the target HI of 1.0 for 100 percent of the four groundwater samples. PCE, TCE, and perchlorate were the greatest contributors.

The range of residential adult receptor estimated HIs included a minimum of 1.3, a median of 16, and a maximum of 320, which overlaps the target HI of 1.0.

The residential blood lead incremental increase estimate for children and adults were 190 µg/dL and 96 µg/dL, respectively. Blood lead estimates greater than 10 µg/dL were estimated for one location.

The estimated residential ILCRs ranged from a minimum of 9×10^{-6}, a median of 1×10^{-4}, and a maximum of 2×10^{-3}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for all four samples. PCE, TCE, CCL, chloroform, NDMA, and 1,2-DCA are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer C

The residential child receptor estimated HI was 120, and the estimated residential adult receptor HI was 50. These are both above the target HI of 1.0. CCL, NAP, perchlorate, PCE, and TCE were the greatest contributors.

The residential blood lead incremental increase estimates for children and adults were 78 µg/dL and 39 µg/dL, respectively. These blood lead estimates are greater than 10 µg/dL.

The estimated residential ILCR was 2×10^{-3}, which is greater than the *de minimus* risk of 1×10^{-6}. Arsenic, CCL, chloroform, NAP, PCE, and TCE are the contributors.

Domestic Use – Layer D

The range of residential child receptor estimated HIs for the two samples included a minimum of 0.94 and a maximum of 16, which overlaps the target HI of 1.0. Perchlorate and TCE were the greatest contributors.

The range of residential adult receptor estimated HIs for the two samples included a minimum of 0.41 and a maximum of 7.0, which overlaps the target HI of 1.0. Perchlorate and TCE were the greatest contributors.

No lead was detected in these samples and, therefore, residential blood lead levels were not estimated.

The estimated residential ILCRs ranged from a minimum of 1×10^{-6} and a maximum of 4×10^{-5}. These ILCRs were above the *de minimus* risk of 1×10^{-6} for all samples. TCE and NDMA are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer E

The range of residential child receptor estimated HIs for the two samples included a minimum of 0.5 and a maximum of 2.3. This range overlaps the target HI of 1.0. TCE was the greatest contributor. For adults, the estimated HIs included a minimum of 0.22 and a maximum of 0.99, which are below the target HI of 1.0.

No lead was detected in these samples and, therefore, residential blood lead levels were not estimated.

The estimated residential ILCRs ranged from a minimum of 1×10^{-6} and a maximum of 7×10^{-6}. These ILCRs were above the *de minimus* risk. TCE is the primary contributor to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer F

The residential child receptor estimated HI was 0.59 and the adult HI was 0.25, which are less than the target HI of 1.0.

No lead was detected in these samples.

The estimated residential ILCR ranged was 5×10^{-6}. This ILCR was above the *de minimus* risk. TCE and NDMA are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Vapor Intrusion – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 0.0019 and a maximum of 0.73. These values are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.00083 and a maximum of 0.31. These values are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 5×10^{-7} and a maximum of 1×10^{-4}. These estimated ILCRs are above the *de minimus* risk of 1×10^{-6} for three of the four locations.

5.12.5.2 Commercial Scenario

<u>Vapor Intrusion – First Water Bearing Zone (Layer S)</u>

The range of commercial worker receptor estimated HIs included a minimum of 0.0003 and a maximum of 0.11. These values are all less than the target HI of 1.0.

The estimated commercial ILCRs ranged from a minimum of 1×10^{-7} and a maximum of 2×10^{-5}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for two of the four locations.

5.13 CHEMICAL PLANT 2 REGION SURFACE WATER AND GROUNDWATER

The HHRA for surface water and groundwater within and beneath the Chemical Plant 2 Area is presented below. MAs within the Chemical

Plant 2 Area include Chemical Plant 2, the Magazine Area, Dredge Pit and Eastern Basin, and OS Areas 1, 2, 3, and 4.

5.13.1 Receptors of Concern

Recreational redevelopment is not anticipated for the MAs within the Chemical Plant 2 Region; therefore, the potentially exposed receptors within the MAs in the Chemical Plant 2 Region include current and future potential commercial/industrial receptors, construction workers, and future potential residents (adults and children).

5.13.2 Constituents of Potential Concern

COPCs identified in groundwater and surface water within and beneath the Chemical Plant 2 Region are presented below.

This section of the HHRA focuses only on groundwater and surface water within Chemical Plant 2 Region, as well as secondary media potentially influenced by these primary media.

5.13.2.1 Groundwater

The results of the groundwater COPC selection for human health are presented on Table 5.13-1. VOCs, SVOCs, metals, perchlorate, nitrates and nitrites, and organochlorine pesticides were detected. Three organic chemicals had maximum detected concentrations that were less than the screening level (one-tenth of a health-based level), but had detection frequencies greater than 5 percent. Therefore, those three compounds were included as COPCs. Results of the concentration/toxicity screen and FOD analyses indicated that the following analytes were COPCs for groundwater:

- Metals – Aluminum, antimony, arsenic, barium, beryllium, boron, cobalt, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, selenium, strontium, thallium, titanium, vanadium, and zinc.
- VOCs – 1,1,2,2-PCA; 1,1,2-TCA; 1,1-DCA; 1,1-DCE; 1,2-DCA; 1,2-DCE; CCL; 1,4-dioxane; acrolein; benzene; chloroform; cis-1,2-DCE; BDCM; carbon disulfide; DBCM; Freon 113; methylene chloride; NAP; PCE; and TCE.
- Nitrate as NO_3, nitrate and nitrite as NO_2.
- Perchlorate.

- Delta-BHC, gamma-BHC, dieldrin, endosulfan, B(2-EH)P, and NDMA.

5.13.2.2 *Surface Water*

Based upon comparison to human health screening criteria, the results of the surface water COPC selection for human health is presented on Table 5.13-2. SVOCs, metals, pesticides, and nitrogen compounds were detected. Results of the concentration/toxicity screen indicated that the following analytes were above the screening levels developed for surface water:

- Metals - Aluminum, arsenic, barium, beryllium, cadmium, copper, iron, lead, manganese, mercury, molybdenum, nickel, perchlorate, silver, thallium, and vanadium.
- 4-Methylphenol, alpha-BHC, delta-BHC, heptachlor, heptachlor epoxide, and pendimethalin (Prowl).
- Nitrate as NO_3 and Nitrite as NO_2.

A summary of selected COPCs for surface water and groundwater within the Chemical Plant 2 Region is presented on Table 5.13-3.

5.13.3 *Exposure Scenarios*

Pathways associated with direct and indirect contact with groundwater and surface water are assessed for the Chemical Plant 2 Region. These pathways include:

- Ingestion of groundwater as a potable water source (future residents only);
- Dermal contact with groundwater during domestic use (e.g., showering, future residents only);
- Inhalation of VOCs from groundwater during domestic use (future residents only);
- Volatilization of VOCs from groundwater, migration of vapors through the vadose zone, and into indoor and ambient air (future residents and future commercial workers only);
- Ingestion of surface water during recreational use (future residents only); and
- Dermal contact with surface water during recreational use (future residents only).

5.13.4 *Fate and Transport Results*

A summary of the soil vapor AFs for indoor and outdoor air for the Chemical Plant 2 Region for each of the VOCs at each depth interval calculated using the models are presented on Tables 5.13-4 and 5.13-5.

5.13.5 *Risk Summary*

This section presents the conservative results of this HHRA for surface water and groundwater within the Chemical Plant 2 Region. The calculated theoretical upper-bound ILCRs were compared to the *de minimus* cumulative risk level (10^{-6}). In addition, USEPA and Cal-EPA defined acceptable cumulative risk range of 1×10^{-6} to 1×10^{-4} (as defined in Section 5.1.4 above). The non-carcinogenic health effects were compared to a target HI of 1.0.

The results of the risk assessment for the COPCs in groundwater and surface water at the property, by receptor and pathway, are summarized below.

5.13.5.1 *Residential Scenario*

<u>Surface Water</u>

The Chemical Plant 2 Region surface water HHRA unit hazard/risk results are presented on Table 5.13-6. Location-specific results are presented on Table 5.13-7, and are summarized on Table 5.13-8.

The range of residential child receptor estimated HIs included a minimum of 0.0093, a median of 0.033, and a maximum of 0.083, which are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.0026, a median of 0.014, and a maximum of 0.023, which are all less than the target HI of 1.0.

The range of residential blood lead incremental increase estimates for children included a minimum of 1.7 µg/dL, a median of 1.8 µg/dL, and a maximum of 2.4 µg/dL; and for adults included a minimum of 0.78 µg/dL, a median of 0.8 µg/dL, and a maximum of 0.93 µg/dL. These incremental increases are small, and less than the target of 10 µg/dL.

The estimated residential ILCRs ranged from a minimum of 4×10^{-7}, a median of 1×10^{-6} and a maximum of 2×10^{-6}. These estimated ILCRs are above the *de minimus* risk of 1×10^{-6} for one sample out of four. Arsenic is the most significant contributor to the ILCR above the *de minimus* level.

Groundwater

The Chemical Plant 2 Region groundwater HHRA unit hazard/risk results for residents are presented on Tables 5.13-9 and 5.13-10 and for commercial/industrial workers on Table 5.13-13. Location-specific results are presented on Tables 5.13-11, 5.13-12, and Table 5.13-14; and summarized on Table 5.13-15. Based upon the risk evaluation, the areas shown in Figures 5.13-1 through 5.13-4 are recommended for further evaluation in the FS.

Domestic Use – Perched Water Zone (Layer Y)

The range of residential child receptor estimated HIs included a minimum of 0.015, a median of 1.6, and a maximum of 100, which overlaps the target HI of 1.0. Seventy-five percent (six locations) of the eight groundwater sample locations were above the target HI of 1.0. 1,2-DCA, aluminum, iron, manganese, nickel, nitrate, perchlorate, chloroform, TCE, vanadium, and zinc were the greatest contributors.

The range of estimated residential blood lead incremental increase estimates for children included a minimum of 19 µg/dL, a median of 390 µg/dL, and a maximum of 770 µg/dL. For adults, the range included a minimum of 9.2 µg/dL, a median of 200 µg/dL, and a maximum of 380 µg/dL. Blood lead estimates greater than 10 µg/dL were estimated for both locations.

The estimated residential ILCRs ranged from a minimum of 1×10^{-6}, a median of 4×10^{-6}, and a maximum of 3×10^{-4}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for six of the eight locations. 1,1,2-TCA; 1,2-DCA; chloroform; PCE; and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 0.04, a median of 41, and a maximum of 1,000, which overlaps the target HI of 1.0. Eighty-nine percent (16 locations) of the 18 groundwater sample locations were above the target HI of 1.0. 1,2-DCA; 1,2-DCE; aluminum;

arsenic; iron; manganese; mercury; nickel; nitrate; perchlorate; TCE; vinyl chloride; and zinc were the greatest contributors.

The range of estimated residential blood lead incremental increase estimates for children included a minimum of 1.9 µg/dL, a median of 23 µg/dL, and a maximum of 480 µg/dL. For adults, the range included a minimum of 0.89, a median of 11 µg/dL, and a maximum of 240 µg/dL. Blood lead estimates greater than 10 µg/dL were estimated for 39 percent (7 locations) of 18 sample locations.

The estimated residential ILCRs ranged from a minimum of 3×10^{-5}, a median of 4×10^{-4}, and a maximum of 2×10^{-2}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 15 of the 18 locations. 1,1,2,2-PCA; 1,1,2-TCA; 1,2-DCA; arsenic; benzene; B(2-EH)P; chloroform; methylene chloride; NDMA; PCE; and TCE are the primary contributors to the ILCRs greater than the *de minimus* risk of 1×10^{-6}.

Domestic Use – Layer A

The range of residential child receptor estimated HI was 7.7 to 120, and the estimated residential adult receptor HI ranged from 3.3 to 53. These are above the target HI of 1.0. 1,2-DCA, manganese, nitrate, perchlorate, and TCE were the greatest contributors.

The estimated residential ILCR ranged from 8×10^{-5} to 2×10^{-3}, which is greater than the *de minimus* risk of 1×10^{-6}. 1,1,2-TCA; 1,2-DCA; 1,4-dioxane; CCL; chloroform; NDMA; and TCE are the contributors.

Domestic Use – Layer B

The range of residential child receptor estimated HIs included a minimum of 0.79, a median of 12, and a maximum of 25. The estimated residential adult receptor HIs range included a minimum of 0.34, a median of 5.2, and a maximum of 11. These overlap the target HI of 1.0. Estimated HIs were above the target HI of 1.0 for 83 percent (five locations) of the six sample locations. 1,2-DCA, manganese, nitrate, perchlorate, and TCE were the greatest contributors.

Estimated incremental blood lead levels for residential children include a maximum of 2.7 µg/dL, and for adults a maximum of 1.3 µg/dL. These are below the target of 10 µg/dL.

The estimated residential ILCR range included a minimum of 1×10^{-6}, a median of 2×10^{-5}, and a maximum of 1×10^{-4}, which are all greater than the *de minimus* risk of 1×10^{-6}. 1,1,2-TCA; 1,2-DCA; arsenic; chloroform; delta-BHC; DBCM; dieldrin; and TCE are the contributors.

Domestic Use – Layer C

The range of estimated residential child receptor HIs included a minimum of 0.01, a median of 460, and a maximum of 5,100. The range of estimated residential adult receptor HIs included a minimum of 0.0046, a median of 200, and a maximum of 2,200. These ranges both overlap the target HI of 1.0. 1,1-DCE; 1,2-DCA; 1,2-DCE; arsenic; carbon disulfide; chloroform; iron; manganese; nitrate; perchlorate; TCE; and vanadium were the greatest contributors.

The range of residential blood lead incremental increase estimates for children included a minimum of 2.2 µg/dL, a median of 4.1 µg/dL, and a maximum of 770 µg/dL. The range of residential blood lead incremental increase estimates for adults included a minimum of 1.1 µg/dL, a median of 2.0 µg/dL, and a maximum of 380 µg/dL. These blood lead estimates are greater than 10 µg/dL for 1 of the 43 sample locations.

The estimated residential ILCR included a minimum of 2×10^{-7}, a median of 2×10^{-3}, and a maximum of 2×10^{-2}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 93 percent (40 sample locations) of the 43 sample locations. 1,1,2,2-PCA; 1,1,2-TCA; 1,1-DCA; 1,2-DCA; 1,4-dioxane; arsenic; B(2-EH)P; BDCM; CCL; chloroform; methylene chloride; NDMA; PCE; TCE; and vinyl chloride are the contributors.

Domestic Use – Layer D

The range of estimated residential child receptor HIs included a minimum of 1, a median of 140, and a maximum of 3,700. The range of estimated residential adult receptor HIs included a minimum of 0.43, a median of 58, and a maximum of 1,600. These ranges both overlap the target HI of 1.0, and are greater that the target for 84 percent (16 sample locations) of the 19 sample locations. 1,1-DCE; 1,2-DCA; 1,2-DCE; chloroform; perchlorate; TCE; and zinc were the greatest contributors.

The estimated residential blood lead incremental increase for children was 140 µg/dL, and for adults was 68 µg/dL. The blood lead estimates for this sample are greater than 10 µg/dL.

The estimated residential ILCR included a minimum of 1×10^{-6}, a median of 6×10^{-4}, and a maximum of 1×10^{-2}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 14 of the 19 sample locations. 1,1,2-TCA; 1,1-DCA; 1,2-DCA; chloroform; methylene chloride; NDMA; PCE; and TCE are the contributors.

Domestic Use – Layer E

The range of estimated residential child receptor HIs included a minimum of 4.5, a median of 16, and a maximum of 2,200. The range of estimated residential adult receptor HIs included a minimum of 1.9, a median of 6.9, and a maximum of 940. These ranges are both greater than the target HI of 1.0. 1,2-DCA; acrolein; 1,2-DCE; iron; manganese; perchlorate; and TCE were the greatest contributors.

The estimated residential ILCR included a minimum of 1×10^{-5}, a median of 4×10^{-5}, and a maximum of 3×10^{-4}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for five of the eight sample locations. 1,2-DCA; B(2-EH)P; chloroform; and TCE are the contributors.

Vapor Intrusion – Perched Water Zone (Layer Y)

The range of residential child receptor estimated HIs included a minimum of 0.006 and a maximum of 0.085. These values are all less than the target HI of 1.0.

The range of residential adult receptor estimated HIs included a minimum of 0.0026 and a maximum of 0.037. These values are all less than the target HI of 1.0.

The estimated residential ILCRs ranged from a minimum of 1×10^{-7}, a median of 2×10^{-7}, and a maximum of 2×10^{-5}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for one location.

Vapor Intrusion – First Water-Bearing Zone (Layer S)

The range of residential child receptor estimated HIs included a minimum of 0.011, a median of 0.11 and a maximum of 3.8. These values are greater than the target HI of 1.0 for one sample.

The range of residential adult receptor estimated HIs included a minimum of 0.0047, a median of 0.046 and a maximum of 1.6. These values are greater than the target HI of 1.0 for one sample.

The estimated residential ILCRs ranged from a minimum of 9×10^{-7}, a median of 5×10^{-6}, and a maximum of 1×10^{-4}. Estimated ILCRs are greater than the *de minimus* risk of 1×10^{-6} for 14 of the 18 locations.

5.13.5.2 Commercial Scenario

Vapor Intrusion – Perched Zone (Layer Y)

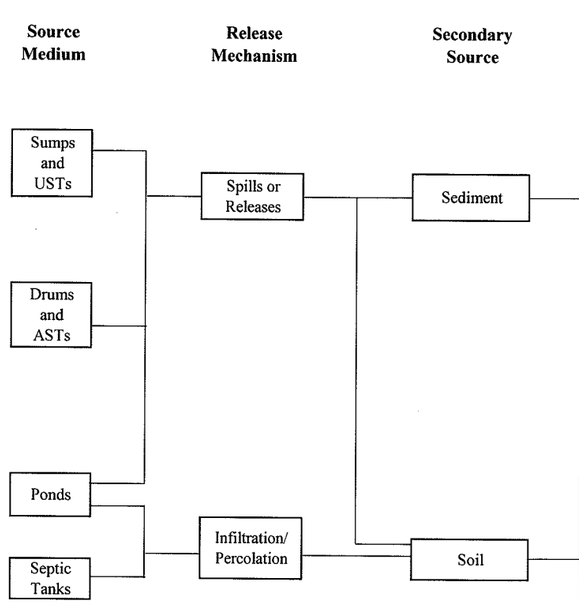
The range of commercial worker receptor estimated HIs included a minimum of 0.0000092 and a maximum of 0.013. These values are all less than the target HI of 1.0.

The estimated commercial ILCRs ranged from a minimum of 3×10^{-8} and a maximum of 4×10^{-6}. Estimated ILCRs were less than the *de minimus* risk of 1×10^{-6} for all locations except one.

Vapor Intrusion – First Water Bearing Zone (Layer S)

The range of commercial worker receptor estimated HIs included a minimum of 0.00069 and a maximum of 0.58. These values are all less than the target HI of 1.0.

The estimated commercial ILCRs ranged from a minimum of 2×10^{-7}, a median of 7×10^{-7}, and a maximum of 3×10^{-5}. Estimated ILCRs were greater than the *de minimus* risk of 1×10^{-6} for 33 percent (6 locations) of the 18 locations.



Secondary Release Mechanism	Exposure Medium	Exposure Route	Future Onsite Resident	Current/ Future Offsite Resident	Current/ Future Onsite Comm/Ind Worker	Current/ Future Onsite Visitor/ Recreator[b]	Current Onsite Construction Worker	Future Onsite Construction Worker
			Human Receptors					
		Ingestion	I	I	I	I	I	I
		Dermal Contact	I	I	I	I	I	I
Dust	Air	Inhalation	I	I	I	I	I	I
Infiltration/ Percolation	Perched/ Regional Groundwater	See Figure 5.1-1b for Human Health Exposure Routes related to Treated and Untreated Groundwater						
Runoff	Surface Water and Sediment	Ingestion	I	I	I	I	I	I
		Inhalation	I	I	I	I	I	I
		Dermal Contact	I	I	I	I	I	I
	Fish/Shellfish	Ingestion	I	I	I	I	I	I
		Ingestion	C	I	C	Q	C	C
		Dermal Contact	C	I	C	Q	C	C
Dust	Air	Inhalation	C	Q	C	Q	C	C
Infiltration/ Percolation	Perched/ Regional Groundwater	See Figure 5.1-1b for Human Health Exposure Routes related to Treated and Untreated Groundwater						
Runoff	Surface Water and Sediment	Ingestion	I	I	I	I	I	I
		Inhalation	I	I	I	I	I	I
		Dermal Contact	I	I	I	I	I	I
	Fish/Shellfish	Ingestion	I	I	I	I	I	I
Volatile Emissions (soil vapor)	Soil Vapor	Inhalation (Indoor)	C	I	C	I	I	I
		Inhalation (Outdoor)	C	Q	C	Q	C	C
Plant Uptake	Garden Produce[a]	Ingestion	Q	I	I	I	I	I

Notes and Key:

a Projected residential redevelopment at Aerojet is not likely to include land-intensive pathways, such as in-situ gardening. The naturally occurring soil at Aerojet is not suited for this type of activity. Significant land preparation activities (i.e., addition of topsoil and nutrients) would be required prior to growing fruits or vegetables.

b Since a residential and/or commercial/industrial soil exposure will be evaluated for all the source sites, there is no need to quantify a separate visitor/recreational exposure for all areas. However, a recreational exposure scenario will be evaluated for Area 39 and Buffalo Creek. Exposures to fish on the Aerojet property are highly unlikely, and are dependent upon the presence of edible species that are of large enough size to be filleted.

ASTs	Above-ground Storage Tank
C	Complete exposure pathway evaluated quantitatively
Comm/Ind	Commercial/Industrial
I	Incomplete exposure pathway
USTs	Underground Storage Tank
Q	Qualitative (not quantitative) evaluation conducted for this potentially complete exposure pathway

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FIGURE 5.1-1a
Conceptual Site Model for the Boundary Operable Unit Soil Exposure Pathways for Human Receptors

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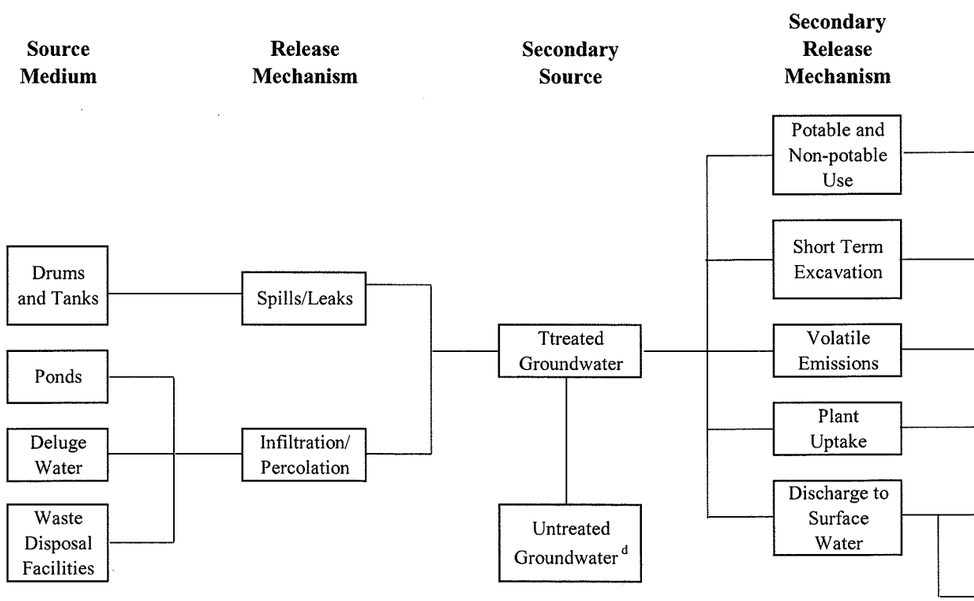

Exposure Route	Human Receptor: Future Onsite Resident	Current/ Future Offsite Resident	Current/ Future Onsite Comm/Ind Worker	Current/ Future Onsite Visitor/ Recreator c	Current Onsite Construction Worker	Future Onsite Construction Worker
Ingestion	H	H	I	I	I	I
Inhalation	H	H	I	I	I	I
Dermal Contact	H	H	I	I	I	I
Ingestion	I	I	I	I	Q	Q
Inhalation	I	I	I	I	Q	Q
Dermal Contact	I	I	I	I	Q	Q
Inhalation (Indoor)	C	C	C	I	I	I
Inhalation (Outdoor)	Q	Q	Q	Q	Q	Q
Ingestion	Q	Q	I	I	I	I
Ingestion	Q	I	Q	Q	Q	Q
Inhalation	I	I	I	I	I	I
Dermal Contact	Q	I	Q	C	Q	Q
Ingestion	Q	I	Q	Q	Q	Q

Notes and Key:

a Projected residential redevelopment at Aerojet is not likely to include land-intensive pathways, such as in-situ gardening. The naturally occurring soil at Aerojet is not suited for this type of activity. Significant land preparation activities (i.e., addition of topsoil and nutrients) would be required prior to growing fruits or vegetables.

b Although construction workers may briefly encounter the shallow water table in some OUs, construction activities in saturated trench conditions are generally avoided and dewatering is performed to avoid work in a wet and slippery trench. Dermal exposures to contaminants in trench water would be incomplete as steady state absorption and penetration of the skin is unlikely, given short exposure times.

c Recreational exposure will be evaluated on a site-specific basis; if a residential and/or commercial/industrial soil exposure has already been evaluated, there is no need to quantify a separate recreational exposure to soil unless the property may be transferred solely for recreational use. Exposures to fish on the Aerojet property are highly unlikely, and are dependent upon the presence of edible species that are of large enough size to be filleted.

d No discharge of untreated groundwater to surface water bodies identified in BOU.

C	Complete exposure pathway evaluated quantitatively
Comm/Ind	Commercial/Industrial
H	Hypothetically complete in absence of institutional controls
I	Incomplete exposure pathway
Q	Qualitative (not quantitative) evaluation conducted for this potentially complete exposure pathway

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FIGURE 5.1-1b
Conceptual Site Model for the Boundary Operable Unit
Groundwater and Surface Water
Exposure Pathways for Human Receptors

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Table 5.1-1 *Indoor Air Model Input Parameters - Soil Vapor and Groundwater*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Parameter	Value
Depth below grade to bottom of enclosed floor space (cm); assumes slab on grade	15
Average soil temperature (°C)	24
Depth below grade to vapor sample (cm)	Site specific
Depth below grade to water table (cm)	Site specific
Thickness of soil stratum A(cm)	= depth to sample
Soil stratum A, used to calculate soil vapor permeability	Sand
Vadose zone dry bulk density (g/cm^3)	1.66
Vadose zone total porosity (unitless)	0.42
Vadose zone water-filled porosity (unitless)	0.155
Building Characteristics - Residential	
Default enclosed space floor thickness (cm)	10
Soil-building pressure differential ($g/cm\text{-}s^2$)	40
Enclosed space floor length (cm)	1,000
Enclosed space floor width (cm)	1,000
Enclosed space height (cm)	244
Floor-wall seam crack width (cm)	0.10
Indoor air exchange rate (1/hr)	0.50
Building Characteristics - Commercial	
Default enclosed space floor thickness (cm)	10
Soil-building pressure differential ($g/cm\text{-}s^2$)	40
Enclosed space floor length (cm)	1,000
Enclosed space floor width (cm)	1,000
Enclosed space height (cm)	244
Floor-wall seam crack width (cm)	0.10
Indoor air exchange rate (1/hr)	0.50

Notes:

All values are defaults used by Cal/EPA except depth to sample, total porosity and volumetric water content.

cm = Centimeter

hr = Hour

$g/cm\text{-}s^2$ = Grams per centimeter-square second

g/cm^3 = Grams per cubic centimeter

Table 5.1-2 Resident Exposure Parameters
Administration Area Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	---chemical-specific---		USEPA 2004a
Dermal adherence factor, adult	AF_a	0.07	mg/cm^2	USEPA 2004a
Dermal adherence factor, child	AF_c	0.2	mg/cm^2	USEPA 2004a
Averaging time, carcinogenic	AT_c	70	years	USEPA 2002c
Averaging time, non-carcinogenic	AT_{nc}	30	years	Based on ED_r
Adult body weight	BW_a	70	kg	USEPA 2002c
Child body weight	BW_c	15	kg	USEPA 2002c
Exposure frequency	EF_r	350	days/year	USEPA 2002c
Exposure frequency-surface water	EFsw	12	days/year	USEPA 1997
Exposure duration	ED_r	30	years	USEPA 2002c
Adult Exposure duration	ED_a	24	years	USEPA 2002c
Child Exposure duration	ED_c	6	years	USEPA 2002c
Adult inhalation rate	$IR_{a'}$	20	m^3/day	USEPA 2002c
Child inhalation rate	$IR_{c'}$	10	m^3/day	USEPA 1997
Available skin surface area, adult	SA_a	5,700	cm^2/day	USEPA 2004a
Available skin surface area, child	SA_c	2,800	cm^2/day	USEPA 2004a
Adult soil ingestion rate	$IR_{s,a}$	100	mg/day	USEPA 2002c
Child soil ingestion rate	$IR_{s,c}$	200	mg/day	USEPA 2002c
Adult tapwater ingestion rate	$IR_{tw,a}$	2	L/day	USEPA 2002c
Child tapwater ingestion rate	$IR_{tw,c}$	1	L/day	USEPA 2002c
Domestic Use Volatilization Factor		0.5	L/m3	USEPA 2004a
Adult surface water ingestion rate	IRsw,a	0.05	L/day	USEPA 1989
Child surface water ingestion rate	IRsw,c	0.05	L/day	USEPA 1989
Adult Surface Area, showering/swimming	$SA_{tw,c}$	18000	cm2	USEPA 2004a
Child Surface Area, showering/swimming	$SA_{tw,a}$	6600	cm2	USEPA 2004a
Adult Exposure Time, Showering/swimming	$ET_{tw,a}$	0.58	hr/event	USEPA 2004a
Child Exposure Time, Showering/swimming	$ET_{tw,c}$	1	hr/event	USEPA 2004a
Exposure Event	EV	1	event/d	USEPA 2004a

Table 5.1-3 Construction Worker Exposure Parameters
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	---chemical-specific---		USEPA 2004a
Dermal adherence factor, soil	AF_s	0.30	mg/cm^2	USEPA 2004a
Averaging time, carcinogenic	AT_c	70	years	USEPA 2004a
Averaging time, non-carcinogenic	AT_{nc}	1.0	years	Based on ED_{cw}
Adult body weight	BW_a	70	kg	USEPA 2002c
Exposure frequency, soil	$EF_{s,cw}$	250	days/year	USEPA 2002c
Exposure frequency, dust	$EF_{s,cw}$	250	days/year	USEPA 2002c
Exposure frequency, volatiles	$EF_{s,cw}$	250	days/year	USEPA 2002c
Exposure duration	ED_{cw}	1.0	years	(1)
Exposure time	ET_{cw}	8.0	hrs/day	
Adult inhalation rate	$IR_{a'}$	20	m^3/day	USEPA 2002c
Construction worker exposed surface area, soil	$SA_{cw,s}$	3,300	cm^2/day	USEPA 2002c
Construction worker soil ingestion rate	$IR_{s,cw}$	330	mg/day	USEPA 2002c

Key:
(1) Based on site data. A one-year exposure duration is appropriate for carcinogenic effects, because the methodology averages exposures over a lifetime (see USEPA 2002a).
kg = Kilogram
m^3/day = Cubic meter per day
mg/day = Milligrams per day
mg/cm^2 = Milligrams per squared centimeter
cm^2/day = Square centimeter per day
USEPA = United States Environmental Protection Agency

Table 5.1-4 Commercial Worker Exposure Parameters
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	---chemical-specific---		USEPA 2004a
Commercial worker dermal adherence factor	AF_{cw}	0.20	mg/cm^2	USEPA 2002c
Averaging time, carcinogenic	AT_c	70	years	USEPA 2002c
Averaging time, non-carcinogenic	AT_{nc}	25	years	Based on ED_{mw}
Adult body weight	BW_a	70	kg	USEPA 2002c
Commercial worker exposure frequency	EF_{cw}	250	days/year	USEPA 2002c
Exposure duration	ED	25	years	USEPA 2002c
Adult inhalation rate	$IR_{a'}$	20	m^3/day	USEPA 2002c
Commercial worker exposed surface area	SA_{cw}	3,300	cm^2/day	USEPA 2002c
Commercial worker soil ingestion rate	$IR_{s,cw}$	100	mg/day	USEPA 2002c

Key:
kg = Kilogram
m^3/day = Cubic meter per day
mg/day = Milligrams per day
mg/cm^2 = Milligrams per squared centimeter
cm^2/day = Square centimeter per day
USEPA = United States Environmental Protection Agency

Table 5.1-5 Recreator Exposure Parameters - Off Road
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	---chemical-specific---		USEPA 2004a
Dermal adherence factor, adult	AF_a	0.07	mg/cm^2	USEPA 2004a
Averaging time, carcinogenic	AT_c	70	years	USEPA 2002c
Averaging time, non-carcinogenic	AT_{nc}	30	years	Based on ED_r
Adult body weight	BW_a	70	kg	USEPA 2002c
Exposure frequency	EF_r	50	days/year	USEPA 2002c
Exposure duration	ED_r	30	years	USEPA 2002c
Adult inhalation rate	$IR_{a'}$	20	m^3/day	USEPA 2002c
Available skin surface area, adult	SA_a	5,700	cm^2/day	USEPA 2004a
Adult soil ingestion rate	$IR_{s,a}$	100	mg/day	USEPA 2002c

Key:

m^3/day = Cubic meter per day
mg/day = Milligrams per day
mg/cm^2 = Milligrams per squared centimeter
cm^2/day = Square centimeter per day
USEPA = United States Environmental Protection Agency

Table 5.1-6 Recreator Exposure Parameters -Wading
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Parameter	Abbrev.	Value	Units	Reference
Dermal absorption fraction	ABS	---chemical-specific---		USEPA 2004c
Dermal adherence factor-sediment	AF_a	0.3	mg/cm^2	USEPA 2004c
Averaging time, carcinogenic	AT_c	70	years	USEPA 2002a
Averaging time, non-carcinogenic	AT_{nc}	6	years	Based on ED_r
Body weight	BW_a	35	kg	USEPA, 1991a, 1997, 2001a*
Exposure frequency	EF_r	50	days/year	Professional judgment**
Exposure frequency-surface water	EFsw	12	days/year	USEPA 1997
Exposure duration	ED_r	6	years	USEPA 2002a
Exposure time	ET_r	4	hrs/day	Professional judgment
Available skin surface area	SA_a	1,800	cm^2/day	USEPA 2004c***
Sediment ingestion rate	$IR_{s,a}$	100	mg/day	USEPA 2002a
Surface water ingestion rate	IRsw,a	0.05	L/day	
Surface Area, showering/swimming	$SA_{tw,c}$	12000	cm^2	USEPA 2004a*
Fraction of total surface area exposed, sediment	SA_f	0.15	--	USEPA 2004a
Exposure Time, Showering/swimming	$ET_{tw,a}$	0.58	hr/event	USEPA 2004a

Notes and Key:
*Assumes a child (young adult) old enough to engage in wading activities (7 to 14 yr range).
**Assumes 2 days per week for 3 months of the year (summer) and one day per week for 6 months of year (spring/fall).
***Assumes wading; feet, and partial hand and forearm exposure.
cm^2 = Square centimeter
hr = Hour
kg = Kilogram
L = Liter
m^3 = Cubic meter
mg = Milligram
USEPA = United States Environmental Protection Agency

Table 5.1-7 *Noncancer Toxicity Criteria*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	CAS Number	Inhalation - Chronic Value[5]	Inhalation - Chronic Reference	Inhalation - Subchronic Value[5]	Inhalation - Subchronic Reference	Oral[(1)] - Chronic Value[5]	Oral[(1)] - Chronic Reference	Oral[(1)] - Subchronic		Oral BIO	Dermal ABS[(2)]	% GI ABS	Dermal Chronic Value
Aluminum	7429-90-5	1.4 E-3	PPRTV	4.4 E-3	Chronic (4)	1.0 E+0	PPRTV	1.0 E+0	Chronic	1.0	NA		
Antimony	7440-36-0	4.0 E-4	route-to-route	4.0 E-4	Chronic	4.0 E-4	USEPA, 2008	4.0 E-4	Chronic	1.0	NA	15%	6.0 E-5
Arsenic	7440-38-2	8.6 E-6	OEHHA, 2008	8.6 E-6	Chronic	3.0 E-4	USEPA, 2008	3.0 E-4	Chronic	1.0	0.03		
Barium	7440-39-3	1.4 E-4	USEPA, 1997	1.4 E-4	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA	7%	1.4 E-2
Beryllium	7440-41-7	5.7 E-6	USEPA, 2008	5.7 E-6	Chronic	2.0 E-3	USEPA, 2008	2.0 E-3	Chronic	1.0	NA	0.7%	1.4 E-5
Boron		5.7 E-3	USEPA, 1997	5.7 E-3	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Cadmium	7440-43-9	1.0 E-3	route-to-route	1.0 E-3	Chronic	1.0 E-3	USEPA, 2008	1.0 E-3	Chronic	1.0	0.001	2.5%	2.5 E-5
Cadmium - Water	7440-43-9											5.0%	5.0 E-5
Chromium	16065-83-1	1.5 E+0	route-to-route	1.5 E+0	Chronic	1.5 E+0	USEPA, 2008[(3)]	1.5 E+0	Chronic	1.0	NA	1.3%	2.0 E-2
Chromium VI	18540-29-9	2.2 E-6	USEPA, 2008	2.2 E-6		3.0 E-3	USEPA, 2008	3.0 E-3	Chronic	1.0	NA	2.5%	7.5 E-5
Cobalt	7440-48-4	5.7 E-6	PPRTV	5.7 E-6	Chronic	2.0 E-2	PPRTV	2.0 E-2	Chronic	1.0	NA		
Copper	7440-50-8	3.7 E-2	route-to-route	3.7 E-2	Chronic	3.7 E-2	USEPA 1997b	3.7 E-2	Chronic	1.0	NA		
Iron	7439-89-6	NA		NA		7.0 E-1	PPRTV	7.0 E-1		1.0	NA		
Lead	7439-92-1	NA		NA		NA		NA	Chronic	0.44	NA		
Lithium	7439-93-2	NA		NA		2.0 E-2	R9PRG	2.0 E-2	Chronic	1.0	NA		
Manganese	7439-96-5	1.4 E-5	USEPA, 2008	1.4 E-5	Chronic	2.4 E-2	USEPA, 2008	2.4 E-2	Chronic	1.0	NA	4.0%	9.6 E-4
Mercury	7439-97-6	8.6 E-5	USEPA, 2008	8.6 E-5	Chronic	3.0 E-4	USEPA, 2008	3.0 E-4	Chronic	1.0	NA	7.0%	2.1 E-5
Molybdenum	7439-98-7	5.0 E-3	route-to-route	5.0 E-3	Chronic	5.0 E-3	USEPA, 2008	5.0 E-3	Chronic	1.0	NA		
Nickel	7440-02-0	1.4 E-5	OEHHA, 2008	1.4 E-5	Chronic	2.0 E-2	USEPA, 2008	2.0 E-2	Chronic	1.0	NA	4%	8.0 E-4
Nitrate as NO3		NA		NA		1.6 E+0	USEPA, 2008	1.6 E+0	Chronic	1.0	NA		
Nitrate plus Nitrite (as N)		NA		NA		1.6 E-1	R9PRG nitrite as surrogate	1.6 E-1	Chronic	1.0	NA		
Nitrite as NO2		NA		NA		1.6 E-1	R9PRG	1.6 E-1	Chronic	1.0	NA		
Perchlorate	14797-73-0	7.0 E-4	route-to-route	7.0 E-4	Chronic	7.0 E-4	USEPA 2008	7.0 E-4	Chronic	1.0	NA		
Selenium	7782-49-2	5.0 E-3	route-to-route	5.0 E-3	Chronic	5.0 E-3	USEPA, 2008	5.0 E-3	Chronic	1.0	NA		
Silver	7440-22-4	5.0 E-3	route-to-route	5.0 E-3	Chronic	5.0 E-3	USEPA, 2008	5.0 E-3	Chronic	1.0	NA	4%	2.0 E-4
Strontium		6.0 E-1	route-to-route	6.0 E-1	Chronic	6.0 E-1	USEPA, 2008	6.0 E-1	Chronic	1.0	NA		
Thallium	7446-18-6	6.6 E-5	route-to-route	6.6 E-5	Chronic	6.6 E-5	USEPA, 2008	6.6 E-5	Chronic	1.0	NA		
Titanium	7440-32-6	8.6 E-3	NCEA	8.6 E-3	Chronic	4.0 E+0	NCEA	4.0 E+0	Chronic	1.0	NA		
Vanadium	7440-62-2	5.0 E-3	route-to-route	5.0 E-3	Chronic	5.0 E-3	NCEA	5.0 E-3	Chronic	1.0	NA	2.6%	1.3 E-4
Zinc	7440-66-6	3.0 E-1	route-to-route	3.0 E-1	Chronic	3.0 E-1	USEPA, 2008	3.0 E-1	Chronic	1.0	NA		
1,1,1-Trichloroethane	71-55-6	1.4 E+0	USEPA 2008	1.4 E+0	Chronic	2.0 E+0	USEPA, 2008	2.0 E+0	Chronic	1.0	NA		
1,1,2,2-Tetrachloroethane	79-34-5	6.0 E-2	route-to-route	6.0 E-2	Chronic	6.0 E-2	USEPA, 2008	6.0 E-2	Chronic	1.0	NA		
1,1,2-Trichloroethane	79-00-5	4.0 E-3	route-to-route	4.0 E-3	Chronic	4.0 E-3	USEPA, 2008	4.0 E-3	Chronic	1.0	NA		
1,1-Dichloroethane	75-34-3	2.0 E-1	route-to-route	2.0 E-1	Chronic	2.0 E-1	PPRTV	2.0 E-1	Chronic	1.0	NA		
1,1-Dichloroethene	75-35-4	2.0 E-2	OEHHA 2008	2.0 E-2	Chronic	5.0 E-2	USEPA 2008	5.0 E-2	Chronic	1.0	NA		
1,2,4-Trimethylbenzene	95-63-6	2.0 E-3	PPRTV	2.0 E-3	Chronic	2.0 E-3	PPRTV	2.0 E-3	Chronic	1.0	NA		
1,2-Dichlorobenzene		6.9 E-3	NCEA	6.9 E-3	Chronic	9.0 E-2	USEPA, 2008	9.0 E-2	Chronic	1.0	NA		
1,2-Dichloroethane	107-06-2	1.4 E-3	NCEA	1.4 E-3	Chronic	2.0 E-2	NCEA	2.0 E-2	Chronic	1.0	NA		
1,2-Dichloroethene (cis/trans)		1.0 E-2	route-to-route	1.0 E-2	Chronic	1.0 E-2	PPRTV	1.0 E-2	Chronic	1.0	NA		
1,3,5-Trimethylbenzene	108-67-8	1.7 E-3	PPRTV	1.7 E-3	Chronic	5.0 E-2	PPRTV	5.0 E-2	Chronic	1.0	NA		
1,3-Butadiene	106-99-0	5.7 E-4	USEPA 2008	5.7 E-4	Chronic	5.7 E-4	Route to route	5.7 E-4	Chronic	1.0	NA		
1,4-Dichlorobenzene		2.3 E-1	USEPA, 2008	2.3 E-1	Chronic	3.0 E-2	NCEA	3.0 E-2	Chronic	1.0	NA		
1,4-Dioxane	123-91-1	8.6 E-1	OEHHA, 2008	8.6 E-1	Chronic	NA		NA		1.0	NA		
2,2,4-Trimethylpentane	540-84-1	2.9 E-2	surrogate: xylene	2.9 E-2	Chronic	2.0 E-1	surrogate: xylene	2.0 E-1	Chronic	1.0	NA		
2,3,7,8-TCDD TEQ	1746-01-6	NA		NA		NA		NA		1.0	0.03		
2-Butanone (Methyl ethyl ke	78-93-3	1.4 E+0	USEPA, 2008	1.4 E+0	Chronic	6.0 E-1	USEPA, 2008	6.0 E-1	Chronic	1.0	NA		
2-Hexanone	591-78-6	8.6 E-1	PA 2008; MIBK Surrog	9.0 E-1	Chronic	8.0 E-2	PA, 1997; MIBK as surrog	8.0 E-2	Chronic	1.0	NA		
2-Methylnaphthalene		NA		NA		4.0 E-3	USEPA, 2008	4.0 E-3	Chronic	1.0	0.13		
2-Propanol	67-63-0	2.6 E-3	R9PRG	2.6 E-3	Chronic	1.0 E-1	A 2007c, butanol as surro	1.0 E-1	Chronic	1.0	NA		
4,4'-DDD	72-54-8	NA		NA		NA		NA		1.0	0.03		
4,4'-DDE	72-55-9	NA		NA		NA		NA		1.0	0.03		
4,4'-DDT	50-29-3	5.0 E-4	route-to-route	5.0 E-4	Chronic	5.0 E-4	USEPA, 2008	5.0 E-4	Chronic	1.0	0.03		
4-Ethyltoluene	622-96-8	2.9 E-2	xylene surrogate	2.9 E-2	Chronic	2.0 E-1	xylene surrogate	2.0 E-1	Chronic	1.0	NA		
4-Methyl-2-pentanone		8.6 E-1	USEPA, 2008	8.6 E-1	Chronic	8.0 E-2	USEPA, 2008	8.0 E-2	Chronic	1.0	NA		
4-Methylphenol	106-44-5	5.0 E-3	route-to-route	5.0 E-3	Chronic	5.0 E-3	USEPA, 1997b	5.0 E-3	Chronic	1.0	0.10		
Acetone	67-64-1	9.0 E-1	route-to-route	9.0 E-1	Chronic	9.0 E-1	USEPA, 2008	9.0 E-1	Chronic	1.0	NA		
Acrolein	107-02-8	5.7 E-6	USEPA, 2008	5.7 E-6	Chronic	5.0 E-4	USEPA, 2008	5.0 E-4	Chronic	1.0	NA		
Aldrin	309-00-2	3.0 E-5	route-to-route	3.0 E-5	Chronic	3.0 E-5	USEPA, 2008	3.0 E-5	Chronic	1.0	0.04		
alpha-BHC	319-84-6	NA		NA		NA		NA		1.0	0.04		
Alpha-chlordane	57-74-9	2.0 E-4	USEPA, 2008	2.0 E-4	Chronic	5.0 E-4	USEPA, 2008	5.0 E-4	Chronic	1.0	0.04		
Anthracene		3.0 E-1	route-to-route	3.0 E-1	Chronic	3.0 E-1	USEPA, 2008	3.0 E-1	Chronic	1.0	0.13		
Benzene	71-43-2	8.6 E-3	USEPA, 2008	8.6 E-3	Chronic	4.0 E-3	USEPA, 2008	4.0 E-3	Chronic	1.0	NA		
Benzo (a) anthracene	56-55-3	NA		NA		NA		NA		1.0	0.13		
Benzo (a) pyrene	50-32-8	NA		NA		NA		NA		1.0	0.13		
Benzo (b & k) fluoranthene (	205-99-2	NA		NA		NA		NA		1.0	0.13		
Benzo (ghi) perylene	191-24-2	3.0 E-2	pyrene as surrogate	3.0 E-2	Chronic	3.0 E-2	pyrene as surrogate	3.0 E-2	Chronic	1.0	0.13		
Benzo(a)anthracene	56-55-3	NA		NA		NA		NA		1.0	0.13		
Benzo(b)fluoranthene	205-99-2	NA		NA		NA		NA	Chronic	1.0	0.13		
Benzo(k)fluoranthene	207-08-9	NA		NA		NA		NA	Chronic	1.0	0.13		
bis(2-Ethylhexyl)phthalate	117-81-7	2.0 E-2	route-to-route	2.0 E-2	Chronic	2.0 E-2	USEPA, 2008	2.0 E-2	Chronic	1.0	0.10		
Bromodichloromethane	75-27-4	2.0 E-2	route-to-route	2.0 E-2	Chronic	2.0 E-2	USEPA, 2008	2.0 E-2	Chronic	1.0	NA		
Bromoform		2.0 E-2	route-to-route	2.0 E-2	Chronic	2.0 E-2	USEPA, 2008	2.0 E-2	Chronic	1.0	NA		
Carbon disulfide	75-15-0	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0 E-1	USEPA, 2008	1.0 E-1	Chronic	1.0	NA		
Carbon tetrachloride	56-23-5	1.1 E-2	OEHHA, 2008	1.1 E-2	Chronic	7.0 E-4	USEPA, 2008	7.0 E-4	Chronic	1.0	NA		
Chloroethane	75-00-3	2.9 E+0	USEPA 2008	2.9 E+0	Chronic	4.0 E-1	NCEA	4.0 E-1	Chronic	1.0	NA		
Chloroform	67-66-3	1.3 E-2	PPRTV	1.3 E-2	Chronic	1.0 E-2	USEPA, 2008	1.0 E-2	Chronic	1.0	NA		
Chrysene	218-01-9	NA		NA		NA		NA	Chronic	1.0	0.13		

Table 5.1-7 *Noncancer Toxicity Criteria*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	CAS Number	Inhalation - Chronic Value[5]	Inhalation - Chronic Reference	Inhalation - Subchronic Value[5]	Inhalation - Subchronic Reference	Oral[(1)] - Chronic Value[5]	Oral[(1)] - Chronic Reference	Oral[(1)] - Subchronic		Oral BIO	Dermal ABS[(2)]	% GI ABS	Dermal Chronic Value
cis-1,2-Dichloroethene	156-59-2	1.0 E-2	route-to-route	1.0 E-2	Chronic	1.0 E-2	PPRTV	1.0 E-2	Chronic	1.0	NA		
Cumene	98-82-8	1.1 E-1	USEPA 2008	1.1 E-1	Chronic	1.0 E-1	USEPA 2008	1.0 E-1	Chronic	1.0	NA		
Cyclohexane	110-82-7	1.7 E+0	USEPA, 2008	1.7 E+0	Chronic	1.7 E+0	route-to-route	1.7 E+0	Chronic	1.0	NA		
delta-BHC	319-86-8	3.0 E-4	route-to-route	3.0 E-4	Chronic	3.0 E-4	EPA, 2008 Lindane surrog	3.0 E-4	Chronic	1.0	0.04		
Dibenz (a,h) anthracene	53-70-3	NA		NA		NA		NA	Chronic	1.0	0.13		
Dibromochloromethane		2.0 E-2	route-to-route	2.0 E-2	Chronic	2.0 E-2	USEPA, 2008	2.0 E-2	Chronic	1.0	NA		
Dichlorodifluoromethane		5.7 E-2	USEPA, 1997	5.7 E-2	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Dieldrin	60-57-1	5.0 E-5	route-to-route	5.0 E-5	Chronic	5.0 E-5	USEPA, 2008	5.0 E-5	Chronic	1.0	0.04		
Di-n-butyl phthalate	84-74-2	1.0 E-1	route-to-route	1.0 E-1	Chronic	1.0 E-1	USEPA 2008	1.0 E-1	Chronic	1.0	0.1		
Endosulfan I	115-29-7	6.0 E-3	route-to-route	6.0 E-3	Chronic	6.0 E-3	USEPA, 2008	6.0 E-3	Chronic	1.0	0.10		
Endosulfan II	115-29-7	6.0 E-3	route-to-route	6.0 E-3	Chronic	6.0 E-3	USEPA, 2008	6.0 E-3	Chronic	1.0	0.10		
Endrin	72-20-8	3.0 E-4	route-to-route	3.0 E-4	Chronic	3.0 E-4	USEPA, 2008	3.0 E-4	Chronic	1.0	0.04		
Ethanol	64-17-5	5.0 E-1	route-to-route	5.0 E-1	Chronic	5.0 E-1	USEPA 2008	5.0 E-1	Chronic	1.0	NA		
Ethylbenzene	100-41-4	2.9 E-1	USEPA 2008	2.9 E-1	Chronic	1.0 E-1	USEPA 2008	1.0 E-1	Chronic	1.0	NA		
Fluoranthene	206-44-0	4.0 E-2	route-to-route	4.0 E-2	Chronic	4.0 E-2	USEPA 2008	4.0 E-2	Chronic	1.0	0.13		
Fluorene		4.0 E-2	route-to-route	4.0 E-2	Chronic	4.0 E-2	USEPA, 2008	4.0 E-2	Chronic	1.0	0.13		
Freon 11	75-69-4	5.7 E-2	USEPA, 1997	5.7 E-2	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Freon 113	76-13-1	8.6 E+0	USEPA, 1997	8.6 E+0	Chronic	3.0 E+1	USEPA, 2008	3.0 E+1	Chronic	1.0	NA		
Freon 12	75-71-8	5.7 E-2	USEPA 1997b	5.7 E-2	Chronic	2.0 E-1	USEPA 2008	2.0 E-1	Chronic	1.0	NA		
gamma-BHC (Lindane)	58-89-9	3.0 E-4	route-to-route	3.0 E-4	Chronic	3.0 E-4	USEPA, 2008	3.0 E-4	Chronic	1.0	0.04		
gamma-chlordane	57-74-9	2.0 E-4	USEPA, 2008	2.0 E-4	Chronic	5.0 E-4	USEPA, 2008	5.0 E-4	Chronic	1.0	0.04		
Heptachlor	76-44-8	5.0 E-4	route-to-route	5.0 E-4	Chronic	5.0 E-4	USEPA, 2008	5.0 E-4	Chronic	1.0	0.04		
Heptachlor epoxide	1024-57-3	1.3 E-5	route-to-route	1.3 E-5	Chronic	1.3 E-5	USEPA, 2008	1.3 E-5	Chronic	1.0	0.04		
Heptane	142-82-5	2.0 E-1	Hexane as surrogate	2.0 E-1	Chronic	1.1 E+1	Hexane as surrogate	1.1 E+1	Chronic	1.0	0.1		
Hexachlorobutadiene		1.0 E-3	route-to-route	1.0 E-3	Chronic	1.0 E-3	PPRTV	1.0 E-3	Chronic	1.0	NA		
Hexane	110-54-3	2.0 E-1	USEPA 1997b	2.0 E-1	Chronic	1.1 E+1	R9PRG	1.1 E+1	Chronic	1.0	0.1		
Hexanedioic Acid, dioctyles	103-23-1	6.0 E-1	route-to-route	6.0 E-1	Chronic	6.0 E-1	USEPA 2008	6.0 E-1	Chronic	1.0	0.1		
Indeno(1,2,3-cd)pyrene	193-39-5	NA		NA		NA		NA	Chronic	1.0	0.13		
m,p-Xylene	1330-20-7	2.9 E-2	USEPA, 2008	2.9 E-2	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Methyl tert-butyl ether	1634-04-4	8.6 E-1	USEPA 2008	8.6 E-1	Chronic	8.6 E-1	route-to-route	8.6 E-1	Chronic	1.0	NA		
Methylene chloride	75-09-2	8.6 E-1	USEPA 1997b	8.6 E-1	Chronic	6.0 E-2	USEPA, 2008	6.0 E-2	Chronic	1.0	NA		
m-Xylene		2.9 E-2	USEPA, 2008	2.9 E-2	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Naphthalene	91-20-3	8.6 E-4	USEPA, 2008	8.6 E-4	Chronic	2.0 E-2	USEPA, 2008	2.0 E-2	Chronic	1.0	0.13		
n-Butylbenzene		1.0 E-2	route-to-route	1.0 E-2	Chronic	1.0 E-2	PPRTV	1.0 E-2	Chronic	1.0	NA		
N-Nitrosodimethylamine	62-75-9	8.0 E-6	route-to-route	8.0 E-6	Chronic	8.0 E-6	PPRTV	8.0 E-6	Chronic	1.0	0.10		
o-Xylene	95-47-6	2.9 E-2	USEPA 2008	2.9 E-2	Chronic	2.0 E-1	USEPA 2008	2.0 E-1	Chronic	1.0	NA		
PCB-1248	12672-29-6	2.0 E-5	route-to-route	2.0 E-5	Chronic	2.0 E-5	USEPA 2008	2.0 E-5	Chronic	1.0	0.14		
PCB-1254	11097-69-1	2.0 E-5	route-to-route	2.0 E-5	Chronic	2.0 E-5	USEPA, 2008	2.0 E-5	Chronic	1.0	0.14		
PCB-1260	11096-82-5	2.0 E-5	route-to-route	2.0 E-5	Chronic	2.0 E-5	USEPA, 2008	2.0 E-5	Chronic	1.0	0.14		
Pendimethalin (Prowl)	40487-42-1	4.0 E-2	route-to-route	4.0 E-2	Chronic	4.0 E-2	USEPA 2008	4.0 E-2	Chronic	1.0	0.10		
Pentachlorophenol	87-86-5	3.0 E-2	route-to-route	3.0 E-2	Chronic	3.0 E-2	USEPA 2008	3.0 E-2	Chronic	1.0	0.10		
Phenanthrene	85-01-8	3.0 E-2	pyrene as surrogate	3.0 E-2	Chronic	3.0 E-2	pyrene as surrogate	3.0 E-2	Chronic	1.0	0.13		
Phenol	108-95-2	5.7 E-2	OEHHA, 2008	5.7 E-2	Chronic	3.0 E-1	USEPA, 2008	3.0 E-1	Chronic	1.0	0.10		
p-Isopropyltoluene		NA		NA		NA		NA		1.0	NA		
Propylbenzene	103-65-1	1.0 E-2	route-to-route	1.0 E-2	Chronic	1.0 E-2	NCEA	1.0 E-2	Chronic	1.0	NA		
p-Xylene		2.9 E-2	USEPA, 2008	2.9 E-2	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Pyrene		3.0 E-2	USEPA, 2008	3.0 E-2	Chronic	3.0 E-2	USEPA, 2008	3.0 E-2	Chronic	1.0	0.13		
sec-Butylbenzene		1.0 E-2	route-to-route	1.0 E-2	Chronic	1.0 E-2	PPRTV	1.0 E-2	Chronic	1.0	NA		
Styrene	100-42-5	2.6 E-1	OEHHA, 2008	2.6 E-1	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Tetrachloroethene	127-18-4	1.0 E-2	route-to-route	1.0 E-2	Chronic	1.0 E-2	USEPA, 2008	1.0 E-2	Chronic	1.0	NA		
Tetrahydrofuran	109-99-9	8.6 E-2	NCEA	8.6 E-2	Chronic	2.0 E-1	NCEA	2.0 E-1	Chronic	1.0	NA		
Toluene	108-88-3	8.6 E-2	OEHHA 2008	8.6 E-2	Chronic	8.0 E-2	USEPA 2008	8.0 E-2	Chronic	1.0	NA		
trans-1,2-Dichloroethene		1.7 E-2	PPRTV	1.7 E-2	Chronic	2.0 E-2	USEPA, 2008	2.0 E-2	Chronic	1.0	NA		
Trichloroethene	79-01-6	1.7 E-1	OEHHA, 2008	1.7 E-1	Chronic	3.0 E-4	NCEA	3.0 E-4	Chronic	1.0	NA		
Trichlorofluoromethane		5.7 E-2	USEPA, 1997	5.7 E-2	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		
Vinyl Chloride	75-01-4	2.9 E-2	USEPA 2008	2.9 E-2	Chronic	3.0 E-3	USEPA 2008	3.0 E-3	Chronic	1.0	NA		
Xylenes (total)	1330-20-7	2.9 E-2	USEPA, 2008	2.9 E-2	Chronic	2.0 E-1	USEPA, 2008	2.0 E-1	Chronic	1.0	NA		

All toxicity values in units of mg/Kg-day

Notes and Key:

ABS = Dermal absorption efficiency
BIO = Bioavailability
mg/kg = Milligrams per kilogram
NA = Not applicable. Data is either not applicable for this chemical (*e.g.* , not carcinogenic) or not available.
NCEA = National Center for Environmental Assessment (USEPA), as referenced in Multi-Region PRG Table (USEPA 2008b).
PPRTV = Provisional Peer Reviewed Toxicity Values, National Center for Environmental Assessment (USEPA), as referenced in USEPA 2008b.
(1) Only cadmium required the adjustment of the oral toxicity criteria for the dermal soil exposure pathway (USEPA 2004e).
(2) Dermal absorption factors obtained from USEPA 2004e.
(3) Total chromium is assessed using Cr(III) toxicity criteria.
(4) The provisional RfD is based upon TWA correction of occupational data for application to non-occupational exposures. For the construction worker, the occupational data (with the TWA correction removed) are utilized with the application of the same uncertainty factors utilized to derive the provisional RfD.
(5) All toxicity values in units of mg/Kg-day

Table 5.1-8 *Carcinogenic Toxicity Criteria*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	CAS Number	Inhalation Value[a]	Inhalation Reference	Oral[(1)] Value[a]	Oral[(1)] Reference	Cancer Weight of Evidence	Oral BIO	Dermal ABS[(2)]
Aluminum	7429-90-5	NA		NA		D	1.0	NA
Antimony	7440-36-0	NA		NA		D	1.0	NA
Arsenic	7440-38-2	1.5 E+1	USEPA, 2008	9.45 E+0	OEHHA, 2008	A	1.0	0.03
Barium	7440-39-3	NA		NA		D	1.0	NA
Beryllium	7440-41-7	8.4 E+0	OEHHA, 2008	NA		B1	1.0	NA
Boron		NA		NA			1.0	NA
Cadmium	7440-43-9	1.5 E+1	OEHHA 2008	NA		B1	1.0	0.001
Chromium	16065-83-1	NA		NA		D	1.0	NA
Chromium VI	18540-29-9	5.1 E+2	OEHHA 2008	NA		A	1.0	NA
Cobalt	7440-48-4	9.8 E+0	PPRTV	NA		D	1.0	NA
Copper	7440-50-8	NA		NA		D	1.0	NA
Iron	7439-89-6	NA		NA		D	1.0	NA
Lead	7439-92-1	NA		NA		B2	0.44	NA
Lithium	7439-93-2	NA		NA		D	1.0	NA
Manganese	7439-96-5	NA		NA		D	1.0	NA
Mercury	7439-97-6	NA		NA		D	1.0	NA
Molybdenum	7439-98-7	NA		NA		D	1.0	NA
Nickel	7440-02-0	NA		NA		D	1.0	NA
Nitrate as NO3		NA		NA		D	1.0	NA
Nitrate plus Nitrite (as N)		NA		NA		D	1.0	NA
Nitrite as NO2		NA		NA		D	1.0	NA
Perchlorate	14797-73-0	NA		NA		D	1.0	NA
Selenium	7782-49-2	NA		NA		D	1.0	NA
Silver	7440-22-4	NA		NA		D	1.0	NA
Strontium		NA		NA		D	1.0	NA
Thallium	7446-18-6	NA		NA		D	1.0	NA
Titanium	7440-32-6	NA		NA		D	1.0	NA
Vanadium	7440-62-2	NA		NA		D	1.0	NA
Zinc	7440-66-6	NA		NA		D	1.0	NA
1,1,1-Trichloroethane	71-55-6	NA		NA		D	1.0	NA
1,1,2,2-Tetrachloroethane	79-34-5	2.0 E-1	OEHHA 2008	2.7 E-1	OEHHA 2008	C	1.0	NA
1,1,2-Trichloroethane	79-00-5	5.7 E-2	OEHHA 2008	7.2 E-2	OEHHA 2008	C	1.0	NA
1,1-Dichloroethane	75-34-3	5.7 E-3	OEHHA 2008	5.7 E-3	OEHHA 2008	C	1.0	NA
1,1-Dichloroethene	75-35-4	NA		NA		D	1.0	NA
1,2,4-Trimethylbenzene	95-63-6	NA		NA		D	1.0	NA
1,2-Dichlorobenzene		NA		NA		D	1.0	NA
1,2-Dichloroethane	107-06-2	9.1 E-2	USEPA 2008	9.1 E-2	USEPA 2008	B2	1.0	NA
1,2-Dichloroethene (cis/trans)		NA		NA		D	1.0	NA
1,3,5-Trimethylbenzene	108-67-8	NA		NA		D	1.0	NA
1,3-Butadiene	106-99-0	6.0 E-1	OEHHA 2008	3.4 E+0	OEHHA 2008	B2	1.0	NA
1,4-Dichlorobenzene		2.2 E-2	NCEA	2.4 E-2	USEPA, 1997		1.0	NA
1,4-Dioxane	123-91-1	2.7 E-2	OEHHA 2008	2.7 E-2	OEHHA 2008	B2	1.0	0.1
2,2,4-Trimethylpentane	540-84-1	NA		NA		D	1.0	NA
2,3,7,8-TCDD TEQ	1746-01-6	1.5 E+5	USEPA, 1997	1.5 E+5	USEPA, 1997		1.0	0.03
2-Butanone (Methyl Ethyl Ketone)	78-93-3	NA		NA		D	1.0	NA
2-Hexanone	591-78-6	NA		NA		D	1.0	NA
2-Methylnaphthalene		NA		NA		NA	1.0	0.13
2-Propanol	67-63-0	NA		NA		D	1.0	NA
4,4'-DDD	72-54-8	3.4 E-1	OEHHA, 2008	3.4 E-1	OEHHA, 2008	B2	1.0	0.03
4,4'-DDE	72-55-9	3.4 E-1	OEHHA, 2008	3.4 E-1	OEHHA, 2008	B2	1.0	0.03
4,4'-DDT	50-29-3	3.4 E-1	OEHHA, 2008	3.4 E-1	OEHHA, 2008	B2	1.0	0.03
4-Ethyltoluene	622-96-8	NA		NA		D	1.0	NA
4-Methyl-2-pentanone	108-10-1	NA		NA		D	1.0	NA
Acetone	67-64-1	NA		NA		D	1.0	NA
Acrolein	107-02-8	NA		NA		D	1.0	NA
Aldrin	309-00-2	1.7 E+1	OEHHA, 2008	1.7 E+1	OEHHA, 2008	B2	1.0	0.04
alpha-BHC	319-84-6	6.3 E+0	USEPA, 2008	6.3 E+0	USEPA, 2008	B2	1.0	0.04
Alpha-chlordane	57-74-9	1.2 E+0	OEHHA, 2008	1.3 E+0	OEHHA, 2008	B2	1.0	0.04
Anthracene		NA		NA		D	1.0	0.13

Table 5.1-8 *Carcinogenic Toxicity Criteria*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	CAS Number	Inhalation Value[a]	Inhalation Reference	Oral[(1)] Value[a]	Oral[(1)] Reference	Cancer Weight of Evidence	Oral BIO	Dermal ABS[(2)]
Benzene	71-43-2	1.0 E-1	OEHHA 2008	1.0 E-1	OEHHA 2008	A	1.0	NA
Benzo (a) anthracene	56-55-3	7.3 E-1	route-to-route	7.3 E-1	NCEA	B2	1.0	0.13
Benzo (a) pyrene	50-32-8	3.9 E+0	OEHHA, 2008	1.2 E+1	OEHHA, 2008	B2	1.0	0.13
Benzo (b & k) fluoranthene (total)	205-99-2	3.9 E-1	OEHHA, 2008	1.2 E+0	OEHHA, 2008	B2	1.0	0.13
Benzo (b) fluoranthene	205-99-2	3.9 E-1	OEHHA, 2008	1.2 E+0	OEHHA, 2008	B2	1.0	0.13
Benzo(a)pyrene	50-32-8	3.9 E+0	OEHHA 2008	1.2 E+1	OEHHA 2008	B2	1.0	0.13
Benzo(b&k)fluoranthene (total)		3.9 E-1	OEHHA 2008	1.2 E+0	OEHHA 2008	B2	1.0	0.13
Benzo(b)fluoranthene	205-99-2	3.9 E-1	OEHHA 2008	1.2 E+0	OEHHA 2008	B2	1.0	0.13
Benzo(ghi)perylene	191-24-2	NA		NA		D	1.0	0.13
Benzo(k)fluoranthene	207-08-9	3.9 E-1	OEHHA 2008	1.2 E+0	OEHHA 2008	B2	1.0	0.13
bis(2-Ethylhexyl)phthalate	117-81-7	1.4 E-2	route-to-route	1.4 E-2	USEPA, 2008	B2	1.0	0.1
Bromodichloromethane	75-27-4	1.3 E-1	OEHHA 2008	1.3 E-1	OEHHA 2008	B2	1.0	NA
Bromoform		3.9 E-3	USEPA, 2008	7.9 E-3	USEPA, 2008	B2	1.0	NA
Carbon Disulfide	75-15-0	NA		NA		D	1.0	NA
Carbon Tetrachloride	56-23-5	1.5 E-1	OEHHA 2008	1.5 E-1	OEHHA 2008	B2	1.0	NA
Chloroethane	75-00-3	NA		NA		D	1.0	NA
Chloroform	67-66-3	8.1 E-2	USEPA 2008	3.1 E-2	OEHHA 2008	B2	1.0	NA
Chrysene	218-01-9	3.9 E-2	OEHHA 2008	1.2 E-1	OEHHA 2008	B2	1.0	0.13
cis-1,2-Dichloroethene	60-57-1	NA		NA		D	1.0	NA
Cumene	98-82-8	NA		NA		D	1.0	NA
Cyclohexane	110-82-7	NA		NA		D	1.0	NA
delta-BHC	319-86-8	1.3 E+0	route-to-route	1.3 E+0	2008 Lindane as surrogate		1.0	0.04
Dibenz(a,h)anthracene	53-70-3	4.1 E+0	OEHHA 2008	7.3 E+0	OEHHA 2008	B2	1.0	0.13
Dibromochloromethane	124-48-1	9.4 E-2	OEHHA 2008	9.4 E-2	OEHHA 2008	C	1.0	NA
Dichlorodifluoromethane		NA		NA		D	1.0	NA
Dieldrin	60-57-1	1.6 E+1	OEHHA, 2008	1.6 E+1	OEHHA, 2008	B2	1.0	0.04
Di-n-butyl phthalate	84-74-2	NA		NA		D	1.0	0.1
Endosulfan I	115-29-7	NA		NA		D	1.0	NA
Endosulfan II	115-29-7	NA		NA		D	1.0	0.1
Endrin	72-20-8	NA		NA		D	1.0	0.04
Ethanol	64-17-5	NA		NA		D	1.0	NA
EthylBenzene		8.7 E-3	OEHHA, 2008	1.1 E-2	OEHHA, 2008	D/B2	1.0	NA
Fluoranthene	206-44-0	NA		NA		D	1.0	0.13
Fluorene		NA		NA		D	1.0	0.13
Freon 11	75-69-4	NA		NA		D	1.0	NA
Freon 113	76-13-1	NA		NA		D	1.0	NA
Freon 12	75-71-8	NA		NA		D	1.0	NA
gamma-BHC (Lindane)	58-89-9	1.3 E+0	route-to-route	1.3 E+0	USEPA 1997b	B2	1.0	0.04
gamma-chlordane	57-74-9	1.2 E+0	OEHHA, 2008	1.3 E+0	OEHHA, 2008	B2	1.0	0.04
Heptachlor	76-44-8	4.6 E+0	USEPA, 2008	4.5 E+0	USEPA, 2008	B2	1.0	0.04
Heptachlor epoxide	1024-57-3	9.1 E+0	USEPA, 2008	9.1 E+0	USEPA, 2008	B2	1.0	0.04
Heptane	142-82-5	NA		NA		D	1.0	NA
Hexachlorobutadiene		7.8 E-2	USEPA, 2008	7.8 E-2	USEPA, 2008	C	1.0	NA
Hexane	110-54-3	NA		NA		D	1.0	NA
Hexanedioic Acid, dioctylester	103-23-1	1.2 E-3	route-to-route	1.2 E-3		C	1.0	0.1
Indeno(1,2,3-cd)pyrene	193-39-5	3.9 E-1	OEHHA 2008	1.2 E+0	OEHHA 2008	B2	1.0	0.13
m,p-Xylene	1330-20-7	NA		NA		D	1.0	NA
Methyl tert-butyl ether	1634-04-4	9.1 E-4	OEHHA 2008	1.8 E-3	OEHHA 2008		1.0	NA
Methylene chloride	75-09-2	3.5 E-3	OEHHA 2008	1.4 E-2	OEHHA 2008	B2	1.0	NA
4-Methylphenol	106-44-5	NA		NA		C	1.0	0.1
m-Xylene		NA		NA		D	1.0	NA
Naphthalene	91-20-3	1.2 E-1	OEHHA 2008	NA		D	1.0	0.13
n-Butylbenzene		NA		NA		D	1.0	NA
N-Nitrosodimethylamine	62-75-9	4.9 E+1	USEPA, 2008	5.1 E+1	USEPA, 2008	B2	1.0	0.1
o-Xylene	95-47-6	NA		NA		D	1.0	NA
PCB-1248	12672-29-6	2.0 E+0	OEHHA 2008	5.0 E+0	OEHHA 2008	B2	1.0	0.14
PCB-1254	11097-69-1	2.0 E+0	OEHHA 2008	5.0 E+0	OEHHA 2008	B2	1.0	0.14
PCB-1260	11096-82-5	2.0 E+0	OEHHA, 2008	5.0 E+0	OEHHA, 2008	B2	1.0	0.14
Pendimethalin (Prowl)	40487-42-1	NA		NA		D	1.0	0.1

Table 5.1-8 *Carcinogenic Toxicity Criteria*
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

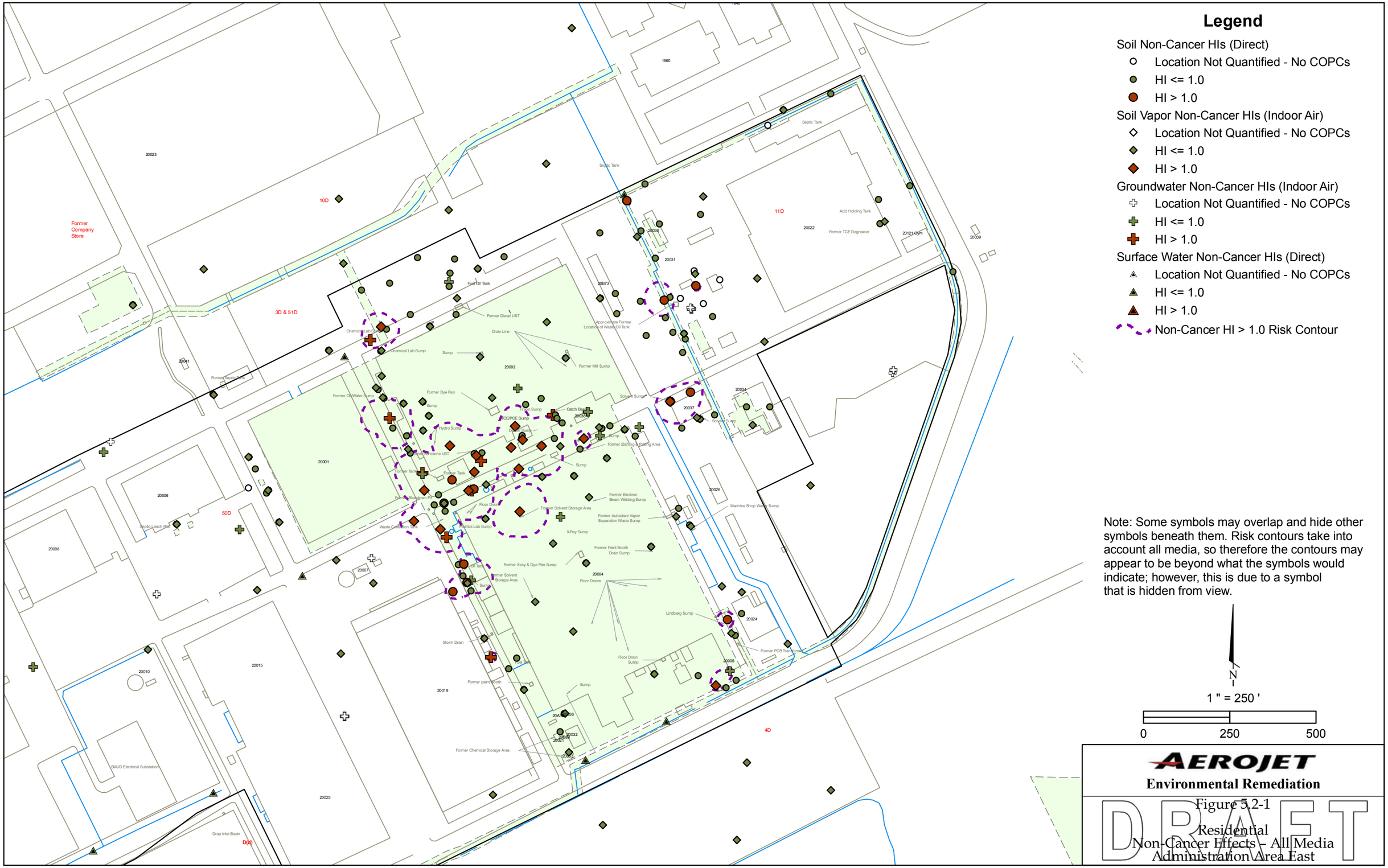
Chemical	CAS Number	Inhalation		Oral[1]		Cancer Weight of Evidence	Oral BIO	Dermal ABS[2]
		Value[a]	Reference	Value[a]	Reference			
Pentachlorophenol	87-86-5	1.8 E-2	OEHHA 2008	1.2 E-1	USEPA, 2008	B2	1.0	0.1
Phenanthrene	85-01-8	NA		NA		D	1.0	0.13
Phenol	108-95-2	NA		NA		D	1.0	0.1
p-Isopropyltoluene		NA		NA		NA	1.0	NA
Propylbenzene	103-65-1	NA		NA		D	1.0	NA
p-Xylene		NA		NA		D	1.0	NA
Pyrene	129-00-0	NA		NA		D	1.0	0.13
sec-Butylbenzene		NA		NA		D	1.0	NA
Styrene	100-42-5	NA		NA		D	1.0	NA
Tetrachloroethene	127-18-4	2.1 E-2	OEHHA, 2008	5.4 E-1	OEHHA, 2008	B2	1.0	NA
Tetrahydrofuran	109-99-9	6.8 E-3	NCEA	7.6 E-3	NCEA	B2	1.0	NA
Toluene	108-88-3	NA		NA		D	1.0	NA
trans-1,2-Dichloroethene	156-60-5	NA		NA		D	1.0	NA
Trichloroethene	79-01-6	7.0 E-3	OEHHA, 2008	1.3 E-2	OEHHA, 2008	B2	1.0	NA
Trichlorofluoromethane		NA		NA		D	1.0	NA
Vinyl chloride		2.7 E-1	OEHHA, 2008	1.5 E+0	USEPA, 2008	A	1.0	NA
Xylenes (total)	1330-20-7	NA		NA		D	1.0	NA

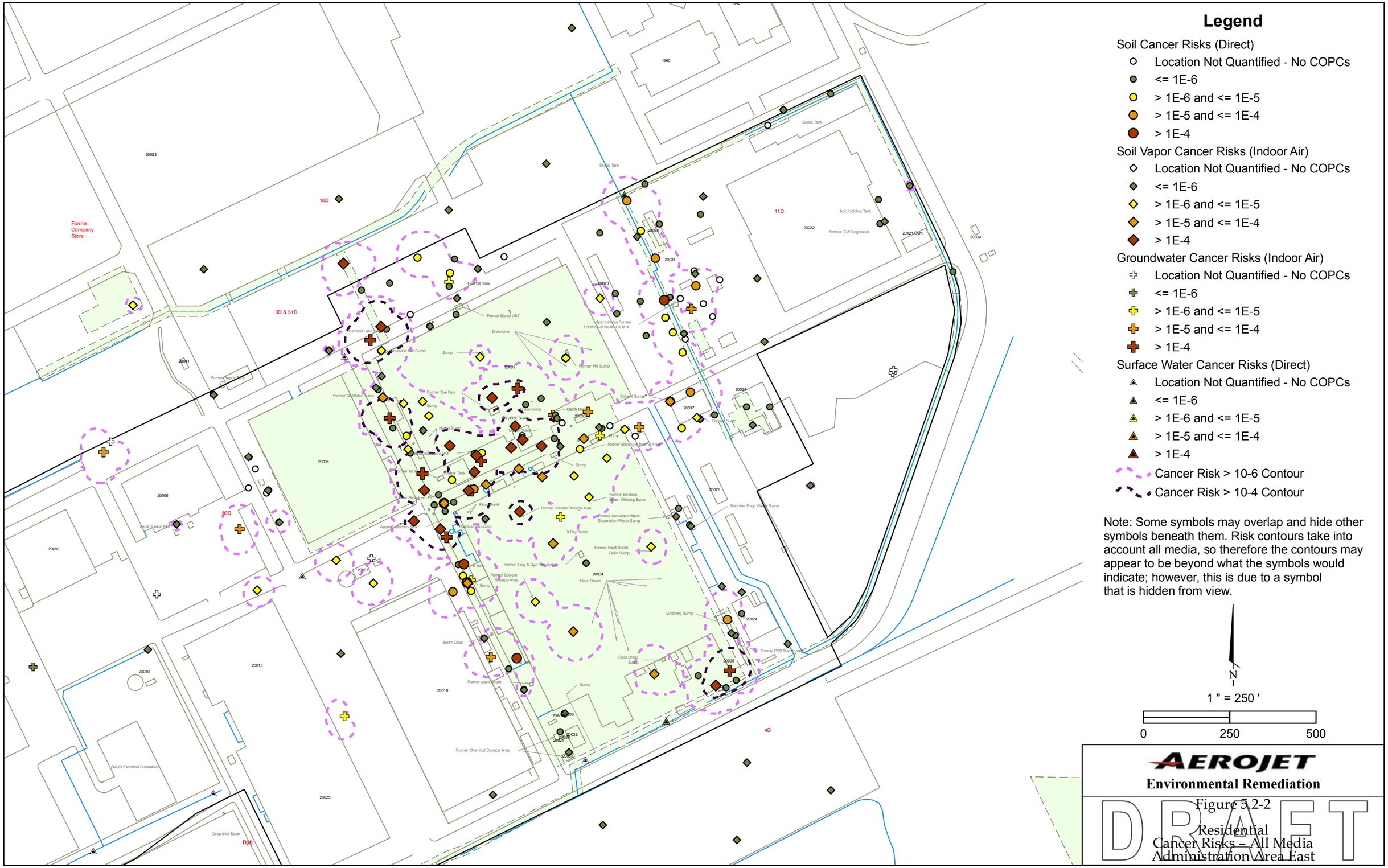
Notes and Key:
NA = Not applicable. Data is either not applicable for this chemical (*i.e.* , not carcinogenic) or not available.
Cancer weight of evidence classification:
A - human carcinogen
B1/B2 - probable human carcinogen
C - possible human carcinogen
D - not classifiable as to human carcinogenicity
ABS = dermal absorption efficiency
BIO = bioavailability
mg/kg = Milligrams per kilogram
NCEA = National Center for Environmental Assessment (USEPA), as referenced in Multi-Region PRG Table (USEPA 2008b).
(1) No COPCs required oral toxicity criteria adjustment for the dermal soil exposure pathway (USEPA 2004e).
(2) Dermal absorption factors obtained from USEPA 2004e.
(3) Carcinogenic via inhalation only.

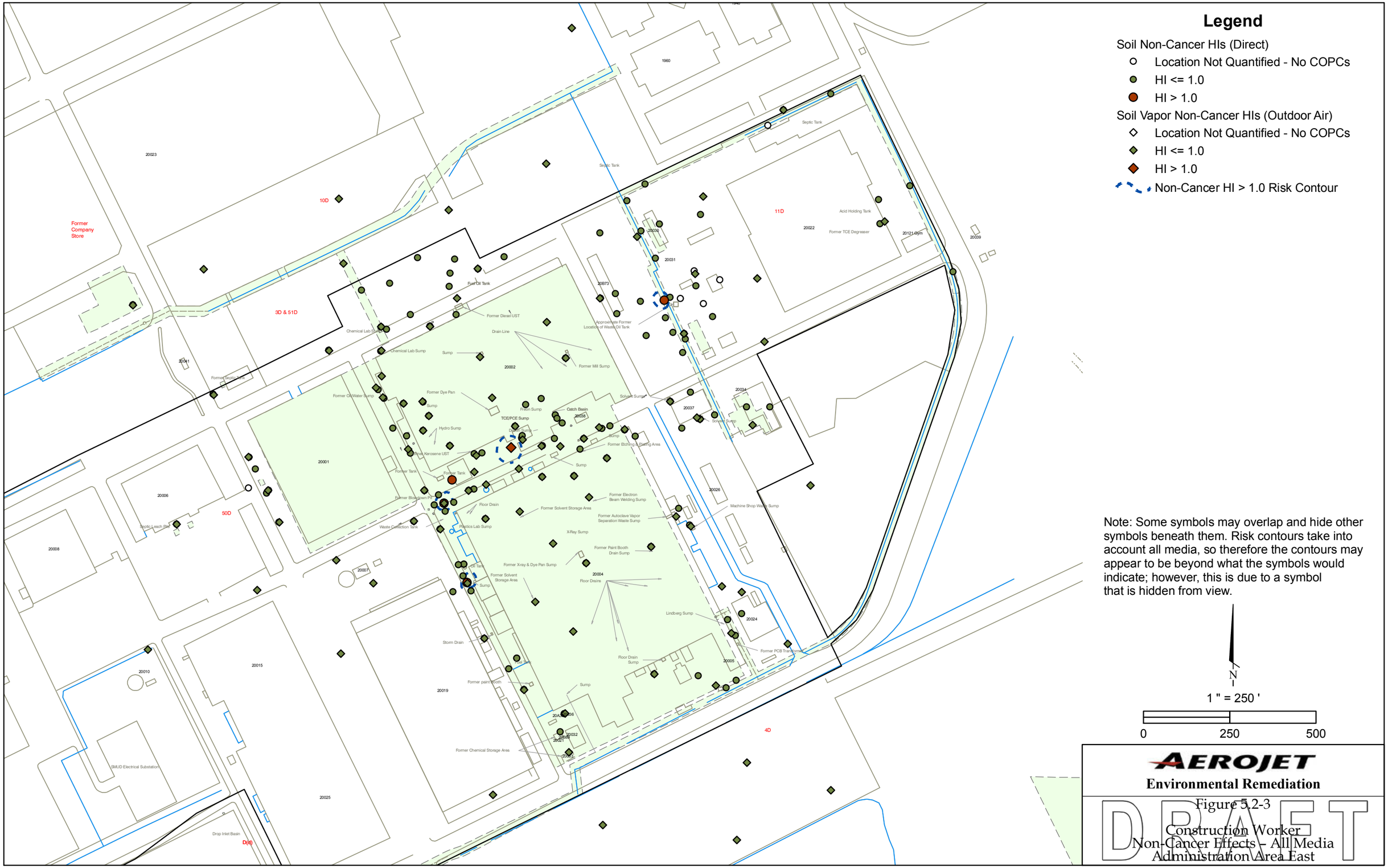
Table 5.1-9 Cross-Reference Table for Remedial Investigation, Human Health Risk Assessment, and Screening Level Ecological Risk Assessment Sections
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

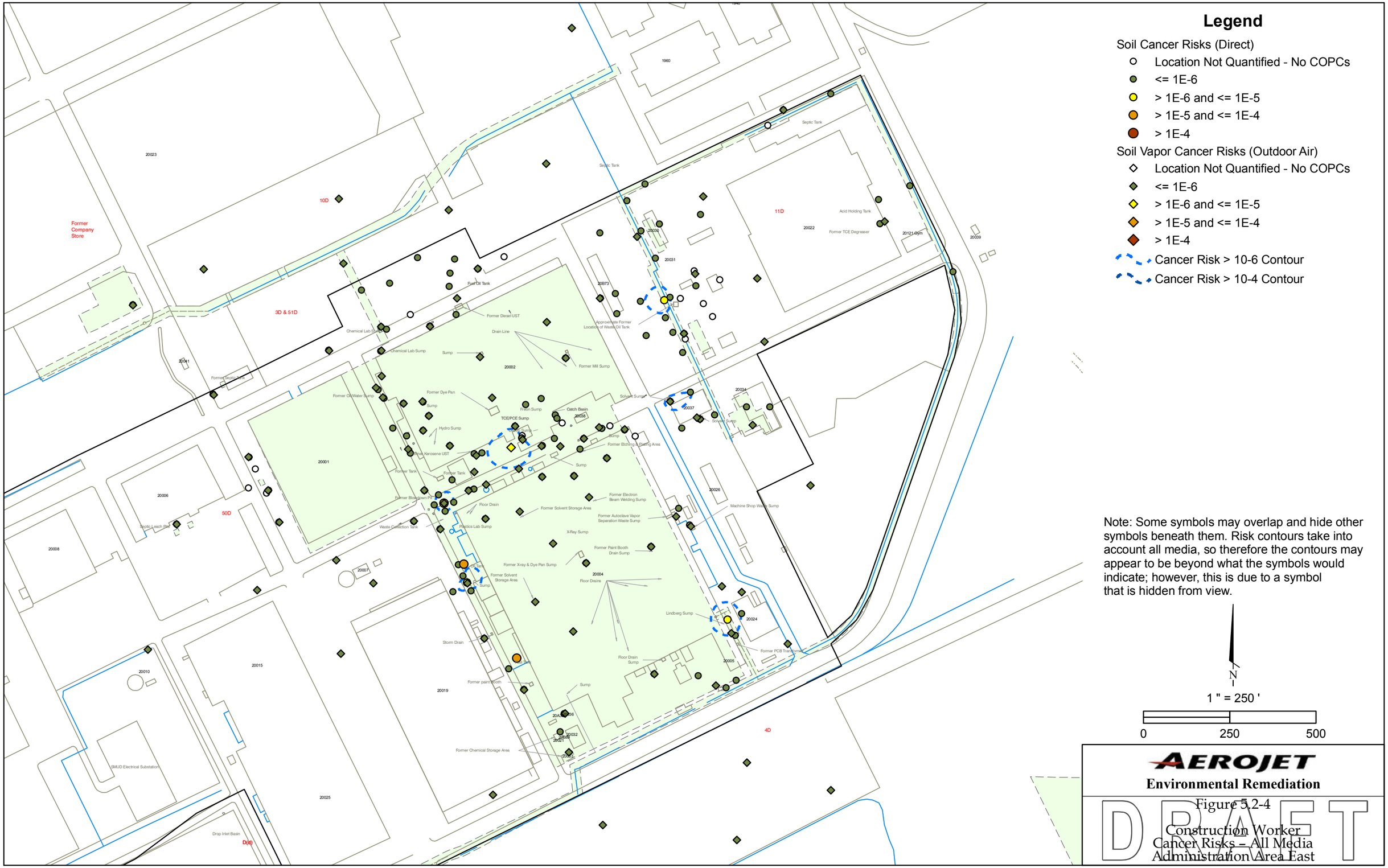
Management Area	RI Section	RI Figures	HHRA Section	SLERA Section
Administration Area (East and West)	4.0	4.2-9 to 4.2-14 4.3-7 to 4.3-12	5.2	6.2
Line 02 Region	5.1, 5.6, 5.7	5.1-11, 5.1-12, 5-1-14	5.3, 5.12	6.3
Line 05 North Area	5.2, 5.6, 5.7	5.2-10, 5.2-11, 5.2-12, 5.2-13	5.4, 5.12	6.4
Westlakes/Open Space 6	5.3, 5.6, 5.7	5.3-2, 5.3-3, 5.3-6, 5.3-7	5.5, 5.12	6.5
Ditch/Buffalo Creek	5.4, 5.6, 5.7	5.4-3	5.11, 5.12	6.6
Open Space Areas 5 and 7	5.5, 5.6, 5.7	NA	5.9, 5.12	6.7
Chemical Plant 2 Region	6.1, 6.5	6.1-9, 6.1-10, 6.1-11, 6.1-12, 6.1-13, 6.1-14	5.6, 5.13	6.8
Magazine Area	6.2, 6.5	6.2-3	5.7, 5.13	6.9
Dredge Pit and Eastern Basin	6.3, 6.5	6.3-4, 6.3-5	5.6, 5.13	6.8
Open Space Areas 1, 2, 4	6.4, 6.5	NA	5.8, 5.13	6.10
Area 39	7.0	7.2-8	5.10	6.11

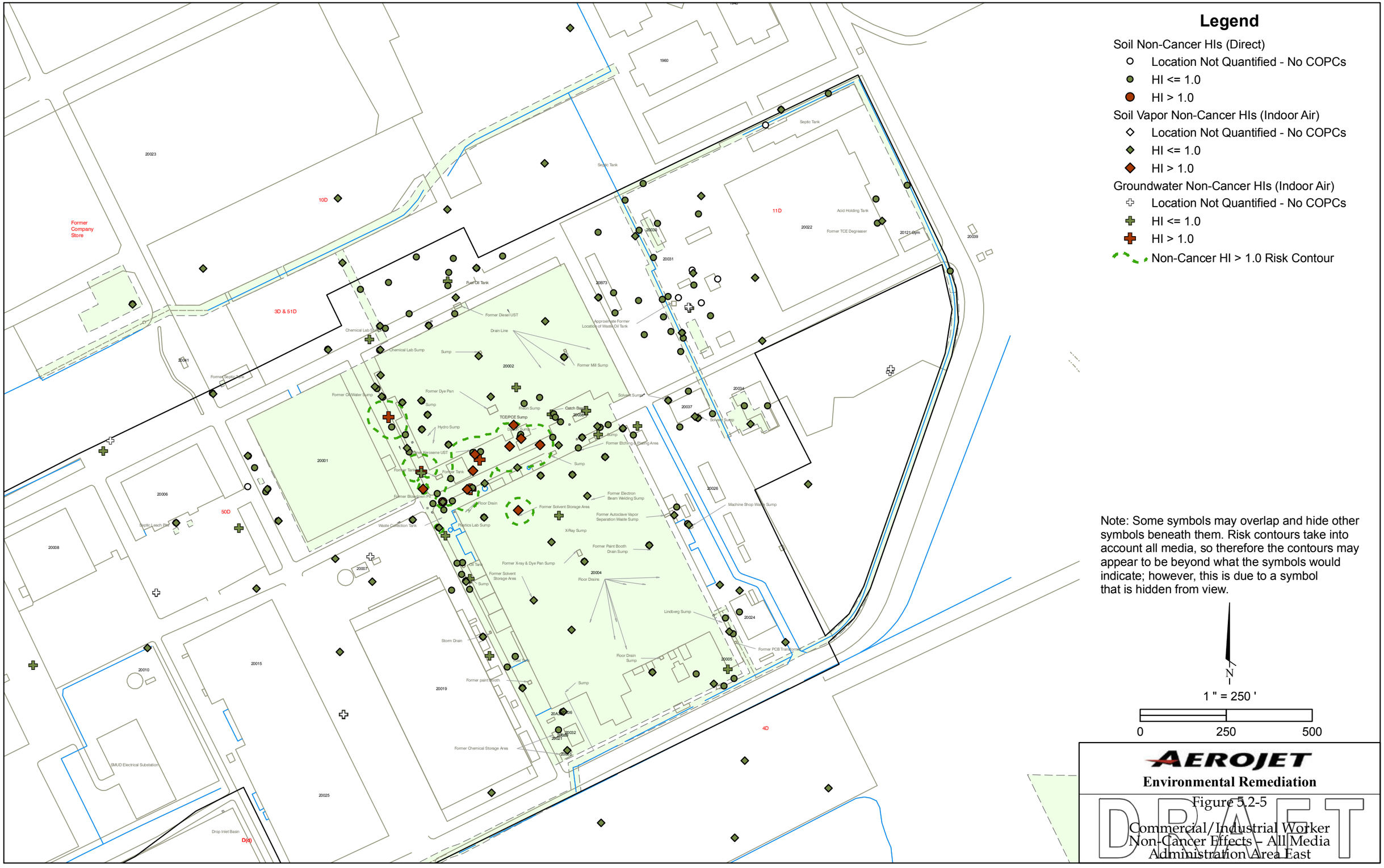
RI = Remedial Investigation
HHRA = Human Health Risk Assessment
SLERA = Screening Level Ecological Risk Assessment
NA = Not Applicable

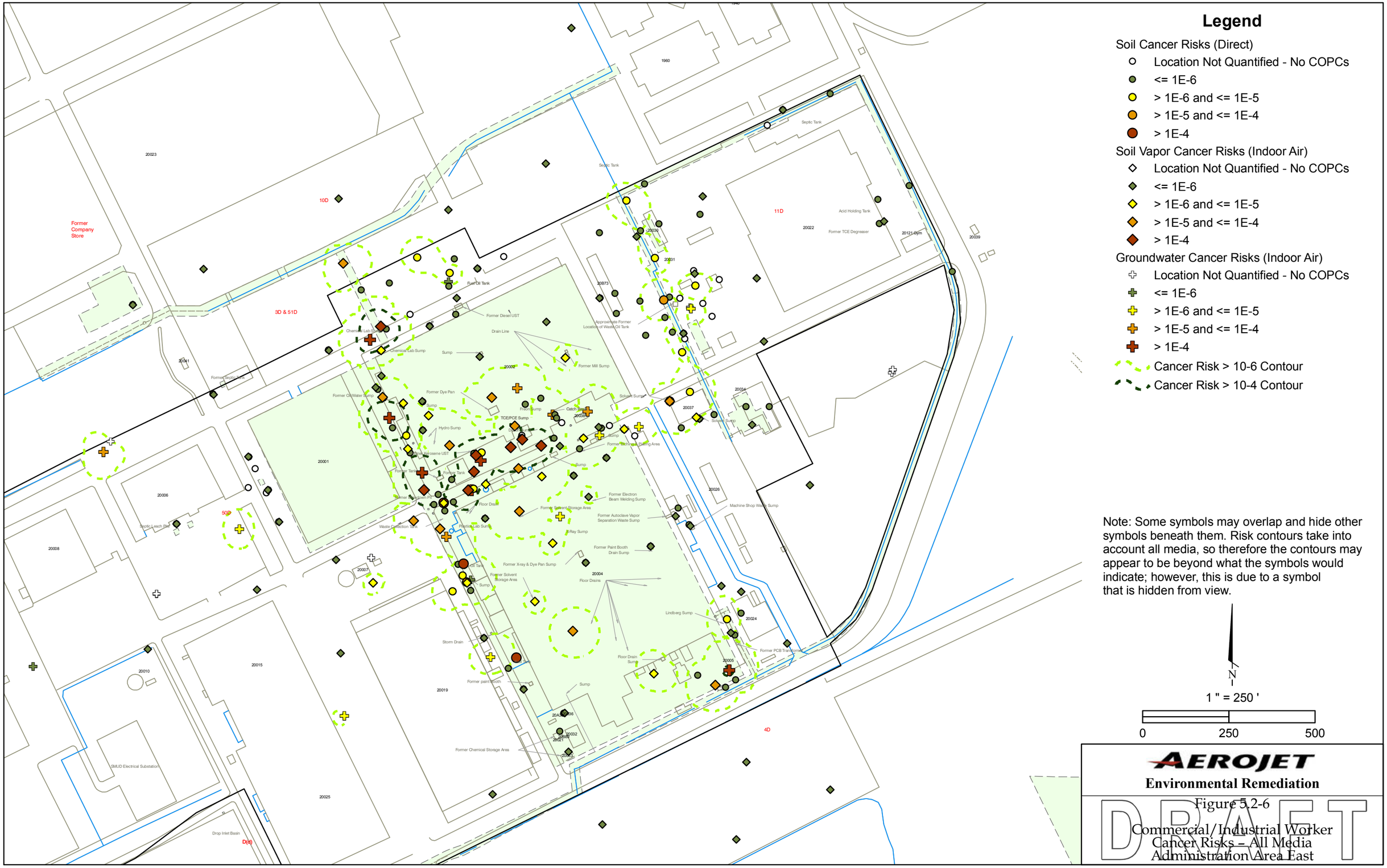

Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Groundwater Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Surface Water Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 250 '
0
250
500
AEROJET
Environmental Remediation
Figure 5.2-1
Residential
Non-Cancer Effects – All Media
Administration Area East
DRAFT
Former Company Store
10D
3D & 51D
50D
11D
4D
D(d)
20023
20022
20002
20001
20004
20006
20007
20008
20010
20015
20019
20025
20026
20024
20005
20031
20034
20037
20041
20039
1960
Septic Tank
Acid Holding Tank
Former TCE Degreaser
Fuel Oil Tank
Former Diesel UST
Drain Line
Chemical Lab Sump
Former Mill Sump
Approximate Former Location of Waste Oil Tank
Former Dye Pan
Former Oil/Water Sump
Hydro Sump
TCE/PCE Sump
Catch Basin
Former Electron Beam Welding Sump
Former Solvent Storage Area
Former Autoclave Vapor Separation Waste Sump
Machine Shop Waste Sump
X-Ray Sump
Former Paint Booth Drain Sump
Former X-ray & Dye Pan Sump
Floor Drains
Lindberg Sump
Former PCB Transformer
Floor Drain Sump
Storm Drain
Former paint booth
Former Chemical Storage Area
SMUD Electrical Substation
Drop Inlet Basin
Sump

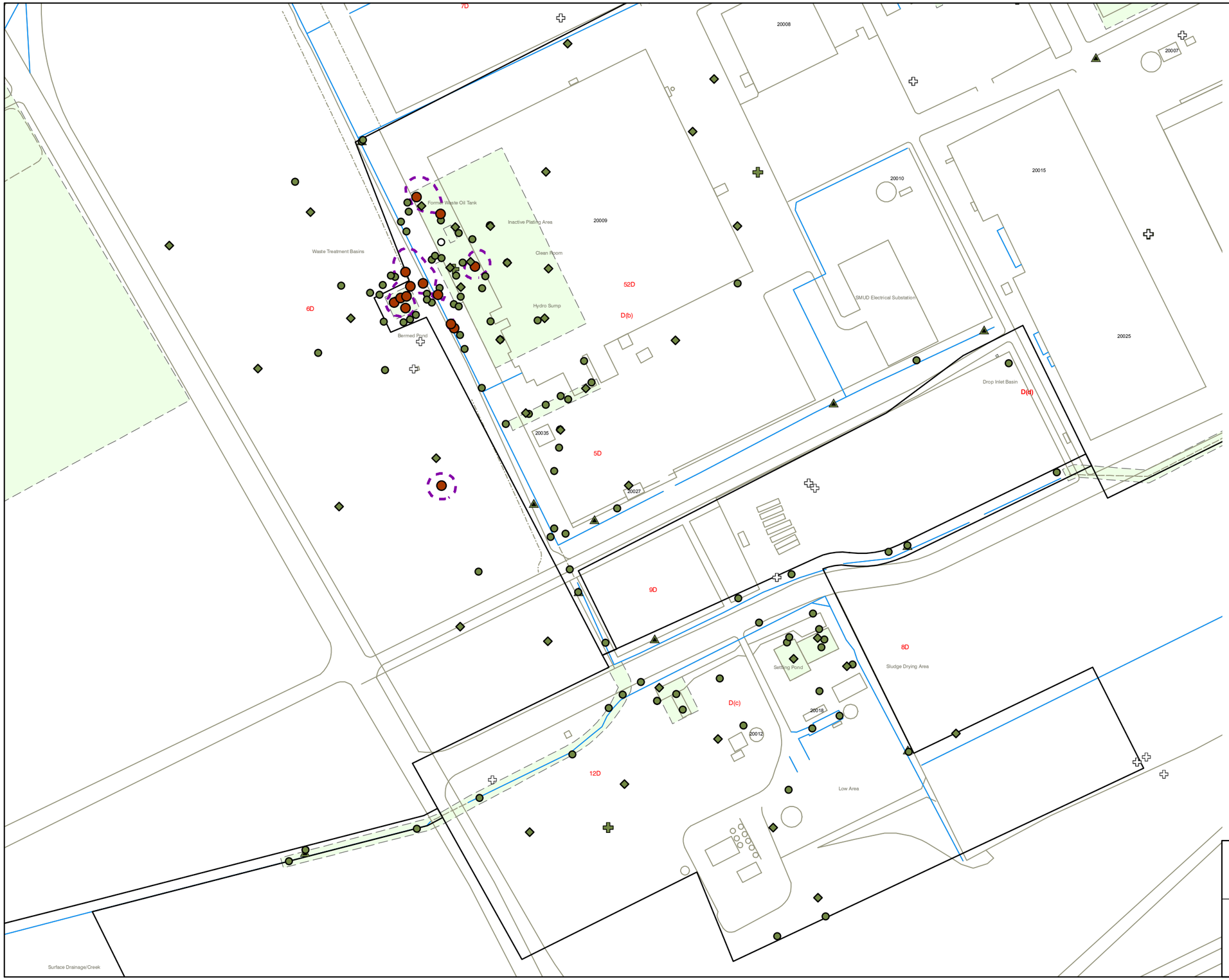

Legend
Soil Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Soil Vapor Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Groundwater Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Surface Water Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Cancer Risk > 10-6 Contour
Cancer Risk > 10-4 Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 250 '
0
250
500
Former Company Store
10D
3D & 51D
11D
30D
4D
D(d)
20023
20041
20006
20008
20007
20001
20002
20010
20015
20019
20025
20004
20005
20024
20026
20031
20034
20037
20039
20873
20121-Gym
1960
Septic Tank
Acid Holding Tank
Former TCE Degreaser
Fuel Oil Tank
Former Diesel UST
Drain Line
Approximate Former Location of Waste Oil Tank
Former Mill Sump
Former Dye Pan
Former Oil/Water Sump
Solvent Sump
Former Electron Beam Welding Sump
Former Autoclave Vapor Separation Waste Sump
Former Solvent Storage Area
X-Ray Sump
Former Paint Booth Drain Sump
Former X-ray & Dye Pits Sumps
Floor Drains
Machine Shop Waste Sump
Lindberg Sump
Former PCB Transformer
Storm Drain
Former paint booth
Former Chemical Storage Area
SMUD Electrical Substation
Drop Inlet Basin
Septic Leach Field
Sump
Catch Basin
Former Tank
Floor Drain
Former Boiler & Plating Area
Waste Collection Area
Chemical Lab Sump
Chemical Lab Sump
Former Oil/Water Sump
Former Stores Store
Former Tank
Former Tank
Boiler Blowdown Pit
Floor Drain
Former Solvent Storage Area
Former Electron Beam Welding Sump
Former Autoclave Vapor Separation Waste Sump
Machine Shop Waste Sump
Former Paint Booth Drain Sump
Former X-ray & Dye Pits Sumps
Former Solvent Storage Area
Floor Drains
Lindberg Sump
Former PCB Transformer
Floor Drain Sump
Former paint booth
Former Chemical Storage Area
AEROJET
Environmental Remediation
DRAFT
Figure 5.2-2
Residential
Cancer Risks – All Media
Administration Area East


Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Outdoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 250 '
0
250
500
AEROJET
Environmental Remediation
Figure 5.2-3
Construction Worker
Non-Cancer Effects – All Media
Administration Area East
DRAFT
Former Company Store
10D
3D & 51D
50D
11D
4D
D(d)
20023
20006
20008
20007
20010
20015
20019
20025
20001
20002
20004
20005
20024
20026
20022
20031
20032
20034
20037
20039
20041
20873
1960
Septic Tank
Acid Holding Tank
Former TCE Degreaser
Fuel Oil Tank
Former Diesel UST
Drain Line
Approximate Former Location of Waste Oil Tank
Chemical Lab Sump
Former Mill Sump
Former Dye Pan
Former Oil/Water Sump
Freon Sump
Catch Basin
TCE/PCE Sump
Hydro Sump
Solvent Sump
Former Etching & Plating Area
Former Kerosene UST
Former Tank
Former Blowdown Pit
Floor Drain
Former Solvent Storage Area
Former Electron Beam Welding Sump
Former Autoclave Vapor Separation Waste Sump
Machine Shop Waste Sump
Waste Collection Tank
Plastics Lab Sump
X-Ray Sump
Former Paint Booth Drain Sump
Former X-ray & Dye Pan Sump
Floor Drains
Lindberg Sump
Former PCB Transformer
Storm Drain
Floor Drain Sump
Former paint booth
Former Chemical Storage Area
Septic Leach Bed
SMUD Electrical Substation
Drop Inlet Basin


Legend
Soil Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Soil Vapor Cancer Risks (Outdoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Cancer Risk > 10-6 Contour
Cancer Risk > 10-4 Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 250 '
0
250
500
AEROJET
Environmental Remediation
DRAFT
Figure 5.2-4
Construction Worker
Cancer Risks – All Media
Administration Area East
Former Company Store
10D
3D & 51D
50D
11D
4D
D(d)
20023
20041
20006
20008
20007
20010
20015
20019
20025
20001
20002
20004
20005
20024
20026
20034
20037
20039
20031
20032
20873
1960
Septic Tank
Acid Holding Tank
Former TCE Degreaser
Fuel Oil Tank
Former Diesel UST
Drain Line
Approximate Former Location of Waste Oil Tank
Chemical Lab Sump
Former Mill Sump
Former Oil/Water Sump
Former Dye Pan
Freon Sump
Catch Basin
TCE/PCE Sump
Hydro Sump
Solvent Sump
Former Etching & Plating Area
Former Kerosene UST
Former Tank
Floor Drain
Former Solvent Storage Area
Former Electron Beam Welding Sump
Former Autoclave Vapor Separation Waste Sump
Machine Shop Waste Sump
Waste Collection Tank
Plastics Lab Sump
X-Ray Sump
Former Paint Booth Drain Sump
Former X-ray & Dye Pan Sump
Floor Drains
Lindberg Sump
Former PCB Transformer
Storm Drain
Floor Drain Sump
Former paint booth
Former Chemical Storage Area
SMUD Electrical Substation
Drop Inlet Basin
Septic Leach Bed


Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Groundwater Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 250 '
0
250
500
AEROJET
Environmental Remediation
Figure 5.2-5
Commercial/Industrial Worker
Non-Cancer Effects – All Media
Administration Area East
DRAFT
Former Company Store
10D
3D & 51D
50D
4D
11D
D(d)
20023
20006
20008
20010
20015
20019
20025
20001
20002
20004
20005
20007
20022
20024
20026
20031
20032
20034
20037
20039
20041
20873
1960
Septic Tank
Acid Holding Tank
Former TCE Degreaser
Fuel Oil Tank
Former Diesel UST
Drain Line
Approximate Former Location of Waste Oil Tank
Chemical Lab Sump
Former Mill Sump
Former Oil/Water Sump
Former Dye Pan
Freon Sump
Solvent Sump
TCE/PCE Sump
Hydro Sump
Former Kerosene UST
Former Tank
Former Blowdown Pit
Floor Drain
Former Solvent Storage Area
Former Electron Beam Welding Sump
Former Autoclave Vapor Separation Waste Sump
Machine Shop Waste Sump
Waste Collection Tank
Plastics Lab Sump
X-Ray Sump
Former Paint Booth Drain Sump
Former X-ray & Dye Pan Sump
Floor Drains
Lindberg Sump
Former PCB Transformer
Storm Drain
Floor Drain Sump
Former paint booth
Former Chemical Storage Area
Septic Leach Bed
SMUD Electrical Substation
Drop Inlet Basin


Legend
Soil Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Soil Vapor Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Groundwater Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Cancer Risk > 10-6 Contour
Cancer Risk > 10-4 Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 250 '
0
250
500
AEROJET
Environmental Remediation
Figure 5.2-6
Commercial/Industrial Worker
Cancer Risks – All Media
Administration Area East
DRAFT
Former Company Store
10D
3D & 51D
11D
50D
4D
D(d)
20023
20022
20001
20002
20004
20005
20006
20007
20008
20010
20015
20019
20021
20024
20025
20026
20031
20032
20034
20037
20039
20041
20873
1960
Septic Tank
Acid Holding Tank
Former TCE Degreaser
Fuel Oil Tank
Former Diesel UST
Drain Line
Approximate Former Location of Waste Oil Tank
Chemical Lab Sump
Sump
Former Mill Sump
Former Dye Pan
Former Oil/Water Sump
Hydro Sump
TCE/PCE Sump
Solvent Sump
Catch Basin
Former Electrical Plating Area
Former Kerosene UST
Former Tank
Floor Drain
Former Solvent Storage Area
Former Electron Beam Welding Sump
Former Autoclave Vapor Separation Waste Sump
Machine Shop Waste Sump
Waste Collection Tank
Photo Lab Sump
X Ray Sump
Former Paint Booth Drain Sump
Former X-ray & Dye Pan Sump
Floor Drains
Lindberg Sump
Storm Drain
Former PCB Transformer
Floor Drain Sump
Former paint booth
Former Chemical Storage Area
Septic Leach Pad
SMUD Electrical Substation
Drop Inlet Basin



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Surface Water Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 225 '

0 225 450

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Environmental Remediation

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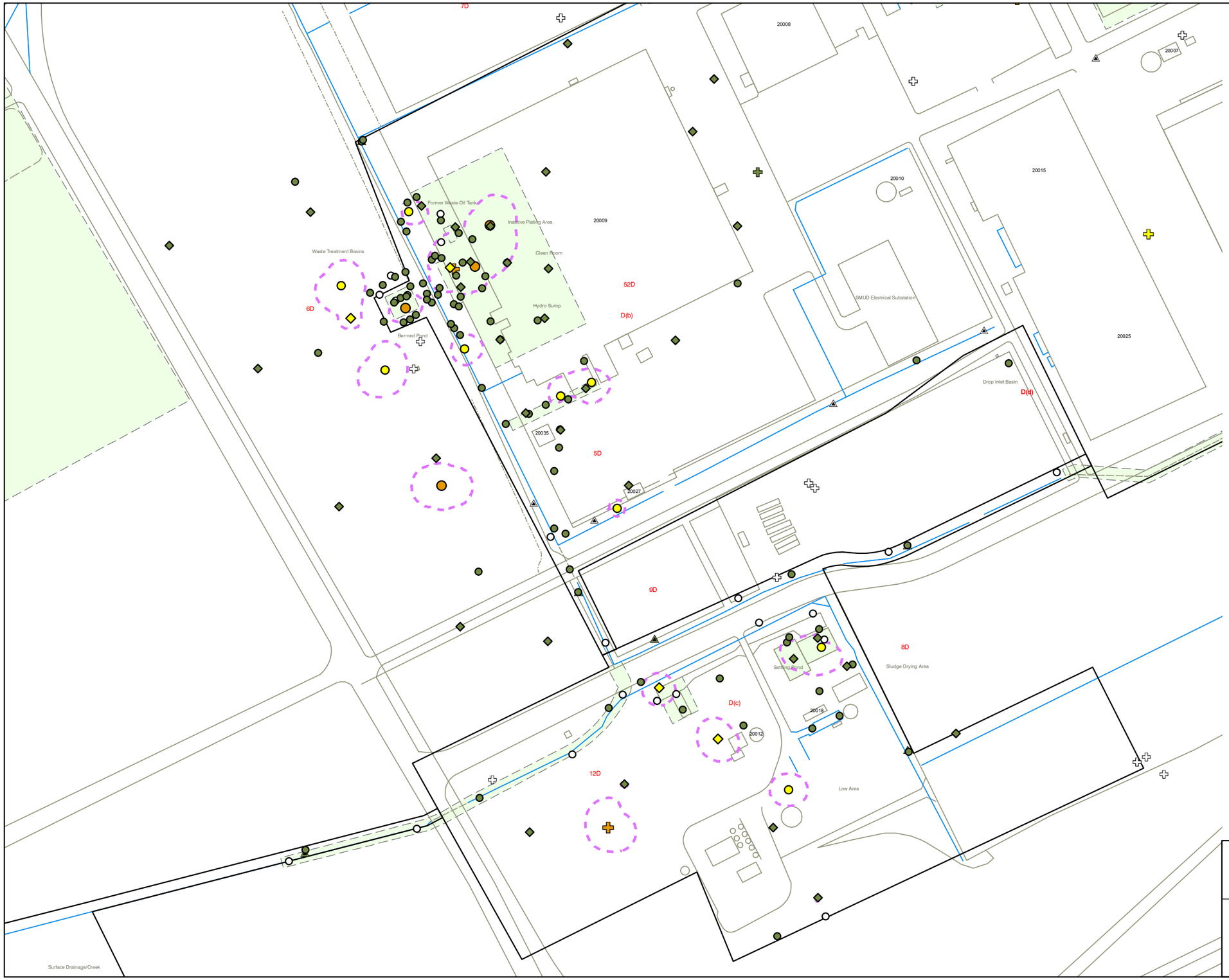
Figure 5.2-7

Residential
Non-Cancer Effects – All Media
Administration Area West



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 225 '

0 225 450

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Environmental Remediation

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Figure 5.2-8

Residential
Cancer Risks – All Media
Administration Area West

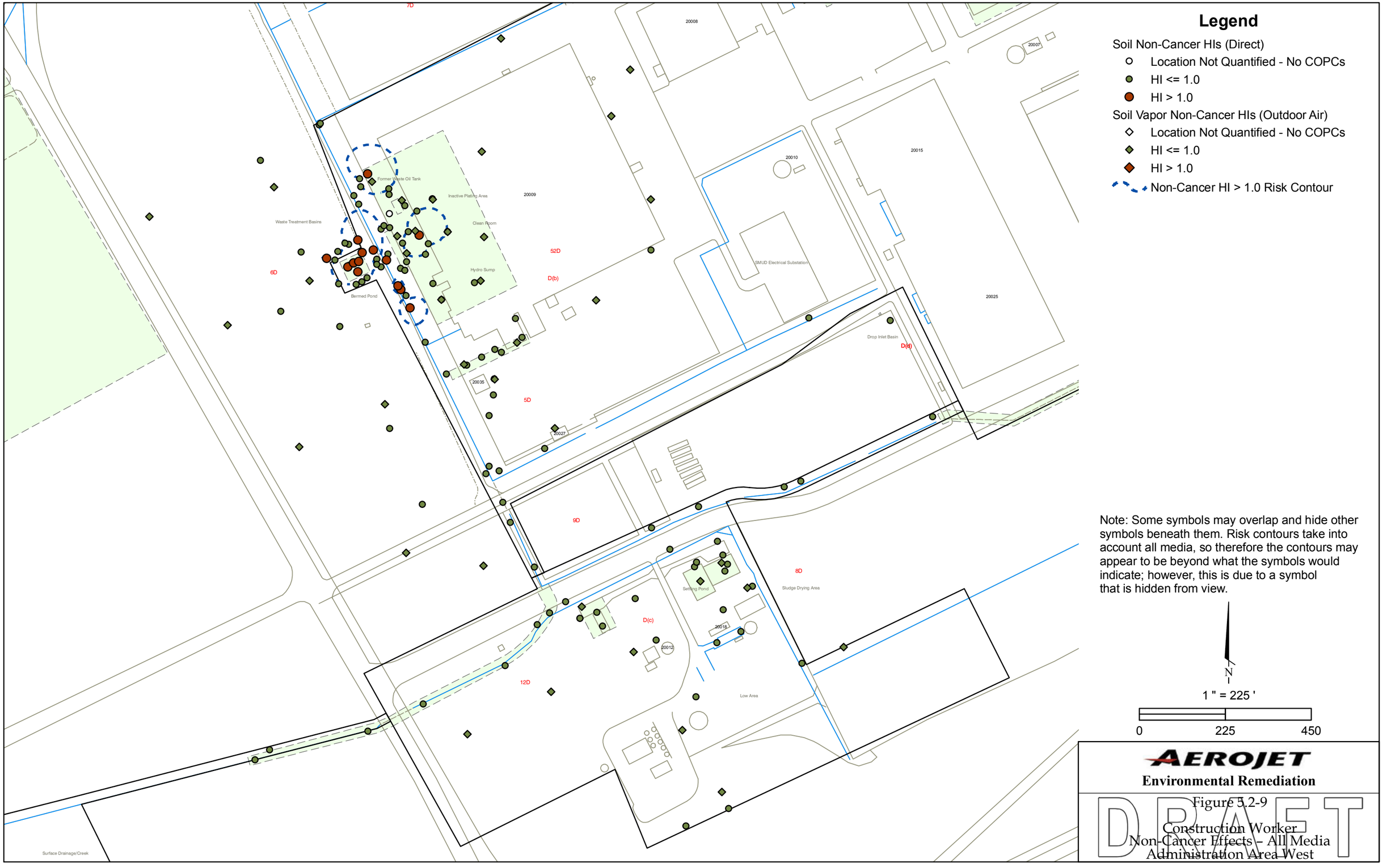
Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Outdoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 225 '
0
225
450
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Figure 5.2-9
Construction Worker
Non-Cancer Effects – All Media
Administration Area West
7D
20008
20007
20010
20015
20009
Former Waste Oil Tank
Inactive Plating Area
Clean Room
Hydro Sump
Waste Treatment Basins
Bermed Pond
6D
52D
D(b)
SMUD Electrical Substation
20025
Drop Inlet Basin
D(d)
20035
5D
20027
9D
8D
Sludge Drying Area
Settling Pond
D(c)
20018
20012
12D
Low Area
Surface Drainage/Creek

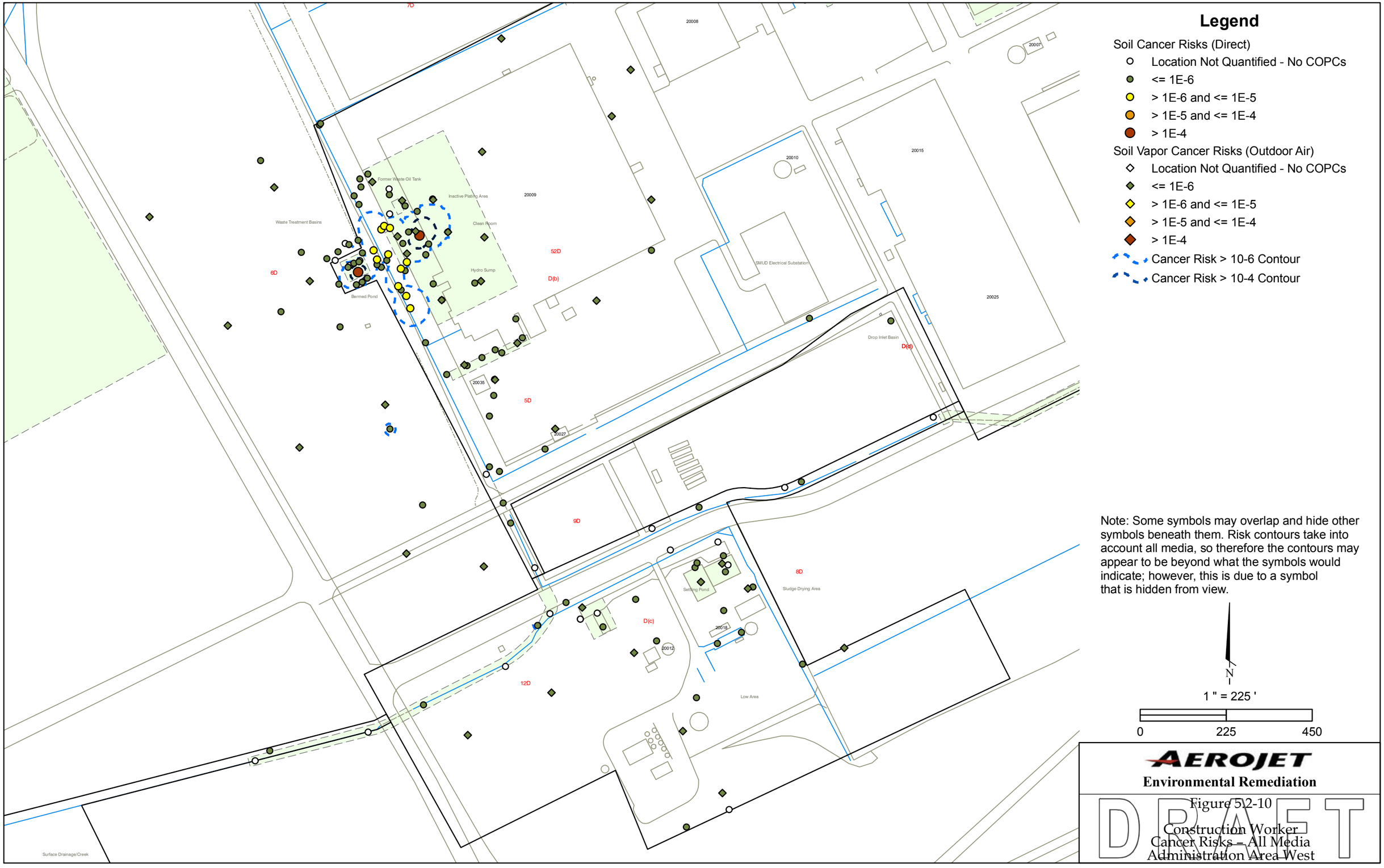
Legend
Soil Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Soil Vapor Cancer Risks (Outdoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Cancer Risk > 10-6 Contour
Cancer Risk > 10-4 Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 225 '
0
225
450
AEROJET
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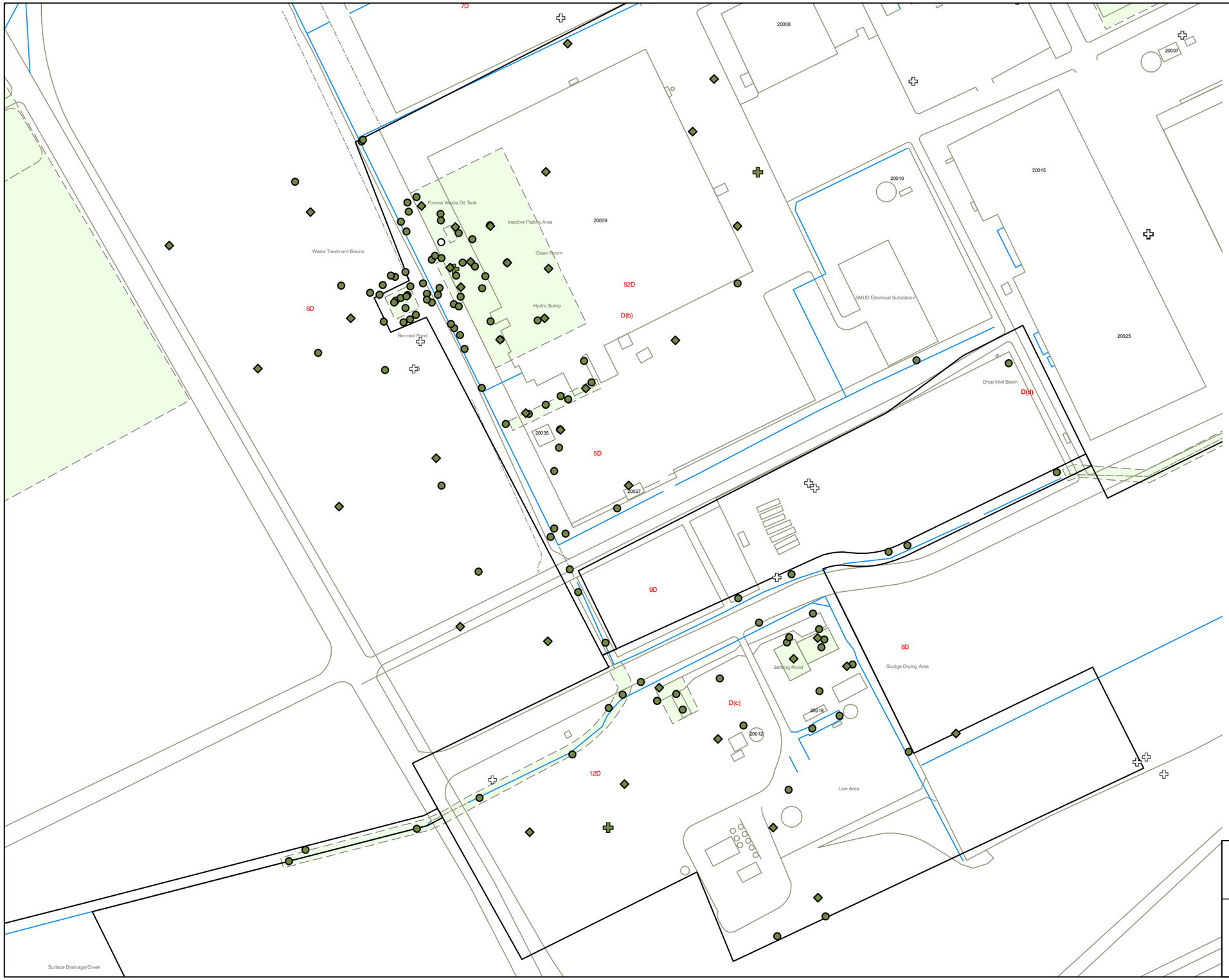
Figure 5.2-10
Construction Worker
Cancer Risks – All Media
Administration Area West
7D
20008
20007
20010
20015
20009
Former Waste Oil Tank
Inactive Plating Area
Clean Room
Hydro Sump
Waste Treatment Basins
Bermed Pond
6D
52D
D(b)
SMUD Electrical Substation
20025
Drop Inlet Basin
D(d)
20035
5D
20027
9D
8D
Sludge Drying Area
Settling Pond
D(c)
20018
20012
12D
Low Area
Surface Drainage/Creek



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 225 '

0 225 450

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Environmental Remediation

Figure 5.2-11

Commercial/Industrial Worker Non-Cancer Effects – All Media Administration Area West

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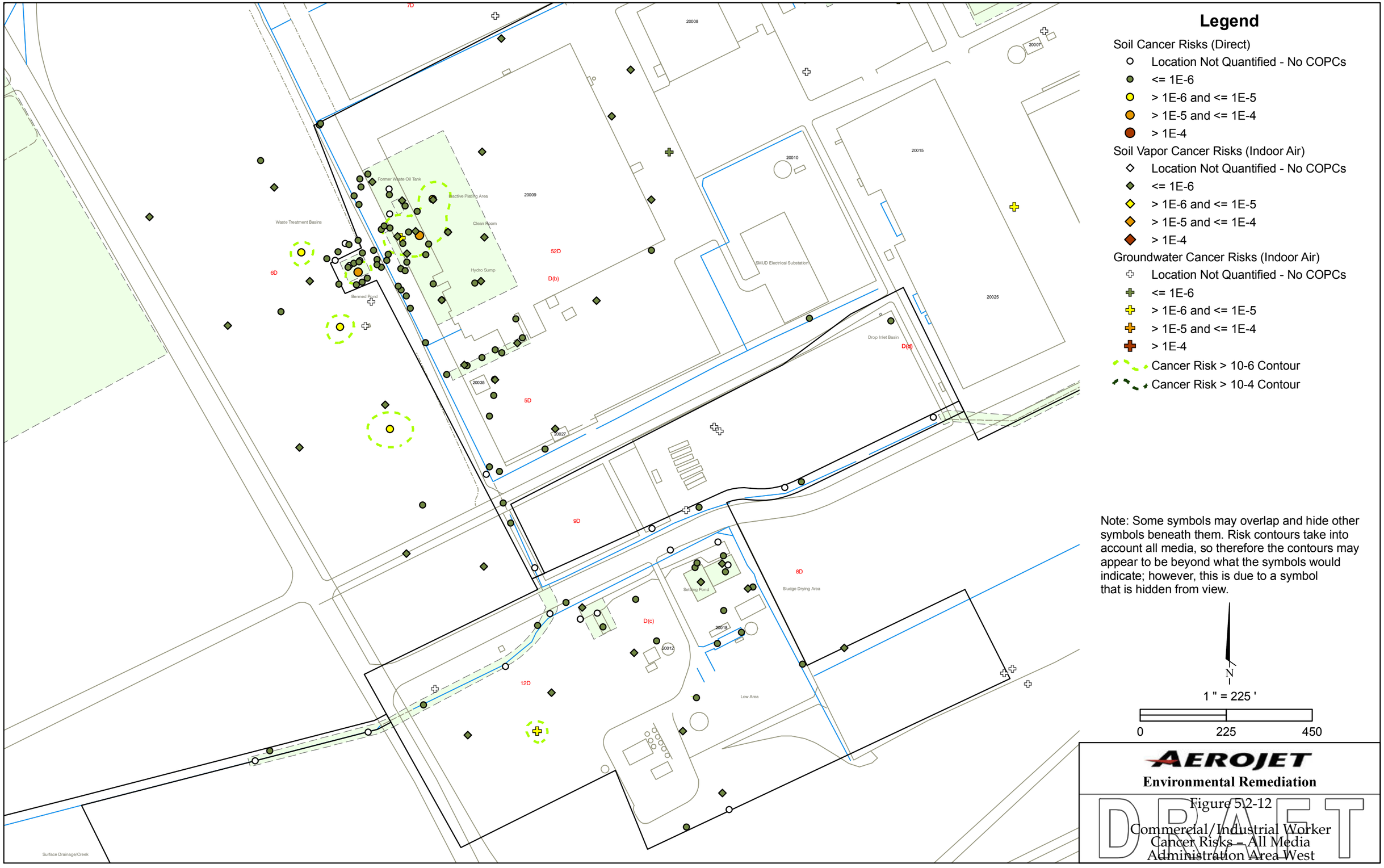
Legend
Soil Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Soil Vapor Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Groundwater Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Cancer Risk > 10-6 Contour
Cancer Risk > 10-4 Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 225 '
0
225
450
AEROJET
Environmental Remediation
DRAFT
Figure 5.2-12
Commercial/Industrial Worker
Cancer Risks – All Media
Administration Area West
7D
20008
20007
20015
20010
20009
Former Waste Oil Tank
Inactive Plating Area
Clean Room
Hydro Sump
Waste Treatment Basins
Bermed Pond
6D
52D
D(b)
SMUD Electrical Substation
20025
Drop Inlet Basin
D(d)
20035
5D
20027
9D
8D
Sludge Drying Area
Settling Pond
D(c)
20018
20012
12D
Low Area
Surface Drainage/Creek

Table 5.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	58	0	0.0%	0.5 - 100	4.3E-02	ca	N	ND*	100%
	71-55-6	1,1,1-Trichloroethane	0.67	56	µg/L	203	10	4.9%	0.5 - 100	1.0E+02	nc	N	BSL	NA
	79-34-5	1,1,2,2-Tetrachloroethane	7.0	37	µg/L	203	2	1.0%	0.5 - 100	5.5E-03	ca	Y		NA
	79-00-5	1,1,2-Trichloroethane	0.23	3.5	µg/L	203	7	3.4%	0.5 - 100	2.0E-02	ca	Y		NA
	75-34-3	1,1-Dichloroethane	0.27	62	µg/L	203	69	34.0%	0.5 - 100	2.0E-01	nc	Y		NA
	75-35-4	1,1-Dichloroethene	0.28	170	µg/L	203	64	31.5%	0.5 - 100	1.0E+00	nc	Y		NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	58	0	0.0%	0.5 - 100	NA		N	ND	NA
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	58	0	0.0%	0.5 - 100	NA		N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	58	0	0.0%	1 - 100	5.6E-04	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	85	0	0.0%	0.5 - 1000	5.0E-01	nc	N	ND*	100%
	95-63-6	1,2,4-Trimethylbenzene	1.3	4.6	µg/L	58	2	3.4%	0.5 - 100	1.2E+00	nc	Y		NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	58	0	0.0%	1 - 100	1.6E-04	ca	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	74	0	0.0%	0.5 - 100	5.6E-04	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	0.60	12	µg/L	101	7	6.9%	0.5 - 1000	3.7E+01	nc	Y		NA
	107-06-2	1,2-Dichloroethane	0.24	30	µg/L	203	33	16.3%	0.5 - 100	1.2E-02	ca	Y		NA
	540-59-0	1,2-Dichloroethene (cis/trans)	0.84	3100	µg/L	158	71	44.9%	0.5 - 100	6.0E+00	nc	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	200	0	0.0%	0.5 - 100	1.6E-02	ca*	N	ND*	100%
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	69	0	0.0%	10 - 2000	8.4E-03	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	0.77	0.77	µg/L	58	1	1.7%	0.5 - 100	1.2E+00	nc	N	BSL	NA
	541-73-1	1,3-Dichlorobenzene	0.45	5.8	µg/L	101	2	2.0%	0.5 - 1000	1.8E+01	nc	N	BSL	NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	58	0	0.0%	0.5 - 100	1.2E+01	nc	N	ND*	100%
	106-46-7	1,4-Dichlorobenzene	0.87	3.3	µg/L	101	2	2.0%	0.5 - 1000	5.0E-02	ca	Y		NA
	123-91-1	1,4-Dioxane	16	37	µg/L	23	3	13.0%	10 - 1000	6.1E-01	ca	Y		NA
	872-50-4	1-Methyl-2-Pyrrolidinone	ND	ND	µg/L	23	0	0.0%	10 - 2000	NA		N	ND	NA
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	58	0	0.0%	0.5 - 100	NA		N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	69	0	0.0%	10 - 1000	3.6E+02	nc	N	ND*	100%
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	69	0	0.0%	10 - 1000	9.6E-02	nc**	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	69	0	0.0%	10 - 1000	1.1E+01	nc	N	ND*	100%
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	69	0	0.0%	5 - 1000	7.3E+01	nc	N	ND*	100%
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	69	0	0.0%	20 - 5000	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	69	0	0.0%	10 - 1000	7.3E+00	nc	N	ND*	100%
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	69	0	0.0%	10 - 1000	3.6E+00	nc	N	ND*	100%
	110-75-8	2-CHLOROETHYL VINYL ETHER	ND	ND	µg/L	38	0	0.0%	5 - 200	NA		N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	69	0	0.0%	5 - 1000	4.9E+01	nc	N	ND*	100%
	95-57-8	2-Chlorophenol	ND	ND	µg/L	69	0	0.0%	10 - 1000	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	58	0	0.0%	0.5 - 100	1.2E+01	nc	N	ND*	100%
	591-78-6	2-Hexanone	ND	ND	µg/L	53	0	0.0%	10 - 1000	NA		N	ND	NA
	91-57-6	2-Methylnaphthalene	24	28	µg/L	70	2	2.9%	0 - 1000	9.3E-03	nc	Y		NA
	95-48-7	2-Methylphenol	ND	ND	µg/L	69	0	0.0%	5 - 1000	1.8E+02	nc	N	ND*	100%
	88-74-4	2-Nitroaniline	ND	ND	µg/L	69	0	0.0%	10 - 5000	1.1E+01	nc	N	ND*	100%

Table 5.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	88-75-5	2-Nitrophenol	ND	ND	µg/L	69	0	0.0%	10 - 1000	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	69	0	0.0%	10 - 1000	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	69	0	0.0%	10 - 5000	3.2E-01	ca**	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	69	0	0.0%	20 - 5000	3.6E-01	nc	N	ND*	100%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	71	0	0.0%	5 - 1000	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	69	0	0.0%	10 - 2000	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	69	0	0.0%	10 - 1000	1.5E+01	nc	N	ND*	100%
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	69	0	0.0%	10 - 1000	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	58	0	0.0%	0.5 - 100	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	µg/L	65	0	0.0%	5 - 1000	1.8E+01	nc	N	ND*	100%
	100-01-6	4-Nitroaniline	ND	ND	µg/L	69	0	0.0%	10 - 5000	3.2E-01	ca*	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	69	0	0.0%	20 - 5000	NA		N	ND	NA
	83-32-9	Acenaphthene	0.090	1.5	µg/L	70	3	4.3%	0.2 - 1000	3.7E+01	nc	N	BSL	NA
	208-96-8	Acenaphthylene	0.26	0.48	µg/L	70	2	2.9%	0.2 - 1000	3.7E+01	nc	N	BSL	NA
	67-64-1	Acetone	ND	ND	µg/L	53	0	0.0%	10 - 1000	5.5E+02	nc	N	ND	NA
	107-02-8	Acrolein	ND	ND	µg/L	1	0	0.0%	25 - 25	4.2E-03	nc	N	ND*	100%
	107-13-1	Acrylonitrile	ND	ND	µg/L	1	0	0.0%	25 - 25	1.1E-03	ca*	N	ND*	100%
	309-00-2	Aldrin	ND	ND	µg/L	5	0	0.0%	0.36 - 0.4	4.0E-04	ca	N	ND*	100%
	7429-90-5	Aluminum	48	840000	µg/L	80	44	55.0%	50 - 200000	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	69	0	0.0%	10 - 1000	1.2E+00	ca*	N	ND*	100%
	120-12-7	Anthracene	0.13	2.6	µg/L	70	4	5.7%	0.2 - 1000	1.8E+02	nc	Y		NA
	7440-36-0	Antimony	0.051	8.0	µg/L	77	14	18.2%	2 - 500000	1.5E+00	nc	Y		NA
	7440-38-2	Arsenic	0.56	200	µg/L	80	26	32.5%	1 - 380000	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	42	0	0.0%	5 - 50	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	8.1	4700	µg/L	80	79	98.8%	100 - 100	2.0E+02	nc	Y		NA
	71-43-2	Benzene	0.86	1.6	µg/L	111	3	2.7%	0.5 - 100	1.5E-02	ca	Y		NA
	92-87-5	Benzidine	ND	ND	µg/L	64	0	0.0%	10 - 1000	2.9E-05	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.090	0.090	µg/L	70	1	1.4%	0.2 - 1000	9.2E-03	ca	Y		NA
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	70	0	0.0%	0.2 - 1000	4.0E-04	ca	N	ND*	100%
	zo (b & k) fluoranthene (to	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	42	0	0.0%	0.4 - 2.2	5.6E-03	ca	N	ND*	100%
	205-99-2	Benzo (b) fluoranthene	ND	ND	µg/L	28	0	0.0%	0.2 - 1000	9.2E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	69	0	0.0%	0.2 - 1000	NA		N	ND	NA
	207-08-9	Benzo (k) fluoranthene	ND	ND	µg/L	28	0	0.0%	0.2 - 1000	5.6E-03	ca	N	ND*	100%
	65-85-0	Benzoic acid	108	108	µg/L	69	1	1.4%	20 - 5000	1.5E+04	nc	N	BSL	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	69	0	0.0%	5 - 1000	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	69	0	0.0%	10 - 1000	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	0.26	42	µg/L	80	8	10.0%	0.5 - 50000	1.0E-01	nc	Y		NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	69	0	0.0%	5 - 1000	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	69	0	0.0%	5 - 1000	1.0E-03	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	69	0	0.0%	10 - 1000	2.7E-02	ca	N	ND*	100%

Table 5.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	117-81-7	Bis(2-ethylhexyl)phthalate	5.5	8400	µg/L	69	6	8.7%	5 - 50	4.8E-01	ca	Y		NA
	7440-42-8	Boron	8.2	1310	µg/L	77	32	41.6%	50 - 100000	7.3E+02	nc	Y		NA
	108-86-1	Bromobenzene	ND	ND	µg/L	58	0	0.0%	0.5 - 100	2.0E+00	nc	N	ND*	100%
	74-97-5	Bromochloromethane	ND	ND	µg/L	58	0	0.0%	0.5 - 100	NA		N	ND	NA
	75-27-4	Bromodichloromethane	0.86	2.0	µg/L	200	3	1.5%	0.5 - 100	1.8E-02	ca	Y		NA
	75-25-2	Bromoform	ND	ND	µg/L	200	0	0.0%	0.5 - 100	8.5E-01	ca	N	ND*	100%
	74-83-9	Bromomethane	ND	ND	µg/L	112	0	0.0%	0.5 - 200	8.7E-01	nc	N	ND*	100%
	7440-43-9	Cadmium	0.026	106	µg/L	80	28	35.0%	1 - 20000	4.0E-03	nc	Y		NA
	7440-70-2	Calcium	1600	100000	µg/L	77	77	100.0%	0 - 0	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	µg/L	42	0	0.0%	10 - 100	3.4E-01	ca	N	ND*	100%
	75-15-0	Carbon disulfide	ND	ND	µg/L	52	0	0.0%	5 - 1000	1.0E+02	nc	N	ND*	100%
	56-23-5	Carbon tetrachloride	0.50	15	µg/L	200	19	9.5%	0.5 - 100	1.0E-02	ca*	Y		NA
	57-74-9	Chlordane (tech)	ND	ND	µg/L	5	0	0.0%	3.64 - 4	3.0E-03	ca	N	ND*	100%
	108-90-7	Chlorobenzene	ND	ND	µg/L	200	0	0.0%	0.5 - 100	1.1E+01	nc	N	ND*	100%
	75-00-3	Chloroethane	ND	ND	µg/L	112	0	0.0%	0.5 - 200	4.6E-01	ca	N	ND*	100%
	67-66-3	Chloroform	0.51	57	µg/L	200	75	37.5%	0.5 - 100	1.7E-02	ca	Y		NA
	74-87-3	Chloromethane	ND	ND	µg/L	112	0	0.0%	0.5 - 200	1.6E+01	ca	N	ND*	100%
	7440-47-3	Chromium	2.8	710	µg/L	80	42	52.5%	2.5 - 40000	5.5E+03	nc	N	BSL	NA
	218-01-9	Chrysene	ND	ND	µg/L	70	0	0.0%	0.2 - 1000	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	0.72	940	µg/L	86	49	57.0%	0.5 - 50	6.1E+00	nc	Y		NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/L	69	0	0.0%	0.5 - 100	NA		N	ND	NA
	7440-48-4	Cobalt	0.095	935	µg/L	77	46	59.7%	1 - 20000	7.3E+01	nc	Y		NA
	7440-50-8	Copper	0.67	10200	µg/L	80	47	58.8%	2 - 50000	1.7E+01	nc	Y		NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	69	0	0.0%	0.2 - 1000	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	69	0	0.0%	5 - 1000	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	ND	ND	µg/L	200	0	0.0%	0.5 - 100	1.3E-02	ca	N	ND*	100%
	74-95-3	Dibromomethane	ND	ND	µg/L	58	0	0.0%	0.5 - 100	6.1E+00	nc	N	ND*	100%
	75-71-8	Dichlorodifluoromethane	0.44	23	µg/L	200	10	5.0%	0.5 - 200	3.9E+01	nc	Y		NA
	60-57-1	Dieldrin	ND	ND	µg/L	5	0	0.0%	0.36 - 0.4	4.2E-04	ca	N	ND*	100%
	68334-30-5	Diesel Range Organics (C10-C28)	24	380000	µg/L	51	27	52.9%	50 - 1500000	NA		N	ITC	NA
	60-29-7	Diethyl ether	ND	ND	µg/L	1	0	0.0%	1000000 - 1000000	1.2E+02	nc	N	ND*	100%
	84-66-2	Diethyl phthalate	ND	ND	µg/L	69	0	0.0%	10 - 1000	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	69	0	0.0%	10 - 1000	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	69	0	0.0%	10 - 2000	3.6E+02	nc	N	ND*	100%
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	69	0	0.0%	5 - 1000	1.5E+02	nc	N	ND*	100%
	1031-07-8	Endosulfan sulfate	ND	ND	µg/L	5	0	0.0%	0.36 - 0.4	NA		N	ND	NA
	72-20-8	Endrin	ND	ND	µg/L	5	0	0.0%	0.36 - 0.4	1.8E-01	nc	N	ND*	100%
	7421-93-4	Endrin aldehyde	ND	ND	µg/L	5	0	0.0%	0.36 - 0.4	1.8E-01	nc	N	ND*	100%

Table 5.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	64-17-5	Ethanol	ND	ND	µg/L	1	0	0.0%	1000000 - 1000000	NA		N	ND	NA
	100-41-4	Ethylbenzene	1.6	2.3	µg/L	111	3	2.7%	0.5 - 100	3.0E+01	nc	N	BSL	NA
	206-44-0	Fluoranthene	ND	ND	µg/L	70	0	0.0%	0.2 - 1000	1.5E+02	nc	N	ND*	100%
	86-73-7	Fluorene	0.28	1.8	µg/L	70	4	5.7%	0.2 - 1000	2.4E+01	nc	Y		NA
	76-13-1	Freon 113	0.64	2700	µg/L	161	32	19.9%	0.5 - 50	4.0E+02	nc	Y		NA
	1024-57-3	Heptachlor epoxide	ND	ND	µg/L	5	0	0.0%	0.36 - 0.4	6.0E-04	ca*	N	ND*	100%
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	69	0	0.0%	5 - 1000	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	85	0	0.0%	1 - 2000	8.6E-02	ca*	N	ND*	100%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	69	0	0.0%	10 - 1000	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	69	0	0.0%	5 - 1000	4.8E-01	ca**	N	ND*	100%
	18540-29-9	Hexavalent Chromium	3.4	21	µg/L	56	4	7.1%	5 - 40000	1.1E+01	nc	Y		NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	69	0	0.0%	0.2 - 1000	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	43	1300000	µg/L	82	65	79.3%	40 - 330000	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	69	0	0.0%	5 - 1000	7.1E+00	ca	N	ND*	100%
	67-63-0	Isopropanol	ND	ND	µg/L	1	0	0.0%	1000000 - 1000000	NA		N	ND	NA
	98-82-8	Isopropylbenzene	0.74	2.6	µg/L	58	2	3.4%	0.5 - 100	6.6E+01	nc	N	BSL	NA
	94114-58-6	Jet fuels	ND	ND	µg/L	1	0	0.0%	40000000 - 40000000	NA		N	ND	NA
	8008-20-6	Kerosene	ND	ND	µg/L	1	0	0.0%	200000000 - 200000000	NA		N	ND	NA
	7439-92-1	Lead	0.083	3000	µg/L	80	41	51.3%	1 - 100000	0.0E+00		Y		NA
	7439-93-2	Lithium	28	110	µg/L	41	3	7.3%	50 - 10000	7.3E+01	nc	Y		NA
	7439-95-4	Magnesium	360	180000	µg/L	77	77	100.0%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	5.0	36000	µg/L	79	66	83.5%	20 - 5000	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	0.12	8.0	µg/L	76	10	13.2%	0 - 1000	1.2E-01	nc	Y		NA
	67-56-1	Methanol	ND	ND	µg/L	1	0	0.0%	1000000 - 1000000	1.8E+03	nc	N	ND*	100%
	72-43-5	Methoxychlor	ND	ND	µg/L	5	0	0.0%	0.36 - 0.4	3.0E+00	nc	N	ND	NA
	78-93-3	Methyl ethyl ketone	ND	ND	µg/L	53	0	0.0%	10 - 1000	7.0E+02	nc	N	ND	NA
	108-10-1	Methyl isobutyl ketone (MIBK)	ND	ND	µg/L	53	0	0.0%	10 - 1000	2.0E+02	nc	N	ND*	100%
	1634-04-4	Methyl tert-butyl ether	0.22	0.22	µg/L	58	1	1.7%	0.5 - 100	1.1E+00	ca	N	BSL	NA
	75-09-2	Methylene chloride	1.4	27	µg/L	200	3	1.5%	0.5 - 100	4.0E-01	ca	Y		NA
	7439-98-7	Molybdenum	0.44	280	µg/L	72	34	47.2%	2 - 44000	1.8E+01	nc	Y		NA
	r Oil Range Organics (C16	Motor Oil Range Organics (C16-C36)	110	180000	µg/L	42	19	45.2%	100 - 100	NA		N	ITC	NA
	108-38-3	m-Xylene	2.0	6.8	µg/L	12	3	25.0%	0.5 - 0.5	2.1E+01	nc	Y		NA
	91-20-3	Naphthalene	0.16	23	µg/L	86	8	9.3%	0.2 - 1000	9.3E-03	ca	Y		NA
	71-36-3	n-Butyl alcohol	ND	ND	µg/L	1	0	0.0%	1000000 - 1000000	3.6E+02	nc	N	ND*	100%
	104-51-8	n-Butylbenzene	0.56	1.8	µg/L	58	3	5.2%	0.5 - 100	2.4E+01	nc	Y		NA

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Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	3622-84-2	N-Butylbenzenesulfonamide	ND	ND	µg/L	23	0	0.0%	10 - 2000	NA		N	ND	NA
	7440-02-0	Nickel	1.0	1000	µg/L	80	45	56.3%	2 - 50000	1.2E+00	nc	Y		NA
	S-NANO3	Nitrate as NO3	40	31000	µg/L	169	137	81.1%	100 - 500000	1.0E+03	nc	Y		NA
	GIS-230-001	Nitrate plus Nitrite (as N)	70	3000	µg/L	126	10	7.9%	50000 - 1000000	NA		N	ITC	NA
	S-NINO2	Nitrite as NO2	660	2800	µg/L	42	4	9.5%	100 - 1000000	1.0E+02	nc	Y		NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	69	0	0.0%	5 - 1000	3.4E-01	nc	N	ND*	100%
	62-75-9	N-Nitrosodimethylamine	0.0013	0.023	µg/L	91	12	13.2%	0.0019 - 1000	1.3E-04	ca	Y		NA
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	69	0	0.0%	10 - 1000	9.6E-04	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	µg/L	27	0	0.0%	10 - 1000	1.4E+00	ca*	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	40	40	µg/L	42	1	2.4%	5 - 5.6	9.1E+01	nc	N	BSL	NA
	71-23-8	n-Propanol	ND	ND	µg/L	1	0	0.0%	1000000 - 1000000	NA		N	ND	NA
	103-65-1	n-Propylbenzene	0.36	0.96	µg/L	58	2	3.4%	0.5 - 100	2.4E+01	nc	N	PM	NA
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	510	1200000	µg/L	7	4	57.1%	490000 - 510000	NA		N	ITC	NA
	95-47-6	o-Xylene	0.50	26	µg/L	34	2	5.9%	0.5 - 100	2.1E+01	nc	Y		NA
	12674-11-2	PCB-1016	ND	ND	µg/L	17	0	0.0%	1 - 1.2	9.0E-03	ca	N	ND*	100%
	11104-28-2	PCB-1221	ND	ND	µg/L	28	0	0.0%	2 - 8	9.0E-03	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	µg/L	28	0	0.0%	1 - 8	9.0E-03	ca	N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	µg/L	28	0	0.0%	1 - 4	9.0E-03	ca	N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	µg/L	27	0	0.0%	1 - 4	3.4E-03	ca	N	ND*	100%
	11097-69-1	PCB-1254	1.3	73	µg/L	28	6	21.4%	1 - 3.85	3.4E-03	ca	Y		NA
	11096-82-5	PCB-1260	ND	ND	µg/L	28	0	0.0%	1 - 4	3.4E-03	ca	N	ND*	100%
	1336-36-3	PCB's	ND	ND	µg/L	11	0	0.0%	1 - 4	NA		N	ND	NA
	87-86-5	Pentachlorophenol	ND	ND	µg/L	69	0	0.0%	20 - 5000	4.0E-02	ca	N	ND*	100%
	14797-73-0	Perchlorate	1.1	16000	µg/L	175	63	36.0%	1 - 500	3.6E-01	ca/nc	Y		NA
	85-01-8	Phenanthrene	0.17	2000	µg/L	70	7	10.0%	0.2 - 10	1.8E+01	nc	Y		NA
	108-95-2	Phenol	10	10	µg/L	69	1	1.4%	5 - 1000	1.1E+03	nc	N	BSL	NA
	99-87-6	p-Isopropyltoluene	0.26	0.60	µg/L	58	2	3.4%	0.5 - 100	NA		Y		NA
	7440-09-7	Potassium	520	82000	µg/L	79	76	96.2%	500 - 5000	NA		N	EN	NA
	106-42-3	p-Xylene	1.0	1.1	µg/L	12	2	16.7%	0.5 - 0.5	2.1E+01	nc	Y		NA
	129-00-0	Pyrene	1.0	1.0	µg/L	70	1	1.4%	0.2 - 1000	1.8E+01	nc	N	BSL	NA
	78-92-2	sec-Butyl alcohol	ND	ND	µg/L	1	0	0.0%	1000000 - 1000000	NA		N	ND	NA
	135-98-8	sec-Butylbenzene	0.38	2.8	µg/L	58	4	6.9%	0.5 - 100	2.4E+01	nc	Y		NA
	7782-49-2	Selenium	0.60	17	µg/L	80	11	13.8%	2 - 400000	1.8E+01	nc	N	BSL	NA
	7440-22-4	Silver	0.025	6.9	µg/L	80	17	21.3%	1 - 50000	1.8E+01	nc	N	BSL	NA
	7440-23-5	Sodium	760	93000	µg/L	77	77	100.0%	0 - 0	NA		N	EN	NA
	8052-41-3	Stoddard solvent	ND	ND	µg/L	1	0	0.0%	40000000 - 40000000	NA		N	ND	NA

Table 5.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	7440-24-6	Strontium	8.2	1300	µg/L	41	41	100.0%	0 - 0	2.2E+03	nc	N	BSL	NA
	100-42-5	Styrene	ND	ND	µg/L	74	0	0.0%	0.5 - 100	1.6E+02	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	0.40	0.40	µg/L	58	1	1.7%	0.5 - 100	2.4E+01	nc	N	BSL	NA
	127-18-4	Tetrachloroethene	0.25	4300	µg/L	203	87	42.9%	0.5 - 50	6.0E-03	ca	Y		NA
	7440-28-0	Thallium	0.18	4.6	µg/L	80	6	7.5%	1 - 400000	1.0E-02	nc	Y		NA
	7440-32-6	Titanium	2.0	24000	µg/L	41	26	63.4%	5 - 50	1.5E+04	nc	Y		NA
	108-88-3	Toluene	0.21	4.3	µg/L	111	10	9.0%	0.5 - 100	1.5E+01	nc	Y		NA
	57-12-5	Total Cyanide	2.2	11	µg/L	15	6	40.0%	5 - 5	1.5E+01	nc	N	BSL	NA
	8001-35-2	Toxaphene	ND	ND	µg/L	5	0	0.0%	7.27 - 8	3.0E-03	ca	N	ND*	100%
	GIS-130-010	TPH	150	2400000	µg/L	44	13	29.5%	50000 - 4000000	NA		N	ITC	NA
	156-60-5	trans-1,2-Dichloroethene	0.25	6.0	µg/L	64	16	25.0%	0.5 - 100	6.0E+00	nc	Y		NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/L	69	0	0.0%	0.5 - 100	2.0E-02	ca	N	ND*	100%
	79-01-6	Trichloroethene	0.24	3900	µg/L	201	120	59.7%	0.5 - 50	2.8E-03	ca	Y		NA
	75-69-4	Trichlorofluoromethane	0.26	0.26	µg/L	200	1	0.5%	0.5 - 100	7.0E+01	nc	N	BSL	NA
	7440-62-2	Vanadium	1.4	600	µg/L	77	54	70.1%	2 - 30000	3.6E+00	nc	Y		NA
	108-05-4	Vinyl Acetate	ND	ND	µg/L	48	0	0.0%	5 - 2000	4.1E+01	nc	N	ND*	100%
	75-01-4	Vinyl chloride	0.22	94	µg/L	203	24	11.8%	0.5 - 200	2.0E-03	ca	Y		NA
	1330-20-7	Xylenes (total)	0.92	29	µg/L	102	7	6.9%	0.5 - 100	2.1E+01	nc	Y		NA
	7440-66-6	Zinc	15	1300000	µg/L	80	54	67.5%	20 - 110000	1.1E+03	nc	Y		NA

Footnotes:

(1) See Table 3

(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ITC = individual toxic compounds associated with the mixture are assessed separately.

Key:

ca = Cancer
COPC = Chemical of potential concern
µg/L = Micrograms per liter
nc = Noncancer
NA = Not applicable

Table 5.2-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East and West	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	4.3E-02	ca	N	ND*	100%
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.0E+02	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	15	0	0%	1 - 1	5.5E-03	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.0E-02	ca	N	ND*	100%
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.0E-01	ca	N	ND*	100%
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.0E+00	nc	N	ND	NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.0E-02	nc	N	ND*	100%
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	15	0	0%	1 - 1	5.0E-01	ca	N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	15	0	0%	1 - 1	5.6E-04	nc	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	5.0E-01	ca	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.2E+00	nc	N	ND	NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	15	0	0%	1 - 1	1.6E-04	nc	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	15	0	0%	0.5 - 0.5	5.6E-04	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	3.7E+01	ca	N	ND	NA
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.2E-02	nc	N	ND*	100%
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.6E-02	ca	N	ND*	100%
	103-33-3	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	15	0	0%	200 - 200	6.1E-02	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.2E+00	nc	N	ND	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.8E+01	nc	N	ND	NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	5.0E-02	ca	N	ND*	100%
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.6E-02	ca	N	ND*	100%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	15	0	0%	10 - 10	3.6E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	15	0	0%	10 - 10	9.6E-02	nc	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	15	0	0%	10 - 10	1.1E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	15	0	0%	5 - 5	7.3E+01	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	15	0	0%	20 - 20	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	15	0	0%	10 - 10	7.3E+00	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	15	0	0%	10 - 10	3.6E+00	nc	N	ND*	100%
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	15	0	0%	5 - 5	4.9E+01	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	µg/L	15	0	0%	10 - 10	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	15	0	0%	5 - 5	9.3E-03	ca	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	µg/L	15	0	0%	5 - 5	1.8E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	µg/L	15	0	0%	10 - 10	1.1E+01	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	µg/L	15	0	0%	20 - 20	NA	nc	N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	15	0	0%	10 - 10	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	15	0	0%	10 - 10	3.2E-01	ca	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	15	0	0%	20 - 20	3.6E-01	nc	N	ND*	100%

Table 5.2-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East and West	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	15	0	0%	5 - 5	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	15	0	0%	10 - 10	NA	nc	N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	15	0	0%	10 - 10	1.5E+01	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	15	0	0%	10 - 10	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	µg/L	15	0	0%	5 - 5	1.8E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	µg/L	15	0	0%	10 - 10	3.2E-01	ca	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	15	0	0%	20 - 20	NA	nc	N	ND	NA
	83-32-9	Acenaphthene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	3.7E+01	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	3.7E+01	nc	N	ND	NA
	7429-90-5	Aluminum	65	11,000	µg/L	15	13	87%	50 - 50	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	15	0	0%	10 - 10	1.2E+00	ca	N	ND*	100%
	120-12-7	Anthracene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	1.8E+02	nc	N	ND	NA
	7440-36-0	Antimony	0.57	3.2	µg/L	15	3	20%	2 - 2	1.5E+00	nc	Y		NA
	7440-38-2	Arsenic	0.86	1.3	µg/L	15	6	40%	1 - 1	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	15	0	0%	5 - 5	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	8.2	90	µg/L	15	14	93%	10 - 10	2.0E+02	nc	N	BSL	NA
	71-43-2	Benzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.5E-02	ca	N	ND*	100%
	92-87-5	Benzidine	ND	ND	µg/L	15	0	0%	50 - 50	2.9E-05	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	9.2E-03	ca	N	ND*	100%
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	4.0E-04	ca	N	ND*	100%
	205-99-2	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	15	0	0%	0.4 - 0.4	5.6E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	15	0	0%	0.4 - 0.4	NA	nc	N	ND	NA
	65-85-0	Benzoic acid	ND	ND	µg/L	15	0	0%	20 - 20	1.5E+04	nc	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	15	0	0%	5 - 5	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	15	0	0%	10 - 10	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	0.080	0.11	µg/L	15	3	20%	0.5 - 0.5	1.0E-01	nc	Y		NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	15	0	0%	5 - 5	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	15	0	0%	5 - 5	1.0E-03	ca	N	ND*	100%
	108-61-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	15	0	0%	10 - 10	2.7E-02	ca	N	ND*	100%
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	µg/L	15	0	0%	5 - 5	4.8E-01	ca	N	ND*	100%
	7440-42-8	Boron	20	20	µg/L	15	1	7%	50 - 50	7.3E+02	nc	N	BSL	NA
	106-86-1	Bromobenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.0E+00	nc	N	ND	NA
	74-97-5	Bromochloromethane	ND	ND	µg/L	15	0	0%	1 - 1	NA	nc	N	ND	NA
	75-27-4	Bromodichloromethane	1.2	1.2	µg/L	15	1	7%	0.5 - 0.5	1.8E-02	ca	Y		NA
	75-25-2	Bromoform	0.92	0.92	µg/L	15	1	7%	0.5 - 0.5	8.5E-01	ca*	Y		NA
	74-83-9	Bromomethane	ND	ND	µg/L	15	0	0%	1 - 1	8.7E-01	nc	N	ND	NA
	7440-43-9	Cadmium	0.052	1.1	µg/L	15	11	73%	1 - 1	4.0E-03	nc	Y		NA
		Calcium	1300	8,100	µg/L	15	15	100%	0 - 0	NA		N	EN	NA

Table 5.2-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East and West	86-74-8	Carbazole	ND	ND	µg/L	15	0	0%	10 - 10	3.4E-01	ca	N	ND*	100%
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.0E-02	ca	N	ND*	100%
	108-90-7	Chlorobenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.1E+01	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	µg/L	15	0	0%	1 - 1	4.6E-01	ca	N	ND*	100%
	67-66-3	Chloroform	15	15	µg/L	15	1	7%	0.5 - 3.1	1.7E-02	ca	Y		NA
	74-87-3	Chloromethane	ND	ND	µg/L	15	0	0%	1 - 1	1.6E+01	nc	N	ND	NA
	16065-83-1	Chromium	0.61	16	µg/L	15	13	87%	2 - 2	5.5E+03	nc	N	BSL	NA
	218-01-9	Chrysene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	6.1E+00	nc	N	ND	NA
	7440-48-4	Cobalt	0.037	8.5	µg/L	15	15	100%	0 - 0	7.3E+01	nc	N	BSL	NA
	7440-50-8	Copper	3.9	140	µg/L	15	15	100%	0 - 0	1.7E+01	nc	Y		NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	15	0	0%	0.4 - 0.4	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	15	0	0%	10 - 10	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	0.25	0.25	µg/L	15	1	7%	0.5 - 0.5	1.3E-02	ca	Y		NA
	74-95-3	Dibromomethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	6.1E+00	nc	N	ND	NA
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	3.9E+01	nc	N	ND	NA
		Diesel Range Organics (C10-C28)	36	55	µg/L	8	3	38%	50 - 160	NA		N	PM	NA
	84-66-2	Diethyl phthalate	ND	ND	µg/L	15	0	0%	10 - 10	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	15	0	0%	10 - 10	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	15	0	0%	10 - 10	3.6E+02	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	15	0	0%	5 - 5	1.5E+02	nc	N	ND	NA
	100-41-4	Ethylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	3.0E+01	nc	N	ND	NA
	206-44-0	Fluoranthene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	1.5E+02	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	2.4E+01	nc	N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	15	0	0%	5 - 5	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	15	0	0%	1 - 1	8.6E-02	ca	N	ND*	100%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	15	0	0%	20 - 20	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	15	0	0%	5 - 5	4.8E-01	ca	N	ND*	100%
	18540-29-9	Hexavalent Chromium	5.6	5.6	µg/L	15	1	7%	5 - 5	1.1E+01	nc	N	BSL	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	15	0	0%	0.4 - 0.4	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	48	12,000	µg/L	15	14	93%	40 - 40	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	15	0	0%	5 - 5	7.1E+00	ca	N	ND	NA
	98-82-8	Isopropylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	6.6E+01	nc	N	ND	NA
	7439-92-1	Lead	0.20	14	µg/L	15	15	100%	0 - 0	0.0E+00		Y		NA
	7469-93-2	Lithium	9.9	10	µg/L	15	1	7%	50 - 50	7.3E+01	nc	N	BSL	NA
	7439-95-4	Magnesium	250	3,200	µg/L	15	15	100%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	7.4	370	µg/L	15	12	80%	20 - 20	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	0.062	0.062	µg/L	15	1	7%	0.2 - 0.2	1.2E-01	nc	N	BSL	NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.1E+00	ca	N	ND	NA

Table 5.2-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East and West	75-09-2	Methylene chloride	ND	ND	µg/L	15	0	0%	1 - 5.4	4.0E-01	ca	N	ND*	100%
	7439-98-7	Molybdenum	0.30	1.5	µg/L	15	4	27%	2 - 2	1.8E+01	nc	N	BSL	NA
		Motor Oil Range Organics (C16-C36)	100	250	µg/L	8	5	63%	100 - 100	NA		N	PM	NA
	91-20-3	Naphthalene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	9.3E-03	ca	N	ND*	100%
	104-51-48	n-Butylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	7440-02-0	Nickel	0.49	11	µg/L	15	15	100%	0 - 0	1.2E+00	nc	Y		NA
		Nitrate as NO3	390	5,700	µg/L	15	14	93%	100 - 100	1.0E+03	nc	Y		NA
		Nitrite as NO2	16	28	µg/L	14	5	36%	100 - 5000	1.0E+02	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	15	0	0%	5 - 5	3.4E-01	nc	N	ND*	100%
	62-75-9	N-Nitrosodimethylamine	ND	ND	µg/L	15	0	0%	0.0019 - 5	1.3E-04	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	15	0	0%	10 - 10	9.6E-04	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	15	0	0%	5 - 5	9.1E+01	ca*	N	ND	NA
	103-65-1	n-Propylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	12674-11-2	PCB-1016	ND	ND	µg/L	12	0	0%	1 - 1	9.0E-03	ca	N	ND*	100%
	11104-28-2	PCB-1221	ND	ND	µg/L	12	0	0%	2 - 2	9.0E-03	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	µg/L	12	0	0%	1 - 1	9.0E-03	ca	N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	µg/L	12	0	0%	1 - 1	3.4E-03	ca	N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	µg/L	12	0	0%	1 - 1	3.4E-03	ca	N	ND*	100%
	11097-69-1	PCB-1254	ND	ND	µg/L	12	0	0%	1 - 1	3.4E-03	ca	N	ND*	100%
	11096-82-5	PCB-1260	ND	ND	µg/L	12	0	0%	1 - 1	3.4E-03	ca	N	ND*	100%
	87-86-5	Pentachlorophenol	ND	ND	µg/L	15	0	0%	20 - 20	4.0E-02	ca	N	ND*	100%
		Perchlorate	ND	ND	µg/L	3	0	0%	1 - 1	3.6E-01	ca/nc	N	ND*	100%
	85-01-8	Phenanthrene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	NA	nc	N	ND	NA
	108-95-2	Phenol	ND	ND	µg/L	15	0	0%	5 - 5	1.1E+03	nc	N	ND	NA
	25155-15-1	p-Isopropyltoluene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	NA	nc	N	ND	NA
	7440-09-7	Potassium	410	2,400	µg/L	15	13	87%	500 - 500	NA		N	EN	NA
	129-00-0	Pyrene	ND	ND	µg/L	15	0	0%	0.2 - 0.2	1.8E+01	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	7782-49-2	Selenium	1.7	1.9	µg/L	15	2	13%	2 - 2	1.8E+01	nc	N	BSL	NA
	7440-22-4	Silver	0.040	2.4	µg/L	15	5	33%	1 - 1	1.8E+01	nc	N	BSL	NA
	7440-23-5	Sodium	520	7,800	µg/L	15	14	93%	730 - 730	NA		N	EN	NA
	7440-24-6	Strontium	7.5	53	µg/L	15	15	100%	0 - 0	2.2E+03	nc	N	BSL	NA
	100-42-5	Styrene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.6E+02	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	127-18-4	Tetrachloroethene	0.21	0.21	µg/L	15	1	7%	0.5 - 0.5	6.0E-03	ca	Y		NA
	7440-28-0	Thallium	0.18	0.18	µg/L	15	1	7%	1 - 1	1.0E-02	nc	Y		NA
	7440-32-6	Titanium	3.6	410	µg/L	15	12	80%	5 - 8.8	1.5E+04	nc	N	BSL	NA
	108-88-3	Toluene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	1.5E+01	nc	N	ND	NA

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Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East and West		Total Cyanide	2.8	2.8	µg/L	3	1	33%	5 - 5	1.5E+01	nc	N	BSL	NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	6.0E+00	nc	N	ND	NA
	79-01-6	Trichloroethene	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.8E-03	ca	N	ND	NA
	75-69-4	Trichlorofluoromethane	ND	ND	µg/L	15	0	0%	0.5 - 0.5	7.0E+01	nc	N	ND	NA
	7440-62-2	Vanadium	0.87	24	µg/L	15	10	67%	2 - 2	3.6E+00	nc	Y		NA
	75-01-4	Vinyl chloride	ND	ND	µg/L	15	0	0%	0.5 - 0.5	2.0E-03	ca	N	ND	NA
	1330-20-7	Xylenes (total)	ND	ND	µg/L	15	0	0%	1 - 1	2.1E+01	nc	N	ND	NA
	7440-66-6	Zinc	18	2,100	µg/L	15	15	100%	0 - 0	1.1E+03	nc	Y		NA

Footnotes:

(1) See Table 2.

(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individually

Table 5.2-3 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East	71-55-6	1,1,1-Trichloroethane	8.0	7,600	$\mu g/m^3$	03D-SP104	20	197	70	35.5%	5.4 - 33000	9.9E+04	nc	Y		NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	$\mu g/m^3$			197	0	0.0%	6.8 - 42000	1.8E+00	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$			197	0	0.0%	5.4 - 33000	6.6E+00	ca	N	ND*	64%
	75-34-3	1,1-Dichloroethane	5.2	9800	$\mu g/m^3$	03D-SP122	30	197	33	16.8%	4 - 24000	6.6E+01	ca	Y		NA
	75-35-4	1,1-Dichloroethene	4.8	120000	$\mu g/m^3$	03D-SP106	25	197	67	34.0%	3.9 - 13000	3.1E+03	nc	Y		NA
	563-58-6	1,1-Dichloropropene	ND	ND	$\mu g/m^3$			197	0	0.0%	18 - 110000	6.7E+00	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	$\mu g/m^3$			197	0	0.0%	29 - 180000	9.9E+03	nc	N	ND*	4%
	95-63-6	1,2,4-Trimethylbenzene	5.7	84	$\mu g/m^3$	03D-SP128	30	197	37	18.8%	4.8 - 30000	2.7E+02	nc	Y		NA
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	$\mu g/m^3$			197	0	0.0%	7.6 - 46000	1.7E+00	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	44	44	$\mu g/m^3$	03D-SP129	15	197	1	0.5%	5.9 - 36000	9.1E+03	nc	N	BSL*	NA
	107-06-2	1,2-Dichloroethane	11	100	$\mu g/m^3$	A20-ST05-SP01	30	197	3	1.5%	4 - 24000	5.0E+00	ca*	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	$\mu g/m^3$			197	0	0.0%	4.6 - 28000	1.1E+01	ca*	N	ND*	27%
	108-67-8	1,3,5-Trimethylbenzene	6.3	22	$\mu g/m^3$	03D-SP96	10	197	8	4.1%	4.8 - 30000	2.7E+02	nc	N	BSL*	NA
	106-99-0	1,3-Butadiene	3.1	260	$\mu g/m^3$	03D-SP132	30	197	129	65.5%	2.2 - 13000	5.9E-01	ca*	Y		NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	$\mu g/m^3$			197	0	0.0%	5.9 - 36000	4.8E+03	nc	N	ND*	3%
	106-46-7	1,4-Dichlorobenzene	9.3	9.3	$\mu g/m^3$	03D-SP129	15	197	1	0.5%	5.9 - 36000	9.7E+00	ca	N	BSL*	NA
	123-91-1	1,4-Dioxane	16	88	$\mu g/m^3$	03D-SP118	20	197	9	4.6%	14 - 87000	1.4E+01	ca	Y		NA
	540-84-1	2,2,4-Trimethylpentane	5.8	18000	$\mu g/m^3$	03D-SP85	25	197	58	29.4%	4.6 - 28000	3.2E+04	nc	Y		NA
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.5	420	$\mu g/m^3$	03D-SP85	30	197	70	35.5%	2.9 - 18000	2.3E+05	nc	Y		NA
	591-78-6	2-Hexanone	18	34	$\mu g/m^3$	03D-SP109	30	197	3	1.5%	16 - 99000	3.6E+03	nc	N	BSL*	NA
	67-63-0	2-Propanol	11	210000	$\mu g/m^3$	03D-SP119	29	197	52	26.4%	9.7 - 59000	4.6E+02	nc	Y		NA
	107-05-1	3-Chloropropene	ND	ND	$\mu g/m^3$			197	0	0.0%	12 - 76000	1.7E+01	nc	N	ND*	33%
	622-96-8	4-Ethyltoluene	5.9	100	$\mu g/m^3$	03D-SP128	30	197	41	20.8%	4.8 - 30000	3.2E+04	nc	Y		NA
	108-10-1	4-Methyl-2-pentanone	4.7	20	$\mu g/m^3$	03D-SP109	30	197	17	8.6%	4 - 25000	3.6E+03	nc	Y		NA
	67-64-1	Acetone	30	2600	$\mu g/m^3$	03D-SP138	30	197	111	56.3%	10 - 57000	1.5E+04	nc	Y		NA
	100-44-7	alpha-Chlorotoluene	ND	ND	$\mu g/m^3$			197	0	0.0%	5.1 - 31000	2.2E+00	ca	N	ND*	100%
	71-43-2	Benzene	3.5	2300	$\mu g/m^3$	03D-SP85	25	197	133	67.5%	3.1 - 19000	3.6E+00	ca	Y		NA
	75-27-4	Bromodichloromethane	14	14	$\mu g/m^3$	03D-SP145	10	197	1	0.5%	6.6 - 40000	3.1E+00	ca	Y		NA
	75-25-2	Bromoform	ND	ND	$\mu g/m^3$			197	0	0.0%	10 - 62000	1.2E+02	nc	N	ND*	18%
	74-83-9	Bromomethane	4.6	5.6	$\mu g/m^3$	A20-ST05-SP03	10	197	2	1.0%	3.8 - 23000	2.3E+02	nc	N	BSL*	NA
		Butylbenzene	ND	ND	$\mu g/m^3$			197	0	0.0%	22 - 130000	6.5E+03	nc	N	ND*	5%
	75-15-0	Carbon Disulfide	3.7	31000	$\mu g/m^3$	03D-SP109	20	197	123	62.4%	3.1 - 19000	3.1E+04	nc	Y		NA
	56-23-5	Carbon Tetrachloride	13	46	$\mu g/m^3$	A20-B34-SP03	29	197	4	2.0%	6.2 - 38000	2.5E+00	ca*	Y		NA
	108-90-7	Chlorobenzene	7.7	20	$\mu g/m^3$	51D-SP04	20	197	2	1.0%	4.5 - 28000	4.5E+04	nc	N	BSL*	NA
	75-00-3	Chloroethane	13	16	$\mu g/m^3$	03D-SP106	15	197	2	1.0%	2.6 - 16000	1.2E+02	ca	N	BSL*	NA
	67-66-3	Chloroform	5.6	1700	$\mu g/m^3$	A20-ST05-SP01	20	197	64	32.5%	4.8 - 30000	2.0E+01	ca	Y		NA
	74-87-3	Chloromethane	13	13	$\mu g/m^3$	11D-SP29	30	197	1	0.5%	8.1 - 50000	1.0E+02	nc	N	BSL*	NA

Table 5.2-3 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East	156-59-2	cis-1,2-Dichloroethene	4.7	73000	µg/m^3	03D-SP85	25	197	64	32.5%	3.9 - 24000	1.6E+03	nc	Y		NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/m^3			197	0	0.0%	4.5 - 27000	6.7E+00	ca	N	ND*	30%
	98-82-8	Cumene	5.5	2600	µg/m^3	03D-SP85	25	197	20	10.2%	4.8 - 30000	1.8E+04	nc	Y		NA
	110-82-7	Cyclohexane	4.6	60000	µg/m^3	03D-SP85	25	197	73	37.1%	3.4 - 11000	2.7E+05	nc	Y		NA
	124-48-1	Dibromochloromethane	ND	ND	µg/m^3			197	0	0.0%	8.4 - 52000	4.6E+00	ca	N	ND*	100%
	64-17-5	Ethanol	8.9	150	µg/m^3	03D-SP87	10	197	84	42.6%	7.4 - 46000	7.9E+04	nc	Y		NA
	100-41-4	Ethyl Benzene	5.6	960	µg/m^3	03D-SP134	20	197	76	38.6%	4.3 - 26000	4.2E+01	ca	Y		NA
	75-69-4	Freon 11	9.2	790	µg/m^3	03D-SP142	30	197	11	5.6%	5.5 - 34000	3.1E+04	nc	Y		NA
	76-13-1	Freon 113	9.2	64000000	µg/m^3	03D-SP106	25	197	138	70.1%	7.5 - 560	1.4E+06	nc	Y		NA
	76-14-2	Freon 114	ND	ND	µg/m^3			197	0	0.0%	6.9 - 42000	1.4E+06	nc	N	ND	NA
	75-71-8	Freon 12	7.2	30000	µg/m^3	03D-SP119	29	197	18	9.1%	4.9 - 30000	9.1E+03	nc	Y		NA
	142-82-5	Heptane	4.9	9500	µg/m^3	03D-SP85	25	197	119	60.4%	4 - 25000	8.7E+03	nc	Y		NA
	87-68-3	Hexachlorobutadiene	ND	ND	µg/m^3			197	0	0.0%	42 - 260000	4.9E+00	ca*	N	ND*	100%
	110-54-3	Hexane	4.3	64000	µg/m^3	03D-SP85	25	197	152	77.2%	3.5 - 21000	8.7E+03	nc	Y		NA
	136777-61-2	m,p-Xylene	5.3	7800	µg/m^3	03D-SP119	29	197	129	65.5%	4.3 - 26000	3.2E+04	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/m^3			197	0	0.0%	3.6 - 22000	4.0E+02	ca	N	ND*	7%
	75-09-2	Methylene Chloride	160	160	µg/m^3	03D-SP143	30	197	1	0.5%	3.4 - 21000	1.0E+02	ca	Y		NA
	95-47-6	o-Xylene	5.4	960.000	µg/m^3	03D-SP85	25	197	70	35.5%	4.3 - 26000	3.2E+04	nc	Y		NA
	99-87-6	p-Cymene	220	220	µg/m^3	03D-SP131	10	197	1	0.5%	22 - 130000	3.2E+04	nc	N	BSL*	NA
	103-65-1	Propylbenzene	6.4	530	µg/m^3	03D-SP85	25	197	17	8.6%	4.8 - 30000	6.4E+03	nc	Y		NA
	135-98-8	sec-Butylbenzene	43	1000	µg/m^3	03D-SP85	25	197	7	3.6%	22 - 130000	6.5E+03	nc	N	BSL*	NA
	100-42-5	Styrene	5.3	61	µg/m^3	03D-SP125	20	197	24	12.2%	4.2 - 26000	4.1E+04	nc	Y		NA
	98-06-6	tert-Butylbenzene	27	46	µg/m^3	A20-ST02-SP02	20	197	2	1.0%	22 - 130000	6.5E+03	nc	N	BSL*	NA
	127-18-4	Tetrachloroethene	11	30000000	µg/m^3	03D-SP102	10	197	168	85.3%	6.7 - 1800	1.8E+01	ca	Y		NA
	109-99-9	Tetrahydrofuran	3.4	60	µg/m^3	03D-SP138	30	197	63	32.0%	2.9 - 18000	5.3E+01	ca	Y		NA
	108-88-3	Toluene	5.8	7300	µg/m^3	03D-SP119	29	197	159	80.7%	3.7 - 23000	1.4E+04	nc	Y		NA
	156-60-5	trans-1,2-Dichloroethene	21	15000	µg/m^3	03D-SP119	20	197	13	6.6%	3.9 - 24000	3.2E+03	nc	Y		NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/m^3			197	0	0.0%	4.5 - 27000	6.7E+00	ca	N	ND*	30%
	79-01-6	Trichloroethene	6.6	700000	µg/m^3	A20-ST05-SP01	20	196	145	74.0%	5.3 - 17000	5.3E+01	ca	Y		NA
	75-01-4	Vinyl Chloride	6.1	170000	µg/m^3	03D-SP85	25	197	36	18.3%	2.5 - 8200	1.3E+00	ca	Y		NA

Notes and Key:

(1) See Table 1

(2) FOD = Frequency of detection screening

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

NA = Not applicable

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

bgs = Below ground surface

ca = Cancer

COPC = Chemical of potential concern

µg/L = Micrograms per liter

nc = Noncancer

Table 5.2-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East	7439-92-1	Lead	1.9	379	mg/kg	11D-SNS02	0.01	281	268	95.4%	3 - 7.7	1.5E+01	nc	Y		NA
	7439-92-1	Lithium	1.7	41	mg/kg	A20-ST01-SB02-5.0	5	226	222	98.2%	5.5 - 7.4	1.6E+02	nc	N	BSL	NA
	7439-95-4	Magnesium	2,560	7,370	mg/kg	03D-SB02	1	46	46	100.0%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	150	1,700	mg/kg	A20-ST20-SB01-5.0	5	273	270	98.9%	110 - 800	1.8E+02	nc	N	BG	NA
	7439-97-6	Mercury	0.0037	2.9	mg/kg	03D-SB03	10	274	227	82.8%	0.021 - 0.15	1.8E+00	nc	Y		NA
	7439-98-7	Molybdenum	0.15	100	mg/kg	A20-RB37-SB01-1.0	1	231	214	92.6%	1.1 - 2	3.8E+01	nc	Y		NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.1	12,000	mg/kg	03D-SB46-11	11	194	154	79.4%	4.2 - 450	NA		N	ITC	NA
	91-20-3	Naphthalene	0.0018	2.2	mg/kg	03D-AH01	3	225	9	4.0%	0.0067 - 13	1.7E-01	ca	Y		NA
	7440-02-0	Nickel	5.2	144	mg/kg	03D-AH02	3	273	270	98.9%	17 - 30	1.6E+02	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	2.0E+00	nc	N	ND*	3%
	62-75-9	N-Nitrosodimethylamine	0.00032	0.00032	mg/kg	03D-SB35-5.0	5	238	1	0.4%	0.0031 - 13	9.5E-04	ca*	N	BSL	NA
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	NA		49	0	0.0%	0.21 - 13	9.9E+00	ca*	N	ND	NA
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	NA		184	0	0.0%	0.2 - 11	1.5E+02		N	ND	NA
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.9E-03	ca	N	ND*	100%
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	98	469	mg/kg	03D-AH02	0.01	3	3	100.0%	0 - 0	NA		N	ITC	NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.67 - 67	3.0E-01	ca	N	ND*	100%
	7601-90-3	Perchlorate	0.0085	0.025	mg/kg	11D-SB09-1.0	1	146	2	1.4%	0.0056 - 43	7.8E-01	ca/nc	N	BSL	NA
	AER-001-248	Petroleum Hydrocarbons	26	2,100	mg/kg	03D-SB07	1	37	18	48.6%	20 - 20	NA		N	ITC	NA
	85-01-8	Phenanthrene	0.0025	140	mg/kg	03D-AH01	3	234	44	18.8%	0.0067 - 1.7	2.3E+02 (s)	nc	Y		NA
	108-95-2	Phenol	0.057	7.3	mg/kg	11D-SB05-1.0	1	233	64	27.5%	0.21 - 13	1.8E+03	nc	Y		NA
	1336-36-3	Polychlorinated biphenyl	ND	ND	mg/kg	NA		27	0	0.0%	0.033 - 0.167	8.9E-03	ca**	N	ND*	100%
	9/7/7440	Potassium	729	2,250	mg/kg	11D-SNS02	0.01	46	46	100.0%	0 - 0	NA		N	EN	NA
	129-00-0	Pyrene	0.0067	180	mg/kg	03D-AH02	3	234	25	10.7%	0.0067 - 1.7	2.3E+02	nc	Y		NA
	7782-49-2	Selenium	0.22	3.6	mg/kg	51D-SB09-9.0	9	273	82	30.0%	0.82 - 7.5	3.8E+01	nc	N	BSL	NA
	7440-22-4	Silver	0.048	24	mg/kg	03D-SB03	10	273	27	9.9%	0.41 - 2.2	3.8E+01	nc	N	BSL	NA
	7440-23-5	Sodium	117	712	mg/kg	03D-SB08	10	46	45	97.8%	100 - 100	NA		N	EN	NA
	7440-24-6	Strontium	12	64	mg/kg	A20-ST01-SB02-5.0	5	227	224	98.7%	13 - 26	4.7E+03	nc	N	BSL	NA
	7440-28-0	Thallium	0.11	7.8	mg/kg	03D-SB03	1	273	154	56.4%	0.52 - 9.6	5.0E-01	nc	N	BG	NA
	7440-31-5	Tin	ND	ND	mg/kg	NA		4	0	0.0%	50 - 50	4.7E+03	nc	N	ND	NA
	7440-32-6	Titanium	270	1,500	mg/kg	03D-SB51-5.0	5	231	228	98.7%	490 - 810	1.0E+04	nc	N	BSL	NA
		Total Cyanide	0.76	1.8	mg/kg	11D-SNS21-0.5-T	0.5	125	2	1.6%	0.49 - 0.79	1.2E+02	nc	N	BSL	NA
	AER-001-090	Total Recov. Petroleum Hydrocarbons	26	2,100	mg/kg	03D-SB07	1	39	19	48.7%	20 - 20	NA		N	ITC	NA
	7440-62-2	Vanadium	23	160	mg/kg	A20-ST01-SB02-5.0	5	273	270	98.9%	30 - 83	5.3E-01	nc	N	BG	NA
	7440-66-6	Zinc	16	1,350	mg/kg	11D-SNS02	0.01	273	270	98.9%	69 - 220	2.3E+03	nc	N	BSL	NA

Notes and Key:

(1) See Table 2
(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram
NA = Not applicable
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.2-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East	79-34-5	1,1,2,2-Tetrachloroethane	0.40	3.0	mg/kg	51D-SB04	1	9	7	77.8%	0.21 - 0.21	5.5E-03	ca	Y		NA
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.2E+00	nc	N	ND*	0.86%
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.0E+01	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 130	6.1E-02	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	5.3E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	3.4E-01	ca	N	ND*	22%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.1E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.1E-01	nc**	N	ND*	21%
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	1.8E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	1.2E+02	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.51 - 67	1.2E+01	nc	N	ND*	0.86%
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	1.2E+01	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.1E+00	nc	N	ND*	0.86%
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	4.9E+02	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.3E+00	nc	N	ND*	0.86%
	91-57-6	2-Methylnaphthalene	0.48	2.5	mg/kg	03D-AH01	3	233	2	0.9%	0.2 - 13	5.6E+00 (s)	nc	N	BSL	NA
	95-48-7	2-Methylphenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	3.1E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 67	1.8E+01	nc	N	ND*	0.43%
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	NA	nc	N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	NA		228	0	0.0%	0.51 - 28	NA	ca	N	ND	NA
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 67	1.8E+00	nc	N	ND*	9%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 67	6.1E-01	nc	N	ND*	21%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	NA		232	0	0.0%	0.2 - 13.3	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	2.4E+01	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	NA		232	0	0.0%	0.2 - 13.3	3.1E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	NA		233	0	0.0%	0.51 - 67	2.3E+00	ca**	N	ND*	10%
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 67	NA		N	ND	NA
	83-32-9	Acenaphthene	0.0029	21	mg/kg	03D-AH01	3	234	6	2.6%	0.0067 - 1.7	3.7E+02	nc	N	ND	NA
	208-96-8	Acenaphthylene	0.0053	0.13	mg/kg	03D-SB46-5	5	234	4	1.7%	0.0067 - 13	2.3E+02 (s)	nc	N	BSL	NA
	7429-90-5	Aluminum	5,750	71,000	mg/kg	A20-ST20-SB01-5.0	5	273	270	98.9%	9100 - 17000	7.6E+03	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	8.5E+00	ca**	N	ND	NA
	120-12-7	Anthracene	0.0034	53	mg/kg	03D-AH01	3	234	9	3.8%	0.0067 - 1.7	2.2E+03	nc	N	BSL	NA
	7440-36-0	Antimony	0.058	2.0	mg/kg	03D-SB32-5.0	5	270	186	68.9%	1 - 8.9	3.0E+00	nc	N	BSL	NA
	12674-11-2	PCB-1016	0.011	0.083	mg/kg	11D-SNS12-0.5	0.5	233	4	1.7%	0.02 - 1.1	3.9E-01	ca	N	BSL	NA
	11104-28-2	PCB-1221	ND	ND	mg/kg	NA		233	0	0.0%	0.02 - 1.1	8.9E-03	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	mg/kg	NA		233	0	0.0%	0.02 - 1.1	8.9E-03	ca	N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	mg/kg	NA		233	0	0.0%	0.02 - 1.1	8.9E-03	ca	N	ND*	100%
	12672-29-6	PCB-1248	0.011	0.26	mg/kg	03D-SB22-7.75	7.75	233	3	1.3%	0.02 - 1.1	8.9E-03	ca	Y		NA
	11097-69-1	PCB-1254	0.014	47	mg/kg	03D-SB33-5-T	5	233	46	19.7%	0.02 - 0.57	2.2E-02	ca	Y		NA
	11096-82-5	PCB-1260	0.011	1.6	mg/kg	11D-SB06-1.0	1	233	18	7.7%	0.02 - 1.1	8.9E-03	ca	Y		NA
	7440-38-2	Arsenic	0.79	29	mg/kg	A20-ST01-SB02-5.0	5	273	239	87.5%	0.94 - 7.5	6.2E-03	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	NA		189	0	0.0%	0.2 - 11	4.4E-01	ca	N	ND*	4%

Table 5.2-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area East	7440-39-3	Barium	31	320	mg/kg	03D-SB55-5.0	5	273	270	98.9%	35 - 110	5.2E+02	nc	N	BSL	NA
	922-87-5	Benzidine	ND	ND	mg/kg	NA		189	0	0.0%	0.36 - 20	2.1E-04	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.0042	110	mg/kg	03D-AH02	3	234	27	11.5%	0.0067 - 1.7	6.2E-03	ca	Y		NA
	50-32-8	Benzo (a) pyrene	0.0061	67	mg/kg	03D-AH02		233	13	5.6%	0.0067 - 1.7	3.8E-03	ca	Y		NA
	205-99-2	Benzo (b & k) fluoranthene (total)	0.011	0.088	mg/kg	03D-SNS34-0.25	0.25	189	16	8.5%	0.013 - 0.74	6.2E-02	ca	Y		NA
	205-99-2	Benzo (b) fluoranthene	48	60	mg/kg	03D-AH02	3	44	2	4.5%	0.33 - 1.7	6.2E-02	ca	Y		NA
	191-24-2	Benzo (ghi) perylene	0.0075	18	mg/kg	03D-AH01	3	233	5	2.1%	0.0067 - 13	2.3E+02 (s)	nc	N	BSL	NA
	207-08-9	Benzo (k) fluoranthene	56	63	mg/kg	03D-AH02	3	44	2	4.5%	0.33 - 1.7	3.8E-02	ca	Y		NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	NA		233	0	0.0%	0.51 - 67	1.0E+04	max	N	ND	NA
	100-51-6	Benzyl alcohol	0.12	37	mg/kg	03D-SB40-3.75	3.75	233	3	1.3%	0.2 - 13	1.8E+03	nc	N	BSL	NA
	7440-41-7	Beryllium	0.13	1.3	mg/kg	A20-ST20-SB01-5.0	5	273	224	82.1%	0.22 - 0.5	1.5E+01	nc	N	BSL	NA
	AER-001-412	Bis(2-Chloroethoxy)methane	ND	ND	mg/kg	NA		235	0	0.0%	0.2 - 13.3	NA		N	ND	NA
	111-44-4	Bis(2-Chloroethyl)ether	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	2.2E-02	ca	N	ND*	100%
	AER-001-413	Bis(2-Chloroisopropyl)ether	ND	ND	mg/kg	NA		235	0	0.0%	0.2 - 13.3	2.9E-01	ca	N	ND*	26%
	AER-001-414	Bis(2-Ethylhexyl)phthalate	0.053	0.053	mg/kg	03D-SB42-1	1	234	1	0.4%	0.51 - 28	3.5E+00	ca*	N	BSL	NA
	7440-42-8	Boron	2.4	23	mg/kg	A20-ST20-SB01-5.0	5	273	147	53.8%	4.1 - 50	1.6E+03	nc	N	BSL	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	1.2E+03	nc	N	ND	NA
	7440-43-9	Cadmium	0.045	5.9	mg/kg	11D-SNS02	0.01	273	113	41.4%	0.2 - 1.3	1.7E-01	nc	Y		NA
	7440-70-2	Calcium	1,270	14,000	mg/kg	03D-SB01	1	46	46	100.0%	0 - 0	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	mg/kg	NA		189	0	0.0%	0.2 - 11	2.4E+00	ca	N	ND*	0.53%
	7440-47-3	Chromium	5.6	268	mg/kg	03D-AH02	3	273	270	98.9%	14 - 36	1.0E+04	max	N	BSL/BG	NA
	1333-82-0	Chromium VI	0.069	4.0	mg/kg	03D-SNS34	0.25	218	201	92.2%	0.21 - 0.31	1.7E+00	ca**	Y		NA
	218-01-9	Chrysene	0.0049	110	mg/kg	03D-AH02	3	234	35	15.0%	0.0067 - 1.7	3.8E-01	ca	Y		NA
	7440-48-4	Cobalt	4.9	50	mg/kg	03D-SB40-3.75	3.75	273	270	98.9%	5 - 17	6.6E+01	ca**	N	BSL	NA
	7440-50-8	Copper	9.0	163	mg/kg	03D-SB01	1	273	270	98.9%	24 - 30	3.0E+02	nc	N	BSL	NA
	53-70-3	Dibenz (a,h) anthracene	6.4	6.4	mg/kg	03D-AH01	3	233	1	0.4%	0.0067 - 13	6.2E-03	ca	Y		NA
	132-64-9	Dibenzofuran	0.061	7.8	mg/kg	03D-AH01	3	233	2	0.9%	0.2 - 13	1.5E+01	nc	N	BSL	NA
	68334-30-5	Diesel Range Organics (C10-C28)	0.77	9,100	mg/kg	03D-SB46-11	11	236	151	64.0%	1.7 - 140	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	4.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	2.6	2.6	mg/kg	03D-SNS34-0.25	0.25	233	1	0.4%	0.2 - 13	1.0E+04	max	N	BSL	NA
	84-74-2	Di-n-butyl phthalate	0.80	51	mg/kg	51D-SB02	10	235	41	17.4%	0.41 - 22	6.1E+02	nc	Y		NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	2.4E+02	nc	N	ND	NA
	206-44-0	Fluoranthene	0.0018	170	mg/kg	03D-AH01 03D-AH02	3 0.01	234	28	12.0%	0.0067 - 1.7	2.3E+02	nc	Y		NA
	86-73-7	Fluorene	0.0034	21	mg/kg	03D-AH02	3	234	7	3.0%	0.0067 - 1.7	2.7E+02	nc	N	BSL	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	3.0E-02	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	6.2E-01	ca**	N	ND*	21%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	NA		233	0	0.0%	0.667 - 39	3.7E+01	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	3.5E+00	ca**	N	ND*	0.86%
	AER-001-224	Hexadecanoic Acid	NA	NA	mg/kg	NA		NA	NA	NA	NA	NA		N	NA	NA
	AER-001-226	Hexadecanoic Acid, Dioctylester	NA	NA	mg/kg	NA		NA	NA	NA	NA	NA		N	NA	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0073	22	mg/kg	03D-AH02 - 3	3	233	4	1.7%	0.0067 - 1.7	6.2E-02	ca	Y		NA
	7439-89-6	Iron	9,310	206,000	mg/kg	03D-SB06 - 10	10	46	46	100.0%	0 - 0	2.3E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	mg/kg	NA		233	0	0.0%	0.2 - 13	5.1E+01	ca*	N	ND	NA
	8008-20-6	Kerosene	ND	ND	mg/kg	NA		32	0	0.0%	1 - 12	NA		N	ITC	NA

Table 5.2-5 Chemical of Potential Concern Summary
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
1,1,2,2-Tetrachloroethane	N	ND*	Y	
1,1,1-Trichloroethane	Y		NA	NA
1,1,2-Trichloroethane	N	ND*	NA	NA
1,1-Dichloroethane	Y		NA	NA
1,1-Dichloroethene	Y		NA	NA
1,1-Dichloropropene	N	ND*	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	N	ND*	N	ND*
1,2,4-Trimethylbenzene	Y		NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	N	ND*	NA	NA
1,2-Dichlorobenzene	N	BSL*	N	ND
1,2-Dichloroethane	Y		NA	NA
cis-1,2-Dichloroethene	Y		NA	NA
trans-1,2-Dichloroethene	Y		NA	NA
1,2-Dichloropropane	N	ND*	NA	NA
1,2-Diphenylhydrazine	NA	NA	N	ND
1,3,5-Trimethylbenzene	N	BSL*	NA	NA
1,3-Butadiene	Y		NA	NA
1,3-Dichlorobenzene	N	ND*	N	ND
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	N	BSL*	N	ND*
1,4-Dioxane	Y		NA	NA
2,2,4-Trimethylpentane	Y		NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	N	ND
2,4,6-Trichlorophenol	NA	NA	N	ND*
2,4-Dichlorophenol	NA	NA	N	ND
2,4-Dimethylphenol	NA	NA	N	ND
2,4-Dinitrophenol	NA	NA	N	ND*
2,4-Dinitrotoluene	NA	NA	N	ND
2,6-Dinitrotoluene	NA	NA	N	ND*
2-Butanone (Methyl Ethyl Ketone)	Y		NA	NA
2-Chloronaphthalene	NA	NA	N	ND
2-Chlorophenol	NA	NA	N	ND*
2-Chlorotoluene	NA	NA	NA	NA
2-Hexanone	N	BSL*	NA	NA
2-Methylnaphthalene	NA	NA	N	BSL
2-Methylphenol	NA	NA	N	ND
2-Nitroaniline	NA	NA	N	ND*
2-Nitrophenol	NA	NA	N	ND
2-Propanol	Y		NA	NA
3,3'-Dichlorobenzidine	NA	NA	N	ND
3-Chloropropene	N	ND*	NA	NA
3-Nitroaniline	NA	NA	N	ND*
4,6-Dinitro-2-methylphenol	NA	NA	N	ND*
4-Bromophenyl phenyl ether	NA	NA	N	ND
4-Chloro-3-methylphenol	NA	NA	N	ND
4-Chloroaniline	NA	NA	N	ND
4-Chlorophenyl phenyl ether	NA	NA	N	ND
4-Chlorotoluene	NA	NA	NA	NA
4-Ethyltoluene	Y		NA	NA
4-Methyl-2-pentanone	Y		NA	NA
4-Methylphenol	NA	NA	N	ND
4-Nitroaniline	NA	NA	N	ND*
4-Nitrophenol	NA	NA	N	ND
Acenaphthene	NA	NA	N	ND

Table 5.2-5 Chemical of Potential Concern Summary
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Acenaphthylene	NA	NA	N	BSL
Acetone	Y		NA	NA
alpha-Chlorotoluene	N	ND*	NA	NA
Aluminum	NA	NA	N	BG
Aniline	NA	NA	N	ND
Anthracene	NA	NA	N	BSL
Antimony	NA	NA	N	BSL
PCB-1016	NA	NA	N	BSL
PCB-1221	NA	NA	N	ND*
PCB-1232	NA	NA	N	ND*
PCB-1242	NA	NA	N	ND*
PCB-1248	NA	NA	Y	
PCB-1254	NA	NA	Y	
PCB-1260	NA	NA	Y	
Arsenic	NA	NA	N	BG
Azobenzene	NA	NA	N	ND*
Barium	NA	NA	N	BSL
Benzene	Y		NA	NA
Benzidine	NA	NA	N	ND*
Benzo (a) anthracene	NA	NA	Y	
Benzo (a) pyrene	NA	NA	Y	
Benzo (b & k) fluoranthene (total)	NA	NA	Y	
Benzo (ghi) perylene	NA	NA	N	BSL
Benzo (b) fluoranthene	NA	NA	Y	
Benzo (k) fluoranthene	NA	NA	Y	
Benzoic acid	NA	NA	N	ND
Benzyl alcohol	NA	NA	N	BSL
Benzyl butyl phthalate	NA	NA	N	ND
Beryllium	NA	NA	N	BSL
Bis(2-Chloroethoxy)methane	NA	NA	N	ND
Bis(2-Chloroethyl)ether	NA	NA	N	ND*
Bis(2-Chloroisopropyl)ether	NA	NA	N	ND*
Bis(2-Ethylhexyl)phthalate	NA	NA	N	BSL
Boron	NA	NA	N	BSL
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	NA
Bromodichloromethane	Y		NA	NA
Bromoform	N	ND*	NA	NA
Bromomethane	N	BSL*	NA	NA
Butylbenzene	N	ND*	NA	NA
Cadmium	NA	NA	Y	
Calcium	NA	NA	N	EN
Carbazole	NA	NA	N	ND*
Carbon Disulfide	Y		NA	NA
Carbon Tetrachloride	Y		NA	NA
Chlorobenzene	N	BSL*	NA	NA
Chloroethane	N	BSL*	NA	NA
Chloroform	Y		NA	NA
Chloromethane	N	BSL*	NA	NA
Chromium	NA	NA	N	BSL/BG
Chrysene	NA	NA	Y	
cis-1,2-Dichloroethene	Y		NA	NA
cis-1,3-Dichloropropene	N	ND*	NA	NA
Cobalt	NA	NA	N	BSL
Copper	NA	NA	N	BSL
Cyclohexane	Y		NA	NA
Dibenz (a,h) anthracene	NA	NA	Y	
Dibenzofuran	NA	NA	N	BSL

Table 5.2-5 Chemical of Potential Concern Summary
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Dibromochloromethane	N	ND*	NA	NA
Dibromomethane	NA	NA	NA	NA
Freon 12	Y		NA	NA
Diesel Range Organics (C10-C28)	NA	NA	N	ITC
Diethyl phthalate	NA	NA	N	ND
Dimethyl phthalate	NA	NA	N	BSL
Di-n-butyl phthalate	NA	NA	Y	
Di-n-octyl phthalate	NA	NA	N	ND
Ethanol	Y		NA	NA
Ethyl benzene	Y		NA	NA
Fluoranthene	NA	NA	Y	
Fluorene	NA	NA	N	BSL
Freon 113	Y		NA	NA
Freon 114	N	ND	NA	NA
Heptane	Y		NA	NA
Hexachlorobenzene	NA	NA	N	ND*
Hexachlorobutadiene	N	ND*	N	ND*
Hexachlorocyclopentadiene	NA	NA	N	ND
Hexachloroethane	NA	NA	N	ND*
Hexane	Y		NA	NA
Chromium VI	NA	NA	Y	
Indeno (1,2,3-cd) pyrene	NA	NA	Y	
Iron	NA	NA	Y	
Isophorone	NA	NA	N	ND
Cumene	Y		NA	NA
Lead	NA	NA	Y	
Lithium	NA	NA	N	BSL
m,p-Xylene	Y		NA	NA
Magnesium	NA	NA	N	EN
Manganese	NA	NA	N	BG
Mercury	NA	NA	Y	
Methyl tert-butyl ether	N	ND*	NA	NA
Methylene Chloride	Y		NA	NA
Molybdenum	NA	NA	Y	
Motor Oil Range Organics (C16-C36)	NA	NA	N	ITC
Naphthalene	NA	NA	Y	
Butylbenzene	N	ND*	NA	NA
Nickel	NA	NA	N	BSL
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	NA	NA	N	ND*
N-Nitrosodimethylamine	NA	NA	N	BSL
N-Nitrosodi-n-propylamine	NA	NA	N	ND*
N-Nitrosodiphenylamine	NA	NA	N	ND
Propylbenzene	Y		NA	NA
o-Xylene	Y		NA	NA
Pentachlorophenol	NA	NA	N	ND*
Perchlorate	NA	NA	N	BSL
Phenanthrene	NA	NA	Y	
Phenol	NA	NA	Y	
p-Cymene	N	BSL*	NA	NA
Polychlorinated biphenyl	NA	NA	N	ND*
Potassium	NA	NA	N	EN
Pyrene	NA	NA	Y	
sec-Butylbenzene	N	BSL*	NA	NA
Selenium	NA	NA	N	BSL
Silver	NA	NA	N	BSL
Sodium	NA	NA	N	EN

Table 5.2-5 Chemical of Potential Concern Summary
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Strontium	NA	NA	N	BSL
Styrene	Y		NA	NA
tert-Butylbenzene	N	BSL*	NA	NA
Tetrachloroethene	Y		NA	NA
Tetrahydrofuran	Y		NA	NA
Thallium	NA	NA	N	BG
Tin	NA	NA	N	ND
Titanium	NA	NA	N	BSL
Toluene	Y		NA	NA
Total Cyanide	NA	NA	N	BSL
trans-1,2-Dichloroethene	Y		NA	NA
trans-1,3-Dichloropropene	N	ND*	NA	NA
Trichloroethene	Y		NA	NA
Freon 11	Y		NA	NA
Vanadium	NA	NA	N	BG
Vinyl Chloride	Y		NA	NA
Xylenes (total)	NA	NA	NA	NA
Zinc	NA	NA	N	BSL

Key:
Y = COPC
N = Not a COPC
NA = Not applicable
COPC = Constituent of Potential Concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Table 5.2-6 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)
Admin Area West	71-55-6	1,1,1-Trichloroethane	7.8	33000	µg/m^3	52D-SP32-20	20	81	41	51%	5.9 - 8.7	9.9E+04	nc	Y	
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/m^3	ND	ND	81	0	0%	7.4 - 170	1.8E+00	ca	N	ND*
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/m^3	ND	ND	81	0	0%	5.9 - 140	6.6E+00	ca	N	ND*
	75-34-3	1,1-Dichloroethane	4.7	170	µg/m^3	52D-SP32-20	20	81	20	25%	4.4 - 6.8	6.6E+01	ca	Y	
	75-35-4	1,1-Dichloroethene	8.3	2100	µg/m^3	52D-SP36-30	30	81	33	41%	4.3 - 6.3	3.1E+03	nc	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	µg/m^3	ND	ND	81	0	0%	20 - 460	6.7E+00	ca	N	ND*
	120-82-1	1,2,4-Trichlorobenzene	36	36	µg/m^3	D(b)-SP04-10	10	81	1	1%	32 - 750	9.9E+03	nc	N	BSL
	95-63-6	1,2,4-Trimethylbenzene	6.8	18	µg/m^3	52D-SP26-10	10	81	12	15%	5.3 - 120	2.7E+02	nc	Y	
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/m^3	ND	ND	81	0	0%	8.3 - 190	1.7E+00	ca	N	ND*
	95-50-1	1,2-Dichlorobenzene	7.7	7.7	µg/m^3	52D-SP24-30	30	81	1	1%	6.5 - 150	9.1E+03	nc	N	BSL
	107-06-2	1,2-Dichloroethane	ND	ND	µg/m^3	ND	ND	81	0	0%	4.4 - 100	5.0E+00	ca*	N	ND*
	78-87-5	1,2-Dichloropropane	ND	ND	µg/m^3	ND	ND	81	0	0%	5 - 120	1.1E+01	ca*	N	ND*
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/m^3	ND	ND	81	0	0%	5.3 - 120	2.7E+02	nc	N	ND
	106-99-0	1,3-Butadiene	2.9	220	µg/m^3	08D-SP07-20 52D-SP44-40	20 40	81	57	70%	2.4 - 56	5.9E-01	ca*	N	NR
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/m^3	ND	ND	81	0	0%	6.5 - 150	4.8E+03	nc	N	ND
	106-46-7	1,4-Dichlorobenzene	6.9	11	µg/m^3	08D-SP08-10	10	81	5	6%	6.5 - 150	9.7E+00	ca	Y	
	123-91-1	1,4-Dioxane	17	70	µg/m^3	52D-SP35-30	30	81	5	6%	16 - 360	1.4E+01	ca	Y	
	540-84-1	2,2,4-Trimethylpentane	9.6	2500	µg/m^3	52D-SP27-30 52D-SP33-20	20 30	81	14	17%	5 - 120	3.2E+04	nc	Y	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	20	340	µg/m^3	52D-SP28-20	20	81	26	32%	3.4 - 75	2.3E+05	nc	Y	
	591-78-6	2-Hexanone	21	26	µg/m^3	52D-SP40-20	20	81	2	2%	18 - 410	3.6E+03	nc	N	BSL
	67-63-0	2-Propanol	13	100	µg/m^3	52D-SP28-20	20	81	9	11%	11 - 250	4.6E+02	nc	Y	
	107-05-1	3-Chloropropene	ND	ND	µg/m^3	ND	ND	81	0	0%	14 - 320	1.7E+01	nc	N	ND*
	622-96-8	4-Ethyltoluene	6.2	17	µg/m^3	52D-SP27-30	30	81	12	15%	5.3 - 120	3.2E+04	nc	Y	
	108-10-1	4-Methyl-2-pentanone	4.8	160	µg/m^3	52D-SP44-30	30	81	13	16%	4.4 - 100	3.6E+03	nc	Y	
	67-64-1	Acetone	53	2000	µg/m^3	52D-SP28-20	20	81	52	64%	13 - 240	1.5E+04	nc	Y	
	100-44-7	alpha-Chlorotoluene	ND	ND	µg/m^3	ND	ND	81	0	0%	5.6 - 130	2.2E+00	ca	N	ND*
	71-43-2	Benzene	3.6	81	µg/m^3	52D-SP29-10	10	81	54	67%	3.6 - 81	3.6E+00	ca	Y	
	75-27-4	Bromodichloromethane	16	16	µg/m^3	52D-SP35-30	30	81	1	1%	7.2 - 170	3.1E+00	ca	Y	
	75-25-2	Bromoform	ND	ND	µg/m^3	ND	ND	81	0	0%	11 - 260	1.2E+02	nc	N	ND*
	74-83-9	Bromomethane	8.7	8.7	µg/m^3	08D-SP08-10	10	81	1	1%	4.2 - 98	2.3E+02	nc	N	BSL
	104-51-8	Butylbenzene	ND	ND	µg/m^3	ND	ND	81	0	0%	24 - 560	6.5E+03	nc	N	ND
	75-15-0	Carbon Disulfide	3.6	360	µg/m^3	AW-08D-SP10-10	10	81	67	83%	3.6 - 79	3.1E+04	nc	Y	
	56-23-5	Carbon Tetrachloride	21	41	µg/m^3	52D-SP28-20	20	81	3	4%	6.8 - 160	2.5E+00	ca*	Y	
	108-90-7	Chlorobenzene	ND	ND	µg/m^3	ND	ND	81	0	0%	5 - 120	4.5E+04	nc	N	ND
	75-00-3	Chloroethane	4.3	5.9	µg/m^3	52D-SP44-40	40	81	3	4%	2.8 - 67	1.2E+02	ca	N	BSL
	67-66-3	Chloroform	6.3	710	µg/m^3	D(c)-SP05-30	30	81	31	38%	5.3 - 120	2.0E+01	ca	Y	
	74-87-3	Chloromethane	41	41	µg/m^3	52D-SP44-40	40	81	1	1%	8.9 - 210	1.0E+02	nc	N	BSL
	156-59-2	cis-1,2-Dichloroethene	5.3	530	µg/m^3	52D-SP42-30	30	81	16	20%	4.3 - 100	1.6E+03	nc	Y	
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/m^3	ND	ND	81	0	0%	4.9 - 110	6.7E+00	ca	N	ND*
	98-82-8	Cumene	ND	ND	µg/m^3	ND	ND	81	0	0%	5.3 - 120	1.8E+04	nc	N	ND
	110-82-7	Cyclohexane	4.3	64	µg/m^3	52D-SP43-20	20	81	20	25%	3.8 - 87	2.7E+05	nc	Y	
	124-48-1	Dibromochloromethane	ND	ND	µg/m^3	ND	ND	81	0	0%	9.2 - 220	4.6E+00	ca	N	ND*

Table 5.2-6 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)
Admin Area West	64-17-5	Ethanol	8.6	160	$\mu g/m^3$	52D-SP28-20	20	81	34	42%	8.1 - 190	7.9E+04	nc	Y	
	100-41-4	Ethyl Benzene	5.1	18	$\mu g/m^3$	52D-SP27-30	30	81	15	19%	4.8 - 110	4.2E+01	nc	Y	
	75-69-4	Freon 11	7.6	110	$\mu g/m^3$	52D-SP36-30	30	81	10	12%	6.1 - 140	3.1E+04	nc	Y	
	76-13-1	Freon 113	11	3400	$\mu g/m^3$	52D-SP36-20 52D-SP36-30	20 30	81	56	69%	8.4 - 10	1.4E+06	nc	Y	
	76-14-2	Freon 114	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	7.6 - 180	1.4E+06	nc	N	ND
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	5.3 - 120	9.1E+03	nc	N	ND
	142-82-5	Heptane	5.2	85	$\mu g/m^3$	52D-SP44-30	30	81	47	58%	4.7 - 100	8.7E+03	nc	Y	
	87-68-3	Hexachlorobutadiene	110	110	$\mu g/m^3$	D(b)-SP04-10	10	81	1	1%	46 - 1100	4.9E+00	ca*	Y	
	110-54-3	Hexane	4.6	220	$\mu g/m^3$	08D-SP07-20	20	81	67	83%	4 - 89	8.7E+03	nc	Y	
	136777-61-2	m,p-Xylene	5.2	68	$\mu g/m^3$	52D-SP27-30	30	81	33	41%	4.9 - 110	3.2E+04	nc	Y	
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	3.9 - 91	4.0E+02	ca	N	ND
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	3.8 - 88	1.0E+02	ca	N	ND
	95-47-6	o-Xylene	5.6	17	$\mu g/m^3$	52D-SP27-30 52D-SP29-10	30 10	81	14	17%	4.7 - 110	3.2E+04	nc	Y	
	99-87-6	p-Cymene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	24 - 560	3.2E+04	nc	N	ND
	103-65-1	Propylbenzene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	5.3 - 120	6.4E+03	nc	N	ND
	135-98-8	sec-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	24 - 560	6.5E+03	nc	N	ND
	100-42-5	Styrene	4.8	17	$\mu g/m^3$	52D-SP29-10	10	81	10	12%	4.6 - 110	4.1E+04	nc	Y	
	98-06-6	tert-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	24 - 560	6.5E+03	nc	N	ND
	127-18-4	Tetrachloroethene	7.9	560	$\mu g/m^3$	52D-SP42-30	30	81	51	63%	7.5 - 170	1.8E+01	ca	Y	
	109-99-9	Tetrahydrofuran	3.4	85	$\mu g/m^3$	52D-SP42-30	30	81	36	44%	3.2 - 75	5.3E+01	ca	Y	
	108-88-3	Toluene	4.4	110	$\mu g/m^3$	52D-SP27-30	30	81	69	85%	4.3 - 95	1.4E+04	nc	Y	
	156-60-5	trans-1,2-Dichloroethene	5.8	32	$\mu g/m^3$	52D-SP42-30	30	81	3	4%	4.3 - 100	3.2E+03	nc	N	BSL
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	4.9 - 110	6.7E+00	ca	N	ND*
	79-01-6	Trichloroethene	6.9	8300	$\mu g/m^3$	52D-SP42-30	30	81	57	70%	5.8 - 7.8	5.3E+01	ca	Y	
	75-01-4	Vinyl Chloride	3.4	6.0	$\mu g/m^3$	52D-SP36-30	30	81	4	5%	2.8 - 65	1.3E+00	ca	Y	

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations

TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram

mg/kg = Milligrams per kilogram
nc = Noncancer
ND = Not detected
ITC = Individual toxic compounds associated with the mixture are assessed separately.

Table 5.2-7 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	79-34-5	1,1,2,2-Tetrachloroethane	0.40	0.40	mg/kg	08D-AH02 52D-AH03	10 5	2	2	100%	NA	5.5E-03	ca	Y		NA
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	6.2E+00	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	6.0E+01	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	156	0	0%	0.2 - 13.3	6.1E-02	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	5.3E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	3.4E-01	ca	N	ND*	5%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	6.1E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	6.1E-01	nc**	N	ND*	20%
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	1.8E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	1.2E+02	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.51 - 6.67	1.2E+01	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	1.2E+01	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	6.1E+00	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	4.9E+02	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	6.3E+00	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.7	5.6E+00 (s)	nc	N	ND	NA
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.7	3.1E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.67	1.8E+01	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 3.3	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	162	0	0%	0.51 - 5.4	NA		N	ND	NA
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.67	1.8E+00	nc	N	ND*	19%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.67	6.1E-01	nc	N	ND*	25%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	150	0	0%	0.2 - 2.2	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	2.4E+01	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	150	0	0%	0.2 - 6.67	3.1E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	162	0	0%	0.51 - 6.67	2.3E+00	ca**	N	ND*	20%
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.67	NA		N	ND	NA
	83-32-9	Acenaphthene	0.0029	0.013	mg/kg	52D-SB07-5.0	5	152	5	3%	0.0067 - 1.33	3.7E+02	nc	N	BSL	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	152	0	0%	0.0067 - 1.33	2.3E+02 (s)	nc	N	ND	NA
	7429-90-5	Aluminum	2670	50000	mg/kg	52D-SB17-5.0	5	264	264	100%	NA	7.6E+03	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	156	0	0%	0.2 - 2.2	8.5E+00	ca**	N	ND	NA
	120-12-7	Anthracene	0.0036	0.093	mg/kg	52D-SB07-5.0	5	152	8	5.3%	0.0067 - 1.33	2.2E+03	nc	Y		NA
	7440-36-0	Antimony	0.045	49	mg/kg	06D-SNS07-0.5	0.5	258	157	61%	0.21 - 110	3.0E+00	nc	Y		NA
	7440-38-2	Arsenic	0.87	33	mg/kg	06D-SNS08-0.5	0.5	257	205	80%	0.63 - 57	6.2E-03	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	126	0	0%	0.2 - 2.2	4.4E-01	ca	N	ND*	5%
	7440-39-3	Barium	29	470	mg/kg	D(b)-SD01-0	0	258	258	100%	NA	5.2E+02	nc	N	BSL	NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	126	0	0%	0.35 - 3.8	2.1E-04	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.0049	0.33	mg/kg	52D-SB07-5.0	5	152	15	10%	0.0067 - 1.33	6.2E-03	ca	Y		NA
	50-32-8	Benzo (a) pyrene	0.0070	0.34	mg/kg	52D-SB07-5.0	5	152	13	9%	0.0067 - 1.33	3.8E-03	ca	Y		NA
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.011	0.45	mg/kg	52D-SB07-5.0	5	116	16	14%	0.013 - 0.15	6.2E-02	ca	Y		NA

Table 5.2-7 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	205-99-2	Benzo (b) fluoranthene	0.13	0.13	mg/kg	05D-SNS15-0.5	0.5	37	1	3%	0.33 - 1.33	6.2E-02	ca	Y		NA
	191-24-2	Benzo (ghi) perylene	0.0076	0.093	mg/kg	52D-SB07-5.0	5	152	10	7%	0.0067 - 1.33	2.3E+02 (s)	nc	Y		NA
	207-08-9	Benzo (k) fluoranthene	0.037	0.037	mg/kg	05D-SNS15-0.5	0.5	37	1	3%	0.33 - 1.33	3.8E-02	ca	N	BSL	NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	156	0	0%	0.51 - 6.67	1.0E+04	max	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	156	0	0%	0.2 - 2.2	1.8E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	1.2E+03	nc	N	ND	NA
	7440-41-7	Beryllium	0.093	1.1	mg/kg	52D-SB17-5.0	5	258	191	74%	0.22 - 11	1.5E+01	nc	N	BSL	NA
	AER-001-412	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	2.2E-02	ca	N	ND*	100%
	AER-001-413	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	2.9E-01	ca	N	ND*	29%
	AER-001-414	Bis(2-ethylhexyl)phthalate	0.050	1.3	mg/kg	06D-SNS08-0.5	0.5	162	3	2%	0.333 - 5.4	3.5E+00	ca*	N	BSL	NA
	7440-42-8	Boron	1.7	164	mg/kg	06D-SNS01	0.01	258	80	31%	4 - 230	1.6E+03	nc	N	BSL	NA
	7440-43-9	Cadmium	0.084	190	mg/kg	05D-SB03-1.0	1	264	183	69%	0.4 - 1	1.7E-01	nc	Y		NA
	7440-70-2	Calcium	710	165000	mg/kg	06D-SNS01	0.01	65	65	100%	NA	NA		N	EN	NA
	86-74-8	Carbazole	0.0066	0.0066	mg/kg	05D-SNS15-0.5	0.5	126	1	1%	0.2 - 2.2	2.4E+00	ca	N	BSL	NA
	7440-47-3	Chromium	17	43000	mg/kg	06D-SNS07-0.5	0.5	264	264	100%	NA	1.0E+04	max	Y		NA
	18540-29-9	Chromium VI	0.022	720	mg/kg	52D-SB10-11	11	159	154	97%	0.23 - 0.27	1.7E+00	ca**	Y		NA
	218-01-9	Chrysene	0.0043	0.43	mg/kg	52D-SB07-5.0	5	152	25	16%	0.0067 - 1.33	3.8E-01	ca	Y		NA
	7440-48-4	Cobalt	3.5	49	mg/kg	D(c)-SB03-11	11	258	258	100%	NA	6.6E+01	ca**	N	BSL	NA
	7440-50-8	Copper	8.3	960	mg/kg	06D-SNS07-0.5	0.5	264	264	100%	NA	3.0E+02	nc	Y		NA
	53-70-3	Dibenz (a,h) anthracene	0.0068	0.018	mg/kg	D(c)-SB05-1	1	152	2	1%	0.0067 - 1.33	6.2E-03	ca	Y		NA
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	1.5E+01	nc	N	ND	NA
	68334-30-5	Diesel Range Organics (C10-C28)	0.94	250	mg/kg	05D-SNS16-0.5	0.5	116	88	76%	1.7 - 19	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	4.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	1.0E+04	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	0.67	20	mg/kg	52D-SA-SB03	5	162	27	17%	0.33 - 4.3	6.1E+02	nc	Y		NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	2.4E+02	nc	N	ND	NA
	206-44-0	Fluoranthene	0.0019	0.53	mg/kg	52D-SB07-5.0	5	152	32	21%	0.0067 - 6.7	2.3E+02	nc	Y		NA
	86-73-7	Fluorene	0.0042	0.016	mg/kg	52D-SB07-5.0	5	152	2	1%	0.0067 - 6.7	2.7E+02	nc	N	BSL	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.7	3.0E-02	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.7	6.2E-01	ca**	N	ND*	20%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	162	0	0%	0.33 - 7.6	3.7E+01	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.7	3.5E+00	ca**	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0073	0.059	mg/kg	52D-SB07-5.0 D(c)-SB05-1	5 1	152	8	5.3%	0.0067 - 6.7	6.2E-02	ca	Y		NA
	7439-89-6	Iron	6330	47200	mg/kg	52D-SB01	5	65	65	100%	NA	2.3E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.7	5.1E+01	ca*	N	ND	NA
	7439-92-1	Lead	2.0	640	mg/kg	06D-SNS07-0.5	0.5	266	263	99%	2.4 - 5	1.5E+01	nc	Y		NA
	7439-93-2	Lithium	3.0	25	mg/kg	52D-SB17-5.0	5	193	188	97%	5.8 - 280	1.6E+02	nc	N	BSL	NA
	7439-95-4	Magnesium	1250	20800	mg/kg	05D-SNS02	0.01	65	65	100%	NA	NA		N	EN	NA
	7439-96-5	Manganese	77	10100	mg/kg	06D-SNS01	0.01	264	264	100%	NA	1.8E+02	nc	N	BG	NA

Table 5.2-7 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Admin Area West	7439-97-6	Mercury	0.0032	31	mg/kg	05D-SNS03	0.01	262	187	71%	0.02 - 0.1	1.8E+00	nc	Y		NA
	7439-98-7	Molybdenum	0.16	70	mg/kg	06D-SNS07-0.5	0.5	215	186	87%	1 - 2	3.8E+01	nc	Y		NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.2	850	mg/kg	05D-SNS16-0.5	0.5	106	98	92%	4.4 - 14	NA		N	ITC	NA
	91-20-3	Naphthalene	0.0017	0.025	mg/kg	05D-SNS12-0.5	0.5	151	4	3%	0.0067 - 6.7	1.7E-01	ca	N	BSL	NA
	7440-02-0	Nickel	11	2090	mg/kg	52D-SB02	1	264	264	100%	NA	1.6E+02	nc	Y		NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 2.2	2.0E+00	nc	N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	155	0	0%	0.0031 - 6.7	9.5E-04	ca*	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	162	0	0%	0.2 - 6.7	6.9E-03	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	44	0	0%	0.2 - 6.7	9.9E+00	ca*	N	ND	NA
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	1.6	1.6	mg/kg	52D-SB07-5.0	5	118	1	1%	0.2 - 2.2	1.5E+02		N	BSL	NA
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	ND	ND	mg/kg	ND	ND	17	0	0%	50 - 50	NA		N	ITC	NA
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	50	0	0%	0.021 - 0.7	3.9E-01	ca	N	ND	NA
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	54	0	0%	0.021 - 0.7	8.9E-03	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	54	0	0%	0.021 - 0.7	8.9E-03	ca	N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	54	0	0%	0.021 - 0.7	8.9E-03	ca	N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	54	0	0%	0.021 - 0.7	8.9E-03	ca	N	ND*	100%
	11097-69-1	PCB-1254	0.034	2.5	mg/kg	05D-SB06-1	1	54	6	11%	0.021 - 0.7	2.2E-02	ca	Y		NA
	11096-82-5	PCB-1260	0.065	0.80	mg/kg	05D-SB07-1	1	54	4	7%	0.021 - 0.68	8.9E-03	ca	Y		NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	162	0	0%	0.67 - 7.6	3.0E-01	ca	N	ND*	100%
	14797-73-0	Perchlorate	0.011	1.9	mg/kg	06D-SNS11-2.5	2.5	108	10	9%	0.0051 - 0.064	7.8E-01	ca/nc	Y		NA
	AER-001-248	Petroleum Hydrocarbons	129	129	mg/kg	08D-SNS02	0.01	3	1	33%	20 - 20	NA		N	ITC	NA
	85-01-8	Phenanthrene	0.0024	0.44	mg/kg	52D-SB07-5.0	5	152	24	16%	0.0067 - 1.33	2.3E+02 (s)	nc	Y		NA
	108-95-2	Phenol	0.11	4.5	mg/kg	D(b)-SB05-1.0	1	162	30	19%	0.2 - 2.2	1.8E+03	nc	Y		NA
	AER-001-089	Polychlorinated Biphenyl	ND	ND	mg/kg	ND	ND	14	0	0%	0.033 - 0.0333	8.9E-03	ca**	N	ND*	100%
	7440-09-7	Potassium	275	4000	mg/kg	12D-SNS03	3	65	65	100%	NA	NA		N	EN	NA
	129-00-0	Pyrene	0.014	0.74	mg/kg	52D-SB07-5.0	5	152	17	11%	0.0067 - 1.33	2.3E+02	nc	Y		NA
	7782-49-2	Selenium	0.21	11	mg/kg	D(C)-SB01 DC-AH01	5 5	258	43	17%	1 - 110	3.8E+01	nc	N	BSL	NA
	7440-22-4	Silver	0.052	200	mg/kg	05D-SB03-1.0	1	264	112	42%	0.54 - 2.2	3.8E+01	nc	Y		NA
	7440-23-5	Sodium	103	2410	mg/kg	06D-SNS01	0.01	65	45	69%	100 - 100	NA		N	EN	NA
	7440-24-6	Strontium	9.9	200	mg/kg	06D-SNS08-0.5	0.5	193	193	100%	NA	4.7E+03	nc	N	BSL	NA
	7440-28-0	Thallium	0.086	16	mg/kg	06D-SNS06-0.5	0.5	264	159	60%	0.51 - 56	5.0E-01	nc	N	BG	NA
	7440-31-5	Tin	ND	ND	mg/kg	ND	ND	16	0	0%	50 - 50	4.7E+03	nc	N	ND	NA
	7440-32-6	Titanium	110	1600	mg/kg	09D-SD01-0.25 D(b)-SB02-1.0	0.25 1.0	209	209	100%	NA	1.0E+04	nc	N	BSL	NA
	57-12-5	Total Cyanide	0.50	25	mg/kg	06D-SNS06-0.5	0.5	85	13	15%	0.5 - 1.1	1.2E+02	nc	N	BSL	NA
	AER-001-090	Total Recov. Petroleum Hydrocarbons	26	1740	mg/kg	52D-SB01	1	7	3	43%	20 - 20	NA		N	ITC	NA
	7440-62-2	Vanadium	15	170	mg/kg	AW-AF1-SB01-1.0	1	258	258	100%	NA	5.3E-01	nc	N	BG	NA
	7440-66-6	Zinc	14	6410	mg/kg	06D-SNS01	0.01	264	264	100%	NA	2.3E+03	nc	Y		NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations

TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

(s) Surrogate value used. For methylnaphthalenes, R9PRG for naphthalene is used. For other PAHs, pyrene is used.

ITC = individual toxic compounds associated with the mixture are assessed separately.

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
NA = Not applicable

Table 5.2-8 *Chemical of Potential Concern Summary*
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
1,1,1,2-Tetrachloroethane					N	ND	N	ND*
1,1,1-Trichloroethane	Y				N	BSL	N	ND
1,1,2,2-Tetrachloroethane	N	ND*	Y		Y		N	ND*
1,1,2-Trichloroethane	N	ND*			Y		N	ND*
1,1-Dichloroethane	Y				Y		N	ND*
1,1-Dichloroethene	N	ND			Y		N	ND
1,1-Dichloropropene	N	ND*			N	ND	N	ND*
1,2,3-Trichlorobenzene					N	ND*	N	ND
1,2,3-Trichloropropane					N	ND*	N	ND*
1,2,4-Trichlorobenzene	N	BSL	N	ND	N	ND*	N	ND
1,2,4-Trimethylbenzene	Y				Y		N	ND
1,2-Dibromo-3-chloropropane					N	ND*	N	ND*
1,2-Dibromoethane (EDB)	N	ND*			N	ND*	N	ND*
1,2-Dichlorobenzene	N	BSL	N	ND	Y		N	ND
1,2-Dichloroethane	N	ND*			Y		N	ND*
1,2-Dichloroethene (cis/trans)					Y			
1,2-Dichloropropane	N	ND*			N	ND*	N	ND*
1,2-Diphenylhydrazine (as Azobenzene)			N	ND*	N	ND*	N	ND*
1,3,5-Trimethylbenzene	N	ND			N	BSL	N	ND
1,3-Butadiene	N	NR						
1,3-Dichlorobenzene	N	ND	N	ND	N	BSL	N	ND
1,3-Dichloropropane					N	ND*	N	ND
1,4-Dichlorobenzene	Y		N	ND*	Y		N	ND*
1,4-Dioxane	Y				Y			
1-Methyl-2-Pyrrolidinone					N	ND		
2,2,4-Trimethylpentane	Y							
2,2-Dichloropropane					N	ND*	N	ND*
2,4,5-Trichlorophenol			N	ND	N	ND*	N	ND
2,4,6-Trichlorophenol			N	ND*	N	ND*	N	ND*
2,4-Dichlorophenol			N	ND	N	ND*	N	ND
2,4-Dimethylphenol			N	ND	N	ND*	N	ND
2,4-Dinitrophenol			N	ND	N	ND*	N	ND*
2,4-Dinitrotoluene			N	ND	N	ND*	N	ND
2,6-Dinitrotoluene			N	ND	N	ND	N	ND*
2-Butanone (Methyl Ethyl Ketone)	Y							
2-CHLOROETHYL VINYL ETHER					N	ND*		
2-Chloronaphthalene			N	ND	N	ND*	N	ND
2-Chlorophenol			N	ND	N	ND*	N	ND*
2-Chlorotoluene					N	ND	N	ND
2-Hexanone	N	BSL			N	ND*		
2-Methylnaphthalene			N	ND	Y		N	ND*
2-Methylphenol			N	ND	N	ND*	N	ND
2-Nitroaniline			N	ND	N	ND	N	ND
2-Nitrophenol			N	ND	N	ND*	N	ND
2-Propanol	Y							
3,3'-Dichlorobenzidine			N	ND	N	ND*	N	ND*
3-Chloropropene	N	ND*						
3-Nitroaniline			N	ND*	N	ND*	N	ND*
4,6-Dinitro-2-methylphenol			N	ND*	N	ND	N	ND*
4-Bromophenyl phenyl ether			N	ND	N	ND	N	ND
4-Chloro-3-methylphenol			N	ND	N	ND*	N	ND
4-Chloroaniline			N	ND	N	ND	N	ND
4-Chlorophenyl phenyl ether			N	ND	N	ND	N	ND
4-Chlorotoluene					N	ND*	N	ND
4-Ethyltoluene	Y							
4-Methyl-2-pentanone	Y							
4-Methylphenol			N	ND	N	ND*	N	ND
4-Nitroaniline			N	ND*	N	ND	N	ND*
4-Nitrophenol			N	ND	N	ND*	N	ND
Acenaphthene			N	BSL	N	BSL	N	ND
Acenaphthylene			N	ND	N	BSL	N	ND
Acetone	Y				N	ND*		
Acrolein					N	ND*		

Table 5.2-8 *Chemical of Potential Concern Summary*
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Acrylonitrile					N	ND*		
Aldrin					N	ND*		
alpha-Chlorotoluene	N	ND*						
Aluminum			N	BG	Y		Y	
Aniline			N	ND	N	ND*	N	ND*
Anthracene			Y		Y		N	ND
Antimony			Y		Y		Y	
Arsenic			N	BG	Y		Y	
Azobenzene			N	ND*	N	ND*	N	ND*
Barium			N	BSL	Y		N	BSL
Benzene	Y				Y		N	ND*
Benzidine			N	ND*	N	ND*	N	ND*
Benzo (a) anthracene			Y		Y		N	ND*
Benzo (a) pyrene			Y		N	ND*	N	ND*
Benzo (b & k) fluoranthene (total)			Y		N	ND*	N	ND*
Benzo (b) fluoranthene			Y		N	ND		
Benzo (ghi) perylene			Y		N	ND*	N	ND
Benzo (k) fluoranthene			N	BSL	N	ND		
Benzoic acid			N	ND	N	BSL	N	ND
Benzyl alcohol			N	ND	N	ND	N	ND
Benzyl butyl phthalate			N	ND	N	ND*	N	ND
Beryllium			N	BSL	Y		Y	
Bis(2-chloroethoxy)methane			N	ND	N	ND*	N	ND
Bis(2-chloroethyl)ether			N	ND*	N	ND*	N	ND*
Bis(2-chloroisopropyl)ether			N	ND*	N	ND*	N	ND*
Bis(2-ethylhexyl)phthalate			N	BSL	Y		N	ND*
Boron			N	BSL	Y		N	BSL
Bromobenzene					N	ND	N	ND
Bromochloromethane					N	ND*	N	ND
Bromodichloromethane	Y				Y		Y	
Bromoform	N	ND*			N	ND*	Y	
Bromomethane	N	BSL			N	ND*	N	ND
Butylbenzene	N	ND						
Cadmium			Y		Y		Y	
Calcium			N	EN	N	EN	N	EN
Carbazole			N	BSL	N	ND*	N	ND*
Carbon Disulfide	Y				N	ND*		
Carbon Tetrachloride	Y				Y		N	ND*
Chlordane (tech)					N	ND*		
Chlorobenzene	N	ND			N	ND*	N	ND
Chloroethane	N	BSL			N	ND*	N	ND*
Chloroform	Y				Y		Y	
Chloromethane	N	BSL			N	ND*	N	ND
Chromium			Y		N	BSL	N	BSL
Chromium VI			Y					
Chrysene			Y		N	ND*	N	ND*
cis-1,2-Dichloroethene	Y				Y		N	ND
cis-1,3-Dichloropropene	N	ND*			N	ND*		
Cobalt			N	BSL	Y		N	BSL
Copper			Y		Y		Y	
Cumene	N	ND						
Cyclohexane	Y							
Dibenz (a,h) anthracene			Y		N	ND*	N	ND*
Dibenzofuran			N	ND	N	ND*	N	ND*
Dibromochloromethane	N	ND*			N	ND*	Y	
Dibromomethane					N	ND*	N	ND
Dichlorodifluoromethane					Y		N	ND
Dieldrin					N	ND		

Table 5.2-8 *Chemical of Potential Concern Summary*
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Diesel Range Organics (C10-C28)			N	ITC	N	ITC	N	PM
Diethyl ether					N	ND		
Diethyl phthalate			N	ND	N	ND	N	ND
Dimethyl phthalate			N	ND	N	ND*	N	ND
Di-n-butyl phthalate			Y		N	ND*	N	ND
Di-n-octyl phthalate			N	ND	N	ND	N	ND
Endosulfan sulfate					N	ND*		
Endrin					N	ND*		
Endrin aldehyde					N	ND		
Ethanol	Y				N	ND*		
Ethyl Benzene	Y				N	BSL	N	ND
Fluoranthene			Y		N	ND*	N	ND
Fluorene			N	BSL	Y		N	ND
Freon 11	Y							
Freon 113	Y				Y			
Freon 114	N	ND						
Freon 12	N	ND						
Heptachlor epoxide					N	ND*		
Heptane	Y							
Hexachlorobenzene			N	ND*	N	ND*	N	ND*
Hexachlorobutadiene	Y		N	ND*	N	ND*	N	ND*
Hexachlorocyclopentadiene			N	ND	N	ND*	N	ND*
Hexachloroethane			N	ND	N	ND*	N	ND*
Hexane	Y							
Hexavalent Chromium					Y		N	BSL
Indeno (1,2,3-cd) pyrene			Y		N	ND*	N	ND*
Iron			Y		Y		Y	
Isophorone			N	ND	N	ND	N	ND
Isopropanol					N	ND		
Isopropylbenzene					N	BSL	N	ND
Jet fuels					N	ND		
Kerosene					N	ND*		
Lead			Y		Y		Y	
Lithium			N	BSL	Y		N	BSL
m,p-Xylene	Y							
Magnesium			N	EN	N	EN	N	EN
Manganese			N	BG	Y		Y	
Mercury			Y		Y		N	BSL
Methanol					N	ND		
Methoxychlor					N	ND		
Methyl ethyl ketone					N	ND*		
Methyl isobutyl ketone (MIBK)					N	ND*		
Methyl tert-butyl ether	N	ND			N	BSL	N	ND
Methylene Chloride	N	ND			Y		N	ND*
Molybdenum			Y		Y		N	BSL
Motor Oil Range Organics (C16-C36)			N	ITC	N	ITC	N	PM
m-Xylene					Y			
Naphthalene			N	BSL	Y		N	ND*
n-Butyl alcohol					N	ND*		
n-Butylbenzene					Y		N	ND
N-Butylbenzenesulfonamide					N	ND*		
Nickel			Y		Y		Y	
Nitrate as NO3					Y		Y	
Nitrate plus Nitrite (as N)					N	ITC		
Nitrite as NO2					Y		N	BSL
Nitrobenzene			N	ND	N	ND*	N	ND*
N-Nitrosodimethylamine			N	ND*	Y		N	ND*
N-Nitrosodi-n-propylamine			N	ND*	N	ND*	N	ND*
N-Nitrosodiphenylamine			N	ND	N	ND		
N-Nitrosodiphenylamine (as Diphenylamine)			#N/A	#N/A				
n-Propanol					N	ND*		
n-Propylbenzene					N	PM	N	ND
o-Xylene	Y				Y			

Table 5.2-8 *Chemical of Potential Concern Summary*
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Oil & Grease (E413.2-SM5520C Total)			N	ITC	N	ITC		
p-Cymene	N	ND						
PCB-1016			N	ND	N	ND*	N	ND*
PCB-1221			N	ND*	N	ND*	N	ND*
PCB-1232			N	ND*	N	ND*	N	ND*
PCB-1242			N	ND*	N	ND*	N	ND*
PCB-1248			N	ND*	N	ND*	N	ND*
PCB-1254			Y		Y		N	ND*
PCB-1260			Y		N	ND	N	ND*
PCB's					N	ND*		
Pentachlorophenol			N	ND*	N	ND*	N	ND*
Perchlorate			Y		Y		N	ND*
Petroleum Hydrocarbons			N	ITC				
Phenanthrene			Y		Y		N	ND
Phenol			Y		N	BSL	N	ND
p-Isopropyltoluene					Y		N	ND
POLYCHLORINATED BIPHENYL			N	ND*				
Potassium			N	EN	N	EN	N	EN
Propylbenzene	N	ND						
p-Xylene					Y			
Pyrene			Y		N	BSL	N	ND
sec-Butyl alcohol					N	ND*		
sec-Butylbenzene	N	ND			Y		N	ND
Selenium			N	BSL	N	BSL	N	BSL
Silver			Y		N	BSL	N	BSL
Sodium			N	EN	N	EN	N	EN
Stoddard solvent					N	ND		
Strontium			N	BSL	N	BSL	N	BSL
Styrene	Y				N	ND*	N	ND
tert-Butylbenzene	N	ND			N	BSL	N	ND
Tetrachloroethene	Y				Y		Y	
Tetrahydrofuran	Y							
Thallium			N	BG	Y		Y	
Tin			N	ND				
Titanium			N	BSL	Y		N	BSL
Toluene	Y				Y		N	ND
Total Cyanide			N	BSL	N	BSL	N	BSL
TOTAL RECOV. PETROLEUM HYDROCARBONS			N	ITC				
Toxaphene					N	ND		
TPH					N	ITC		
trans-1,2-Dichloroethene	N	BSL			Y		N	ND
trans-1,3-Dichloropropene	N	ND*			N	ND*		
Trichloroethene	Y				Y		N	ND
Trichlorofluoromethane					N	BSL	N	ND
Vanadium			N	BG	Y		Y	
Vinyl Acetate					N	ND*		
Vinyl Chloride	Y				Y		N	ND
Xylenes (total)					Y		N	ND
Zinc			Y		Y		Y	

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.2-9 *Outdoor Air Exposure Point Concentration Results*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Inorganics									
Cadmium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Chromium VI	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Iron	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Lead	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Mercury	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Molybdenum	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(b)fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(k)fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(a)pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Chrysene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Dibenz(a,h)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Indeno(1,2,3-cd)pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Naphthalene	1.0 E+0	2.3 E-5	2.3 E-5	1.0 E+0	2.3 E-5	2.3 E-5	1.0 E+0	2.3 E-5	2.3 E-5
PCB-1248	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1254	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1260	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Di-n-butyl phthalate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenanthrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	1.0 E+0	7.1 E-5	7.1 E-5	1.0 E+0	7.1 E-5	7.1 E-5	1.0 E+0	7.1 E-5	7.1 E-5
Benzene	1.0 E+0	3.7 E-4	3.7 E-4	1.0 E+0	3.7 E-4	3.7 E-4	1.0 E+0	3.7 E-4	3.7 E-4
Chloroform	1.0 E+0	3.8 E-4	3.8 E-4	1.0 E+0	3.8 E-4	3.8 E-4	1.0 E+0	3.8 E-4	3.8 E-4
Ethylbenzene	1.0 E+0	1.9 E-4	1.9 E-4	1.0 E+0	1.9 E-4	1.9 E-4	1.0 E+0	1.9 E-4	1.9 E-4
Methylene chloride	1.0 E+0	4.0 E-4	4.0 E-4	1.0 E+0	4.0 E-4	4.0 E-4	1.0 E+0	4.0 E-4	4.0 E-4
Tetrachloroethylene	1.0 E+0	3.9 E-4	3.9 E-4	1.0 E+0	3.9 E-4	3.9 E-4	1.0 E+0	3.9 E-4	3.9 E-4
Trichloroethylene	1.0 E+0	3.1 E-4	3.1 E-4	1.0 E+0	3.1 E-4	3.1 E-4	1.0 E+0	3.1 E-4	3.1 E-4
cis-1,2-Dichloroethene	1.0 E+0	3.2 E-4	3.2 E-4	1.0 E+0	3.2 E-4	3.2 E-4	1.0 E+0	3.2 E-4	3.2 E-4

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg, Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter

mg/m^3 = Milligrams per cubic meter

mg/kg = Milligrams per kilogram

PEF = Particulate emission factor

VF = Volatilization factor

Table 5.2-10 Outdoor Air Exposure Point Concentration Results
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air			Commercial Worker Indoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Inorganics												
Antimony	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Cadmium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Chromium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Chromium VI	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Copper	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Iron	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Lead	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Mercury	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Molybdenum	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Nickel	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Perchlorate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Silver	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Zinc	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds												
Anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (a) anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (a) pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (b & k) fluoranthene (total)	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (b) fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (ghi) perylene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Chrysene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Dibenz (a,h) anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Di-n-butyl phthalate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Indeno (1,2,3-cd) pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1254	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1260	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Phenanthrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Volatile Organic Compounds												
1,1,2,2-Tetrachloroethane	1.0 E+0	7.1 E-5	7.1 E-5	1.0 E+0	7.1 E-5	7.1 E-5	1.0 E+0	7.1 E-5	7.1 E-5	1.0 E+0	7.1 E-5	7.1 E-5

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg,
Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.2-11 Residential Soil Vapor to Indoor Air Attenuation Factors
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors (feet bgs)										
Chemical/Feet bgs	**10**	**15**	**17**	**18**	**19**	**20**	**25**	**27**	**28**	**29**	**30**
1,1-Dichloroethane	4.5 E-4	3.2 E-4	2.8 E-4	2.7 E-4	2.5 E-4	2.4 E-4	2.0 E-4	1.8 E-4	1.8 E-4	1.7 E-4	1.7 E-4
1,1-Dichloroethene	5.3 E-4	3.7 E-4	3.3 E-4	3.2 E-4	3.0 E-4	3.0 E-4	2.4 E-4	2.2 E-4	2.1 E-4	2.1 E-4	2.0 E-4
1,2-Dichloroethane	5.9 E-4	4.2 E-4	3.8 E-4	3.6 E-4	3.4 E-4	3.3 E-4	2.7 E-4	2.5 E-4	2.4 E-4	2.3 E-4	2.3 E-4
1,3-Butadiene	1.1 E-3	8.1 E-4	7.5 E-4	7.2 E-4	6.9 E-4	6.6 E-4	5.6 E-4	5.2 E-4	5.1 E-4	4.9 E-4	4.8 E-4
1,4-Dioxane	5.9 E-4	4.2 E-4	3.8 E-4	3.6 E-4	3.4 E-4	3.4 E-4	2.7 E-4	2.5 E-4	2.4 E-4	2.3 E-4	2.3 E-4
2-Propanol	5.2 E-4	3.7 E-4	3.3 E-4	3.2 E-4	3.0 E-4	3.0 E-4	2.3 E-4	2.2 E-4	2.1 E-4	2.0 E-4	2.0 E-4
Benzene	5.2 E-4	3.7 E-4	3.3 E-4	3.1 E-4	3.0 E-4	2.8 E-4	2.3 E-4	2.1 E-4	2.1 E-4	2.0 E-4	1.9 E-4
Bromodichloromethane	2.0 E-4	1.4 E-4	1.2 E-4	1.2 E-4	1.1 E-4	1.0 E-4	8.3 E-5	7.7 E-5	7.5 E-5	7.2 E-5	7.0 E-5
Carbon Tetrachloride	4.7 E-4	3.3 E-4	2.9 E-4	2.8 E-4	2.7 E-4	2.5 E-4	2.1 E-4	1.9 E-4	1.9 E-4	1.8 E-4	1.7 E-4
Chloroform	5.9 E-4	4.2 E-4	3.8 E-4	3.6 E-4	3.4 E-4	3.3 E-4	2.7 E-4	2.5 E-4	2.4 E-4	2.3 E-4	2.3 E-4
cis-1,2-Dichloroethene	4.5 E-4	3.1 E-4	2.8 E-4	2.7 E-4	2.5 E-4	2.5 E-4	2.0 E-4	1.8 E-4	1.8 E-4	1.7 E-4	1.6 E-4
Ethylbenzene	4.6 E-4	3.2 E-4	2.8 E-4	2.7 E-4	2.6 E-4	2.5 E-4	2.0 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.7 E-4
Freon 113	4.7 E-4	3.3 E-4	2.9 E-4	2.8 E-4	2.7 E-4	2.7 E-4	2.1 E-4	1.9 E-4	1.9 E-4	1.8 E-4	1.7 E-4
Freon 12	4.1 E-4	2.9 E-4	2.6 E-4	2.4 E-4	2.3 E-4	2.3 E-4	1.8 E-4	1.7 E-4	1.6 E-4	1.5 E-4	1.5 E-4
Heptane	9.3 E-4	7.0 E-4	6.4 E-4	6.1 E-4	5.8 E-4	5.8 E-4	4.7 E-4	4.4 E-4	4.3 E-4	4.1 E-4	4.0 E-4
Hexane	9.3 E-4	7.0 E-4	6.4 E-4	6.1 E-4	5.8 E-4	5.6 E-4	4.7 E-4	4.4 E-4	4.3 E-4	4.1 E-4	4.0 E-4
Methylene Chloride	5.8 E-4	4.1 E-4	3.7 E-4	3.5 E-4	3.3 E-4	3.2 E-4	2.6 E-4	2.4 E-4	2.4 E-4	2.3 E-4	2.2 E-4
Tetrachloroethylene	4.4 E-4	3.1 E-4	2.7 E-4	2.6 E-4	2.5 E-4	2.4 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.7 E-4	1.6 E-4
Tetrahydrofuran	6.0 E-4	4.3 E-4	3.8 E-4	3.6 E-4	3.5 E-4	3.5 E-4	2.7 E-4	2.5 E-4	2.5 E-4	2.4 E-4	2.3 E-4
trans-1,2-Dichloroethene	4.3 E-4	3.0 E-4	2.7 E-4	2.6 E-4	2.4 E-4	2.4 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.6 E-4	1.6 E-4
Trichloroethylene	4.8 E-4	3.3 E-4	3.0 E-4	2.8 E-4	2.7 E-4	2.7 E-4	2.1 E-4	1.9 E-4	1.9 E-4	1.8 E-4	1.8 E-4
Vinyl Chloride	6.0 E-4	4.3 E-4	3.8 E-4	3.7 E-4	3.5 E-4	3.5 E-4	2.7 E-4	2.5 E-4	2.5 E-4	2.4 E-4	2.3 E-4
1,1,1-Trichloroethane	4.7 E-4	3.3 E-4	2.9 E-4	2.8 E-4	2.7 E-4	2.7 E-4	2.1 E-4	1.9 E-4	1.9 E-4	1.8 E-4	1.7 E-4
1,2,4-Trimethylbenzene	3.8 E-4	2.6 E-4	2.4 E-4	2.2 E-4	2.1 E-4	2.1 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.4 E-4	1.4 E-4
2,2,4-Trimethylpentane	5.1 E-4	3.6 E-4	3.2 E-4	3.1 E-4	2.9 E-4	2.9 E-4	2.3 E-4	2.1 E-4	2.1 E-4	2.0 E-4	1.9 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	3.4 E-4	3.1 E-4	2.9 E-4	2.8 E-4	2.8 E-4	2.2 E-4	2.0 E-4	1.9 E-4	1.9 E-4	1.8 E-4
4-Ethyltoluene	5.1 E-4	3.6 E-4	3.2 E-4	3.1 E-4	2.9 E-4	2.9 E-4	2.3 E-4	2.1 E-4	2.1 E-4	2.0 E-4	1.9 E-4
4-Methyl-2-pentanone	4.6 E-4	3.2 E-4	2.9 E-4	2.7 E-4	2.6 E-4	2.6 E-4	2.0 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.7 E-4
Acetone	6.8 E-4	4.9 E-4	4.4 E-4	4.2 E-4	4.0 E-4	4.0 E-4	3.2 E-4	2.9 E-4	2.9 E-4	2.8 E-4	2.7 E-4
Carbon Disulfide	5.9 E-4	4.2 E-4	3.8 E-4	3.6 E-4	3.4 E-4	3.4 E-4	2.7 E-4	2.5 E-4	2.4 E-4	2.3 E-4	2.3 E-4
Cumene	4.0 E-4	2.8 E-4	2.5 E-4	2.4 E-4	2.3 E-4	2.3 E-4	1.7 E-4	1.6 E-4	1.6 E-4	1.5 E-4	1.5 E-4
Cyclohexane	4.8 E-4	3.4 E-4	3.0 E-4	2.9 E-4	2.7 E-4	2.7 E-4	2.1 E-4	2.0 E-4	1.9 E-4	1.8 E-4	1.8 E-4
Ethanol	8.4 E-4	6.3 E-4	5.7 E-4	5.4 E-4	5.2 E-4	5.2 E-4	4.1 E-4	3.9 E-4	3.7 E-4	3.6 E-4	3.5 E-4
Freon 11	5.1 E-4	3.6 E-4	3.2 E-4	3.1 E-4	2.9 E-4	2.9 E-4	2.3 E-4	2.1 E-4	2.1 E-4	2.0 E-4	1.9 E-4
m,p-Xylene	4.6 E-4	3.3 E-4	2.9 E-4	2.8 E-4	2.6 E-4	2.6 E-4	2.0 E-4	1.9 E-4	1.8 E-4	1.8 E-4	1.7 E-4
o-Xylene	5.1 E-4	3.6 E-4	3.2 E-4	3.1 E-4	2.9 E-4	2.9 E-4	2.3 E-4	2.1 E-4	2.1 E-4	2.0 E-4	1.9 E-4
Propylbenzene	3.8 E-4	2.6 E-4	2.3 E-4	2.2 E-4	2.1 E-4	2.1 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.4 E-4	1.4 E-4
Styrene	4.4 E-4	3.0 E-4	2.7 E-4	2.6 E-4	2.4 E-4	2.4 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.6 E-4	1.6 E-4
Toluene	5.1 E-4	3.6 E-4	3.2 E-4	3.1 E-4	2.9 E-4	2.9 E-4	2.3 E-4	2.1 E-4	2.1 E-4	2.0 E-4	1.9 E-4

Key:
bgs = Below ground surface

Table 5.2-12 Commercial Soil Vapor to Indoor Air Attenuation Factors
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors										
	Feet bgs										
Chemical/Feet bgs	**10**	**15**	**17**	**18**	**19**	**20**	**25**	**27**	**28**	**29**	**30**
1,1-Dichloroethane	2.3 E-4	1.6 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.2 E-4	9.9 E-5	9.2 E-5	8.9 E-5	8.6 E-5	8.3 E-5
1,1-Dichloroethene	2.6 E-4	1.9 E-4	1.7 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.2 E-4	1.1 E-4	1.1 E-4	1.0 E-4	9.9 E-5
1,2-Dichloroethane	2.9 E-4	2.1 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.6 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.2 E-4	1.1 E-4
1,3-Butadiene	5.3 E-4	4.1 E-4	3.7 E-4	3.6 E-4	3.4 E-4	3.3 E-4	2.8 E-4	2.6 E-4	2.5 E-4	2.5 E-4	2.4 E-4
1,4-Dioxane	3.0 E-4	2.1 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.7 E-4	1.3 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.1 E-4
2-Propanol	2.6 E-4	1.9 E-4	1.7 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.2 E-4	1.1 E-4	1.1 E-4	1.0 E-4	9.9 E-5
Benzene	2.6 E-4	1.8 E-4	1.6 E-4	1.6 E-4	1.5 E-4	1.4 E-4	1.2 E-4	1.1 E-4	1.0 E-4	1.0 E-4	9.7 E-5
Bromodichloromethane	1.0 E-4	6.9 E-5	6.1 E-5	5.8 E-5	5.5 E-5	5.2 E-5	4.2 E-5	3.9 E-5	3.7 E-5	3.6 E-5	3.5 E-5
Carbon Tetrachloride	2.4 E-4	1.6 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.0 E-4	9.6 E-5	9.3 E-5	9.0 E-5	8.7 E-5
Chloroform	2.9 E-4	2.1 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.6 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.2 E-4	1.1 E-4
cis-1,2-Dichloroethene	2.2 E-4	1.6 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.3 E-4	9.8 E-5	9.1 E-5	8.8 E-5	8.5 E-5	8.2 E-5
Ethylbenzene	2.3 E-4	1.6 E-4	1.4 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.0 E-4	9.3 E-5	9.0 E-5	8.7 E-5	8.4 E-5
Freon 113	2.4 E-4	1.6 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.0 E-4	9.6 E-5	9.3 E-5	9.0 E-5	8.7 E-5
Freon 12	2.1 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.2 E-4	8.9 E-5	8.3 E-5	8.0 E-5	7.7 E-5	7.5 E-5
Heptane	4.6 E-4	3.5 E-4	3.2 E-4	3.0 E-4	2.9 E-4	2.9 E-4	2.3 E-4	2.2 E-4	2.1 E-4	2.1 E-4	2.0 E-4
Hexane	4.6 E-4	3.5 E-4	3.2 E-4	3.0 E-4	2.9 E-4	2.8 E-4	2.3 E-4	2.2 E-4	2.1 E-4	2.1 E-4	2.0 E-4
Methylene Chloride	2.9 E-4	2.1 E-4	1.8 E-4	1.8 E-4	1.7 E-4	1.6 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.1 E-4	1.1 E-4
Tetrachloroethylene	2.2 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.2 E-4	9.6 E-5	8.9 E-5	8.6 E-5	8.3 E-5	8.1 E-5
Tetrahydrofuran	3.0 E-4	2.1 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.7 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.2 E-4
trans-1,2-Dichloroethene	2.2 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.2 E-4	9.4 E-5	8.8 E-5	8.5 E-5	8.2 E-5	7.9 E-5
Trichloroethylene	2.4 E-4	1.7 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.0 E-4	9.7 E-5	9.4 E-5	9.1 E-5	8.8 E-5
Vinyl Chloride	3.0 E-4	2.1 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.7 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.2 E-4
1,1,1-Trichloroethane	2.4 E-4	1.7 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.0 E-4	9.6 E-5	9.3 E-5	9.0 E-5	8.7 E-5
1,2,4-Trimethylbenzene	1.9 E-4	1.3 E-4	1.2 E-4	1.1 E-4	1.1 E-4	1.1 E-4	8.2 E-5	7.6 E-5	7.3 E-5	7.1 E-5	6.9 E-5
2,2,4-Trimethylpentane	2.6 E-4	1.8 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.5 E-4	1.1 E-4	1.1 E-4	1.0 E-4	9.9 E-5	9.6 E-5
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.7 E-4	1.5 E-4	1.5 E-4	1.4 E-4	1.4 E-4	1.1 E-4	1.0 E-4	9.7 E-5	9.4 E-5	9.1 E-5
4-Ethyltoluene	2.6 E-4	1.8 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.5 E-4	1.1 E-4	1.1 E-4	1.0 E-4	9.9 E-5	9.6 E-5
4-Methyl-2-pentanone	2.3 E-4	1.6 E-4	1.4 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.0 E-4	9.3 E-5	9.0 E-5	8.7 E-5	8.4 E-5
Acetone	3.4 E-4	2.4 E-4	2.2 E-4	2.1 E-4	2.0 E-4	2.0 E-4	1.6 E-4	1.5 E-4	1.4 E-4	1.4 E-4	1.3 E-4
Carbon Disulfide	2.9 E-4	2.1 E-4	1.9 E-4	1.8 E-4	1.7 E-4	1.7 E-4	1.3 E-4	1.2 E-4	1.2 E-4	1.2 E-4	1.1 E-4
Cumene	2.0 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.1 E-4	1.1 E-4	8.7 E-5	8.1 E-5	7.8 E-5	7.6 E-5	7.3 E-5
Cyclohexane	2.4 E-4	1.7 E-4	1.5 E-4	1.4 E-4	1.4 E-4	1.4 E-4	1.1 E-4	9.8 E-5	9.5 E-5	9.2 E-5	8.9 E-5
Ethanol	4.2 E-4	3.1 E-4	2.8 E-4	2.7 E-4	2.6 E-4	2.6 E-4	2.1 E-4	1.9 E-4	1.9 E-4	1.8 E-4	1.8 E-4
Freon 11	2.6 E-4	1.8 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.5 E-4	1.1 E-4	1.1 E-4	1.0 E-4	9.9 E-5	9.6 E-5
m,p-Xylene	2.3 E-4	1.6 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.3 E-4	1.0 E-4	9.5 E-5	9.2 E-5	8.9 E-5	8.6 E-5
o-Xylene	2.6 E-4	1.8 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.5 E-4	1.1 E-4	1.1 E-4	1.0 E-4	9.9 E-5	9.6 E-5
Propylbenzene	1.9 E-4	1.3 E-4	1.2 E-4	1.1 E-4	1.1 E-4	1.1 E-4	8.1 E-5	7.5 E-5	7.3 E-5	7.0 E-5	6.8 E-5
Styrene	2.2 E-4	1.5 E-4	1.4 E-4	1.3 E-4	1.2 E-4	1.2 E-4	9.5 E-5	8.8 E-5	8.5 E-5	8.2 E-5	8.0 E-5
Toluene	2.6 E-4	1.8 E-4	1.6 E-4	1.5 E-4	1.5 E-4	1.5 E-4	1.1 E-4	1.1 E-4	1.0 E-4	9.9 E-5	9.6 E-5

Key:
bgs = Below ground surface

Table 5.2-13

Source Partitioning Coefficients and Attenuation Factors For Soil Vapor to Outdoor Air
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Attenuation Factor for Sample Depth (Feet bgs)										
Chemical of Potential Concern	**Diffusivity in Air (cm^2/s)**	**10**	**15**	**17**	**18**	**19**	**20**	**25**	**27**	**28**	**29**	**30**
1,1-Dichloroethane	7.4 E-2	5.9 E-6	4.0 E-6	3.5 E-6	3.3 E-6	3.1 E-6	3.0 E-6	2.4 E-6	2.2 E-6	2.1 E-6	2.0 E-6	2.0 E-6
1,1-Dichloroethene	9.0 E-2	7.2 E-6	4.8 E-6	4.2 E-6	4.0 E-6	3.8 E-6	3.6 E-6	2.9 E-6	2.7 E-6	2.6 E-6	2.5 E-6	2.4 E-6
1,2-Dichloroethane	1.0 E-1	8.3 E-6	5.5 E-6	4.9 E-6	4.6 E-6	4.4 E-6	4.2 E-6	3.3 E-6	3.1 E-6	3.0 E-6	2.9 E-6	2.8 E-6
1,3-Butadiene	9.8 E-2	7.8 E-6	5.2 E-6	4.6 E-6	4.3 E-6	4.1 E-6	3.9 E-6	3.1 E-6	2.9 E-6	2.8 E-6	2.7 E-6	2.6 E-6
1,4-Dioxane	9.9 E-2	7.9 E-6	5.3 E-6	4.7 E-6	4.4 E-6	4.2 E-6	4.0 E-6	3.2 E-6	2.9 E-6	2.8 E-6	2.7 E-6	2.6 E-6
2-Propanol	8.6 E-2	6.9 E-6	4.6 E-6	4.0 E-6	3.8 E-6	3.6 E-6	3.4 E-6	2.7 E-6	2.5 E-6	2.5 E-6	2.4 E-6	2.3 E-6
Benzene	8.8 E-2	7.0 E-6	4.7 E-6	4.1 E-6	3.9 E-6	3.7 E-6	3.5 E-6	2.8 E-6	2.6 E-6	2.5 E-6	2.4 E-6	2.3 E-6
Bromodichloromethane	3.0 E-2	2.4 E-6	1.6 E-6	1.4 E-6	1.3 E-6	1.3 E-6	1.2 E-6	9.5 E-7	8.8 E-7	8.5 E-7	8.2 E-7	7.9 E-7
Carbon Tetrachloride	7.8 E-2	6.2 E-6	4.2 E-6	3.7 E-6	3.5 E-6	3.3 E-6	3.1 E-6	2.5 E-6	2.3 E-6	2.2 E-6	2.1 E-6	2.1 E-6
Chloroform	1.0 E-1	8.3 E-6	5.5 E-6	4.9 E-6	4.6 E-6	4.4 E-6	4.2 E-6	3.3 E-6	3.1 E-6	3.0 E-6	2.9 E-6	2.8 E-6
cis-1,2-Dichloroethene	7.4 E-2	5.9 E-6	3.9 E-6	3.5 E-6	3.3 E-6	3.1 E-6	2.9 E-6	2.4 E-6	2.2 E-6	2.1 E-6	2.0 E-6	2.0 E-6
Ethylbenzene	7.5 E-2	6.0 E-6	4.0 E-6	3.5 E-6	3.3 E-6	3.2 E-6	3.0 E-6	2.4 E-6	2.2 E-6	2.1 E-6	2.1 E-6	2.0 E-6
Freon 113	7.8 E-2	6.2 E-6	4.2 E-6	3.7 E-6	3.5 E-6	3.3 E-6	3.1 E-6	2.5 E-6	2.3 E-6	2.2 E-6	2.1 E-6	2.1 E-6
Freon 12	8.0 E-2	6.4 E-6	4.3 E-6	3.8 E-6	3.5 E-6	3.4 E-6	3.2 E-6	2.6 E-6	2.4 E-6	2.3 E-6	2.2 E-6	2.1 E-6
Heptane	6.8 E-2	5.5 E-6	3.6 E-6	3.2 E-6	3.0 E-6	2.9 E-6	2.7 E-6	2.2 E-6	2.0 E-6	2.0 E-6	1.9 E-6	1.8 E-6
Hexane	2.0 E-1	1.6 E-5	1.1 E-5	9.4 E-6	8.9 E-6	8.4 E-6	8.0 E-6	6.4 E-6	5.9 E-6	5.7 E-6	5.5 E-6	5.3 E-6
Methylene Chloride	1.0 E-1	8.1 E-6	5.4 E-6	4.7 E-6	4.5 E-6	4.2 E-6	4.0 E-6	3.2 E-6	3.0 E-6	2.9 E-6	2.8 E-6	2.7 E-6
Tetrachloroethylene	7.2 E-2	5.8 E-6	3.8 E-6	3.4 E-6	3.2 E-6	3.0 E-6	2.9 E-6	2.3 E-6	2.1 E-6	2.1 E-6	2.0 E-6	1.9 E-6
Tetrahydrofuran	1.1 E-1	8.4 E-6	5.6 E-6	4.9 E-6	4.7 E-6	4.4 E-6	4.2 E-6	3.4 E-6	3.1 E-6	3.0 E-6	2.9 E-6	2.8 E-6
trans-1,2-Dichloroethene	7.1 E-2	5.6 E-6	3.8 E-6	3.3 E-6	3.1 E-6	3.0 E-6	2.8 E-6	2.3 E-6	2.1 E-6	2.0 E-6	1.9 E-6	1.9 E-6
Trichloroethylene	7.9 E-2	6.3 E-6	4.2 E-6	3.7 E-6	3.5 E-6	3.3 E-6	3.2 E-6	2.5 E-6	2.3 E-6	2.3 E-6	2.2 E-6	2.1 E-6
Vinyl Chloride	7.9 E-2	6.3 E-6	4.2 E-6	3.7 E-6	3.5 E-6	3.3 E-6	3.2 E-6	2.5 E-6	2.3 E-6	2.3 E-6	2.2 E-6	2.1 E-6
1,1,1-Trichloroethane	7.8 E-2	6.2 E-6	4.2 E-6	3.7 E-6	3.5 E-6	3.3 E-6	3.1 E-6	2.5 E-6	2.3 E-6	2.2 E-6	2.1 E-6	2.1 E-6
1,2,4-Trimethylbenzene	6.1 E-2	4.8 E-6	3.2 E-6	2.8 E-6	2.7 E-6	2.5 E-6	2.4 E-6	1.9 E-6	1.8 E-6	1.7 E-6	1.7 E-6	1.6 E-6
2,2,4-Trimethylpentane	8.7 E-2	6.9 E-6	4.6 E-6	4.1 E-6	3.9 E-6	3.7 E-6	3.5 E-6	2.8 E-6	2.6 E-6	2.5 E-6	2.4 E-6	2.3 E-6
2-Butanone (Methyl Ethyl Ketone)	8.1 E-2	6.5 E-6	4.3 E-6	3.8 E-6	3.6 E-6	3.4 E-6	3.2 E-6	2.6 E-6	2.4 E-6	2.3 E-6	2.2 E-6	2.2 E-6
4-Ethyltoluene	8.7 E-2	6.9 E-6	4.6 E-6	4.1 E-6	3.9 E-6	3.7 E-6	3.5 E-6	2.8 E-6	2.6 E-6	2.5 E-6	2.4 E-6	2.3 E-6
4-Methyl-2-pentanone	7.5 E-2	6.0 E-6	4.0 E-6	3.5 E-6	3.3 E-6	3.2 E-6	3.0 E-6	2.4 E-6	2.2 E-6	2.1 E-6	2.1 E-6	2.0 E-6
Acetone	1.2 E-1	9.9 E-6	6.6 E-6	5.8 E-6	5.5 E-6	5.2 E-6	5.0 E-6	4.0 E-6	3.7 E-6	3.5 E-6	3.4 E-6	3.3 E-6
Carbon Disulfide	1.0 E-1	8.3 E-6	5.5 E-6	4.9 E-6	4.6 E-6	4.4 E-6	4.2 E-6	3.3 E-6	3.1 E-6	3.0 E-6	2.9 E-6	2.8 E-6
Cumene	6.5 E-2	5.2 E-6	3.5 E-6	3.1 E-6	2.9 E-6	2.7 E-6	2.6 E-6	2.1 E-6	1.9 E-6	1.9 E-6	1.8 E-6	1.7 E-6
Cyclohexane	8.0 E-2	6.4 E-6	4.3 E-6	3.8 E-6	3.5 E-6	3.4 E-6	3.2 E-6	2.6 E-6	2.4 E-6	2.3 E-6	2.2 E-6	2.1 E-6
Ethanol	1.6 E-1	1.3 E-5	8.4 E-6	7.4 E-6	7.0 E-6	6.6 E-6	6.3 E-6	5.0 E-6	4.6 E-6	4.5 E-6	4.3 E-6	4.2 E-6
Freon 11	8.7 E-2	6.9 E-6	4.6 E-6	4.1 E-6	3.9 E-6	3.7 E-6	3.5 E-6	2.8 E-6	2.6 E-6	2.5 E-6	2.4 E-6	2.3 E-6
m,p-Xylene	7.7 E-2	6.1 E-6	4.1 E-6	3.6 E-6	3.4 E-6	3.2 E-6	3.1 E-6	2.5 E-6	2.3 E-6	2.2 E-6	2.1 E-6	2.0 E-6
o-Xylene	8.7 E-2	6.9 E-6	4.6 E-6	4.1 E-6	3.9 E-6	3.7 E-6	3.5 E-6	2.8 E-6	2.6 E-6	2.5 E-6	2.4 E-6	2.3 E-6
Propylbenzene	6.0 E-2	4.8 E-6	3.2 E-6	2.8 E-6	2.7 E-6	2.5 E-6	2.4 E-6	1.9 E-6	1.8 E-6	1.7 E-6	1.7 E-6	1.6 E-6
Styrene	7.1 E-2	5.7 E-6	3.8 E-6	3.3 E-6	3.2 E-6	3.0 E-6	2.8 E-6	2.3 E-6	2.1 E-6	2.0 E-6	2.0 E-6	1.9 E-6
Toluene	8.7 E-2	6.9 E-6	4.6 E-6	4.1 E-6	3.9 E-6	3.7 E-6	3.5 E-6	2.8 E-6	2.6 E-6	2.5 E-6	2.4 E-6	2.3 E-6

Table 5.2-13 ***Source Partitioning Coefficients and Attenuation Factors For Soil Vapor to Outdoor Air***
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

a = USEPA, 1988, Superfund Exposure Assessment Manual

$$\text{Ambient Air Attenuation Factor} = \frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm3/m3}}$$

Dia =	chemical specif	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	2.0 E+7	cm^2	Area (assume 4500 cm x 4500 cm)
d =	3.0 E+2	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2.0	m	Breathing zone height
u =	3.0	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
bgs = Below ground surface
cm^2/s = Square Centimeter per second
cm = Centimeter
m = Meter
m/s = Meter per second
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
cm^3 = Cubic centimeter
m^3 = Cubic meter

Table 5.2-14 Residential Soil Vapor to Indoor Air Attenuation Factors
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors				
	Feet bgs				
Chemical/Feet bgs	**10**	**20**	**28**	**30**	**40**
1,1-Dichloroethane	4.5 E-4	2.4 E-4	1.8 E-4	1.7 E-4	1.3 E-4
1,4-Dichlorobenzene	4.3 E-4	2.4 E-4	1.7 E-4	1.6 E-4	1.2 E-4
1,4-Dioxane	5.9 E-4	3.4 E-4	2.4 E-4	2.3 E-4	1.7 E-4
Benzene	5.2 E-4	2.8 E-4	2.1 E-4	1.9 E-4	1.5 E-4
Bromodichloromethane	2.0 E-4	1.0 E-4	7.5 E-5	7.0 E-5	5.2 E-5
Carbon Tetrachloride	4.7 E-4	2.5 E-4	1.9 E-4	1.7 E-4	1.3 E-4
Chloroform	5.9 E-4	3.3 E-4	2.4 E-4	2.3 E-4	1.7 E-4
Hexachlorobutadiene	3.6 E-4	2.0 E-4	1.4 E-4	1.3 E-4	9.7 E-5
Tetrachloroethene	4.4 E-4	2.4 E-4	1.7 E-4	1.6 E-4	1.2 E-4
Tetrahydrofuran	6.0 E-4	3.5 E-4	2.5 E-4	2.3 E-4	1.8 E-4
Trichloroethene	4.8 E-4	2.7 E-4	1.9 E-4	1.8 E-4	1.3 E-4
Vinyl Chloride	6.0 E-4	3.5 E-4	2.5 E-4	2.3 E-4	1.8 E-4
1,1,1-Trichloroethane	4.7 E-4	2.7 E-4	1.9 E-4	1.7 E-4	1.3 E-4
1,2,4-Trimethylbenzene	3.8 E-4	2.1 E-4	1.5 E-4	1.4 E-4	1.0 E-4
2,2,4-Trimethylpentane	5.1 E-4	2.9 E-4	2.1 E-4	1.9 E-4	1.5 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	2.8 E-4	1.9 E-4	1.8 E-4	1.4 E-4
2-Propanol	5.2 E-4	3.0 E-4	2.1 E-4	2.0 E-4	1.5 E-4
4-Ethyltoluene	5.1 E-4	2.9 E-4	2.1 E-4	1.9 E-4	1.5 E-4
4-Methyl-2-Pentanone	4.6 E-4	2.6 E-4	1.8 E-4	1.7 E-4	1.3 E-4
Acetone	6.8 E-4	4.0 E-4	2.9 E-4	2.7 E-4	2.1 E-4
Carbon disulfide	5.9 E-4	3.4 E-4	2.4 E-4	2.3 E-4	1.7 E-4
cis-1,2-Dichloroethene	4.5 E-4	2.5 E-4	1.8 E-4	1.6 E-4	1.5 E-4
Cyclohexane	4.8 E-4	2.7 E-4	1.9 E-4	1.8 E-4	1.4 E-4
Ethanol	8.4 E-4	5.2 E-4	3.7 E-4	3.5 E-4	2.7 E-4
Ethylbenzene	4.6 E-4	2.5 E-4	1.8 E-4	1.7 E-4	1.3 E-4
Freon 11	5.1 E-4	2.9 E-4	2.1 E-4	1.9 E-4	1.5 E-4
Freon 113	4.7 E-4	2.7 E-4	1.9 E-4	1.7 E-4	1.3 E-4
Heptane	9.3 E-4	5.8 E-4	4.3 E-4	4.0 E-4	3.1 E-4
Hexane	9.3 E-4	5.6 E-4	4.3 E-4	4.0 E-4	3.1 E-4
m,p-Xylene	4.6 E-4	2.6 E-4	1.8 E-4	1.7 E-4	1.3 E-4
o-Xylene	5.1 E-4	2.9 E-4	2.1 E-4	1.9 E-4	1.5 E-4
Styrene	4.4 E-4	2.4 E-4	1.7 E-4	1.6 E-4	1.2 E-4
Toluene	5.1 E-4	2.9 E-4	2.1 E-4	1.9 E-4	1.5 E-4

Key:
bgs = Below ground surface

Table 5.2-15 Commercial Soil Vapor to Indoor Air Attenuation Factors
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors				
	Feet bgs				
Chemical/Feet bgs	**10**	**20**	**28**	**30**	**40**
1,1-Dichloroethane	2.3 E-4	1.2 E-4	8.9 E-5	8.3 E-5	6.3 E-5
1,4-Dichlorobenzene	2.1 E-4	1.2 E-4	8.3 E-5	7.8 E-5	5.9 E-5
1,4-Dioxane	3.0 E-4	1.7 E-4	1.2 E-4	1.1 E-4	8.7 E-5
Benzene	2.6 E-4	1.4 E-4	1.0 E-4	9.7 E-5	7.4 E-5
Bromodichloromethane	1.0 E-4	5.2 E-5	3.7 E-5	3.5 E-5	2.6 E-5
Carbon Tetrachloride	2.4 E-4	1.3 E-4	9.3 E-5	8.7 E-5	6.6 E-5
Chloroform	2.9 E-4	1.6 E-4	1.2 E-4	1.1 E-4	8.7 E-5
Hexachlorobutadiene	1.8 E-4	9.9 E-5	6.8 E-5	6.4 E-5	4.8 E-5
Tetrachloroethene	2.2 E-4	1.2 E-4	8.6 E-5	8.1 E-5	6.1 E-5
Tetrahydrofuran	3.0 E-4	1.7 E-4	1.2 E-4	1.2 E-4	8.8 E-5
Trichloroethene	2.4 E-4	1.3 E-4	9.4 E-5	8.8 E-5	6.7 E-5
Vinyl Chloride	3.0 E-4	1.7 E-4	1.2 E-4	1.2 E-4	8.8 E-5
1,1,1-Trichloroethane	2.4 E-4	1.3 E-4	9.3 E-5	8.7 E-5	6.6 E-5
1,2,4-Trimethylbenzene	1.9 E-4	1.1 E-4	7.3 E-5	6.9 E-5	5.2 E-5
2,2,4-Trimethylpentane	2.6 E-4	1.5 E-4	1.0 E-4	9.6 E-5	7.3 E-5
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.4 E-4	9.7 E-5	9.1 E-5	6.9 E-5
2-Propanol	2.6 E-4	1.5 E-4	1.1 E-4	9.9 E-5	7.5 E-5
4-Ethyltoluene	2.6 E-4	1.5 E-4	1.0 E-4	9.6 E-5	7.3 E-5
4-Methyl-2-Pentanone	2.3 E-4	1.3 E-4	9.0 E-5	8.4 E-5	6.4 E-5
Acetone	3.4 E-4	2.0 E-4	1.4 E-4	1.3 E-4	1.0 E-4
Carbon disulfide	2.9 E-4	1.7 E-4	1.2 E-4	1.1 E-4	8.7 E-5
cis-1,2-Dichloroethene	2.2 E-4	1.3 E-4	8.8 E-5	8.2 E-5	6.3 E-5
Cyclohexane	2.4 E-4	1.4 E-4	9.5 E-5	8.9 E-5	6.8 E-5
Ethanol	4.2 E-4	2.6 E-4	1.9 E-4	1.8 E-4	1.4 E-4
Ethylbenzene	2.3 E-4	1.2 E-4	9.0 E-5	8.4 E-5	6.4 E-5
Freon 11	2.6 E-4	1.5 E-4	1.0 E-4	9.6 E-5	7.3 E-5
Freon 113	2.4 E-4	1.3 E-4	9.3 E-5	8.7 E-5	6.6 E-5
Heptane	4.6 E-4	2.9 E-4	2.1 E-4	2.0 E-4	1.6 E-4
Hexane	4.6 E-4	2.8 E-4	2.1 E-4	2.0 E-4	1.6 E-4
m,p-Xylene	2.3 E-4	1.3 E-4	9.2 E-5	8.6 E-5	6.5 E-5
o-Xylene	2.6 E-4	1.5 E-4	1.0 E-4	9.6 E-5	7.3 E-5
Styrene	2.2 E-4	1.2 E-4	8.5 E-5	8.0 E-5	6.1 E-5
Toluene	2.6 E-4	1.5 E-4	1.0 E-4	9.6 E-5	7.3 E-5

Key:
bgs = Below ground surface

Table 5.2-16 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air*
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Soil Vapor		Feet bgs					
Chemical of Potential Concern	Diffusivity in Air (cm^2/s)	10	20	28	28	30	40
1,1,1-Trichloroethane	7.8 E-2	6.2 E-6	3.1 E-6	2.2 E-6	2.2 E-6	2.1 E-6	1.6 E-6
1,1-Dichloroethane	7.4 E-2	5.9 E-6	3.0 E-6	2.1 E-6	2.1 E-6	2.0 E-6	1.5 E-6
1,2,4-Trimethylbenzene	6.1 E-2	4.8 E-6	2.4 E-6	1.7 E-6	1.7 E-6	1.6 E-6	1.2 E-6
1,4-Dichlorobenzene	6.9 E-2	5.5 E-6	2.8 E-6	2.0 E-6	2.0 E-6	1.8 E-6	1.4 E-6
1,4-Dioxane	9.9 E-2	7.9 E-6	4.0 E-6	2.8 E-6	2.8 E-6	2.6 E-6	2.0 E-6
2,2,4-Trimethylpentane	8.7 E-2	6.9 E-6	3.5 E-6	2.5 E-6	2.5 E-6	2.3 E-6	1.7 E-6
2-Butanone (Methyl Ethyl Ketone)	8.1 E-2	6.5 E-6	3.2 E-6	2.3 E-6	2.3 E-6	2.2 E-6	1.6 E-6
2-Propanol	8.6 E-2	6.9 E-6	3.4 E-6	2.5 E-6	2.5 E-6	2.3 E-6	1.7 E-6
4-Ethyltoluene	8.7 E-2	6.9 E-6	3.5 E-6	2.5 E-6	2.5 E-6	2.3 E-6	1.7 E-6
4-Methyl-2-pentanone	7.5 E-2	6.0 E-6	3.0 E-6	2.1 E-6	2.1 E-6	2.0 E-6	1.5 E-6
Acetone	1.2 E-1	9.9 E-6	5.0 E-6	3.5 E-6	3.5 E-6	3.3 E-6	2.5 E-6
Benzene	8.8 E-2	7.0 E-6	3.5 E-6	2.5 E-6	2.5 E-6	2.3 E-6	1.8 E-6
Bromodichloromethane	3.0 E-2	2.4 E-6	1.2 E-6	8.5 E-7	8.5 E-7	7.9 E-7	5.9 E-7
Carbon disulfide	1.0 E-1	8.3 E-6	4.2 E-6	3.0 E-6	3.0 E-6	2.8 E-6	2.1 E-6
Carbon Tetrachloride	7.8 E-2	6.2 E-6	3.1 E-6	2.2 E-6	2.2 E-6	2.1 E-6	1.6 E-6
Chloroform	1.0 E-1	8.3 E-6	4.2 E-6	3.0 E-6	3.0 E-6	2.8 E-6	2.1 E-6
cis-1,2-Dichloroethene	7.4 E-2	5.9 E-6	2.9 E-6	2.1 E-6	2.1 E-6	2.0 E-6	1.5 E-6
Cyclohexane	8.0 E-2	6.4 E-6	3.2 E-6	2.3 E-6	2.3 E-6	2.1 E-6	1.6 E-6
Ethanol	1.6 E-1	1.3 E-5	6.3 E-6	4.5 E-6	4.5 E-6	4.2 E-6	3.1 E-6
Ethylbenzene	7.5 E-2	6.0 E-6	3.0 E-6	2.1 E-6	2.1 E-6	2.0 E-6	1.5 E-6
Freon 11	6.7 E-2	5.3 E-6	2.7 E-6	1.9 E-6	1.9 E-6	1.8 E-6	1.3 E-6
Freon 113	7.8 E-2	6.2 E-6	3.1 E-6	2.2 E-6	2.2 E-6	2.1 E-6	1.6 E-6
Heptane	2.0 E-1	1.6 E-5	8.0 E-6	5.7 E-6	5.7 E-6	5.3 E-6	4.0 E-6
Hexachlorobutadiene	5.6 E-2	4.5 E-6	2.2 E-6	1.6 E-6	1.6 E-6	1.5 E-6	1.1 E-6
Hexane	2.0 E-1	1.6 E-5	8.0 E-6	5.7 E-6	5.7 E-6	5.3 E-6	4.0 E-6
m,p-Xylene	7.7 E-2	6.1 E-6	3.1 E-6	2.2 E-6	2.2 E-6	2.0 E-6	1.5 E-6
o-Xylene	7.7 E-2	6.1 E-6	3.1 E-6	2.2 E-6	2.2 E-6	2.0 E-6	1.5 E-6
Styrene	7.1 E-2	5.7 E-6	2.8 E-6	2.0 E-6	2.0 E-6	1.9 E-6	1.4 E-6
Tetrachloroethene	7.2 E-2	5.8 E-6	2.9 E-6	2.1 E-6	2.1 E-6	1.9 E-6	1.4 E-6
Tetrahydrofuran	1.1 E-1	8.4 E-6	4.2 E-6	3.0 E-6	3.0 E-6	2.8 E-6	2.1 E-6
Toluene	8.7 E-2	6.9 E-6	3.5 E-6	2.5 E-6	2.5 E-6	2.3 E-6	1.7 E-6
trans-1,2-Dichloroethene	7.1 E-2	5.6 E-6	2.8 E-6	2.0 E-6	2.0 E-6	1.9 E-6	1.4 E-6
Trichloroethene	7.9 E-2	6.3 E-6	3.2 E-6	2.3 E-6	2.3 E-6	2.1 E-6	1.6 E-6
Vinyl Chloride	7.9 E-2	6.3 E-6	3.2 E-6	2.3 E-6	2.3 E-6	2.1 E-6	1.6 E-6

a = USEPA, 1988, Superfund Exposure Assessment Manual

Ambient Air Attenuation $\frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm3/m3}}$

Dia =	chemical specif	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	2.0 E+7	cm^2	Area (assume 4500 cm x 4500 cm)
d =	305	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2.0	m	Breathing zone height
u =	3.0	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
bgs = Below ground surface
cm^2/s = Square Centimeter per second
cm = Centimeter
m = Meter
m/s = Meter per second
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
cm^3 = Cubic centimeter
m^3 = Cubic meter

Table 5.2-17 Residential Groundwater to Indoor Air Attenuation Factors
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	AF (µg/m³ per µg/L)	
	Layer	
Chemical	**S (21 ft bgs)**	**Y (10 feet bgs)**
1,1,2,2-Tetrachloroethane	2.7 E-3	5.0 E-3
1,1,2-Trichloroethane	7.9 E-3	1.4 E-2
1,1-Dichloroethane	4.7 E-2	8.5 E-2
1,1-Dichloroethene	2.6 E-1	4.7 E-1
1,2,4-Trimethylbenzene	4.2 E-2	7.6 E-2
1,2-Dichloroethane	1.1 E-2	1.9 E-2
1,2-Dichloroethene (cis/trans)	3.4 E-2	6.1 E-2
1,4-Dichlorobenzene	1.8 E-2	3.3 E-2
1,4-Dioxane	1.0 E-4	1.9 E-4
2-Methylnaphthalene	3.0 E-3	5.5 E-3
Benzene	5.4 E-2	9.6 E-2
Bromodichloromethane	5.7 E-3	1.1 E-2
Carbon tetrachloride	2.7 E-1	4.8 E-1
Chloroform	4.2 E-2	7.3 E-2
cis-1,2-Dichloroethene	3.4 E-2	6.1 E-2
Freon 113	4.2 E+0	7.6 E+0
Methylene chloride	2.4 E-2	4.3 E-2
Naphthalene	3.2 E-3	5.8 E-3
o-Xylene	4.9 E-2	8.8 E-2
p-Isopropyltoluene	1.1 E-1	1.9 E-1
Tetrachloroethene	1.5 E-1	2.7 E-1
Trichloroethene	9.1 E-2	1.6 E-1
Vinyl chloride	3.2 E-1	5.5 E-1
Xylenes (total)	4.9 E-2	8.8 E-2
1,2-Dichlorobenzene	1.5 E-2	2.6 E-2
Dichlorodifluoromethane	2.6 E+0	4.7 E+0
m-Xylene	5.7 E-2	1.0 E-1
n-Butylbenzene	8.4 E-2	1.5 E-1
p-Xylene	6.5 E-2	1.2 E-1
sec-Butylbenzene	5.2 E-2	9.5 E-2
Toluene	6.4 E-2	1.1 E-1
trans-1,2-Dichloroethene	7.5 E-2	1.4 E-1

Key:
AF = Attenuation Factor
bgs = Below ground surface
ft = Feet
µg/m³ = Micrograms per cubic meter
µg/L = Micrograms per liter

Table 5.2-18 Commercial Groundwater to Indoor Air Attenuation Factors
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	AF (µg/m³ per µg/L)	
	Layer	
Chemical	**S (21 ft bgs)**	**Y (10 feet bgs)**
1,1,2,2-Tetrachloroethane	1.4 E-3	2.5 E-3
1,1,2-Trichloroethane	4.0 E-3	7.1 E-3
1,1-Dichloroethane	2.4 E-2	4.2 E-2
1,1-Dichloroethene	1.3 E-1	2.3 E-1
1,2,4-Trimethylbenzene	2.1 E-2	3.8 E-2
1,2-Dichloroethane	5.5 E-3	9.7 E-3
1,2-Dichloroethene (cis/trans)	1.7 E-2	3.1 E-2
1,4-Dichlorobenzene	9.2 E-3	1.7 E-2
1,4-Dioxane	5.1 E-5	9.4 E-5
2-Methylnaphthalene	1.5 E-3	2.8 E-3
Benzene	2.7 E-2	4.8 E-2
Bromodichloromethane	2.8 E-3	5.3 E-3
Carbon tetrachloride	1.3 E-1	2.4 E-1
Chloroform	2.1 E-2	3.7 E-2
cis-1,2-Dichloroethene	1.7 E-2	3.1 E-2
Freon 113	2.1 E+0	3.8 E+0
Methylene chloride	1.2 E-2	2.1 E-2
Naphthalene	1.6 E-3	2.9 E-3
o-Xylene	2.5 E-2	4.4 E-2
p-Isopropyltoluene	5.3 E-2	9.6 E-2
Tetrachloroethene	7.4 E-2	1.3 E-1
Trichloroethene	4.5 E-2	8.2 E-2
Vinyl chloride	1.6 E-1	2.8 E-1
Xylenes (total)	2.5 E-2	4.4 E-2
1,2-Dichlorobenzene	7.3 E-3	1.3 E-2
Dichlorodifluoromethane	1.3 E+0	2.4 E+0
m-Xylene	2.9 E-2	5.2 E-2
n-Butylbenzene	4.2 E-2	7.7 E-2
p-Xylene	3.3 E-2	5.9 E-2
sec-Butylbenzene	2.6 E-2	4.8 E-2
Toluene	3.2 E-2	5.7 E-2
trans-1,2-Dichloroethene	3.8 E-2	6.8 E-2

Key:
AF = Attenuation Factor
bgs = Below ground surface
ft = Feet
µg/m^3 = Micrograms per cubic meter
µg/L = Micrograms per liter

Table 5.2-19 *Surface Water Unit Hazard and Unit Cancer Risk Results - Resident*
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Surface Water Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Unit HI	Oral ILCR	Dermal ILCR	Unit ILCR
Inorganics										
Aluminum	1.0 E+0	1.1 E-7	1.4 E-8	1.2 E-7	2.3 E-8	4.9 E-9	2.8 E-8	NA	NA	NA
Antimony	1.0 E+0	2.7 E-4	2.4 E-4	5.2 E-4	5.9 E-5	8.2 E-5	1.4 E-4	NA	NA	NA
Arsenic	1.0 E+0	3.7 E-4	4.8 E-5	4.1 E-4	7.8 E-5	1.6 E-5	9.5 E-5	1.6 E-7	2.8 E-8	1.9 E-7
Beryllium	1.0 E+0	5.5 E-5	1.0 E-3	1.1 E-3	1.2 E-5	3.5 E-4	3.6 E-4	NA	NA	NA
Cadmium	1.0 E+0	1.1 E-4	2.9 E-4	4.0 E-4	2.3 E-5	9.8 E-5	1.2 E-4	NA	NA	NA
Copper	1.0 E+0	3.0 E-6	3.9 E-7	3.4 E-6	6.3 E-7	1.3 E-7	7.7 E-7	NA	NA	NA
Iron	1.0 E+0	1.6 E-7	2.1 E-8	1.8 E-7	3.4 E-8	7.0 E-9	4.1 E-8	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	1.0 E+0	4.6 E-6	1.5 E-5	2.0 E-5	9.8 E-7	5.1 E-6	6.1 E-6	NA	NA	NA
Nickel	1.0 E+0	5.5 E-6	3.6 E-6	9.1 E-6	1.2 E-6	1.2 E-6	2.4 E-6	NA	NA	NA
Nitrate as NO3	1.0 E+0	6.8 E-8	9.0 E-9	7.8 E-8	1.5 E-8	3.1 E-9	1.8 E-8	NA	NA	NA
Thallium	1.0 E+0	1.7 E-3	2.2 E-4	1.9 E-3	3.6 E-4	7.4 E-5	4.3 E-4	NA	NA	NA
Vanadium	1.0 E+0	2.2 E-5	1.1 E-4	1.3 E-4	4.7 E-6	3.8 E-5	4.2 E-5	NA	NA	NA
Zinc	1.0 E+0	3.7 E-7	2.9 E-8	3.9 E-7	7.8 E-8	9.8 E-9	8.8 E-8	NA	NA	NA
Volatile Organic Compounds										
Bromodichloromethane	1.0 E+0	5.5 E-6	8.6 E-6	1.4 E-5	1.2 E-6	3.8 E-6	5.0 E-6	2.3 E-9	5.3 E-9	7.6 E-9
Bromoform	1.0 E+0	5.5 E-6	7.3 E-6	1.3 E-5	1.2 E-6	3.3 E-6	4.4 E-6	1.4 E-10	2.8 E-10	4.1 E-10
Chloroform	1.0 E+0	1.1 E-5	1.9 E-5	3.0 E-5	2.3 E-6	8.6 E-6	1.1 E-5	5.4 E-10	1.4 E-9	2.0 E-9
Dibromochloromethane	1.0 E+0	5.5 E-6	8.0 E-6	1.3 E-5	1.2 E-6	3.6 E-6	4.7 E-6	1.6 E-9	3.6 E-9	5.2 E-9
Tetrachloroethene	1.0 E+0	1.1 E-5	1.3 E-4	1.4 E-4	2.3 E-6	5.6 E-5	5.8 E-5	9.4 E-9	1.6 E-7	1.7 E-7

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.2-20
Surface Water Location-Specific Risk Assessment Results-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/L)																		
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Beryllium**	**Bromodichloromethane**	**Bromoform**	**Cadmium**	**Chloroform**	**Copper**	**Dibromochloromethane**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Tetrachloroethene**	**Thallium**	**Vanadium**	**Zinc**
Unit Hazard Child		1.2 E-7	5.2 E-4	4.1 E-4	1.1 E-3	1.4 E-5	1.3 E-5	4.0 E-4	3.0 E-5	3.4 E-6	1.3 E-5	1.8 E-7	NA	2.0 E-5	9.1 E-6	7.8 E-8	1.4 E-4	1.9 E-3	1.3 E-4	3.9 E-7
Unit Hazard Adult		2.8 E-8	1.4 E-4	9.5 E-5	3.6 E-4	5.0 E-6	4.4 E-6	1.2 E-4	1.1 E-5	7.7 E-7	4.7 E-6	4.1 E-8	NA	6.1 E-6	2.4 E-6	1.8 E-8	5.8 E-5	4.3 E-4	4.2 E-5	8.8 E-8
Unit Risk		NA	NA	1.9 E-7	NA	7.6 E-9	4.1 E-10	NA	2.0 E-9	NA	5.2 E-9	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA
03D-SW03-1.0	1	220						0.052		61		300	0.53	20	0.76				0.87	41
03D-SW04-1.0						1.2	0.92		15	140	0.25	48	0.20	7.4	0.49	390				23
05D-SW05-1.0		65	1.4					0.12		13		90	1.0		0.99	1400				
09D-SW02-1.0		11000		1.1						28		12000	14	370	11	4500			24	240
11D-SW01-1.0		160	3.2					1.1		3.9		160	1.4	14	1.8	2300	0.21			2100
03D-SW01-1.5	1.5		0.57					0.54		9.7			0.93		1.6	5400				880
08D-SW01-1.5		3600		0.95	0.11					4.3		2600	1.3	16	3.1	2000			8.5	18
05D-SW04-2	2	1200						0.096		4.9		1200	4.8	19	2.0	970			3.3	58
12D-SW01-2.0		10000		1.3						14		11000	6.2	210	11	5700			24	65
09D-SW01-3.0	3	4200						0.14				3500		38	6.3	2500				82
09D-SW03-3.0		5800		1.1	0.099			0.13		13		4400	6.5	52	4.9	1800			15	88
05D-SW01-4	4	3300		1.0				0.36		13		3500	11	65	5.2	760		0.18	9.1	230
05D-SW03-4		1700						0.12		5.1		1700	5.8	26	2.4	1000			3.7	52
03D-SW02-4.5	4.5	71						0.059		20		140	1.5		0.83	930				70
05D-SW02-6	6	2100						0.13		4.9		2200	2.5	26	3.2	1300			5.5	93
05D-SW05-1.0-T	NA																			110
09D-SW01-3.0-T				0.86	0.08					13			3.4						14	

Table 5.2-20
Surface Water Location-Specific Risk Assessment Results-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Beryllium**	**Bromodichloromethane**	**Bromoform**	**Cadmium**	**Chloroform**	**Copper**	**Dibromochloromethane**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Tetrachloroethene**	**Thallium**	**Vanadium**	**Zinc**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SW03-1.0	1	2.7 E-5	NA	NA	NA	NA	NA	2.1 E-5	NA	2.0 E-4	NA	5.3 E-5	NA	3.9 E-4	6.9 E-6	NA	NA	NA	1.2 E-4	1.6 E-5	8.4 E-4
03D-SW04-1.0		NA	NA	NA	NA	1.7 E-5	1.2 E-5	NA	4.5 E-4	4.7 E-4	3.4 E-6	8.5 E-6	NA	1.5 E-4	4.5 E-6	3.0 E-5	NA	NA	NA	9.1 E-6	1.2 E-3
05D-SW05-1.0		8.1 E-6	7.2 E-4	NA	NA	NA	NA	4.8 E-5	NA	4.4 E-5	NA	1.6 E-5	NA	NA	9.0 E-6	1.1 E-4	NA	NA	NA	NA	9.5 E-4
09D-SW02-1.0		1.4 E-3	NA	4.5 E-4	NA	NA	NA	NA	NA	9.4 E-5	NA	2.1 E-3	NA	7.3 E-3	1.0 E-4	3.5 E-4	NA	NA	3.2 E-3	9.5 E-5	1.5 E-2
11D-SW01-1.0		2.0 E-5	1.6 E-3	NA	NA	NA	NA	4.4 E-4	NA	1.3 E-5	NA	2.8 E-5	NA	2.7 E-4	1.6 E-5	1.8 E-4	2.9 E-5	NA	NA	8.3 E-4	3.5 E-3
03D-SW01-1.5	1.5	NA	2.9 E-4	NA	NA	NA	NA	2.2 E-4	NA	3.3 E-5	NA	NA	NA	NA	1.5 E-5	4.2 E-4	NA	NA	NA	3.5 E-4	1.3 E-3
08D-SW01-1.5		4.5 E-4	NA	3.9 E-4	1.2 E-4	NA	NA	NA	NA	1.4 E-5	NA	4.6 E-4	NA	3.1 E-4	2.8 E-5	1.6 E-4	NA	NA	1.1 E-3	7.1 E-6	3.1 E-3
05D-SW04-2	2	1.5 E-4	NA	NA	NA	NA	NA	3.8 E-5	NA	1.6 E-5	NA	2.1 E-4	NA	3.7 E-4	1.8 E-5	7.5 E-5	NA	NA	4.4 E-4	2.3 E-5	1.3 E-3
12D-SW01-2.0		1.2 E-3	NA	5.4 E-4	NA	NA	NA	NA	NA	4.7 E-5	NA	1.9 E-3	NA	4.1 E-3	1.0 E-4	4.4 E-4	NA	NA	3.2 E-3	2.6 E-5	1.2 E-2
09D-SW01-3.0	3	5.2 E-4	NA	NA	NA	NA	NA	5.6 E-5	NA	NA	NA	6.2 E-4	NA	7.5 E-4	5.7 E-5	1.9 E-4	NA	NA	NA	3.2 E-5	2.2 E-3
09D-SW03-3.0		7.2 E-4	NA	4.5 E-4	1.1 E-4	NA	NA	5.2 E-5	NA	4.4 E-5	NA	7.8 E-4	NA	1.0 E-3	4.5 E-5	1.4 E-4	NA	NA	2.0 E-3	3.5 E-5	5.4 E-3
05D-SW01-4	4	4.1 E-4	NA	4.1 E-4	NA	NA	NA	1.4 E-4	NA	4.4 E-5	NA	6.2 E-4	NA	1.3 E-3	4.7 E-5	5.9 E-5	NA	3.4 E-4	1.2 E-3	9.1 E-5	4.7 E-3
05D-SW03-4		2.1 E-4	NA	NA	NA	NA	NA	4.8 E-5	NA	1.7 E-5	NA	3.0 E-4	NA	5.1 E-4	2.2 E-5	7.8 E-5	NA	NA	4.9 E-4	2.0 E-5	1.7 E-3
03D-SW02-4.5	4.5	8.8 E-6	NA	NA	NA	NA	NA	2.4 E-5	NA	6.7 E-5	NA	2.5 E-5	NA	NA	7.5 E-6	7.2 E-5	NA	NA	NA	2.8 E-5	2.3 E-4
05D-SW02-6	6	2.6 E-4	NA	NA	NA	NA	NA	5.2 E-5	NA	1.6 E-5	NA	3.9 E-4	NA	5.1 E-4	2.9 E-5	1.0 E-4	NA	NA	7.3 E-4	3.7 E-5	2.1 E-3
05D-SW05-1.0-T	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	4.3 E-5
09D-SW01-3.0-T		NA	NA	3.6 E-4	8.7 E-5	NA	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	2.4 E-3

Table 5.2-20
Surface Water Location-Specific Risk Assessment Results-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Beryllium**	**Bromodichloromethane**	**Bromoform**	**Cadmium**	**Chloroform**	**Copper**	**Dibromochloromethane**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Tetrachloroethene**	**Thallium**	**Vanadium**	**Zinc**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SW03-1.0	1	6.2 E-6	NA	NA	NA	NA	NA	6.3 E-6	NA	4.7 E-5	NA	1.2 E-5	NA	1.2 E-4	1.8 E-6	NA	NA	NA	3.7 E-5	3.6 E-6	2.4 E-4
03D-SW04-1.0		NA	NA	NA	NA	6.0 E-6	4.1 E-6	NA	1.6 E-4	1.1 E-4	1.2 E-6	1.9 E-6	NA	4.5 E-5	1.2 E-6	6.9 E-6	NA	NA	NA	2.0 E-6	3.4 E-4
05D-SW05-1.0		1.8 E-6	2.0 E-4	NA	NA	NA	NA	1.5 E-5	NA	1.0 E-5	NA	3.6 E-6	NA	NA	2.4 E-6	2.5 E-5	NA	NA	NA	NA	2.5 E-4
09D-SW02-1.0		3.1 E-4	NA	1.0 E-4	NA	NA	NA	NA	NA	2.1 E-5	NA	4.9 E-4	NA	2.3 E-3	2.6 E-5	8.0 E-5	NA	NA	1.0 E-3	2.1 E-5	4.3 E-3
11D-SW01-1.0		4.5 E-6	4.5 E-4	NA	NA	NA	NA	1.3 E-4	NA	3.0 E-6	NA	6.5 E-6	NA	8.5 E-5	4.3 E-6	4.1 E-5	1.2 E-5	NA	NA	1.8 E-4	9.2 E-4
03D-SW01-1.5	1.5	NA	8.0 E-5	NA	NA	NA	NA	6.6 E-5	NA	7.4 E-6	NA	NA	NA	NA	3.8 E-6	9.6 E-5	NA	NA	NA	7.8 E-5	3.3 E-4
08D-SW01-1.5		1.0 E-4	NA	9.0 E-5	4.0 E-5	NA	NA	NA	NA	3.3 E-6	NA	1.1 E-4	NA	9.7 E-5	7.4 E-6	3.5 E-5	NA	NA	3.6 E-4	1.6 E-6	8.4 E-4
05D-SW04-2	2	3.4 E-5	NA	NA	NA	NA	NA	1.2 E-5	NA	3.8 E-6	NA	4.9 E-5	NA	1.2 E-4	4.8 E-6	1.7 E-5	NA	NA	1.4 E-4	5.1 E-6	3.8 E-4
12D-SW01-2.0		2.8 E-4	NA	1.2 E-4	NA	NA	NA	NA	NA	1.1 E-5	NA	4.5 E-4	NA	1.3 E-3	2.6 E-5	1.0 E-4	NA	NA	1.0 E-3	5.7 E-6	3.3 E-3
09D-SW01-3.0	3	1.2 E-4	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	1.4 E-4	NA	2.3 E-4	1.5 E-5	4.4 E-5	NA	NA	NA	7.2 E-6	5.8 E-4
09D-SW03-3.0		1.6 E-4	NA	1.0 E-4	3.6 E-5	NA	NA	1.6 E-5	NA	1.0 E-5	NA	1.8 E-4	NA	3.2 E-4	1.2 E-5	3.2 E-5	NA	NA	6.4 E-4	7.8 E-6	1.5 E-3
05D-SW01-4	4	9.4 E-5	NA	9.5 E-5	NA	NA	NA	4.4 E-5	NA	1.0 E-5	NA	1.4 E-4	NA	4.0 E-4	1.2 E-5	1.3 E-5	NA	7.7 E-5	3.9 E-4	2.0 E-5	1.3 E-3
05D-SW03-4		4.8 E-5	NA	NA	NA	NA	NA	1.5 E-5	NA	3.9 E-6	NA	6.9 E-5	NA	1.6 E-4	5.8 E-6	1.8 E-5	NA	NA	1.6 E-4	4.6 E-6	4.8 E-4
03D-SW02-4.5	4.5	2.0 E-6	NA	NA	NA	NA	NA	7.2 E-6	NA	1.5 E-5	NA	5.7 E-6	NA	NA	2.0 E-6	1.6 E-5	NA	NA	NA	6.2 E-6	5.5 E-5
05D-SW02-6	6	6.0 E-5	NA	NA	NA	NA	NA	1.6 E-5	NA	3.8 E-6	NA	8.9 E-5	NA	1.6 E-4	7.7 E-6	2.3 E-5	NA	NA	2.3 E-4	8.2 E-6	6.0 E-4
05D-SW05-1.0-T	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-6	9.7 E-6
09D-SW01-3.0-T		NA	NA	8.1 E-5	2.9 E-5	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	7.1 E-4

Table 5.2-20
Surface Water Location-Specific Risk Assessment Results-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				Blood Lead	
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Beryllium**	**Bromodichloromethane**	**Bromoform**	**Cadmium**	**Chloroform**	**Copper**	**Dibromochloromethane**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Tetrachloroethene**	**Thallium**	**Vanadium**	**Zinc**	**ILCR**	**Child**	**Adult**
Unit Hazard Child																							
Unit Hazard Adult																							
Unit Risk																							
03D-SW03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7	0.77
03D-SW04-1.0		NA	NA	NA	NA	9.1 E-9	3.8 E-10	NA	2.9 E-8	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	1.7	0.77
05D-SW05-1.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7	0.77
09D-SW02-1.0		NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	2.0	0.85
11D-SW01-1.0		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	4 E-8	1.7	0.77
03D-SW01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7	0.77
08D-SW01-1.5		NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	1.7	0.77
05D-SW04-2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8	0.79
12D-SW01-2.0		NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	1.8	0.80
09D-SW01-3.0	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
09D-SW03-3.0		NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	1.9	0.81
05D-SW01-4	4	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	2.0	0.83
05D-SW03-4		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8	0.80
03D-SW02-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7	0.78
05D-SW02-6	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8	0.78
05D-SW05-1.0-T	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
09D-SW01-3.0-T		NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	1.8	0.79

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.2-21 All Receptors Hazard Index and Cancer Risk Results for Surface Water
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	Blood Lead	
		Resident			Resident	
Sample Name	**Depth**	**Child**	**Adult**	**Resident**	**Child**	**Adult**
03D-SW03-1.0	1	8.4 E-4	2.4 E-4	**NA**	1.7 E+0	7.7 E-1
03D-SW04-1.0		1.2 E-3	3.4 E-4	4 E-8	1.7 E+0	7.7 E-1
05D-SW05-1.0		9.5 E-4	2.5 E-4	**NA**	1.7 E+0	7.7 E-1
09D-SW02-1.0		1.5 E-2	4.3 E-3	2 E-7	2.0 E+0	8.5 E-1
11D-SW01-1.0		3.5 E-3	9.2 E-4	4 E-8	1.7 E+0	7.7 E-1
03D-SW01-1.5	1.5	1.3 E-3	3.3 E-4	**NA**	1.7 E+0	7.7 E-1
08D-SW01-1.5		3.1 E-3	8.4 E-4	2 E-7	1.7 E+0	7.7 E-1
05D-SW04-2	2	1.3 E-3	3.8 E-4	**NA**	1.8 E+0	7.9 E-1
12D-SW01-2.0		1.2 E-2	3.3 E-3	3 E-7	1.8 E+0	8.0 E-1
09D-SW01-3.0	3	2.2 E-3	5.8 E-4	**NA**	**NA**	**NA**
09D-SW03-3.0		5.4 E-3	1.5 E-3	2 E-7	1.9 E+0	8.1 E-1
05D-SW01-4	4	4.7 E-3	1.3 E-3	2 E-7	2.0 E+0	8.3 E-1
05D-SW03-4		1.7 E-3	4.8 E-4	**NA**	1.8 E+0	8.0 E-1
03D-SW02-4.5	4.5	2.3 E-4	5.5 E-5	**NA**	1.7 E+0	7.8 E-1
05D-SW02-6	6	2.1 E-3	6.0 E-4	**NA**	1.8 E+0	7.8 E-1
05D-SW05-1.0-T	NA	4.3 E-5	9.7 E-6	**NA**	**NA**	**NA**
09D-SW01-3.0-T		2.4 E-3	7.1 E-4	2 E-7	1.8 E+0	7.9 E-1
Minimum		4.3 E-5	9.7 E-6	4 E-8	1.7 E+0	7.7 E-1
Median		2.1 E-3	5.8 E-4	2 E-7	1.8 E+0	7.8 E-1
Maximum		1.5 E-2	4.3 E-3	3 E-7	2.0 E+0	8.5 E-1

Notes and Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.2-22 *Groundwater Unit Hazard and Unit Cancer Risk Results-Resident*
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Groundwater Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Aluminum	1.0 E+0	6.4 E-5	2.8 E-6	NA	6.7 E-5	2.7 E-5	9.5 E-7	NA	2.8 E-5	NA	NA	NA	NA
Antimony	1.0 E+0	1.6 E-1	7.0 E-3	NA	1.7 E-1	6.8 E-2	2.4 E-3	NA	7.1 E-2	NA	NA	NA	NA
Arsenic	1.0 E+0	2.1 E-1	1.4 E-3	NA	2.1 E-1	9.1 E-2	4.8 E-4	NA	9.2 E-2	1.4 E-4	8.1 E-7	NA	1.4 E-4
Barium	1.0 E+0	3.2 E-4	3.0 E-5	NA	3.5 E-4	1.4 E-4	1.0 E-5	NA	1.5 E-4	NA	NA	NA	NA
Beryllium	1.0 E+0	3.2 E-2	3.0 E-2	NA	6.2 E-2	1.4 E-2	1.0 E-2	NA	2.4 E-2	NA	NA	NA	NA
Boron	1.0 E+0	3.2 E-4	2.1 E-6	NA	3.2 E-4	1.4 E-4	7.2 E-7	NA	1.4 E-4	NA	NA	NA	NA
Cadmium	1.0 E+0	6.4 E-2	8.4 E-3	NA	7.2 E-2	2.7 E-2	2.9 E-3	NA	3.0 E-2	NA	NA	NA	NA
Cobalt	1.0 E+0	3.2 E-3	8.4 E-6	NA	3.2 E-3	1.4 E-3	2.9 E-6	NA	1.4 E-3	NA	NA	NA	NA
Copper	1.0 E+0	1.7 E-3	1.1 E-5	NA	1.7 E-3	7.4 E-4	3.9 E-6	NA	7.4 E-4	NA	NA	NA	NA
Chromium VI	1.0 E+0	2.1 E-2	1.1 E-2	NA	3.3 E-2	9.1 E-3	3.8 E-3	NA	1.3 E-2	NA	NA	NA	NA
Iron	1.0 E+0	9.1 E-5	6.0 E-7	NA	9.2 E-5	3.9 E-5	2.0 E-7	NA	3.9 E-5	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lithium	1.0 E+0	3.2 E-3	2.1 E-5	NA	3.2 E-3	1.4 E-3	7.2 E-6	NA	1.4 E-3	NA	NA	NA	NA
Manganese	1.0 E+0	2.7 E-3	4.4 E-4	NA	3.1 E-3	1.1 E-3	1.5 E-4	NA	1.3 E-3	NA	NA	NA	NA
Mercury	1.0 E+0	2.1 E-1	2.0 E-2	NA	2.3 E-1	9.1 E-2	6.8 E-3	NA	9.8 E-2	NA	NA	NA	NA
Molybdenum	1.0 E+0	1.3 E-2	8.4 E-5	NA	1.3 E-2	5.5 E-3	2.9 E-5	NA	5.5 E-3	NA	NA	NA	NA
Nickel	1.0 E+0	3.2 E-3	1.1 E-4	NA	3.3 E-3	1.4 E-3	3.6 E-5	NA	1.4 E-3	NA	NA	NA	NA
Nitrate as NO3	1.0 E+0	4.0 E-5	2.6 E-7	NA	4.0 E-5	1.7 E-5	8.9 E-8	NA	1.7 E-5	NA	NA	NA	NA
Nitrite as NO2	1.0 E+0	4.0 E-4	2.6 E-6	NA	4.0 E-4	1.7 E-4	8.9 E-7	NA	1.7 E-4	NA	NA	NA	NA
Perchlorate	1.0 E+0	9.1 E-2	6.0 E-4	NA	9.2 E-2	3.9 E-2	2.0 E-4	NA	3.9 E-2	NA	NA	NA	NA
Thallium	1.0 E+0	9.7 E-1	6.4 E-3	NA	9.7 E-1	4.2 E-1	2.2 E-3	NA	4.2 E-1	NA	NA	NA	NA
Titanium	1.0 E+0	1.6 E-5	1.1 E-7	NA	1.6 E-5	6.8 E-6	3.6 E-8	NA	6.9 E-6	NA	NA	NA	NA
Vanadium	1.0 E+0	1.3 E-2	3.2 E-3	NA	1.6 E-2	5.5 E-3	1.1 E-3	NA	6.6 E-3	NA	NA	NA	NA
Zinc	1.0 E+0	2.1 E-4	8.4 E-7	NA	2.1 E-4	9.1 E-5	2.9 E-7	NA	9.2 E-5	NA	NA	NA	NA
Semivolatile Organic Compounds													
Anthracene	1.0 E+0	2.1 E-4	2.1 E-3	NA	2.3 E-3	9.1 E-5	9.3 E-4	NA	1.0 E-3	NA	NA	NA	NA
Benzo (a) anthracene	1.0 E+0	NA	0.0 E+0	NA	NA	NA	0.0 E+0	NA	NA	1.1 E-5	0.0 E+0	NA	1.1 E-5
Bis(2-ethylhexyl)phthalate	1.0 E+0	3.2 E-3	0.0 E+0	NA	3.2 E-3	1.4 E-3	0.0 E+0	NA	1.4 E-3	2.1 E-7	0.0 E+0	NA	2.1 E-7
Fluorene	1.0 E+0	1.6 E-3	1.1 E-2	NA	1.2 E-2	6.8 E-4	4.8 E-3	NA	5.4 E-3	NA	NA	NA	NA
N-Nitrosodimethylamine	1.0 E+0	8.0 E+0	2.1 E+0	NA	1.0 E+1	3.4 E+0	8.9 E-1	NA	4.3 E+0	7.6 E-4	2.0 E-4	NA	9.6 E-4
PCB-1254	1.0 E+0	3.2 E+0	5.8 E+1	NA	6.2 E+1	1.4 E+0	2.6 E+1	NA	2.7 E+1	7.4 E-5	1.4 E-3	NA	1.5 E-3
Phenanthrene	1.0 E+0	2.1 E-3	5.6 E-3	NA	7.7 E-3	9.1 E-4	2.5 E-3	NA	3.4 E-3	NA	NA	NA	NA
Volatile Organic Compounds													
1,1,2,2-Tetrachloroethane	1.0 E+0	1.1 E-3	1.3 E-4	5.3 E-3	6.5 E-3	4.6 E-4	5.8 E-5	2.3 E-3	2.8 E-3	4.0 E-6	5.0 E-7	1.5 E-5	1.9 E-5
1,1,2-Trichloroethane	1.0 E+0	1.6 E-2	1.4 E-3	8.0 E-2	9.7 E-2	6.8 E-3	6.4 E-4	3.4 E-2	4.2 E-2	1.1 E-6	9.9 E-8	4.2 E-6	5.4 E-6
1,1-Dichloroethane	1.0 E+0	3.2 E-4	2.5 E-5	1.6 E-3	1.9 E-3	1.4 E-4	1.1 E-5	6.8 E-4	8.3 E-4	8.5 E-8	6.6 E-9	4.2 E-7	5.2 E-7
1,1-Dichloroethene	1.0 E+0	1.3 E-3	1.8 E-4	1.6 E-2	1.7 E-2	5.5 E-4	7.6 E-5	6.8 E-3	7.5 E-3	NA	NA	NA	NA
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E-2	1.7 E-1	1.6 E-1	3.6 E-1	1.4 E-2	7.5 E-2	6.8 E-2	1.6 E-1	NA	NA	NA	NA
1,2-Dichlorobenzene	1.0 E+0	7.1 E-4	4.5 E-4	4.6 E-2	4.7 E-2	3.0 E-4	2.0 E-4	2.0 E-2	2.0 E-2	NA	NA	NA	NA
1,2-Dichloroethane	1.0 E+0	3.2 E-3	1.6 E-4	2.3 E-1	2.3 E-1	1.4 E-3	6.7 E-5	9.8 E-2	9.9 E-2	1.4 E-6	6.6 E-8	6.8 E-6	8.2 E-6
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA

Table 5.2-22 ***Groundwater Unit Hazard and Unit Cancer Risk Results-Resident***
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Groundwater Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
1,4-Dichlorobenzene	1.0 E+0	2.1 E-3	1.4 E-3	1.4 E-3	4.9 E-3	9.1 E-4	6.1 E-4	6.0 E-4	2.1 E-3	3.6 E-7	2.4 E-7	1.6 E-6	2.2 E-6
1,4-Dioxane	1.0 E+0	NA	NA	3.7 E-4	3.7 E-4	NA	NA	1.6 E-4	1.6 E-4	4.0 E-7	1.4 E-9	2.0 E-6	2.4 E-6
2-Methylnaphthalene	1.0 E+0	1.6 E-2	8.2 E-2	NA	9.8 E-2	6.8 E-3	3.7 E-2	NA	4.3 E-2	NA	NA	NA	NA
Benzene	1.0 E+0	1.6 E-2	2.4 E-3	3.7 E-2	5.6 E-2	6.8 E-3	1.0 E-3	1.6 E-2	2.4 E-2	1.5 E-6	2.3 E-7	7.4 E-6	9.2 E-6
Bromodichloromethane	1.0 E+0	3.2 E-3	2.5 E-4	1.6 E-2	1.9 E-2	1.4 E-3	1.1 E-4	6.8 E-3	8.3 E-3	1.9 E-6	1.6 E-7	9.7 E-6	1.2 E-5
Carbon tetrachloride	1.0 E+0	9.1 E-2	2.4 E-2	2.8 E-2	1.4 E-1	3.9 E-2	1.0 E-2	1.2 E-2	6.2 E-2	2.2 E-6	5.9 E-7	1.1 E-5	1.4 E-5
Chloroform	1.0 E+0	6.4 E-3	5.6 E-4	2.5 E-2	3.2 E-2	2.7 E-3	2.5 E-4	1.1 E-2	1.4 E-2	4.6 E-7	4.1 E-8	6.0 E-6	6.5 E-6
cis-1,2-Dichloroethene	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA
Dichlorodifluoromethane	1.0 E+0	3.2 E-4	3.7 E-5	5.6 E-3	6.0 E-3	1.4 E-4	1.7 E-5	2.4 E-3	2.6 E-3	NA	NA	NA	NA
Freon 113	1.0 E+0	2.1 E-6	7.2 E-6	3.7 E-5	4.6 E-5	9.1 E-7	3.9 E-6	1.6 E-5	2.1 E-5	NA	NA	NA	NA
Methylene chloride	1.0 E+0	1.1 E-3	4.0 E-5	3.7 E-4	1.5 E-3	4.6 E-4	1.7 E-5	1.6 E-4	6.3 E-4	2.1 E-7	7.8 E-9	2.6 E-7	4.8 E-7
m-Xylene	1.0 E+0	3.2 E-4	2.0 E-4	1.1 E-2	1.2 E-2	1.4 E-4	8.9 E-5	4.8 E-3	5.0 E-3	NA	NA	NA	NA
Naphthalene	1.0 E+0	3.2 E-3	2.1 E-3	3.7 E-1	3.8 E-1	1.4 E-3	9.1 E-4	1.6 E-1	1.6 E-1	NA	NA	8.9 E-6	8.9 E-6
n-Butylbenzene	1.0 E+0	6.4 E-3	3.2 E-2	3.2 E-2	7.0 E-2	2.7 E-3	1.4 E-2	1.4 E-2	3.1 E-2	NA	NA	NA	NA
o-Xylene	1.0 E+0	3.2 E-4	2.0 E-4	1.1 E-2	1.2 E-2	1.4 E-4	8.9 E-5	4.8 E-3	5.0 E-3	NA	NA	NA	NA
p-Isopropyltoluene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
p-Xylene	1.0 E+0	3.2 E-4	2.0 E-4	1.1 E-2	1.2 E-2	1.4 E-4	8.9 E-5	4.8 E-3	5.0 E-3	NA	NA	NA	NA
sec-Butylbenzene	1.0 E+0	6.4 E-3	3.0 E-2	3.2 E-2	6.8 E-2	2.7 E-3	1.3 E-2	1.4 E-2	3.0 E-2	NA	NA	NA	NA
Tetrachloroethene	1.0 E+0	6.4 E-3	3.7 E-3	3.2 E-2	4.2 E-2	2.7 E-3	1.6 E-3	1.4 E-2	1.8 E-2	8.0 E-6	4.7 E-6	1.6 E-6	1.4 E-5
Toluene	1.0 E+0	8.0 E-4	2.7 E-4	3.7 E-3	4.8 E-3	3.4 E-4	1.2 E-4	1.6 E-3	2.1 E-3	NA	NA	NA	NA
trans-1,2-Dichloroethene	1.0 E+0	3.2 E-3	2.8 E-4	1.9 E-2	2.2 E-2	1.4 E-3	1.2 E-4	8.1 E-3	9.5 E-3	NA	NA	NA	NA
Trichloroethene	1.0 E+0	2.1 E-1	3.6 E-2	1.9 E-3	2.5 E-1	9.1 E-2	1.6 E-2	8.0 E-4	1.1 E-1	1.9 E-7	3.3 E-8	5.2 E-7	7.5 E-7
Vinyl chloride	1.0 E+0	2.1 E-2	1.2 E-3	1.1 E-2	3.3 E-2	9.1 E-3	4.9 E-4	4.7 E-3	1.4 E-2	2.2 E-5	1.2 E-6	2.0 E-5	4.4 E-5
Xylenes (total)	1.0 E+0	3.2 E-4	2.0 E-4	1.1 E-2	1.2 E-2	1.4 E-4	8.9 E-5	4.8 E-3	5.0 E-3	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.2-23 Groundwater Inhalation Hazard and Unit Cancer Risk Results-Resident Administration Area Management Area Boundary Operable Unit Risk Assessment Aerojet Superfund Site Sacramento County, California

Chemical	Indoor Vapor Concentration (µg/L)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds				
1,1,2,2-Tetrachloroethane	1.0 E+0	1.1 E+1	4.6 E+0	3.0 E-2
1,1,2-Trichloroethane	1.0 E+0	1.6 E+2	6.8 E+1	8.5 E-3
1,1-Dichloroethane	1.0 E+0	3.2 E+0	1.4 E+0	8.5 E-4
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
1,2-Dichlorobenzene	1.0 E+0	9.3 E+1	4.0 E+1	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E+1	2.7 E+1	NA
1,4-Dichlorobenzene	1.0 E+0	2.8 E+0	1.2 E+0	3.3 E-3
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2-Methylnaphthalene	1.0 E+0	NA	NA	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.9 E-2
Carbon tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Dichlorodifluoromethane	1.0 E+0	1.1 E+1	4.8 E+0	NA
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Methylene chloride	1.0 E+0	7.5 E-1	3.2 E-1	5.2 E-4
m-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Naphthalene	1.0 E+0	7.5 E+2	3.2 E+2	1.8 E-2
n-Butylbenzene	1.0 E+0	6.4 E+1	2.7 E+1	NA
o-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
p-Isopropyltoluene	1.0 E+0	NA	NA	NA
p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
sec-Butylbenzene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Tetrachloroethene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Toluene	1.0 E+0	7.4 E+0	3.2 E+0	NA
trans-1,2-Dichloroethene	1.0 E+0	3.8 E+1	1.6 E+1	NA
Trichloroethene	1.0 E+0	3.7 E+0	1.6 E+0	1.0 E-3
Vinyl chloride	1.0 E+0	2.2 E+1	9.4 E+0	4.0 E-2
Xylenes (total)	1.0 E+0	2.2 E+1	9.6 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter

Table 5.2-24 Groundwater Inhalation Hazard and Unit Cancer Risk Results-Commercial Worker
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Indoor Vapor Concentration (µg/L)	Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds			
1,1,2,2-Tetrachloroethane	1.0 E+0	3.3 E+0	1.4 E-2
1,1,2-Trichloroethane	1.0 E+0	4.9 E+1	4.0 E-3
1,1-Dichloroethane	1.0 E+0	9.8 E-1	4.0 E-4
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,2-Dichlorobenzene	1.0 E+0	2.8 E+1	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,2-Dichloroethene (cis/trans)	1.0 E+0	2.0 E+1	NA
1,4-Dichlorobenzene	1.0 E+0	8.5 E-1	1.5 E-3
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
2-Methylnaphthalene	1.0 E+0	NA	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Bromodichloromethane	1.0 E+0	9.8 E+0	9.1 E-3
Carbon tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Dichlorodifluoromethane	1.0 E+0	3.4 E+0	NA
Freon 113	1.0 E+0	2.3 E-2	NA
Methylene chloride	1.0 E+0	2.3 E-1	2.4 E-4
m-Xylene	1.0 E+0	6.8 E+0	NA
Naphthalene	1.0 E+0	2.3 E+2	8.4 E-3
n-Butylbenzene	1.0 E+0	2.0 E+1	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
p-Isopropyltoluene	1.0 E+0	NA	NA
p-Xylene	1.0 E+0	6.8 E+0	NA
sec-Butylbenzene	1.0 E+0	2.0 E+1	NA
Tetrachloroethene	1.0 E+0	2.0 E+1	1.5 E-3
Toluene	1.0 E+0	2.3 E+0	NA
trans-1,2-Dichloroethene	1.0 E+0	1.2 E+1	NA
Trichloroethene	1.0 E+0	1.1 E+0	4.9 E-4
Vinyl chloride	1.0 E+0	6.7 E+0	1.9 E-2
Xylenes (total)	1.0 E+0	6.8 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

		Concentration (ug/L)																		
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2-Methylnaphthalene**	**Anthracene**	**Benzene**	**Benzo (a) anthracene**	**Bis(2-ethylhexyl)phthalate**	**Bromodichloromethane**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child		6.5 E-3	9.7 E-2	1.9 E-3	1.7 E-2	3.6 E-1	4.7 E-2	2.3 E-1	3.9 E-2	4.9 E-3	3.7 E-4	9.8 E-2	2.3 E-3	5.6 E-2	NA	3.2 E-3	1.9 E-2	1.4 E-1	3.2 E-2	3.9 E-2
Unit Hazard Adult		2.8 E-3	4.2 E-2	8.3 E-4	7.5 E-3	1.6 E-1	2.0 E-2	9.9 E-2	1.7 E-2	2.1 E-3	1.6 E-4	4.3 E-2	1.0 E-3	2.4 E-2	NA	1.4 E-3	8.3 E-3	6.2 E-2	1.4 E-2	1.7 E-2
Unit Risk		1.9 E-5	5.4 E-6	5.2 E-7	NA	NA	NA	8.2 E-6	NA	2.2 E-6	2.4 E-6	NA	NA	9.2 E-6	1.1 E-5	2.1 E-7	1.2 E-5	1.4 E-5	6.5 E-6	NA
100	C			10	130			24	66									15	14	74
107	C		0.25	32	4.8				12										12	
193	C								0.84											1.2
195	C			3.5	0.74			1.3	85										11	61
3310	C			2.7	33			4.6	23									1.7	2.9	24
3400	C			2.1	28			4.7	2.9							16		2.7	2.4	9.7
3401	C			0.53	5.7			0.98								20				5.3
3514	C		0.50	6.3	130			21	40		16							10	18	94
3519	C			1.7	20			15	11									3.4	4.4	
3627	C		3.5	13	160			24	56		37							12	14	50
193-T	C																			
195-T	C																			
105	D			7.5	75			16	26									3.4	21	
188	D			23	2.5			0.81	180										12	170
189	D			2.4	1.3				83										5.4	15
190	D																			
194	D																			
203	D																			
3311	D																			
3312	D																			
3402	D															71				
3515	D																			
3526	D																			
3527	D																			
191	E								1.6											
196	E																			
197	E																			22
204	E																			
3313	E																			
3516	E																			
3528	E																			
205	F																			
3314	F																			
106	S			8.0					120										2.0	
133	S			15	6.0			0.58	100										8.5	180
192	S			3.6	0.30				19										6.8	27
262	S			11					260				2.6	1.6	0.090	8400				0.72
263	S	37		32	140				3100			24							4.6	72
268	S																		0.51	
269	S			7.9	19								0.18							940
273	S		0.55	6.6	120			0.24	380				0.13						9.4	370
274	S			7.8	5.6				180										9.3	98
275	S			0.33															9.8	5.9
501	S															11				
3655	S			5.9	0.89														5.6	94
3679	S		0.47	62	7.6			2.0											21	470
3680	S			0.39																4.4
3681	S			25	3.2			0.91											8.2	190
3684	S			0.80	8.8			0.77										0.51	2.3	2.4
3693	S					1.3	0.83					28								5.0
3694	S																			
3695	S			3.3	1.1														3.7	55
3681-T	S																			
71	Y								2.0								2.0		37	
644	Y						9.7		69	3.3										32
645	Y																		57	
879	Y																0.86		41	
880	Y																		8.8	
881	Y			13		4.6	1.6		57							5.5				21
882	Y	7.0			6.4				12											27
71-T	Y																		9.7	
882-T	Y																			

Table 5.2-25a
Groundwater Location-Specific Risk Assessment Results for Organics-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)																			
Sample Name	Layer	Dichlorodifluoromethane	Fluorene	Freon 113	Methylene chloride	m-Xylene	Naphthalene	n-Butylbenzene	N-Nitrosodimethylamine	o-Xylene	PCB-1254	Phenanthrene	p-Isopropyltoluene	p-Xylene	sec-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Xylenes (total)
Unit Hazard Child		6.0 E-3	1.2 E-2	4.6 E-5	1.5 E-3	1.2 E-2	3.8 E-1	7.0 E-2	1.0 E+1	1.2 E-2	6.2 E+1	7.7 E-3	NA	1.2 E-2	6.8 E-2	4.2 E-2	4.8 E-3	2.2 E-2	2.5 E-1	3.3 E-2	1.2 E-2
Unit Hazard Adult		2.6 E-3	5.4 E-3	2.1 E-5	6.3 E-4	5.0 E-3	1.6 E-1	3.1 E-2	4.3 E+0	5.0 E-3	2.7 E+1	3.4 E-3	NA	5.0 E-3	3.0 E-2	1.8 E-2	2.1 E-3	9.5 E-3	1.1 E-1	1.4 E-2	5.0 E-3
Unit Risk		NA	NA	NA	4.8 E-7	NA	8.9 E-6	NA	9.6 E-4	NA	1.5 E-3	NA	NA	NA	NA	1.4 E-5	NA	NA	7.5 E-7	4.4 E-5	NA
100	C															94			2500		
107	C															0.57		1.0	17	24	
193	C																		0.73		
195	C			3.1															240		
3310	C				27											3.1	1.2	0.3	520		
3400	C															4.4	0.27		300		
3401	C															1.5	0.60		82		
3514	C								0.0032							18	0.32	0.34	3900	0.36	
3519	C								0.0014							15			1500		
3627	C								0.015							17			2100		
193-T	C															1.3			0.28		
195-T	C																	1.9			
105	D															21			1400	4.6	
188	D																	6.0	100		
189	D																		38		
190	D																				
194	D																				
203	D																				
3311	D																				
3312	D																				
3402	D															1.3			1.1		
3515	D																		0.78		
3526	D			1.2															6.9		
3527	D																				
191	E																		23		
196	E																				
197	E																				
204	E																				
3313	E																				
3516	E																				
3528	E																				
205	F																				
3314	F																				
106	S			31												13			790		
133	S								0.0046							0.25		0.92	190	38	
192	S															12			7.3	0.34	
262	S		1.8	21		5.0	2.4	0.56				2000			0.38	17			7.0	70	16
263	S			2700			16									2900			1700	65	
268	S			1.1												4.6			5.6		
269	S	3.7	0.28	1000			0.33					0.32				3800		0.71	200	13	
273	S	23		1100			0.21					0.29				4300		0.52	2200	94	
274	S	9.5		570												86		0.51	980		
275	S															14			4.0		
501	S																				
3655	S	0.89							0.0035							5.1		0.46	99	1.3	
3679	S								0.023									1.7	130	0.68	
3680	S																		1.1		
3681	S																	4.7	22	0.22	
3684	S															5.3			170		
3693	S	8.5	0.30				23	1.8				3.8	0.26		2.8	1.7				13	0.92
3694	S																		36		
3695	S						0.25		0.0013							1.3			63		
3681-T	S								0.0067												
71	Y				1.4														1.0		
644	Y			8.0		2.0	0.16				14			1.0		5.0	4.3		0.46	10	
645	Y															17.5			2.0		
879	Y			29												57			0.24		
880	Y								0.0023							0.37			0.51		
881	Y	0.97	1.1	29		6.8	2.6	0.72		26	73	3.9	0.60	1.1	0.98	0.35	0.21		0.25		29
882	Y			1500					0.0015		1.3					1700		0.29	130		
71-T	Y																				
882-T	Y																				

		Child Non-Cancer Hazard Index																			
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dichlorobenzene	1,4-Dioxane	2-Methylnaphthalene	Anthracene	Benzene	Benzo (a) anthracene	Bis(2-ethylhexyl) phthalate	Bromodichloro methane	Carbon tetrachloride	Chloroform	cis-1,2-Dichloroethene	Dichlorodifluoromethane
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
100	C	NA	NA	1.9 E-2	2.3 E+0	NA	NA	5.6 E+0	2.6 E+0	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E+0	4.4 E-1	2.9 E+0	NA
107	C	NA	2.4 E-2	6.2 E-2	8.4 E-2	NA	NA	NA	4.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-1	NA	NA
193	C	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2	NA
195	C	NA	NA	6.8 E-3	1.3 E-2	NA	NA	3.0 E-1	3.3 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1	2.4 E+0	NA
3310	C	NA	NA	5.2 E-3	5.8 E-1	NA	NA	1.1 E+0	9.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1	9.1 E-2	9.3 E-1	NA
3400	C	NA	NA	4.1 E-3	4.9 E-1	NA	NA	1.1 E+0	1.1 E-1	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	3.9 E-1	7.6 E-2	3.8 E-1	NA
3401	C	NA	NA	1.0 E-3	9.9 E-2	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	NA	NA	2.1 E-1	NA
3514	C	NA	4.9 E-2	1.2 E-2	2.3 E+0	NA	NA	4.9 E+0	1.6 E+0	NA	6.0 E-3	NA	NA	NA	NA	NA	NA	1.4 E+0	5.7 E-1	3.7 E+0	NA
3519	C	NA	NA	3.3 E-3	3.5 E-1	NA	NA	3.5 E+0	4.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-1	1.4 E-1	NA	NA
3627	C	NA	3.4 E-1	2.5 E-2	2.8 E+0	NA	NA	5.6 E+0	2.2 E+0	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	1.7 E+0	4.4 E-1	1.9 E+0	NA
193-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
195-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
105	D	NA	NA	1.5 E-2	1.3 E+0	NA	NA	3.7 E+0	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-1	6.6 E-1	NA	NA
188	D	NA	NA	4.5 E-2	4.4 E-2	NA	NA	1.9 E-1	7.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-1	6.6 E+0	NA
189	D	NA	NA	4.7 E-3	2.3 E-2	NA	NA	NA	3.2 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	5.8 E-1	NA
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
203	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA
3515	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3526	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3527	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
191	E	NA	NA	NA	NA	NA	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-1	NA
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
106	S	NA	NA	1.6 E-2	NA	NA	NA	NA	4.7 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	NA
133	S	NA	NA	2.9 E-2	1.0 E-1	NA	NA	1.3 E-1	3.9 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-1	7.0 E+0	NA
192	S	NA	NA	7.0 E-3	5.2 E-3	NA	NA	NA	7.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1	1.1 E+0	NA
262	S	NA	NA	2.1 E-2	NA	NA	NA	NA	1.0 E+1	NA	NA	NA	6.0 E-3	8.9 E-2	NA	2.7 E+1	NA	NA	NA	2.8 E-2	NA
263	S	2.4 E-1	NA	6.2 E-2	2.4 E+0	NA	NA	NA	1.2 E+2	NA	NA	2.4 E+0	NA	NA	NA	NA	NA	NA	1.5 E-1	2.8 E+0	NA
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA
269	S	NA	NA	1.5 E-2	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	3.7 E+1	2.2 E-2
273	S	NA	5.4 E-2	1.3 E-2	2.1 E+0	NA	NA	5.6 E-2	1.5 E+1	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	3.0 E-1	1.4 E+1	1.4 E-1
274	S	NA	NA	1.5 E-2	9.8 E-2	NA	NA	NA	7.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-1	3.8 E+0	5.7 E-2
275	S	NA	NA	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	2.3 E-1	NA
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA
3655	S	NA	NA	1.1 E-2	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	3.7 E+0	5.3 E-3
3679	S	NA	4.6 E-2	1.2 E-1	1.3 E-1	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-1	1.8 E+1	NA
3680	S	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA
3681	S	NA	NA	4.9 E-2	5.6 E-2	NA	NA	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1	7.4 E+0	NA
3684	S	NA	NA	1.6 E-3	1.5 E-1	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-2	7.3 E-2	9.3 E-2	NA
3693	S	NA	NA	NA	NA	4.7 E-1	3.9 E-2	NA	NA	NA	NA	2.7 E+0	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	5.1 E-2
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	6.4 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	2.1 E+0	NA
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	7.8 E-2	NA	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	1.2 E+0	NA	NA
644	Y	NA	NA	NA	NA	NA	4.6 E-1	NA	2.7 E+0	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+0	NA
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E+0	NA	NA
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	1.3 E+0	NA	NA
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA
881	Y	NA	NA	2.5 E-2	NA	1.7 E+0	7.6 E-2	NA	2.2 E+0	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	8.0 E-1	5.8 E-3
882	Y	4.6 E-2	NA	NA	1.1 E-1	NA	NA	NA	4.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+0	NA
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Child Non-Cancer Hazard Index																			
Sample Name	Layer	Fluorene	Freon 113	Methylene chloride	m-Xylene	Naphthalene	n-Butylbenzene	N-Nitrosodimethylamine	o-Xylene	PCB-1254	Phenanthrene	p-Isopropyltoluene	p-Xylene	sec-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes (total)	HI
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
100	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E+0	NA	NA	6.3 E+2	NA	NA	6.5 E+2
107	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	2.2 E-2	4.3 E+0	8.0 E-1	NA	6.1 E+0
193	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	2.6 E-1
195	C	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E+1	NA	NA	6.6 E+1
3310	C	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	5.7 E-3	6.7 E-3	1.3 E+2	NA	NA	1.3 E+2
3400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	1.3 E-3	NA	7.5 E+1	NA	NA	7.8 E+1
3401	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2	2.9 E-3	NA	2.1 E+1	NA	NA	2.1 E+1
3514	C	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	7.6 E-1	1.5 E-3	7.6 E-3	9.8 E+2	1.2 E-2	NA	9.9 E+2
3519	C	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	6.3 E-1	NA	NA	3.8 E+2	NA	NA	3.8 E+2
3627	C	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	7.1 E-1	NA	NA	5.3 E+2	NA	NA	5.4 E+2
193-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-2	NA	NA	7.0 E-2	NA	NA	1.2 E-1
195-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	4.2 E-2
105	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-1	NA	NA	3.5 E+2	1.5 E-1	NA	3.6 E+2
188	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	2.5 E+1	NA	NA	3.9 E+1
189	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E+0	NA	NA	1.4 E+1
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
203	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-2	NA	NA	2.8 E-1	NA	NA	5.6 E-1
3515	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	NA	2.0 E-1
3526	D	NA	5.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E+0	NA	NA	1.7 E+0
3527	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
191	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E+0	NA	NA	5.8 E+0
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-1
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
106	S	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-1	NA	NA	2.0 E+2	NA	NA	2.0 E+2
133	S	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	2.0 E-2	4.8 E+1	1.3 E+0	NA	6.0 E+1
192	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-1	NA	NA	1.8 E+0	1.1 E-2	NA	4.4 E+0
262	S	2.2 E-2	9.8 E-4	NA	5.9 E-2	9.1 E-1	3.9 E-2	NA	NA	NA	1.5 E+1	NA	NA	2.6 E-2	7.1 E-1	NA	NA	1.8 E+0	2.3 E+0	1.9 E-1	5.9 E+1
263	S	NA	1.3 E-1	NA	NA	6.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+2	NA	NA	4.3 E+2	2.2 E+0	NA	6.8 E+2
268	S	NA	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	1.4 E+0	NA	NA	1.6 E+0
269	S	3.4 E-3	4.6 E-2	NA	NA	1.2 E-1	NA	NA	NA	NA	2.5 E-3	NA	NA	NA	1.6 E+2	NA	1.6 E-2	5.0 E+1	4.4 E-1	NA	2.5 E+2
273	S	NA	5.1 E-2	NA	NA	7.9 E-2	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	1.8 E+2	NA	1.2 E-2	5.5 E+2	3.1 E+0	NA	7.7 E+2
274	S	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E+0	NA	1.1 E-2	2.5 E+2	NA	NA	2.6 E+2
275	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-1	NA	NA	1.0 E+0	NA	NA	2.1 E+0
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2
3655	S	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	2.1 E-1	NA	1.0 E-2	2.5 E+1	4.4 E-2	NA	2.9 E+1
3679	S	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	3.3 E+1	2.3 E-2	NA	5.3 E+1
3680	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	4.5 E-1
3681	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	5.5 E+0	7.4 E-3	NA	1.4 E+1
3684	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	4.3 E+1	NA	NA	4.3 E+1
3693	S	3.7 E-3	NA	NA	NA	8.7 E+0	1.3 E-1	NA	NA	NA	2.9 E-2	NA	NA	1.9 E-1	7.1 E-2	NA	NA	NA	4.4 E-1	1.1 E-2	1.3 E+1
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E+0	NA	NA	9.0 E+0
3695	S	NA	NA	NA	NA	9.5 E-2	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	5.5 E-2	NA	NA	1.6 E+1	NA	NA	1.8 E+1
3681-T	S	NA	NA	NA	NA	NA	NA	6.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-2
71	Y	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	NA	1.5 E+0
644	Y	NA	3.7 E-4	NA	2.3 E-2	6.1 E-2	NA	NA	NA	8.9 E+2	NA	NA	1.2 E-2	NA	2.1 E-1	2.1 E-2	NA	1.2 E-1	3.3 E-1	NA	8.9 E+2
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-1	NA	NA	5.0 E-1	NA	NA	3.0 E+0
879	Y	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E+0	NA	NA	6.0 E-2	NA	NA	3.8 E+0
880	Y	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	1.3 E-1	NA	NA	4.4 E-1
881	Y	1.4 E-2	1.3 E-3	NA	8.0 E-2	9.8 E-1	5.0 E-2	NA	3.1 E-1	4.5 E+3	3.0 E-2	NA	1.3 E-2	6.7 E-2	1.5 E-2	1.0 E-3	NA	6.3 E-2	NA	3.4 E-1	4.5 E+3
882	Y	NA	7.0 E-2	NA	NA	NA	NA	1.5 E-2	NA	8.0 E+1	NA	NA	NA	NA	7.1 E+1	NA	6.5 E-3	3.3 E+1	NA	NA	1.9 E+2
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Adult Non-Cancer Hazard Index																		
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dichlorobenzene	1,4-Dioxane	2-Methylnaphthalene	Anthracene	Benzene	Benzo (a) anthracene	Bis(2-ethylhexyl) phthalate	Bromodichloromethane	Carbon tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
100	C	NA	NA	8.3 E-3	9.7 E-1	NA	NA	2.4 E+0	1.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-1	1.9 E-1	1.2 E+0
107	C	NA	1.0 E-2	2.7 E-2	3.6 E-2	NA	NA	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	NA
193	C	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
195	C	NA	NA	2.9 E-3	5.5 E-3	NA	NA	1.3 E-1	1.4 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	1.0 E+0
3310	C	NA	NA	2.2 E-3	2.5 E-1	NA	NA	4.6 E-1	3.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	3.9 E-2	4.0 E-1
3400	C	NA	NA	1.7 E-3	2.1 E-1	NA	NA	4.7 E-1	4.8 E-2	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	1.7 E-1	3.2 E-2	1.6 E-1
3401	C	NA	NA	4.4 E-4	4.3 E-2	NA	NA	9.7 E-2	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	8.8 E-2
3514	C	NA	2.1 E-2	5.2 E-3	9.7 E-1	NA	NA	2.1 E+0	6.7 E-1	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	6.2 E-1	2.4 E-1	1.6 E+0
3519	C	NA	NA	1.4 E-3	1.5 E-1	NA	NA	1.5 E+0	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1	6.0 E-2	NA
3627	C	NA	1.5 E-1	1.1 E-2	1.2 E+0	NA	NA	2.4 E+0	9.3 E-1	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	7.4 E-1	1.9 E-1	8.3 E-1
193-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
195-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
105	D	NA	NA	6.2 E-3	5.6 E-1	NA	NA	1.6 E+0	4.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1	2.8 E-1	NA
188	D	NA	NA	1.9 E-2	1.9 E-2	NA	NA	8.0 E-2	3.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	2.8 E+0
189	D	NA	NA	2.0 E-3	9.7 E-3	NA	NA	NA	1.4 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-2	2.5 E-1
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
203	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-2	NA	NA	NA	NA
3515	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3526	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3527	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
191	E	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
106	S	NA	NA	6.7 E-3	NA	NA	NA	NA	2.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA
133	S	NA	NA	1.2 E-2	4.5 E-2	NA	NA	5.8 E-2	1.7 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	3.0 E+0
192	S	NA	NA	3.0 E-3	2.2 E-3	NA	NA	NA	3.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-2	4.5 E-1
262	S	NA	NA	9.2 E-3	NA	NA	NA	NA	4.3 E+0	NA	NA	NA	2.6 E-3	3.8 E-2	NA	1.2 E+1	NA	NA	NA	1.2 E-2
263	S	1.0 E-1	NA	2.7 E-2	1.0 E+0	NA	NA	NA	5.2 E+1	NA	NA	1.0 E+0	NA	NA	NA	NA	NA	NA	6.2 E-2	1.2 E+0
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-3	NA
269	S	NA	NA	6.6 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	1.6 E+1
273	S	NA	2.3 E-2	5.5 E-3	9.0 E-1	NA	NA	2.4 E-2	6.3 E+0	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	1.3 E-1	6.2 E+0
274	S	NA	NA	6.5 E-3	4.2 E-2	NA	NA	NA	3.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	1.6 E+0
275	S	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	9.8 E-2
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA
3655	S	NA	NA	4.9 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-2	1.6 E+0
3679	S	NA	2.0 E-2	5.2 E-2	5.7 E-2	NA	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	7.8 E+0
3680	S	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-2
3681	S	NA	NA	2.1 E-2	2.4 E-2	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	3.2 E+0
3684	S	NA	NA	6.7 E-4	6.6 E-2	NA	NA	7.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	3.1 E-2	4.0 E-2
3693	S	NA	NA	NA	NA	2.0 E-1	1.7 E-2	NA	NA	NA	NA	1.2 E+0	NA	NA	NA	NA	NA	NA	NA	8.3 E-2
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	2.7 E-3	8.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2	9.2 E-1
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	5.0 E-1	NA
644	Y	NA	NA	NA	NA	NA	2.0 E-1	NA	1.2 E+0	7.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-1
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-1	NA
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-3	NA	5.5 E-1	NA
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA
881	Y	NA	NA	1.1 E-2	NA	7.2 E-1	3.3 E-2	NA	9.5 E-1	NA	NA	NA	NA	NA	NA	7.5 E-3	NA	NA	NA	3.4 E-1
882	Y	2.0 E-2	NA	NA	4.8 E-2	NA	NA	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-1
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Adult Non-Cancer Hazard Index																				
Sample Name	Layer	Dichlorodifluoromethane	Fluorene	Freon 113	Methylene chloride	m-Xylene	Naphthalene	n-Butylbenzene	N-Nitrosodimethylamine	o-Xylene	PCB-1254	Phenanthrene	p-Isopropyltoluene	p-Xylene	sec-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Xylenes (total)	HI
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
100	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E+0	NA	NA	2.7 E+2	NA	NA	2.8 E+2
107	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	9.5 E-3	1.8 E+0	3.4 E-1	NA	2.6 E+0
193	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	1.1 E-1
195	C	NA	NA	6.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E+1	NA	NA	2.9 E+1
3310	C	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-2	2.5 E-3	2.9 E-3	5.6 E+1	NA	NA	5.8 E+1
3400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-2	5.5 E-4	NA	3.2 E+1	NA	NA	3.4 E+1
3401	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	1.2 E-3	NA	8.9 E+0	NA	NA	9.1 E+0
3514	C	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	3.3 E-1	6.6 E-4	3.2 E-3	4.2 E+2	5.2 E-3	NA	4.3 E+2
3519	C	NA	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA	NA	NA	NA	NA	2.7 E-1	NA	NA	1.6 E+2	NA	NA	1.6 E+2
3627	C	NA	NA	NA	NA	NA	NA	NA	6.5 E-2	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	2.3 E+2	NA	NA	2.3 E+2
193-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	3.0 E-2	NA	NA	5.4 E-2
195-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	1.8 E-2
105	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-1	NA	NA	1.5 E+2	6.6 E-2	NA	1.5 E+2
188	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-2	1.1 E+1	NA	NA	1.7 E+1
189	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E+0	NA	NA	5.8 E+0
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
203	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	1.2 E-1	NA	NA	2.4 E-1
3515	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-2	NA	NA	8.4 E-2
3526	D	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-1	NA	NA	7.4 E-1
3527	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
191	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E+0	NA	NA	2.5 E+0
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
106	S	NA	NA	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	8.5 E+1	NA	NA	8.8 E+1
133	S	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	8.8 E-3	2.1 E+1	5.5 E-1	NA	2.6 E+1
192	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	7.9 E-1	4.9 E-3	NA	1.9 E+0
262	S	NA	9.8 E-3	4.4 E-4	NA	2.5 E-2	3.9 E-1	1.7 E-2	NA	NA	NA	6.8 E+0	NA	NA	1.1 E-2	3.1 E-1	NA	NA	7.6 E-1	1.0 E+0	8.0 E-2	2.5 E+1
263	S	NA	NA	5.6 E-2	NA	NA	2.6 E+0	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E+1	NA	NA	1.8 E+2	9.3 E-1	NA	2.9 E+2
268	S	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-2	NA	NA	6.0 E-1	NA	NA	6.9 E-1
269	S	9.5 E-3	1.5 E-3	2.1 E-2	NA	NA	5.3 E-2	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	6.9 E+1	NA	6.8 E-3	2.2 E+1	1.9 E-1	NA	1.1 E+2
273	S	5.9 E-2	NA	2.3 E-2	NA	NA	3.4 E-2	NA	NA	NA	NA	9.9 E-4	NA	NA	NA	7.8 E+1	NA	5.0 E-3	2.4 E+2	1.3 E+0	NA	3.3 E+2
274	S	2.4 E-2	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E+0	NA	4.9 E-3	1.1 E+2	NA	NA	1.1 E+2
275	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	NA	4.3 E-1	NA	NA	9.2 E-1
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
3655	S	2.3 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	9.2 E-2	NA	4.4 E-3	1.1 E+1	1.9 E-2	NA	1.2 E+1
3679	S	NA	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	1.4 E+1	9.8 E-3	NA	2.3 E+1
3680	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	1.9 E-1
3681	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2	2.4 E+0	3.2 E-3	NA	5.8 E+0
3684	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-2	NA	NA	1.8 E+1	NA	NA	1.9 E+1
3693	S	2.2 E-2	1.6 E-3	NA	NA	NA	3.7 E+0	5.5 E-2	NA	NA	NA	1.3 E-2	NA	NA	8.3 E-2	3.1 E-2	NA	NA	NA	1.9 E-1	4.6 E-3	5.6 E+0
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E+0	NA	NA	3.9 E+0
3695	S	NA	NA	NA	NA	NA	4.1 E-2	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	6.8 E+0	NA	NA	7.8 E+0
3681-T	S	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
71	Y	NA	NA	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	6.6 E-1
644	Y	NA	NA	1.7 E-4	NA	1.0 E-2	2.6 E-2	NA	NA	NA	3.9 E+2	NA	NA	5.0 E-3	NA	9.0 E-2	8.8 E-3	NA	5.0 E-2	1.4 E-1	NA	4.0 E+2
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-1	NA	NA	2.2 E-1	NA	NA	1.3 E+0
879	Y	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+0	NA	NA	2.6 E-2	NA	NA	1.6 E+0
880	Y	NA	NA	NA	NA	NA	NA	NA	9.9 E-3	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	5.5 E-2	NA	NA	1.9 E-1
881	Y	2.5 E-3	6.0 E-3	6.0 E-4	NA	3.4 E-2	4.2 E-1	2.2 E-2	NA	1.3 E-1	2.0 E+3	1.3 E-2	NA	5.5 E-3	2.9 E-2	6.3 E-3	4.3 E-4	NA	2.7 E-2	NA	1.5 E-1	2.0 E+3
882	Y	NA	NA	3.1 E-2	NA	NA	NA	NA	6.5 E-3	NA	3.6 E+1	NA	NA	NA	NA	3.1 E+1	NA	2.8 E-3	1.4 E+1	NA	NA	8.1 E+1
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dichlorobenzene	1,4-Dioxane	2-Methylnaphthalene	Anthracene	Benzene	Benzo (a) anthracene	Bis(2-ethylhexyl) phthalate	Bromodichloromethane	Carbon tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
100	C	NA	NA	5.2 E-6	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	9.1 E-5	NA
107	C	NA	1.4 E-6	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	NA
193	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
195	C	NA	NA	1.8 E-6	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-5	NA
3310	C	NA	NA	1.4 E-6	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	1.9 E-5	NA
3400	C	NA	NA	1.1 E-6	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	3.8 E-5	1.6 E-5	NA
3401	C	NA	NA	2.7 E-7	NA	NA	NA	8.0 E-6	NA	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	NA	NA
3514	C	NA	2.7 E-6	3.2 E-6	NA	NA	NA	1.7 E-4	NA	NA	3.9 E-5	NA	NA	NA	NA	NA	NA	1.4 E-4	1.2 E-4	NA
3519	C	NA	NA	8.8 E-7	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	2.9 E-5	NA
3627	C	NA	1.9 E-5	6.7 E-6	NA	NA	NA	2.0 E-4	NA	NA	8.9 E-5	NA	NA	NA	NA	NA	NA	1.7 E-4	9.1 E-5	NA
193-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
195-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
105	D	NA	NA	3.9 E-6	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	1.4 E-4	NA
188	D	NA	NA	1.2 E-5	NA	NA	NA	6.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	NA
189	D	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
203	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA
3515	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3526	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3527	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
191	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
106	S	NA	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA
133	S	NA	NA	7.7 E-6	NA	NA	NA	4.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA
192	S	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA
262	S	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	9.8 E-7	1.7 E-3	NA	NA	NA	NA
263	S	7.2 E-4	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA
269	S	NA	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
273	S	NA	3.0 E-6	3.4 E-6	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5	NA
274	S	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA
275	S	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	NA
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA
3655	S	NA	NA	3.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA
3679	S	NA	2.5 E-6	3.2 E-5	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA
3680	S	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3681	S	NA	NA	1.3 E-5	NA	NA	NA	7.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	NA
3684	S	NA	NA	4.1 E-7	NA	NA	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	1.5 E-5	NA
3693	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	2.4 E-4	NA
644	Y	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	2.7 E-4	NA
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA
881	Y	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA
882	Y	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	**Layer**	**Dichlorodifluoromethane**	**Fluorene**	**Freon 113**	**Methylene chloride**	**m-Xylene**	**Naphthalene**	**n-Butylbenzene**	**N-Nitrosodimethylamine**	**o-Xylene**	**PCB-1254**	**Phenanthrene**	**p-Isopropyltoluene**	**p-Xylene**	**sec-Butylbenzene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**Xylenes (total)**	**ILCR**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
100	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	1.9 E-3	NA	NA	4 E-3
107	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-6	NA	NA	1.3 E-5	1.0 E-3	NA	1 E-3
193	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	5 E-7
195	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	3 E-4
3310	C	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	3.9 E-4	NA	NA	5 E-4
3400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	2.2 E-4	NA	NA	4 E-4
3401	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	6.1 E-5	NA	NA	1 E-4
3514	C	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	2.9 E-3	1.6 E-5	NA	4 E-3
3519	C	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	1.1 E-3	NA	NA	2 E-3
3627	C	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	1.6 E-3	NA	NA	2 E-3
193-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	2.1 E-7	NA	NA	2 E-5
195-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
105	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	1.0 E-3	2.0 E-4	NA	2 E-3
188	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	NA	NA	2 E-4
189	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	6 E-5
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
203	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	8.2 E-7	NA	NA	3 E-5
3515	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	6 E-7
3526	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	5 E-6
3527	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
191	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	2 E-5
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
106	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	5.9 E-4	NA	NA	8 E-4
133	S	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	1.4 E-4	1.7 E-3	NA	2 E-3
192	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	5.5 E-6	1.5 E-5	NA	2 E-4
262	S	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	5.2 E-6	3.1 E-3	NA	5 E-3
263	S	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	1.3 E-3	2.8 E-3	NA	5 E-2
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	NA	NA	4.2 E-6	NA	NA	7 E-5
269	S	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	1.5 E-4	5.7 E-4	NA	6 E-2
273	S	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-2	NA	NA	1.6 E-3	4.1 E-3	NA	7 E-2
274	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	7.3 E-4	NA	NA	2 E-3
275	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	3.0 E-6	NA	NA	3 E-4
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
3655	S	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	NA	7.4 E-5	5.7 E-5	NA	2 E-4
3679	S	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-5	3.0 E-5	NA	3 E-4
3680	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-7	NA	NA	1 E-6
3681	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	9.6 E-6	NA	1 E-4
3684	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	NA	1.3 E-4	NA	NA	2 E-4
3693	S	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	5.7 E-4	NA	8 E-4
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	3 E-5
3695	S	NA	NA	NA	NA	NA	2.2 E-6	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	4.7 E-5	NA	NA	9 E-5
3681-T	S	NA	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-6
71	Y	NA	NA	NA	6.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-7	NA	NA	3 E-4
644	Y	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	7.2 E-5	NA	NA	3.4 E-7	4.4 E-4	NA	2 E-2
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	1.5 E-6	NA	NA	6 E-4
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	1.8 E-7	NA	NA	1 E-3
880	Y	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	5.3 E-6	NA	NA	3.8 E-7	NA	NA	6 E-5
881	Y	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	5.0 E-6	NA	NA	1.9 E-7	NA	NA	1 E-1
882	Y	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	1.9 E-3	NA	NA	NA	NA	2.4 E-2	NA	NA	9.7 E-5	NA	NA	3 E-2
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-5
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.2-25b
Groundwater Location-Specific Risk Assessment Results for Inorganics-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/L)																							
Sample Name	**Layer**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Boron**	**Cadmium**	**Cobalt**	**Copper**	**Chromium VI**	**Iron**	**Lead**	**Lithium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Nitrate as NO3**	**Nitrite as NO2**	**Perchlorate**	**Thallium**	**Titanium**	**Vanadium**	**Zinc**
Unit Hazard Child		6.7 E-5	1.7 E-1	2.1 E-1	3.5 E-4	6.2 E-2	3.2 E-4	7.2 E-2	3.2 E-3	1.7 E-3	3.3 E-2	9.2 E-5	NA	3.2 E-3	3.1 E-3	2.3 E-1	1.3 E-2	3.3 E-3	4.0 E-5	4.0 E-4	9.2 E-2	9.7 E-1	1.6 E-5	1.6 E-2	2.1 E-4
Unit Hazard Adult		2.8 E-5	7.1 E-2	9.2 E-2	1.5 E-4	2.4 E-2	1.4 E-4	3.0 E-2	1.4 E-3	7.4 E-4	1.3 E-2	3.9 E-5	NA	1.4 E-3	1.3 E-3	9.8 E-2	5.5 E-3	1.4 E-3	1.7 E-5	1.7 E-4	3.9 E-2	4.2 E-1	6.9 E-6	6.6 E-3	9.2 E-5
Unit Risk		NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
100	C																		17000		16000				
107	C			1.2	39			0.026	0.56	1.6		10000	0.27		29		1.0	5.5	7400		3.0			7.0	
193	C				22			0.34		0.67		760	13		49				1200						1600
195	C		0.66	2.4				0.46	0.57	4.7		2100	97		24		1.8	6.2	10000		3.3			14	3100
3310	C			1.0	45		13					490	69				0.66	3.5	21000		1200			16	1100
3400	C				49			0.096	1.9			120	1.2		8.7			8.4	25000	2800	1300			13	
3401	C			3.6	41			0.22	1.9	3.3		360	1.5		24		1.8	7.7	16000	2600	1100			6.9	
3514	C	290		1.3	120		29		1.0	8.1		45000	3.2		140		2.1	8.1	22000		4300		12	9.0	590
3519	C				68														25000		3900			7.3	
3627	C				130										5.2				13000		970			7.2	
193-T	C			4.8					0.31								1.3	3.4						3.5	
195-T	C	690			79		19												9000				17		
105	D				73							590			69				21000		6200				
188	D	990	1.5	1.9	70			2.2	0.81	300		5900	400		48		2.1	5.7	10000		1.9			18	13000
189	D																		3200						
190	D																		100						
194	D																		1400						
203	D	370	0.1	9.2	59		100	3.6	0.63	7.8	20	1900	190	28	63		1.6	5.3	1400		9.1			1.8	17000
3311	D																		2300						
3312	D																		2100						
3402	D				31														670						
3515	D				88										120										
3526	D				91														9900		75			6.3	120
3527	D				68										26				40						
191	E																		300						
196	E																		700						
197	E																		9000						
204	E																		1090						
3313	E																		300						
3516	E				51		44			42					140			35							
3528	E				70										27										110
205	F																								
3314	F																		100						
106	S																		4600						
133	S	180		1.5	32		12	0.060	0.45	2.3		6800	1.1		45		1.4	3.8	13000		4.3	0.18	6.1	15	76
192	S		0.086	0.96	61			1.0	0.34	3.2		8900	110		40		1.6	3.2	8200		6.3			8.9	2200
262	S	580			54		82	0.28	0.88	60		33000	9.6		850		1.9	6.9	4300				23	2.7	200
263	S	100			100			0.039	0.99	8.0		8700	1.1		1800		0.53	4.0	9400	2200		0.34	8.8		96
268	S				8.1			0.22	0.23			2200	1.1		140			2.5	5400						140
269	S		0.24	1.1	24			0.47	0.79	2.1		3800	1.1		360			5.1					6.0		43
273	S				26		20		0.24	1.4		8400	0.26		120	0.12	0.44	1.0	1900				2.1	2.3	
274	S	48			31		8.2				17	8900			590			7.4	5100				2.9	6.6	61
275	S	290		0.56	150		70		0.28	1.5		45000			820		1.3	11	22000		4.4		15	5.6	180
501	S	1800	1.4		120		150	0.39	1.2	150		4500	200		170		2.8	8.5						4.5	67000
3655	S																		5200		1.1				
3679	S	63		0.74	88			0.072	0.6	1.1		160	0.34		23				9300		4.8		4.0	12	30
3680	S	71	0.051		22		28		0.46				0.094				0.44	2.6	7300		1.7			6.3	
3681	S	2500			34			0.039	1.6	3.4		3100	0.87		34		3.2	5.8	5500				130	24	21
3684	S	260	0.07		34		47		0.48	4.6		330	0.79		11		3.1		9500		840		16	7.9	210
3693	S	10000	0.21	2.1	450	0.85	25	0.30	23	48		10000	12		1600		25	51	170			0.26	290	110	290
3694	S				31		25		0.22	0.84			0.083					1.2	8700		3.3			9.8	25
3695	S	11000	2.3	1.0	150	0.26		0.087	5.6	20		11000	2.8		230		2.5	19	11000		3.4		560	53	100
3681-T	S			3.1																	4.4				
71	Y	180			11				2.5	1.1		5700			60			4.1	30000		9.8		6.9	3.2	
644	Y	840000	8.0	200	4700	3.6	1310	106	935	10200		1300000	3000		36000	8.0	11	1000	580			4.6	24000	565	1300000
645	Y	35000		4.2	160	0.44	170	0.29	16	100	21	60000	80		840		3.8	77	5400				1400	90	9600
879	Y	330000		4.9	1100	42	116	3.5	150	8400		270000	120	69	6200	1.8		570	2800			0.74	5200	600	7200
880	Y	2100	1.7	1.1	87		48	0.36	8.3	31		120000	150		2700		2.1	30	2100				80	10	6200
881	Y	250000		16	2600	4.7	220	1.9	280	250		760000	110	110	11000	3.5	280	310	55				9100	530	30000
882	Y	19400			246		252		29	61		48600	760		2680		4.5	53	28000					86	32500
71-T	Y																				36				
882-T	Y	31000	0.4	5.3	230	0.64		0.54	23	68		35000	88		5400	0.22		61	31000		1.6	0.23	1200	81	5000

Table 5.2-25b
Groundwater Location-Specific Risk Assessment Results for Inorganics-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																								
Sample Name	Layer	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Cobalt	Copper	Chromium VI	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Nickel	Nitrate as NO3	Nitrite as NO2	Perchlorate	Thallium	Titanium	Vanadium	Zinc	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
100	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-1	NA	1.5 E+3	NA	NA	NA	NA	1.5 E+3
107	C	NA	NA	2.6 E-1	1.4 E-2	NA	NA	1.9 E-3	1.8 E-3	2.8 E-3	NA	9.2 E-1	NA	NA	9.0 E-2	NA	1.3 E-2	1.8 E-2	3.0 E-1	NA	2.8 E-1	NA	NA	1.1 E-1	NA	2.0 E+0
193	C	NA	NA	NA	7.7 E-3	NA	NA	2.5 E-2	NA	1.2 E-3	NA	7.0 E-2	NA	NA	1.5 E-1	NA	NA	NA	4.8 E-2	NA	NA	NA	NA	NA	3.4 E-1	6.5 E-1
195	C	NA	1.1 E-1	5.1 E-1	NA	NA	NA	3.3 E-2	1.8 E-3	8.2 E-3	NA	1.9 E-1	NA	NA	7.4 E-2	NA	2.3 E-2	2.0 E-2	4.0 E-1	NA	3.0 E-1	NA	NA	2.2 E-1	6.6 E-1	2.6 E+0
3310	C	NA	NA	2.1 E-1	1.6 E-2	NA	4.2 E-3	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	8.5 E-3	1.2 E-2	8.4 E-1	NA	1.1 E+2	NA	NA	2.6 E-1	2.4 E-1	1.1 E+2
3400	C	NA	NA	NA	1.7 E-2	NA	NA	6.9 E-3	6.1 E-3	NA	NA	1.1 E-2	NA	NA	2.7 E-2	NA	NA	2.8 E-2	1.0 E+0	1.1 E+0	1.2 E+2	NA	NA	2.1 E-1	NA	1.2 E+2
3401	C	NA	NA	7.7 E-1	1.4 E-2	NA	NA	1.6 E-2	6.1 E-3	5.7 E-3	NA	3.3 E-2	NA	NA	7.4 E-2	NA	2.3 E-2	2.5 E-2	6.4 E-1	1.0 E+0	1.0 E+2	NA	NA	1.1 E-1	NA	1.0 E+2
3514	C	1.9 E-2	NA	2.8 E-1	4.2 E-2	NA	9.3 E-3	NA	3.2 E-3	1.4 E-2	NA	4.1 E+0	NA	NA	4.3 E-1	NA	2.7 E-2	2.7 E-2	8.8 E-1	NA	4.0 E+2	NA	1.9 E-4	1.4 E-1	1.3 E-1	4.0 E+2
3519	C	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+0	NA	3.6 E+2	NA	NA	1.2 E-1	NA	3.6 E+2
3627	C	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	5.2 E-1	NA	8.9 E+1	NA	NA	1.2 E-1	NA	9.0 E+1
193-T	C	NA	NA	1.0 E+0	NA	NA	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	1.1 E-2	NA	NA	NA	NA	NA	5.6 E-2	NA	1.1 E+0
195-T	C	4.6 E-2	NA	NA	2.8 E-2	NA	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	2.7 E-4	NA	NA	4.4 E-1
105	D	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	2.1 E-1	NA	NA	NA	8.4 E-1	NA	5.7 E+2	NA	NA	NA	NA	5.7 E+2
188	D	6.6 E-2	2.5 E-1	4.1 E-1	2.4 E-2	NA	NA	1.6 E-1	2.6 E-3	5.2 E-1	NA	5.4 E-1	NA	NA	1.5 E-1	NA	2.7 E-2	1.9 E-2	4.0 E-1	NA	1.7 E-1	NA	NA	2.9 E-1	2.8 E+0	5.8 E+0
189	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	1.3 E-1
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	4.0 E-3
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-2	NA	NA	NA	NA	NA	NA	5.6 E-2
203	D	2.5 E-2	1.7 E-2	2.0 E+0	2.1 E-2	NA	3.2 E-2	2.6 E-1	2.0 E-3	1.4 E-2	6.5 E-1	1.7 E-1	NA	9.0 E-2	2.0 E-1	NA	2.1 E-2	1.7 E-2	5.6 E-2	NA	8.4 E-1	NA	NA	2.9 E-2	3.6 E+0	8.1 E+0
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	NA	NA	9.3 E-2
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-2	NA	NA	NA	NA	NA	NA	8.4 E-2
3402	D	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	3.8 E-2
3515	D	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1
3526	D	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	NA	6.9 E+0	NA	NA	1.0 E-1	2.6 E-2	7.5 E+0
3527	D	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-2	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	1.1 E-1
191	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	2.8 E-2
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	3.6 E-1
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	4.4 E-2
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2
3516	E	NA	NA	NA	1.8 E-2	NA	1.4 E-2	NA	NA	7.3 E-2	NA	NA	NA	NA	4.3 E-1	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	6.6 E-1
3528	E	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	1.3 E-1
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	4.0 E-3
106	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	NA	NA	NA	1.9 E-1
133	S	1.2 E-2	NA	3.2 E-1	1.1 E-2	NA	3.9 E-3	4.3 E-3	1.4 E-3	4.0 E-3	NA	6.3 E-1	NA	NA	1.4 E-1	NA	1.8 E-2	1.3 E-2	5.2 E-1	NA	4.0 E-1	1.8 E-1	9.8 E-5	2.4 E-1	1.6 E-2	2.5 E+0
192	S	NA	1.4 E-2	2.1 E-1	2.1 E-2	NA	NA	7.2 E-2	1.1 E-3	5.6 E-3	NA	8.2 E-1	NA	NA	1.2 E-1	NA	2.1 E-2	1.1 E-2	3.3 E-1	NA	5.8 E-1	NA	NA	1.4 E-1	4.7 E-1	2.8 E+0
262	S	3.9 E-2	NA	NA	1.9 E-2	NA	2.6 E-2	2.0 E-2	2.8 E-3	1.0 E-1	NA	3.0 E+0	NA	NA	2.6 E+0	NA	2.4 E-2	2.3 E-2	1.7 E-1	NA	NA	NA	3.7 E-4	4.3 E-2	4.3 E-2	6.2 E+0
263	S	6.7 E-3	NA	NA	3.5 E-2	NA	NA	2.8 E-3	3.2 E-3	1.4 E-2	NA	8.0 E-1	NA	NA	5.6 E+0	NA	6.8 E-3	1.3 E-2	3.8 E-1	8.8 E-1	NA	3.3 E-1	1.4 E-4	NA	2.1 E-2	8.1 E+0
268	S	NA	NA	NA	2.8 E-3	NA	NA	1.6 E-2	7.4 E-4	NA	NA	2.0 E-1	NA	NA	4.3 E-1	NA	NA	8.3 E-3	2.2 E-1	NA	NA	NA	NA	NA	3.0 E-2	9.1 E-1
269	S	NA	4.0 E-2	2.4 E-1	8.4 E-3	NA	NA	3.4 E-2	2.5 E-3	3.7 E-3	NA	3.5 E-1	NA	NA	1.1 E+0	NA	NA	1.7 E-2	NA	NA	NA	NA	9.7 E-5	NA	9.2 E-3	1.8 E+0
273	S	NA	NA	NA	9.1 E-3	NA	6.4 E-3	NA	7.7 E-4	2.4 E-3	NA	7.7 E-1	NA	NA	3.7 E-1	2.8 E-2	5.7 E-3	3.3 E-3	7.6 E-2	NA	NA	NA	3.4 E-5	3.7 E-2	NA	1.3 E+0
274	S	3.2 E-3	NA	NA	1.1 E-2	NA	2.6 E-3	NA	NA	NA	5.5 E-1	8.2 E-1	NA	NA	1.8 E+0	NA	NA	2.4 E-2	2.1 E-1	NA	NA	NA	4.7 E-5	1.1 E-1	1.3 E-2	3.6 E+0
275	S	1.9 E-2	NA	1.2 E-1	5.2 E-2	NA	2.3 E-2	NA	9.0 E-4	2.6 E-3	NA	4.1 E+0	NA	NA	2.5 E+0	NA	1.7 E-2	3.6 E-2	8.8 E-1	NA	4.0 E-1	NA	2.4 E-4	9.0 E-2	3.9 E-2	8.4 E+0
501	S	1.2 E-1	2.3 E-1	NA	4.2 E-2	NA	4.8 E-2	2.8 E-2	3.8 E-3	2.6 E-1	NA	4.1 E-1	NA	NA	5.3 E-1	NA	3.6 E-2	2.8 E-2	NA	NA	NA	NA	NA	7.2 E-2	1.4 E+1	1.6 E+1
3655	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1	NA	1.0 E-1	NA	NA	NA	NA	3.1 E-1
3679	S	4.2 E-3	NA	1.6 E-1	3.1 E-2	NA	NA	5.2 E-3	1.9 E-3	1.9 E-3	NA	1.5 E-2	NA	NA	7.1 E-2	NA	NA	NA	3.7 E-1	NA	4.4 E-1	NA	6.4 E-5	1.9 E-1	6.4 E-3	1.3 E+0
3680	S	4.7 E-3	8.5 E-3	NA	7.7 E-3	NA	9.0 E-3	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	5.7 E-3	8.6 E-3	2.9 E-1	NA	1.6 E-1	NA	NA	1.0 E-1	NA	6.0 E-1
3681	S	1.7 E-1	NA	NA	1.2 E-2	NA	NA	2.8 E-3	5.1 E-3	5.9 E-3	NA	2.8 E-1	NA	NA	1.1 E-1	NA	4.1 E-2	1.9 E-2	2.2 E-1	NA	NA	NA	2.1 E-3	3.8 E-1	4.5 E-3	1.3 E+0
3684	S	1.7 E-2	1.2 E-2	NA	1.2 E-2	NA	1.5 E-2	NA	1.5 E-3	8.0 E-3	NA	3.0 E-2	NA	NA	3.4 E-2	NA	4.0 E-2	NA	3.8 E-1	NA	7.7 E+1	NA	2.6 E-4	1.3 E-1	4.5 E-2	7.8 E+1
3693	S	6.7 E-1	3.5 E-2	4.5 E-1	1.6 E-1	5.3 E-2	8.0 E-3	2.2 E-2	7.4 E-2	8.3 E-2	NA	9.2 E-1	NA	NA	5.0 E+0	NA	3.2 E-1	1.7 E-1	6.8 E-3	NA	NA	2.5 E-1	4.7 E-3	1.8 E+0	6.2 E-2	1.0 E+1
3694	S	NA	NA	NA	1.1 E-2	NA	8.0 E-3	NA	7.1 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	3.5 E-1	NA	3.0 E-1	NA	NA	1.6 E-1	5.3 E-3	8.4 E-1
3695	S	7.3 E-1	3.8 E-1	2.1 E-1	5.2 E-2	1.6 E-2	NA	6.3 E-3	1.8 E-2	3.5 E-2	NA	1.0 E+0	NA	NA	7.1 E-1	NA	3.2 E-2	6.3 E-2	4.4 E-1	NA	3.1 E-1	NA	9.0 E-3	8.5 E-1	2.1 E-2	4.9 E+0
3681-T	S	NA	NA	6.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	NA	NA	NA	NA	1.1 E+0
71	Y	1.2 E-2	NA	NA	3.8 E-3	NA	NA	NA	8.0 E-3	1.9 E-3	NA	5.2 E-1	NA	NA	1.9 E-1	NA	NA	1.4 E-2	1.2 E+0	NA	9.0 E-1	NA	1.1 E-4	5.1 E-2	NA	2.9 E+0
644	Y	5.6 E+1	1.3 E+0	4.3 E+1	1.6 E+0	2.2 E-1	4.2 E-1	7.7 E+0	3.0 E+0	1.8 E+1	NA	1.2 E+2	NA	NA	1.1 E+2	1.9 E+0	1.4 E-1	3.3 E+0	2.3 E-2	NA	NA	4.5 E+0	3.9 E-1	9.1 E+0	2.8 E+2	6.6 E+2
645	Y	2.3 E+0	NA	9.0 E-1	5.6 E-2	2.7 E-2	5.5 E-2	2.1 E-2	5.1 E-2	1.7 E-1	6.8 E-1	5.5 E+0	NA	NA	2.6 E+0	NA	4.9 E-2	2.5 E-1	2.2 E-1	NA	NA	NA	2.3 E-2	1.4 E+0	2.1 E+0	1.6 E+1
879	Y	2.2 E+1	NA	1.1 E+0	3.8 E-1	2.6 E+0	3.7 E-2	2.5 E-1	4.8 E-1	1.5 E+1	NA	2.5 E+1	NA	2.2 E-1	1.9 E+1	4.2 E-1	NA	1.9 E+0	1.1 E-1	NA	NA	7.2 E-1	8.4 E-2	9.6 E+0	1.5 E+0	1.0 E+2
880	Y	1.4 E-1	2.8 E-1	2.4 E-1	3.0 E-2	NA	1.5 E-2	2.6 E-2	2.7 E-2	5.4 E-2	NA	1.1 E+1	NA	NA	8.4 E+0	NA	2.7 E-2	9.9 E-2	8.4 E-2	NA	NA	NA	1.3 E-3	1.6 E-1	1.3 E+0	2.2 E+1
881	Y	1.7 E+1	NA	3.4 E+0	9.1 E-1	2.9 E-1	7.1 E-2	1.4 E-1	9.0 E-1	4.3 E-1	NA	7.0 E+1	NA	3.5 E-1	3.4 E+1	8.2 E-1	3.6 E+0	1.0 E+0	2.2 E-3	NA	NA	NA	1.5 E-1	8.5 E+0	6.4 E+0	1.5 E+2
882	Y	1.3 E+0	NA	NA	8.6 E-2	NA	8.1 E-2	NA	9.3 E-2	1.1 E-1	NA	4.5 E+0	NA	NA	8.3 E+0	NA	5.8 E-2	1.7 E-1	1.1 E+0	NA	NA	NA	NA	1.4 E+0	7.0 E+0	2.4 E+1
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E+0	NA	NA	NA	NA	3.3 E+0
882-T	Y	2.1 E+0	6.7 E-2	1.1 E+0	8.0 E-2	4.0 E-2	NA	3.9 E-2	7.4 E-2	1.2 E-1	NA	3.2 E+0	NA	NA	1.7 E+1	5.1 E-2	NA	2.0 E-1	1.2 E+0	NA	1.5 E-1	2.2 E-1	1.9 E-2	1.3 E+0	1.1 E+0	2.8 E+1

Table 5.2-25b
Groundwater Location-Specific Risk Assessment Results for Inorganics-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																								
Sample Name	Layer	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Cobalt	Copper	Chromium VI	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Nickel	Nitrate as NO3	Nitrite as NO2	Perchlorate	Thallium	Titanium	Vanadium	Zinc	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
100	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-1	NA	6.3 E+2	NA	NA	NA	NA	6.3 E+2
107	C	NA	NA	1.1 E-1	5.7 E-3	NA	NA	7.9 E-4	7.7 E-4	1.2 E-3	NA	3.9 E-1	NA	NA	3.7 E-2	NA	5.5 E-3	7.7 E-3	1.3 E-1	NA	1.2 E-1	NA	NA	4.6 E-2	NA	8.5 E-1
193	C	NA	NA	NA	3.2 E-3	NA	NA	1.0 E-2	NA	5.0 E-4	NA	3.0 E-2	NA	NA	6.3 E-2	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	1.5 E-1	2.7 E-1
195	C	NA	4.7 E-2	2.2 E-1	NA	NA	NA	1.4 E-2	7.8 E-4	3.5 E-3	NA	8.3 E-2	NA	NA	3.1 E-2	NA	9.9 E-3	8.7 E-3	1.7 E-1	NA	1.3 E-1	NA	NA	9.2 E-2	2.8 E-1	1.1 E+0
3310	C	NA	NA	9.2 E-2	6.6 E-3	NA	1.8 E-3	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	3.6 E-3	4.9 E-3	3.6 E-1	NA	4.7 E+1	NA	NA	1.1 E-1	1.0 E-1	4.8 E+1
3400	C	NA	NA	NA	7.2 E-3	NA	NA	2.9 E-3	2.6 E-3	NA	NA	4.7 E-3	NA	NA	1.1 E-2	NA	NA	1.2 E-2	4.3 E-1	4.8 E-1	5.1 E+1	NA	NA	8.6 E-2	NA	5.2 E+1
3401	C	NA	NA	3.3 E-1	6.0 E-3	NA	NA	6.7 E-3	2.6 E-3	2.5 E-3	NA	1.4 E-2	NA	NA	3.1 E-2	NA	9.9 E-3	1.1 E-2	2.8 E-1	4.5 E-1	4.3 E+1	NA	NA	4.5 E-2	NA	4.4 E+1
3514	C	8.2 E-3	NA	1.2 E-1	1.8 E-2	NA	4.0 E-3	NA	1.4 E-3	6.0 E-3	NA	1.8 E+0	NA	NA	1.8 E-1	NA	1.2 E-2	1.1 E-2	3.8 E-1	NA	1.7 E+2	NA	8.3 E-5	5.9 E-2	5.4 E-2	1.7 E+2
3519	C	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	1.5 E+2	NA	NA	4.8 E-2	NA	1.5 E+2
3627	C	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	NA	2.2 E-1	NA	3.8 E+1	NA	NA	4.7 E-2	NA	3.8 E+1
193-T	C	NA	NA	4.4 E-1	NA	NA	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.2 E-3	4.8 E-3	NA	NA	NA	NA	NA	2.3 E-2	NA	4.8 E-1
195-T	C	2.0 E-2	NA	NA	1.2 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	1.2 E-4	NA	NA	1.9 E-1
105	D	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	8.9 E-2	NA	NA	NA	3.6 E-1	NA	2.4 E+2	NA	NA	NA	NA	2.4 E+2
188	D	2.8 E-2	1.1 E-1	1.7 E-1	1.0 E-2	NA	NA	6.7 E-2	1.1 E-3	2.2 E-1	NA	2.3 E-1	NA	NA	6.2 E-2	NA	1.2 E-2	8.0 E-3	1.7 E-1	NA	7.5 E-2	NA	NA	1.2 E-1	1.2 E+0	2.5 E+0
189	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-2	NA	NA	NA	NA	NA	NA	5.5 E-2
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	1.7 E-3
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	2.4 E-2
203	D	1.0 E-2	7.1 E-3	8.4 E-1	8.7 E-3	NA	1.4 E-2	1.1 E-1	8.6 E-4	5.8 E-3	2.6 E-1	7.5 E-2	NA	3.9 E-2	8.1 E-2	NA	8.8 E-3	7.4 E-3	2.4 E-2	NA	3.6 E-1	NA	NA	1.2 E-2	1.6 E+0	3.4 E+0
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	4.0 E-2
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	NA	3.6 E-2
3402	D	NA	NA	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.6 E-2
3515	D	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
3526	D	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	3.0 E+0	NA	NA	4.1 E-2	1.1 E-2	3.2 E+0
3527	D	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	4.4 E-2
191	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	5.2 E-3
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	1.5 E-1
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	1.9 E-2
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	5.2 E-3
3516	E	NA	NA	NA	7.5 E-3	NA	6.1 E-3	NA	NA	3.1 E-2	NA	NA	NA	NA	1.8 E-1	NA	NA	4.9 E-2	NA	NA	NA	NA	NA	NA	NA	2.7 E-1
3528	E	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	5.5 E-2
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	1.7 E-3
106	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	NA	NA	NA	NA	7.9 E-2
133	S	5.1 E-3	NA	1.4 E-1	4.7 E-3	NA	1.7 E-3	1.8 E-3	6.2 E-4	1.7 E-3	NA	2.7 E-1	NA	NA	5.8 E-2	NA	7.7 E-3	5.3 E-3	2.2 E-1	NA	1.7 E-1	7.5 E-2	4.2 E-5	9.9 E-2	7.0 E-3	1.1 E+0
192	S	NA	6.1 E-3	8.8 E-2	9.0 E-3	NA	NA	3.0 E-2	4.7 E-4	2.4 E-3	NA	3.5 E-1	NA	NA	5.2 E-2	NA	8.8 E-3	4.5 E-3	1.4 E-1	NA	2.5 E-1	NA	NA	5.9 E-2	2.0 E-1	1.2 E+0
262	S	1.6 E-2	NA	NA	7.9 E-3	NA	1.1 E-2	8.5 E-3	1.2 E-3	4.5 E-2	NA	1.3 E+0	NA	NA	1.1 E+0	NA	1.0 E-2	9.7 E-3	7.4 E-2	NA	NA	NA	1.6 E-4	1.8 E-2	1.8 E-2	2.6 E+0
263	S	2.8 E-3	NA	NA	1.5 E-2	NA	NA	1.2 E-3	1.4 E-3	6.0 E-3	NA	3.4 E-1	NA	NA	2.3 E+0	NA	2.9 E-3	5.6 E-3	1.6 E-1	3.8 E-1	NA	1.4 E-1	6.1 E-5	NA	8.8 E-3	3.4 E+0
268	S	NA	NA	NA	1.2 E-3	NA	NA	6.7 E-3	3.2 E-4	NA	NA	8.7 E-2	NA	NA	1.8 E-1	NA	NA	3.5 E-3	9.3 E-2	NA	NA	NA	NA	NA	1.3 E-2	3.8 E-1
269	S	NA	1.7 E-2	1.0 E-1	3.5 E-3	NA	NA	1.4 E-2	1.1 E-3	1.6 E-3	NA	1.5 E-1	NA	NA	4.6 E-1	NA	NA	7.2 E-3	NA	NA	NA	NA	4.1 E-5	NA	3.9 E-3	7.6 E-1
273	S	NA	NA	NA	3.8 E-3	NA	2.8 E-3	NA	3.3 E-4	1.0 E-3	NA	3.3 E-1	NA	NA	1.5 E-1	1.2 E-2	2.4 E-3	1.4 E-3	3.3 E-2	NA	NA	NA	1.4 E-5	1.5 E-2	NA	5.6 E-1
274	S	1.4 E-3	NA	NA	4.6 E-3	NA	1.1 E-3	NA	NA	NA	2.2 E-1	3.5 E-1	NA	NA	7.6 E-1	NA	NA	1.0 E-2	8.8 E-2	NA	NA	NA	2.0 E-5	4.3 E-2	5.6 E-3	1.5 E+0
275	S	8.2 E-3	NA	5.1 E-2	2.2 E-2	NA	9.6 E-3	NA	3.8 E-4	1.1 E-3	NA	1.8 E+0	NA	NA	1.1 E+0	NA	7.2 E-3	1.5 E-2	3.8 E-1	NA	1.7 E-1	NA	1.0 E-4	3.7 E-2	1.6 E-2	3.5 E+0
501	S	5.1 E-2	9.9 E-2	NA	1.8 E-2	NA	2.1 E-2	1.2 E-2	1.6 E-3	1.1 E-1	NA	1.8 E-1	NA	NA	2.2 E-1	NA	1.5 E-2	1.2 E-2	NA	NA	NA	NA	NA	3.0 E-2	6.1 E+0	6.9 E+0
3655	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2	NA	4.3 E-2	NA	NA	NA	NA	1.3 E-1
3679	S	1.8 E-3	NA	6.8 E-2	1.3 E-2	NA	NA	2.2 E-3	8.2 E-4	8.2 E-4	NA	6.3 E-3	NA	NA	3.0 E-2	NA	NA	NA	1.6 E-1	NA	1.9 E-1	NA	2.8 E-5	7.9 E-2	2.7 E-3	5.5 E-1
3680	S	2.0 E-3	3.6 E-3	NA	3.2 E-3	NA	3.9 E-3	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	3.7 E-3	1.3 E-1	NA	6.7 E-2	NA	NA	4.1 E-2	NA	2.5 E-1
3681	S	7.1 E-2	NA	NA	5.0 E-3	NA	NA	1.2 E-3	2.2 E-3	2.5 E-3	NA	1.2 E-1	NA	NA	4.4 E-2	NA	1.8 E-2	8.2 E-3	9.5 E-2	NA	NA	NA	9.0 E-4	1.6 E-1	1.9 E-3	5.3 E-1
3684	S	7.4 E-3	5.0 E-3	NA	5.0 E-3	NA	6.5 E-3	NA	6.6 E-4	3.4 E-3	NA	1.3 E-2	NA	NA	1.4 E-2	NA	1.7 E-2	NA	1.6 E-1	NA	3.3 E+1	NA	1.1 E-4	5.2 E-2	1.9 E-2	3.3 E+1
3693	S	2.8 E-1	1.5 E-2	1.9 E-1	6.6 E-2	2.0 E-2	3.4 E-3	9.1 E-3	3.2 E-2	3.6 E-2	NA	3.9 E-1	NA	NA	2.1 E+0	NA	1.4 E-1	7.2 E-2	2.9 E-3	NA	NA	1.1 E-1	2.0 E-3	7.2 E-1	2.7 E-2	4.2 E+0
3694	S	NA	NA	NA	4.6 E-3	NA	3.4 E-3	NA	3.0 E-4	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	1.5 E-1	NA	1.3 E-1	NA	NA	6.4 E-2	2.3 E-3	3.6 E-1
3695	S	3.1 E-1	1.6 E-1	9.2 E-2	2.2 E-2	6.2 E-3	NA	2.6 E-3	7.7 E-3	1.5 E-2	NA	4.3 E-1	NA	NA	3.0 E-1	NA	1.4 E-2	2.7 E-2	1.9 E-1	NA	1.3 E-1	NA	3.9 E-3	3.5 E-1	9.2 E-3	2.1 E+0
3681-T	S	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	4.6 E-1
71	Y	5.1 E-3	NA	NA	1.6 E-3	NA	NA	NA	3.4 E-3	8.2 E-4	NA	2.2 E-1	NA	NA	7.7 E-2	NA	NA	5.8 E-3	5.2 E-1	NA	3.9 E-1	NA	4.8 E-5	2.1 E-2	NA	1.2 E+0
644	Y	2.4 E+1	5.7 E-1	1.8 E+1	6.9 E-1	8.6 E-2	1.8 E-1	3.2 E+0	1.3 E+0	7.6 E+0	NA	5.1 E+1	NA	NA	4.6 E+1	7.9 E-1	6.1 E-2	1.4 E+0	1.0 E-2	NA	NA	1.9 E+0	1.7 E-1	3.7 E+0	1.2 E+2	2.8 E+2
645	Y	9.9 E-1	NA	3.9 E-1	2.4 E-2	1.1 E-2	2.3 E-2	8.8 E-3	2.2 E-2	7.4 E-2	2.7 E-1	2.4 E+0	NA	NA	1.1 E+0	NA	2.1 E-2	1.1 E-1	9.3 E-2	NA	NA	NA	9.6 E-3	5.9 E-1	8.8 E-1	7.0 E+0
879	Y	9.4 E+0	NA	4.5 E-1	1.6 E-1	1.0 E+0	1.6 E-2	1.1 E-1	2.1 E-1	6.3 E+0	NA	1.1 E+1	NA	9.5 E-2	8.0 E+0	1.8 E-1	NA	8.0 E-1	4.8 E-2	NA	NA	3.1 E-1	3.6 E-2	3.9 E+0	6.6 E-1	4.2 E+1
880	Y	6.0 E-2	1.2 E-1	1.0 E-1	1.3 E-2	NA	6.6 E-3	1.1 E-2	1.1 E-2	2.3 E-2	NA	4.7 E+0	NA	NA	3.5 E+0	NA	1.2 E-2	4.2 E-2	3.6 E-2	NA	NA	NA	5.5 E-4	6.6 E-2	5.7 E-1	9.3 E+0
881	Y	7.1 E+0	NA	1.5 E+0	3.8 E-1	1.1 E-1	3.0 E-2	5.7 E-2	3.8 E-1	1.9 E-1	NA	3.0 E+1	NA	1.5 E-1	1.4 E+1	3.4 E-1	1.5 E+0	4.4 E-1	9.5 E-4	NA	NA	NA	6.3 E-2	3.5 E+0	2.7 E+0	6.3 E+1
882	Y	5.5 E-1	NA	NA	3.6 E-2	NA	3.5 E-2	NA	4.0 E-2	4.5 E-2	NA	1.9 E+0	NA	NA	3.5 E+0	NA	2.5 E-2	7.4 E-2	4.8 E-1	NA	NA	NA	NA	5.6 E-1	3.0 E+0	1.0 E+1
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E+0	NA	NA	NA	NA	1.4 E+0
882-T	Y	8.8 E-1	2.8 E-2	4.9 E-1	3.4 E-2	1.5 E-2	NA	1.6 E-2	3.2 E-2	5.1 E-2	NA	1.4 E+0	NA	NA	7.0 E+0	2.2 E-2	NA	8.6 E-2	5.3 E-1	NA	6.3 E-2	9.6 E-2	8.3 E-3	5.3 E-1	4.6 E-1	1.2 E+1

Table 5.2-25b
Groundwater Location-Specific Risk Assessment Results for Inorganics-Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	Layer	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Cobalt	Copper	Chromium VI	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Nickel	Nitrate as NO3	Nitrite as NO2	Perchlorate	Thallium	Titanium	Vanadium	Zinc	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
100	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
107	C	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4	1.9	0.90
193	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0	3.9
195	C	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4	48	24
3310	C	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4	35	17
3400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3	1.1
3401	C	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-4	2.5	1.2
3514	C	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4	3.3	1.6
3519	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3627	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
193-T	C	NA	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-4	NA	NA
195-T	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
105	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
188	D	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4	193	96
189	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
190	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
194	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
203	D	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-3	93	46
3311	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3515	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3526	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3527	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
191	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
196	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
197	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
204	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
106	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
133	S	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4	2.3	1.1
192	S	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4	54	27
262	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4	3.1
263	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3	1.1
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3	1.1
269	S	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4	2.3	1.1
273	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9	0.90
274	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
275	S	NA	NA	7.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-5	NA	NA
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	97	49
3655	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3679	S	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4	1.9	0.92
3680	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8	0.86
3681	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2	1.0
3684	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2	1.0
3693	S	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4	7.5	3.7
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8	0.85
3695	S	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4	3.1	1.5
3681-T	S	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-4	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
644	Y	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-2	1437	718
645	Y	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-4	40	20
879	Y	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-4	59	30
880	Y	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4	74	37
881	Y	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-3	54	27
882	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	365	183
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
882-T	Y	NA	NA	7.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-4	44	22

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the tabl
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)															
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2-Methylnaphthalene**	**Benzene**	**Bromodichloromethane**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child		1.1 E+1	1.6 E+2	3.2 E+0	3.2 E+1	3.2 E+2	9.3 E+1	4.6 E+2	6.4 E+1	2.8 E+0	7.5 E-1	NA	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1
Unit Hazard Adult		4.6 E+0	6.8 E+1	1.4 E+0	1.4 E+1	1.4 E+2	4.0 E+1	2.0 E+2	2.7 E+1	1.2 E+0	3.2 E-1	NA	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1
Unit Risk		3.0 E-2	8.5 E-3	8.5 E-4	NA	NA	NA	1.4 E-2	NA	3.3 E-3	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA
106	S			8.0					120							2.0	
133	S			15	6.0			0.58	100							8.5	180
192	S			3.6	0.30				19							6.8	27
262	S			11					260				1.6				0.72
263	S	37		32	140				3100			24				4.6	72
268	S															0.51	
269	S			7.9	19												940
273	S		0.55	6.6	120			0.24	380							9.4	370
274	S			7.8	5.6				180							9.3	98
275	S			0.33												9.8	5.9
501	S																
3655	S			5.9	0.89											5.6	94
3679	S		0.47	62	7.6			2.0								21	470
3680	S			0.39													4.4
3681	S			25	3.2			0.91								8.2	190
3684	S			0.8	8.8			0.77							0.51	2.3	2.4
3693	S					1.3	0.83					28					5.0
3694	S																
3695	S			3.3	1.1											3.7	55
3681-T	S																
71	Y								2.0					2.0		37	
644	Y						9.7		69	3.3							31.7
645	Y															57	
879	Y													0.86		41	
880	Y															8.8	
881	Y			13		4.6	1.6		57								20.6
882	Y	7.0			6.4				12								26.5
71-T	Y															9.7	
882-T	Y																

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Name	Layer	Dichlorodifluoromethane	Freon 113	Methylene Chloride	m-Xylene	Naphthalene	n-Butylbenzene	o-Xylene	p-Isopropyltoluene	p-Xylene	sec-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Xylenes (total)
Unit Hazard Child		1.1 E+1	7.4 E-2	7.5 E-1	2.2 E+1	7.5 E+2	6.4 E+1	2.2 E+1	NA	2.2 E+1	6.4 E+1	6.4 E+1	7.4 E+0	3.8 E+1	3.7 E+0	2.2 E+1	2.2 E+1
Unit Hazard Adult		4.8 E+0	3.2 E-2	3.2 E-1	9.6 E+0	3.2 E+2	2.7 E+1	9.6 E+0	NA	9.6 E+0	2.7 E+1	2.7 E+1	3.2 E+0	1.6 E+1	1.6 E+0	9.4 E+0	9.6 E+0
Unit Risk		NA	NA	5.2 E-4	NA	1.8 E-2	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	1.0 E-3	4.0 E-2	NA
106	S		31									13			790		
133	S											0.25		0.92	190	38	
192	S											12			7.3	0.34	
262	S		21		5.0	2.4	0.56				0.38	17			7.0	70	16
263	S		2700			16						2900			1700	65	
268	S		1.1									4.6			5.6		
269	S	3.7	1000			0.33						3800		0.71	200	13	
273	S	23	1100			0.21						4300		0.52	2200	94	
274	S	9.5	570									86		0.51	980		
275	S											14			4.0		
501	S																
3655	S	0.89										5.1		0.46	99	1.3	
3679	S													1.7	130	0.68	
3680	S														1.1		
3681	S													4.7	22	0.22	
3684	S											5.3			170		
3693	S	8.5				23	1.8		0.26		2.8	1.7				13	0.92
3694	S														36		
3695	S					0.25						1.3			63		
3681-T	S																
71	Y			1.4											1.0		
644	Y		8.0		2.0	0.16				1.0		5.0	4.3		0.46	10	
645	Y											17.5			2.0		
879	Y		29									57			0.24		
880	Y											0.37			0.51		
881	Y	0.97	29		6.8	2.6	0.72	26.2	0.60	1.1	0.98	0.35	0.21		0.25		29
882	Y		1500									1700		0.29	130		
71-T	Y																
882-T	Y																

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index														
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2-Methylnaphthalene**	**Benzene**	**Bromodichloromethane**	**Carbon tetrachloride**	**Chloroform**
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
106	S	NA	NA	1.2 E-3	NA	NA	NA	NA	2.6 E-1	NA	NA	NA	NA	NA	NA	4.1 E-3
133	S	NA	NA	2.3 E-3	5.0 E-2	NA	NA	2.9 E-3	2.2 E-1	NA	NA	NA	NA	NA	NA	1.7 E-2
192	S	NA	NA	5.4 E-4	2.5 E-3	NA	NA	NA	4.1 E-2	NA	NA	NA	NA	NA	NA	1.4 E-2
262	S	NA	NA	1.7 E-3	NA	NA	NA	NA	5.6 E-1	NA	NA	NA	6.4 E-3	NA	NA	NA
263	S	1.1 E-3	NA	4.8 E-3	1.2 E+0	NA	NA	NA	6.7 E+0	NA	NA	NA	NA	NA	NA	9.4 E-3
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
269	S	NA	NA	1.2 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
273	S	NA	7.0 E-4	9.9 E-4	1.0 E+0	NA	NA	1.2 E-3	8.2 E-1	NA	NA	NA	NA	NA	NA	1.9 E-2
274	S	NA	NA	1.2 E-3	4.7 E-2	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	1.9 E-2
275	S	NA	NA	5.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	NA	NA	8.9 E-4	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
3679	S	NA	5.9 E-4	9.3 E-3	6.4 E-2	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	4.3 E-2
3680	S	NA	NA	5.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3681	S	NA	NA	3.8 E-3	2.7 E-2	NA	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
3684	S	NA	NA	1.2 E-4	7.4 E-2	NA	NA	3.9 E-3	NA	NA	NA	NA	NA	NA	7.6 E-3	4.7 E-3
3693	S	NA	NA	NA	NA	1.7 E-2	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	5.0 E-4	9.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-3
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	7.8 E-3	NA	NA	NA	NA	6.8 E-4	NA	1.3 E-1
644	Y	NA	NA	NA	NA	NA	2.4 E-2	NA	2.7 E-1	3.1 E-4	NA	NA	NA	NA	NA	NA
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	1.5 E-1
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
881	Y	NA	NA	3.5 E-3	NA	1.1 E-1	3.9 E-3	NA	2.2 E-1	NA	NA	NA	NA	NA	NA	NA
882	Y	3.7 E-4	NA	NA	9.5 E-2	NA	NA	NA	4.7 E-2	NA	NA	NA	NA	NA	NA	NA
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																	
Sample Name	**Layer**	**cis-1,2-Dichloroethene**	**Dichlorodifluoromethane**	**Freon 113**	**Methylene chloride**	**m-Xylene**	**Naphthalene**	**n-Butylbenzene**	**o-Xylene**	**p-Isopropyltoluene**	**p-Xylene**	**sec-Butylbenzene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**Xylenes (total)**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
106	S	NA	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	2.7 E-1	NA	NA	6.7 E-1
133	S	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	2.6 E-3	6.4 E-2	2.6 E-1	NA	1.0 E+0
192	S	5.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	2.5 E-3	2.4 E-3	NA	2.3 E-1
262	S	1.6 E-3	NA	6.6 E-3	NA	6.4 E-3	5.7 E-3	3.0 E-3	NA	NA	NA	1.3 E-3	1.6 E-1	NA	NA	2.4 E-3	4.9 E-1	1.8 E-2	1.3 E+0
263	S	1.6 E-1	NA	8.5 E-1	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	2.7 E+1	NA	NA	5.8 E-1	4.5 E-1	NA	3.7 E+1
268	S	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	1.9 E-3	NA	NA	4.7 E-2
269	S	2.0 E+0	1.1 E-1	3.1 E-1	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	3.6 E+1	NA	2.0 E-3	6.8 E-2	9.0 E-2	NA	3.9 E+1
273	S	8.0 E-1	6.7 E-1	3.5 E-1	NA	NA	5.0 E-4	NA	NA	NA	NA	NA	4.1 E+1	NA	1.5 E-3	7.4 E-1	6.5 E-1	NA	4.6 E+1
274	S	2.1 E-1	2.8 E-1	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-1	NA	1.4 E-3	3.3 E-1	NA	NA	2.3 E+0
275	S	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	1.4 E-3	NA	NA	1.7 E-1
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	2.0 E-1	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-2	NA	1.3 E-3	3.3 E-2	9.0 E-3	NA	3.4 E-1
3679	S	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3	4.4 E-2	4.7 E-3	NA	1.2 E+0
3680	S	9.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	1.0 E-2
3681	S	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	7.4 E-3	1.5 E-3	NA	4.9 E-1
3684	S	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	NA	5.8 E-2	NA	NA	2.0 E-1
3693	S	1.1 E-2	2.5 E-1	NA	NA	NA	5.5 E-2	9.7 E-3	NA	NA	NA	9.3 E-3	1.6 E-2	NA	NA	NA	9.0 E-2	1.0 E-3	4.6 E-1
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	1.2 E-2
3695	S	1.2 E-1	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	2.1 E-2	NA	NA	1.7 E-1
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	NA	NA	1.4 E-1
644	Y	1.2 E-1	NA	4.5 E-3	NA	4.7 E-3	7.0 E-4	NA	NA	NA	2.6 E-3	NA	8.6 E-2	3.6 E-3	NA	2.8 E-4	1.2 E-1	NA	6.4 E-1
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1	NA	NA	1.2 E-3	NA	NA	5.1 E-1
879	Y	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-1	NA	NA	1.5 E-4	NA	NA	1.1 E+0
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	3.1 E-4	NA	NA	3.8 E-2
881	Y	8.1 E-2	5.1 E-2	1.6 E-2	NA	1.6 E-2	1.1 E-2	7.1 E-3	5.2 E-2	NA	2.9 E-3	6.0 E-3	6.0 E-3	1.8 E-4	NA	1.5 E-4	NA	5.7 E-2	6.5 E-1
882	Y	1.0 E-1	NA	8.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E+1	NA	1.5 E-3	7.9 E-2	NA	NA	3.0 E+1
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index															
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dichlorobenzene	1,4-Dioxane	2-Methylnaphthalene	Benzene	Bromodichloromethane	Carbon tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
106	S	NA	NA	5.2 E-4	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	1.8 E-3	NA
133	S	NA	NA	9.7 E-4	2.2 E-2	NA	NA	1.3 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	7.5 E-3	1.7 E-1
192	S	NA	NA	2.3 E-4	1.1 E-3	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	6.0 E-3	2.5 E-2
262	S	NA	NA	7.1 E-4	NA	NA	NA	NA	2.4 E-1	NA	NA	NA	2.8 E-3	NA	NA	NA	6.7 E-4
263	S	4.6 E-4	NA	2.1 E-3	5.0 E-1	NA	NA	NA	2.9 E+0	NA	NA	NA	NA	NA	NA	4.0 E-3	6.7 E-2
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	NA
269	S	NA	NA	5.1 E-4	6.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-1
273	S	NA	3.0 E-4	4.3 E-4	4.3 E-1	NA	NA	5.2 E-4	3.5 E-1	NA	NA	NA	NA	NA	NA	8.2 E-3	3.4 E-1
274	S	NA	NA	5.0 E-4	2.0 E-2	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	8.2 E-3	9.1 E-2
275	S	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-3	5.5 E-3
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	NA	NA	3.8 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-3	8.7 E-2
3679	S	NA	2.5 E-4	4.0 E-3	2.7 E-2	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	4.4 E-1
3680	S	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3
3681	S	NA	NA	1.6 E-3	1.1 E-2	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	7.2 E-3	1.8 E-1
3684	S	NA	NA	5.2 E-5	3.2 E-2	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	3.2 E-3	2.0 E-3	2.2 E-3
3693	S	NA	NA	NA	NA	7.4 E-3	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-3
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	2.1 E-4	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	5.1 E-2
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA	2.9 E-4	NA	5.7 E-2	NA
644	Y	NA	NA	NA	NA	NA	1.0 E-2	NA	1.2 E-1	1.3 E-4	NA	NA	NA	NA	NA	NA	5.3 E-2
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-2	NA
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	6.3 E-2	NA
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA
881	Y	NA	NA	1.5 E-3	NA	4.8 E-2	1.7 E-3	NA	9.6 E-2	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
882	Y	1.6 E-4	NA	NA	4.1 E-2	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	4.4 E-2
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Layer**	**Dichlorodifluoromethane**	**Freon 113**	**Methylene chloride**	**m-Xylene**	**Naphthalene**	**n-Butylbenzene**	**o-Xylene**	**p-Isopropyltoluene**	**p-Xylene**	**sec-Butylbenzene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**Xylenes (total)**	**HI**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
106	S	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-2	NA	NA	1.1 E-1	NA	NA	2.9 E-1
133	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	1.1 E-3	2.8 E-2	1.1 E-1	NA	4.3 E-1
192	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-2	NA	NA	1.1 E-3	1.0 E-3	NA	1.0 E-1
262	S	NA	2.8 E-3	NA	2.7 E-3	2.4 E-3	1.3 E-3	NA	NA	NA	5.4 E-4	6.9 E-2	NA	NA	1.0 E-3	2.1 E-1	7.6 E-3	5.4 E-1
263	S	NA	3.6 E-1	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	1.2 E+1	NA	NA	2.5 E-1	1.9 E-1	NA	1.6 E+1
268	S	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	8.1 E-4	NA	NA	2.0 E-2
269	S	4.6 E-2	1.3 E-1	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	1.5 E+1	NA	8.6 E-4	2.9 E-2	3.9 E-2	NA	1.7 E+1
273	S	2.9 E-1	1.5 E-1	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	1.7 E+1	NA	6.3 E-4	3.2 E-1	2.8 E-1	NA	2.0 E+1
274	S	1.2 E-1	7.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1	NA	6.2 E-4	1.4 E-1	NA	NA	9.7 E-1
275	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-2	NA	NA	5.8 E-4	NA	NA	7.1 E-2
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	5.6 E-4	1.4 E-2	3.9 E-3	NA	1.5 E-1
3679	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	1.9 E-2	2.0 E-3	NA	5.1 E-1
3680	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	4.3 E-3
3681	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3	3.2 E-3	6.6 E-4	NA	2.1 E-1
3684	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	2.5 E-2	NA	NA	8.7 E-2
3693	S	1.1 E-1	NA	NA	NA	2.3 E-2	4.2 E-3	NA	NA	NA	4.0 E-3	6.9 E-3	NA	NA	NA	3.9 E-2	4.4 E-4	2.0 E-1
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	5.2 E-3
3695	S	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	5.3 E-3	NA	NA	9.1 E-3	NA	NA	7.3 E-2
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	6.1 E-2
644	Y	NA	1.9 E-3	NA	2.0 E-3	3.0 E-4	NA	NA	NA	1.1 E-3	NA	3.7 E-2	1.6 E-3	NA	1.2 E-4	5.2 E-2	NA	2.8 E-1
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	5.2 E-4	NA	NA	2.2 E-1
879	Y	NA	7.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-1	NA	NA	6.3 E-5	NA	NA	4.9 E-1
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	1.3 E-4	NA	NA	1.6 E-2
881	Y	2.2 E-2	7.0 E-3	NA	6.8 E-3	4.9 E-3	3.0 E-3	2.2 E-2	NA	1.2 E-3	2.6 E-3	2.6 E-3	7.6 E-5	NA	6.5 E-5	NA	2.4 E-2	2.8 E-1
882	Y	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+1	NA	6.4 E-4	3.4 E-2	NA	NA	1.3 E+1
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk														
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dichlorobenzene	1,4-Dioxane	2-Methylnaphthalene	Benzene	Bromodichloromethane	Carbon tetrachloride	Chloroform
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
106	S	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6
133	S	NA	NA	6.0 E-7	NA	NA	NA	8.7 E-8	NA	NA	NA	NA	NA	NA	NA	4.2 E-6
192	S	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6
262	S	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA
263	S	3.0 E-6	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7
269	S	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
273	S	NA	3.7 E-8	2.6 E-7	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	4.7 E-6
274	S	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-6
275	S	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6
3679	S	NA	3.2 E-8	2.5 E-6	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	1.0 E-5
3680	S	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3681	S	NA	NA	1.0 E-6	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	4.1 E-6
3684	S	NA	NA	3.2 E-8	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	3.0 E-6	1.1 E-6
3693	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	3.2 E-5
644	Y	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	NA
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-5
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	3.6 E-5
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6
881	Y	NA	NA	9.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
882	Y	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-6
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-26
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	Layer	cis-1,2-Dichloroethene	Dichlorodifluoromethane	Freon 113	Methylene chloride	m-Xylene	Naphthalene	n-Butylbenzene	o-Xylene	p-Isopropyltoluene	p-Xylene	sec-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	Xylenes (total)	ILCR
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
106	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	NA	7.5 E-5	NA	NA	8 E-5
133	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	1.8 E-5	4.8 E-4	NA	5 E-4
192	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-6	NA	NA	6.9 E-7	4.3 E-6	NA	1 E-5
262	S	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	7.9 E-6	NA	NA	6.6 E-7	8.9 E-4	NA	9 E-4
263	S	NA	NA	NA	NA	NA	9.1 E-7	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	1.6 E-4	8.2 E-4	NA	2 E-3
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	5.3 E-7	NA	NA	3 E-6
269	S	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	1.9 E-5	1.6 E-4	NA	2 E-3
273	S	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	2.1 E-4	1.2 E-3	NA	3 E-3
274	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	9.3 E-5	NA	NA	1 E-4
275	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	3.8 E-7	NA	NA	1 E-5
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
3655	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	9.4 E-6	1.6 E-5	NA	3 E-5
3679	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	8.6 E-6	NA	3 E-5
3680	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	1 E-7
3681	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	2.8 E-6	NA	1 E-5
3684	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	1.6 E-5	NA	NA	2 E-5
3693	S	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	7.9 E-7	NA	NA	NA	1.6 E-4	NA	2 E-4
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	3 E-6
3695	S	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	6.0 E-7	NA	NA	6.0 E-6	NA	NA	9 E-6
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
71	Y	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	3 E-5
644	Y	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	7.8 E-8	2.2 E-4	NA	2 E-4
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	3.4 E-7	NA	NA	6 E-5
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	4.1 E-8	NA	NA	8 E-5
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	8.7 E-8	NA	NA	8 E-6
881	Y	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	4.2 E-8	NA	NA	2 E-6
882	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	2.2 E-5	NA	NA	1 E-3
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-6
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x groundwater to indoor air attenuation factor (from Table 5.2- 17) x the unit hazard or unit risk for the chemical).

Table 5.2-27
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)													
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2-Methylnaphthalene**	**Benzene**	**Bromodichloromethane**	**Carbon tetrachloride**
Unit Hazard		3.3 E+0	4.9 E+1	9.8 E-1	9.8 E+0	9.8 E+1	2.8 E+1	1.4 E+2	2.0 E+1	8.5 E-1	2.3 E-1	NA	2.3 E+1	9.8 E+0	1.7 E+1
Unit Risk		1.4 E-2	4.0 E-3	4.0 E-4	NA	NA	NA	6.4 E-3	NA	1.5 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2
106	S			8.0					120						
133	S			15	6.0			0.58	100						
192	S			3.6	0.3				19						
262	S			11					260				1.6		
263	S	37		32	140				3100			24			
268	S														
269	S			7.9	19										
273	S		0.55	6.6	120			0.24	380						
274	S			7.8	5.6				180						
275	S			0.33											
501	S														
3655	S			5.9	0.89										
3679	S		0.47	62	7.6			2.0							
3680	S			0.39											
3681	S			25	3.2			0.91							
3684	S			0.8	8.8			0.77							0.51
3693	S					1.3	0.83					28			
3694	S														
3695	S			3.3	1.1										
3681-T	S														
71	Y								2.0					2.0	
644	Y						9.7		69	3.3					
645	Y														
879	Y													0.86	
880	Y														
881	Y			13		4.6	1.6		57						
882	Y	7.0			6.4				12						
71-T	Y														
882-T	Y														

Table 5.2-27
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)																	
Sample Name	**Layer**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dichlorodifluoromethane**	**Freon 113**	**Methylene chloride**	**m-Xylene**	**Naphthalene**	**n-Butylbenzene**	**o-Xylene**	**p-Isopropyltoluene**	**p-Xylene**	**sec-Butylbenzene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**Xylenes (total)**
Unit Hazard		1.5 E+1	2.0 E+1	3.4 E+0	2.3 E-2	2.3 E-1	6.8 E+0	2.3 E+2	2.0 E+1	6.8 E+0	NA	6.8 E+0	2.0 E+1	2.0 E+1	2.3 E+0	1.2 E+1	1.1 E+0	6.7 E+0	6.8 E+0
Unit Risk		5.6 E-3	NA	NA	NA	2.4 E-4	NA	8.4 E-3	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	4.9 E-4	1.9 E-2	NA
106	S	2.0			31									13			790		
133	S	8.5	180											0.25		0.92	190	38	
192	S	6.8	27											12			7.3	0.34	
262	S		0.72		21		5.0	2.4	0.56				0.38	17			7.0	70	16
263	S	4.6	72		2700			16						2900			1700	65	
268	S	0.51			1.1									4.6			5.6		
269	S		940	3.7	1000			0.33						3800		0.71	200	13	
273	S	9.4	370	23	1100			0.21						4300		0.52	2200	94	
274	S	9.3	98	9.5	570									86		0.51	980		
275	S	9.8	5.9											14			4.0		
501	S																		
3655	S	5.6	94	0.89										5.1		0.46	99	1.3	
3679	S	21	470													1.7	130	0.68	
3680	S		4.4														1.1		
3681	S	8.2	190													4.7	22	0.22	
3684	S	2.3	2.4											5.3			170		
3693	S		5.0	8.5				23	1.8		0.26		2.8	1.7				13	0.92
3694	S																36		
3695	S	3.7	55					0.25						1.3			63		
3681-T	S																		
71	Y	37				1.4											1.0		
644	Y		32		8.0		2.0	0.16				1.0		5.0	4.3		0.46	10	
645	Y	57												17.5			2.0		
879	Y	41			29									57			0.24		
880	Y	8.8												0.37			0.51		
881	Y		21	0.97	29		6.8	2.6	0.72	26	0.6	1.1	0.98	0.35	0.21		0.25		29
882	Y		27		1500									1700		0.29	130		
71-T	Y	9.7																	
882-T	Y																		

Table 5.2-27
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index													
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2-Methylnaphthalene**	**Benzene**	**Bromodichloromethane**	**Carbon tetrachloride**
Unit Hazard															
Unit Risk															
106	S	NA	NA	1.8 E-4	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA
133	S	NA	NA	3.5 E-4	7.7 E-3	NA	NA	4.5 E-4	3.3 E-2	NA	NA	NA	NA	NA	NA
192	S	NA	NA	8.3 E-5	3.8 E-4	NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA
262	S	NA	NA	2.5 E-4	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	9.8 E-4	NA	NA
263	S	1.7 E-4	NA	7.4 E-4	1.8 E-1	NA	NA	NA	1.0 E+0	NA	NA	NA	NA	NA	NA
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
269	S	NA	NA	1.8 E-4	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
273	S	NA	1.1 E-4	1.5 E-4	1.5 E-1	NA	NA	1.9 E-4	1.3 E-1	NA	NA	NA	NA	NA	NA
274	S	NA	NA	1.8 E-4	7.2 E-3	NA	NA	NA	6.0 E-2	NA	NA	NA	NA	NA	NA
275	S	NA	NA	7.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	NA	NA	1.4 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3679	S	NA	9.1 E-5	1.4 E-3	9.7 E-3	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA
3680	S	NA	NA	9.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3681	S	NA	NA	5.8 E-4	4.1 E-3	NA	NA	7.0 E-4	NA	NA	NA	NA	NA	NA	NA
3684	S	NA	NA	1.8 E-5	1.1 E-2	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	1.2 E-3
3693	S	NA	NA	NA	NA	2.7 E-3	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	7.6 E-5	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	1.0 E-4	NA
644	Y	NA	NA	NA	NA	NA	3.6 E-3	NA	4.1 E-2	4.7 E-5	NA	NA	NA	NA	NA
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
881	Y	NA	NA	5.4 E-4	NA	1.7 E-2	6.0 E-4	NA	3.4 E-2	NA	NA	NA	NA	NA	NA
882	Y	5.7 E-5	NA	NA	1.5 E-2	NA	NA	NA	7.2 E-3	NA	NA	NA	NA	NA	NA
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-27
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Layer	Chloroform	cis-1,2-Dichloroethene	Dichlorodifluoromethane	Freon 113	Methylene chloride	m-Xylene	Naphthalene	n-Butylbenzene	o-Xylene	p-Isopropyltoluene	p-Xylene	sec-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Xylenes (total)	HI
Unit Hazard																				
Unit Risk																				
106	S	6.3 E-4	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	4.1 E-2	NA	NA	1.0 E-1
133	S	2.7 E-3	6.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	4.0 E-4	9.8 E-3	4.0 E-2	NA	1.5 E-1
192	S	2.1 E-3	8.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	3.8 E-4	3.6 E-4	NA	3.6 E-2
262	S	NA	2.4 E-4	NA	1.0 E-3	NA	9.8 E-4	8.7 E-4	4.6 E-4	NA	NA	NA	1.9 E-4	2.5 E-2	NA	NA	3.6 E-4	7.5 E-2	2.7 E-3	1.9 E-1
263	S	1.4 E-3	2.4 E-2	NA	1.3 E-1	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	4.2 E+0	NA	NA	8.8 E-2	6.9 E-2	NA	5.7 E+0
268	S	1.6 E-4	NA	NA	5.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	2.9 E-4	NA	NA	7.2 E-3
269	S	NA	3.1 E-1	1.6 E-2	4.8 E-2	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	5.5 E+0	NA	3.1 E-4	1.0 E-2	1.4 E-2	NA	5.9 E+0
273	S	2.9 E-3	1.2 E-1	1.0 E-1	5.3 E-2	NA	NA	7.6 E-5	NA	NA	NA	NA	NA	6.2 E+0	NA	2.3 E-4	1.1 E-1	1.0 E-1	NA	7.0 E+0
274	S	2.9 E-3	3.2 E-2	4.2 E-2	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	2.2 E-4	5.1 E-2	NA	NA	3.5 E-1
275	S	3.1 E-3	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	2.1 E-4	NA	NA	2.6 E-2
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	1.8 E-3	3.1 E-2	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	2.0 E-4	5.1 E-3	1.4 E-3	NA	5.2 E-2
3679	S	6.6 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	6.7 E-3	7.2 E-4	NA	1.8 E-1
3680	S	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	1.5 E-3
3681	S	2.6 E-3	6.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	1.1 E-3	2.3 E-4	NA	7.4 E-2
3684	S	7.2 E-4	8.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	8.8 E-3	NA	NA	3.1 E-2
3693	S	NA	1.7 E-3	3.8 E-2	NA	NA	NA	8.4 E-3	1.5 E-3	NA	NA	NA	1.4 E-3	2.5 E-3	NA	NA	NA	1.4 E-2	1.6 E-4	7.0 E-2
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	1.9 E-3
3695	S	1.2 E-3	1.8 E-2	NA	NA	NA	NA	9.1 E-5	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	3.3 E-3	NA	NA	2.6 E-2
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	2.0 E-2	NA	NA	NA	6.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-5	NA	NA	2.2 E-2
644	Y	NA	1.9 E-2	NA	6.9 E-4	NA	7.1 E-4	1.1 E-4	NA	NA	NA	4.0 E-4	NA	1.3 E-2	5.6 E-4	NA	4.3 E-5	1.9 E-2	NA	9.8 E-2
645	Y	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	1.9 E-4	NA	NA	7.7 E-2
879	Y	2.3 E-2	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	2.2 E-5	NA	NA	1.7 E-1
880	Y	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-4	NA	NA	4.7 E-5	NA	NA	5.9 E-3
881	Y	NA	1.2 E-2	7.8 E-3	2.5 E-3	NA	2.4 E-3	1.7 E-3	1.1 E-3	7.9 E-3	NA	4.4 E-4	9.1 E-4	9.2 E-4	2.7 E-5	NA	2.3 E-5	NA	8.7 E-3	9.9 E-2
882	Y	NA	1.6 E-2	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E+0	NA	2.3 E-4	1.2 E-2	NA	NA	4.6 E+0
71-T	Y	5.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-3
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-27
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk													
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichlorobenzene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2-Methylnaphthalene**	**Benzene**	**Bromodichloromethane**	**Carbon tetrachloride**
Unit Hazard															
Unit Risk															
106	S	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
133	S	NA	NA	1.4 E-7	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA
192	S	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
262	S	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA
263	S	7.1 E-7	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
268	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
269	S	NA	NA	7.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
273	S	NA	8.7 E-9	6.2 E-8	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA
274	S	NA	NA	7.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
275	S	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3655	S	NA	NA	5.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3679	S	NA	7.4 E-9	5.8 E-7	NA	NA	NA	7.0 E-8	NA	NA	NA	NA	NA	NA	NA
3680	S	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3681	S	NA	NA	2.3 E-7	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA
3684	S	NA	NA	7.5 E-9	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	7.1 E-7
3693	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3695	S	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA
644	Y	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	NA
645	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
879	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA
880	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
881	Y	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
882	Y	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
71-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-27
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Layer**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dichlorodifluoromethane**	**Freon 113**	**Methylene chloride**	**m-Xylene**	**Naphthalene**	**n-Butylbenzene**	**o-Xylene**	**p-Isopropyltoluene**	**p-Xylene**	**sec-Butylbenzene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl Chloride**	**Xylenes (total)**	**ILCR**
Unit Hazard																				
Unit Risk																				
106	S	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	1.8 E-5	NA	NA	2 E-5
133	S	9.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	4.2 E-6	1.1 E-4	NA	1 E-4
192	S	8.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	1.6 E-7	1.0 E-6	NA	3 E-6
262	S	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	1.6 E-7	2.1 E-4	NA	2 E-4
263	S	5.4 E-7	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	3.8 E-5	1.9 E-4	NA	5 E-4
268	S	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	NA	NA	1.2 E-7	NA	NA	7 E-7
269	S	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	4.4 E-6	3.9 E-5	NA	5 E-4
273	S	1.1 E-6	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	4.9 E-5	2.8 E-4	NA	8 E-4
274	S	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	2.2 E-5	NA	NA	3 E-5
275	S	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	8.9 E-8	NA	NA	3 E-6
501	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
3655	S	6.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	2.2 E-6	3.9 E-6	NA	7 E-6
3679	S	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	2.0 E-6	NA	8 E-6
3680	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	3 E-8
3681	S	9.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	6.6 E-7	NA	2 E-6
3684	S	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	3.8 E-6	NA	NA	5 E-6
3693	S	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	3.9 E-5	NA	4 E-5
3694	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	8 E-7
3695	S	4.3 E-7	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	1.4 E-6	NA	NA	2 E-6
3681-T	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
71	Y	7.6 E-6	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	8 E-6
644	Y	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	9.8 E-7	NA	NA	1.8 E-8	5.2 E-5	NA	5 E-5
645	Y	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	8.0 E-8	NA	NA	2 E-5
879	Y	8.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	9.6 E-9	NA	NA	2 E-5
880	Y	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA	2.0 E-8	NA	NA	2 E-6
881	Y	NA	NA	NA	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	1.0 E-8	NA	NA	4 E-7
882	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	5.2 E-6	NA	NA	3 E-4
71-T	Y	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
882-T	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:

All concentrations reported in micrograms per liter.

HI = Hazard index

ILCR = Incremental lifetime cancer risk

NA = Not applicable.

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Hazard (HI) or risk (ILCR) is the concentration for the chemical x groundwater to indoor air attenuation factor (from Table 5.2- 18) x the unit hazard or unit risk for the chemical).

Table 5.2-28 All Receptors Hazard Index and Cancer Risk Results for Groundwater
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk					Blood Lead	
		Ingestion and Domestic Use		Vapor Intrusion			Domestic + Vapor Intrusion			Ingestion and Domestic Use	Vapor Intrusion		Domestic + Vapor Intrusion			
		Resident		Resident		Commercial	Resident		Commercial			Commercial		Commercial	Resident	
Sample Name	Layer	Child	Adult	Child	Adult	Worker	Child	Adult	Worker	Resident	Resident	Worker	Resident	Worker	Child	Adult
100	C	**2.1 E+3**	**9.1 E+2**	NA	NA	NA	**2.1 E+3**	**9.1 E+2**	NA	**4 E-3**	NA	NA	**4 E-3**	NA	NA	NA
107	C	**8.1 E+0**	**3.5 E+0**	NA	NA	NA	**8.1 E+0**	**3.5 E+0**	NA	**1 E-3**	NA	NA	**1 E-3**	NA	1.9 E+0	9.0 E-1
193	C	9.1 E-1	3.9 E-1	NA	NA	NA	9.1 E-1	3.9 E-1	NA	5 E-7	NA	NA	5 E-7	NA	8.0 E+0	3.9 E+0
195	C	**6.9 E+1**	**3.0 E+1**	NA	NA	NA	**6.9 E+1**	**3.0 E+1**	NA	**6 E-4**	NA	NA	**6 E-4**	NA	**4.8 E+1**	**2.4 E+1**
3310	C	**2.5 E+2**	**1.1 E+2**	NA	NA	NA	**2.5 E+2**	**1.1 E+2**	NA	**7 E-4**	NA	NA	**7 E-4**	NA	**3.5 E+1**	**1.7 E+1**
3400	C	**2.0 E+2**	**8.6 E+1**	NA	NA	NA	**2.0 E+2**	**8.6 E+1**	NA	**4 E-4**	NA	NA	**4 E-4**	NA	2.3 E+0	1.1 E+0
3401	C	**1.3 E+2**	**5.4 E+1**	NA	NA	NA	**1.3 E+2**	**5.4 E+1**	NA	**6 E-4**	NA	NA	**6 E-4**	NA	2.5 E+0	1.2 E+0
3514	C	**1.4 E+3**	**6.0 E+2**	NA	NA	NA	**1.4 E+3**	**6.0 E+2**	NA	**4 E-3**	NA	NA	**4 E-3**	NA	3.3 E+0	1.6 E+0
3519	C	**7.4 E+2**	**3.2 E+2**	NA	NA	NA	**7.4 E+2**	**3.2 E+2**	NA	**2 E-3**	NA	NA	**2 E-3**	NA	NA	NA
3627	C	**6.3 E+2**	**2.7 E+2**	NA	NA	NA	**6.3 E+2**	**2.7 E+2**	NA	**2 E-3**	NA	NA	**2 E-3**	NA	NA	NA
193-T	C	**1.2 E+0**	5.3 E-1	NA	NA	NA	**1.2 E+0**	5.3 E-1	NA	**7 E-4**	NA	NA	**7 E-4**	NA	NA	NA
195-T	C	4.8 E-1	2.1 E-1	NA	NA	NA	4.8 E-1	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA
105	D	**9.3 E+2**	**4.0 E+2**	NA	NA	NA	**9.3 E+2**	**4.0 E+2**	NA	**2 E-3**	NA	NA	**2 E-3**	NA	NA	NA
188	D	**4.5 E+1**	**1.9 E+1**	NA	NA	NA	**4.5 E+1**	**1.9 E+1**	NA	**4 E-4**	NA	NA	**4 E-4**	NA	**1.9 E+2**	**9.6 E+1**
189	D	**1.4 E+1**	**5.9 E+0**	NA	NA	NA	**1.4 E+1**	**5.9 E+0**	NA	**6 E-5**	NA	NA	**6 E-5**	NA	NA	NA
190	D	4.0 E-3	1.7 E-3	NA	NA	NA	4.0 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA
194	D	5.6 E-2	2.4 E-2	NA	NA	NA	5.6 E-2	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA
203	D	**8.1 E+0**	**3.4 E+0**	NA	NA	NA	**8.1 E+0**	**3.4 E+0**	NA	**1 E-3**	NA	NA	**1 E-3**	NA	**9.3 E+1**	**4.6 E+1**
3311	D	9.3 E-2	4.0 E-2	NA	NA	NA	9.3 E-2	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA
3312	D	8.4 E-2	3.6 E-2	NA	NA	NA	8.4 E-2	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA
3402	D	6.0 E-1	2.6 E-1	NA	NA	NA	6.0 E-1	2.6 E-1	NA	**3 E-5**	NA	NA	**3 E-5**	NA	NA	NA
3515	D	6.0 E-1	2.5 E-1	NA	NA	NA	6.0 E-1	2.5 E-1	NA	6 E-7	NA	NA	6 E-7	NA	NA	NA
3526	D	**9.2 E+0**	**3.9 E+0**	NA	NA	NA	**9.2 E+0**	**3.9 E+0**	NA	**5 E-6**	NA	NA	**5 E-6**	NA	NA	NA
3527	D	1.1 E-1	4.4 E-2	NA	NA	NA	1.1 E-1	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA
191	E	**5.8 E+0**	**2.5 E+0**	NA	NA	NA	**5.8 E+0**	**2.5 E+0**	NA	**2 E-5**	NA	NA	**2 E-5**	NA	NA	NA
196	E	2.8 E-2	1.2 E-2	NA	NA	NA	2.8 E-2	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA
197	E	**1.2 E+0**	5.2 E-1	NA	NA	NA	**1.2 E+0**	5.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA
204	E	4.4 E-2	1.9 E-2	NA	NA	NA	4.4 E-2	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA
3313	E	1.2 E-2	5.2 E-3	NA	NA	NA	1.2 E-2	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA
3516	E	6.6 E-1	2.7 E-1	NA	NA	NA	6.6 E-1	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA
3528	E	1.3 E-1	5.5 E-2	NA	NA	NA	1.3 E-1	5.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA
205	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3314	F	4.0 E-3	1.7 E-3	NA	NA	NA	4.0 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA
106	S	**2.0 E+2**	**8.8 E+1**	6.7 E-1	2.9 E-1	1.0 E-1	**2.0 E+2**	**8.8 E+1**	1.0 E-1	**8 E-4**	**8 E-5**	**2 E-5**	**9 E-4**	**2 E-5**	NA	NA
133	S	**6.3 E+1**	**2.7 E+1**	**1.0 E+0**	4.3 E-1	1.5 E-1	**6.4 E+1**	**2.7 E+1**	1.5 E-1	**2 E-3**	**5 E-4**	**1 E-4**	**3 E-3**	**1 E-4**	2.3 E+0	1.1 E+0
192	S	**7.2 E+0**	**3.1 E+0**	2.3 E-1	1.0 E-1	3.6 E-2	**7.4 E+0**	**3.2 E+0**	3.6 E-2	**4 E-4**	**1 E-5**	**3 E-6**	**4 E-4**	**3 E-6**	**5.4 E+1**	**2.7 E+1**
262	S	**6.5 E+1**	**2.8 E+1**	**1.3 E+0**	5.4 E-1	1.9 E-1	**6.6 E+1**	**2.8 E+1**	1.9 E-1	**5 E-3**	**9 E-4**	**2 E-4**	**6 E-3**	**2 E-4**	6.4 E+0	3.1 E+0
263	S	**6.9 E+2**	**3.0 E+2**	**3.7 E+1**	**1.6 E+1**	**5.7 E+0**	**7.3 E+2**	**3.1 E+2**	**5.7 E+0**	**5 E-2**	**2 E-3**	**5 E-4**	**5 E-2**	**5 E-4**	2.3 E+0	1.1 E+0
268	S	**2.5 E+0**	**1.1 E+0**	4.7 E-2	2.0 E-2	7.2 E-3	**2.6 E+0**	**1.1 E+0**	7.2 E-3	**7 E-5**	**3 E-6**	7 E-7	**8 E-5**	7 E-7	2.3 E+0	1.1 E+0
269	S	**2.5 E+2**	**1.1 E+2**	**3.9 E+1**	**1.7 E+1**	**5.9 E+0**	**2.9 E+2**	**1.2 E+2**	**5.9 E+0**	**6 E-2**	**2 E-3**	**5 E-4**	**6 E-2**	**5 E-4**	2.3 E+0	1.1 E+0
273	S	**7.7 E+2**	**3.3 E+2**	**4.6 E+1**	**2.0 E+1**	**7.0 E+0**	**8.1 E+2**	**3.5 E+2**	**7.0 E+0**	**7 E-2**	**3 E-3**	**8 E-4**	**7 E-2**	**8 E-4**	1.9 E+0	9.0 E-1
274	S	**2.6 E+2**	**1.1 E+2**	**2.3 E+0**	9.7 E-1	3.5 E-1	**2.7 E+2**	**1.1 E+2**	3.5 E-1	**2 E-3**	**1 E-4**	**3 E-5**	**2 E-3**	**3 E-5**	NA	NA
275	S	**1.0 E+1**	**4.5 E+0**	1.7 E-1	7.1 E-2	2.6 E-2	**1.1 E+1**	**4.5 E+0**	2.6 E-2	**3 E-4**	**1 E-5**	**3 E-6**	**4 E-4**	**3 E-6**	NA	NA
501	S	**1.6 E+1**	**6.9 E+0**	NA	NA	NA	**1.6 E+1**	**6.9 E+0**	NA	**2 E-6**	0 E+0	0 E+0	**2 E-6**	0 E+0	**9.7 E+1**	**4.9 E+1**
3655	S	**2.9 E+1**	**1.3 E+1**	3.4 E-1	1.5 E-1	5.2 E-2	**3.0 E+1**	**1.3 E+1**	5.2 E-2	**2 E-4**	**3 E-5**	**7 E-6**	**3 E-4**	**7 E-6**	NA	NA
3679	S	**5.4 E+1**	**2.3 E+1**	**1.2 E+0**	5.1 E-1	1.8 E-1	**5.5 E+1**	**2.4 E+1**	1.8 E-1	**4 E-4**	**3 E-5**	**8 E-6**	**5 E-4**	**8 E-6**	1.9 E+0	9.2 E-1
3680	S	**1.0 E+0**	4.5 E-1	1.0 E-2	4.3 E-3	1.5 E-3	**1.1 E+0**	4.5 E-1	1.5 E-3	1 E-6	1 E-7	3 E-8	1 E-6	3 E-8	1.8 E+0	8.6 E-1
3681	S	**1.5 E+1**	**6.4 E+0**	4.9 E-1	2.1 E-1	7.4 E-2	**1.5 E+1**	**6.6 E+0**	7.4 E-2	**1 E-4**	**1 E-5**	**2 E-6**	**1 E-4**	**2 E-6**	2.2 E+0	1.0 E+0
3684	S	**1.2 E+2**	**5.2 E+1**	2.0 E-1	8.7 E-2	3.1 E-2	**1.2 E+2**	**5.2 E+1**	3.1 E-2	**2 E-4**	**2 E-5**	**5 E-6**	**3 E-4**	**5 E-6**	2.2 E+0	1.0 E+0
3693	S	**2.3 E+1**	**9.8 E+0**	4.6 E-1	2.0 E-1	7.0 E-2	**2.4 E+1**	**1.0 E+1**	7.0 E-2	**1 E-3**	**2 E-4**	**4 E-5**	**1 E-3**	**4 E-5**	7.5 E+0	3.7 E+0
3694	S	**9.9 E+0**	**4.2 E+0**	1.2 E-2	5.2 E-3	1.9 E-3	**9.9 E+0**	**4.2 E+0**	1.9 E-3	**3 E-5**	**3 E-6**	8 E-7	**3 E-5**	8 E-7	1.8 E+0	8.5 E-1
3695	S	**2.3 E+1**	**9.9 E+0**	1.7 E-1	7.3 E-2	2.6 E-2	**2.3 E+1**	**1.0 E+1**	2.6 E-2	**2 E-4**	**9 E-6**	**2 E-6**	**2 E-4**	**2 E-6**	3.1 E+0	1.5 E+0
3681-T	S	**1.1 E+0**	4.9 E-1	NA	NA	NA	**1.1 E+0**	4.9 E-1	NA	**4 E-4**	0 E+0	0 E+0	**4 E-4**	0 E+0	NA	NA
71	Y	**4.4 E+0**	**1.9 E+0**	1.4 E-1	6.1 E-2	2.2 E-2	**4.6 E+0**	**2.0 E+0**	2.2 E-2	**3 E-4**	**3 E-5**	**8 E-6**	**3 E-4**	**8 E-6**	NA	NA
644	Y	**1.6 E+3**	**6.8 E+2**	6.4 E-1	2.8 E-1	9.8 E-2	**1.6 E+3**	**6.8 E+2**	9.8 E-2	**5 E-2**	**2 E-4**	**5 E-5**	**5 E-2**	**5 E-5**	**1.4 E+3**	**7.2 E+2**
645	Y	**2.0 E+1**	**8.3 E+0**	5.1 E-1	2.2 E-1	7.7 E-2	**2.0 E+1**	**8.5 E+0**	7.7 E-2	**1 E-3**	**6 E-5**	**2 E-5**	**1 E-3**	**2 E-5**	**4.0 E+1**	**2.0 E+1**
879	Y	**1.0 E+2**	**4.4 E+1**	**1.1 E+0**	4.9 E-1	1.7 E-1	**1.1 E+2**	**4.4 E+1**	1.7 E-1	**2 E-3**	**8 E-5**	**2 E-5**	**2 E-3**	**2 E-5**	**5.9 E+1**	**3.0 E+1**

Table 5.2-28 All Receptors Hazard Index and Cancer Risk Results for Groundwater
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk					Blood Lead	
		Ingestion and Domestic Use		Vapor Intrusion			Domestic + Vapor Intrusion			Ingestion and Domestic Use	Vapor Intrusion		Domestic + Vapor Intrusion			
		Resident		Resident		Commercial	Resident		Commercial			Commercial		Commercial	Resident	
Sample Name	**Layer**	**Child**	**Adult**	**Child**	**Adult**	**Worker**	**Child**	**Adult**	**Worker**	**Resident**	**Resident**	**Worker**	**Resident**	**Worker**	**Child**	**Adult**
880	Y	**2.2 E+1**	**9.5 E+0**	3.8 E-2	1.6 E-2	5.9 E-3	**2.2 E+1**	**9.5 E+0**	5.9 E-3	**2 E-4**	**8 E-6**	**2 E-6**	**2 E-4**	**2 E-6**	**7.4 E+1**	**3.7 E+1**
881	Y	**4.7 E+3**	**2.1 E+3**	6.5 E-1	2.8 E-1	9.9 E-2	**4.7 E+3**	**2.1 E+3**	9.9 E-2	**1 E-1**	**2 E-6**	4 E-7	**1 E-1**	4 E-7	**5.4 E+1**	**2.7 E+1**
882	Y	**2.1 E+2**	**9.1 E+1**	**3.0 E+1**	**1.3 E+1**	**4.6 E+0**	**2.4 E+2**	**1.0 E+2**	**4.6 E+0**	**3 E-2**	**1 E-3**	**3 E-4**	**3 E-2**	**3 E-4**	**3.7 E+2**	**1.8 E+2**
71-T	Y	**3.6 E+0**	**1.5 E+0**	3.5 E-2	1.5 E-2	5.3 E-3	**3.7 E+0**	**1.6 E+0**	5.3 E-3	**6 E-5**	**8 E-6**	**2 E-6**	**7 E-5**	**2 E-6**	**NA**	**NA**
882-T	Y	**2.8 E+1**	**1.2 E+1**	**NA**	**NA**	**NA**	**2.8 E+1**	**1.2 E+1**	**NA**	**7 E-4**	0 E+0	0 E+0	**7 E-4**	0 E+0	**4.4 E+1**	**2.2 E+1**
Layer																
C	Minimum	4.8 E-1	2.1 E-1				4.8 E-1	2.1 E-1		5 E-7			5 E-7		1.9 E+0	9.0 E-1
	Median	1.6 E+2	7.0 E+1				1.6 E+2	7.0 E+1		7 E-4			7 E-4		3.3 E+0	1.6 E+0
	Maximum	2.1 E+3	9.1 E+2				2.1 E+3	9.1 E+2		4 E-3			4 E-3		4.8 E+1	2.4 E+1
D	Minimum	4.0 E-3	1.7 E-3				4.0 E-3	1.7 E-3		6 E-7			6 E-7		9.3 E+1	4.6 E+1
	Median	6.0 E-1	2.5 E-1				6.0 E-1	2.5 E-1		6 E-5			6 E-5		1.4 E+2	7.1 E+1
	Maximum	9.3 E+2	4.0 E+2				9.3 E+2	4.0 E+2		2 E-3			2 E-3		1.9 E+2	9.6 E+1
E	Minimum	1.2 E-2	5.2 E-3				1.2 E-2	5.2 E-3		2 E-5			2 E-5			
	Median	1.3 E-1	5.5 E-2				1.3 E-1	5.5 E-2		2 E-5			2 E-5			
	Maximum	5.8 E+0	2.5 E+0				5.8 E+0	2.5 E+0		2 E-5			2 E-5			
S	Minimum	1.0 E+0	4.5 E-1	1.0 E-2	4.3 E-3	1.5 E-3	1.1 E+0	4.5 E-1	1.5 E-3	1 E-6	1 E-7	3 E-8	1 E-6	3 E-8	1.8 E+0	8.5 E-1
	Median	2.6 E+1	1.1 E+1	4.7 E-1	2.0 E-1	7.2 E-2	2.7 E+1	1.1 E+1	7.2 E-2	4 E-4	3 E-5	6 E-6	4 E-4	6 E-6	2.3 E+0	1.1 E+0
	Maximum	7.7 E+2	3.3 E+2	4.6 E+1	2.0 E+1	7.0 E+0	8.1 E+2	3.5 E+2	7.0 E+0	7 E-2	3 E-3	8 E-4	7 E-2	8 E-4	9.7 E+1	4.9 E+1
Y	Minimum	3.6 E+0	1.5 E+0	3.5 E-2	1.5 E-2	5.3 E-3	3.7 E+0	1.6 E+0	5.3 E-3	6 E-5	2 E-6	4 E-7	7 E-5	4 E-7	4.0 E+1	2.0 E+1
	Median	2.8 E+1	1.2 E+1	5.7 E-1	2.5 E-1	8.8 E-2	2.8 E+1	1.2 E+1	8.8 E-2	1 E-3	3 E-5	8 E-6	1 E-3	8 E-6	5.9 E+1	3.0 E+1
	Maximum	4.7 E+3	2.1 E+3	3.0 E+1	1.3 E+1	4.6 E+0	4.7 E+3	2.1 E+3	4.6 E+0	1 E-1	1 E-3	3 E-4	1 E-1	3 E-4	1.4 E+3	7.2 E+2

Notes and Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.2-29 ***Soil Unit Hazard and Unit Cancer Risk Results - Resident***
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Cadmium	1.0 E+0	1.3 E-2	1.4 E-3	4.7 E-7	1.4 E-2	1.4 E-3	2.2 E-4	2.0 E-7	1.6 E-3	NA	NA	1.6 E-9	1.6 E-9
Chromium VI	1.0 E+0	4.3 E-3	0.0 E+0	2.1 E-4	4.5 E-3	4.6 E-4	0.0 E+0	9.2 E-5	5.5 E-4	NA	NA	5.6 E-8	5.6 E-8
Iron	1.0 E+0	1.8 E-5	0.0 E+0	NA	1.8 E-5	2.0 E-6	0.0 E+0	NA	2.0 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	4.3 E-2	0.0 E+0	5.5 E-6	4.3 E-2	4.6 E-3	0.0 E+0	2.4 E-6	4.6 E-3	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.6 E-3	0.0 E+0	9.4 E-8	2.6 E-3	2.7 E-4	0.0 E+0	4.0 E-8	2.7 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds													
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	4.7 E-7	8.0 E-11	1.6 E-6
Benzo(b)fluoranthene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo(k)fluoranthene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	7.7 E-6	4.3 E-10	2.6 E-5
Chrysene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	7.7 E-8	4.3 E-12	2.6 E-7
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	4.7 E-6	4.5 E-10	1.6 E-5
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Naphthalene	1.0 E+0	6.4 E-4	2.3 E-4	1.7 E-2	1.8 E-2	6.8 E-5	3.6 E-5	7.4 E-3	7.5 E-3	NA	NA	4.1 E-7	4.1 E-7
PCB-1248	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
PCB-1254	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
PCB-1260	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA
Di-n-butyl phthalate	1.0 E+0	1.3 E-4	3.6 E-5	4.7 E-9	1.6 E-4	1.4 E-5	5.5 E-6	2.0 E-9	1.9 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
Phenanthrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Volatile Organic Compounds													
1,1,2,2-Tetrachloroethane	1.0 E+0	2.1 E-4	0.0 E+0	7.6 E-4	9.7 E-4	2.3 E-5	0.0 E+0	3.2 E-4	3.5 E-4	4.2 E-7	0.0 E+0	2.1 E-6	2.6 E-6

Key:
HQ = hazard quotient
HI - hazard index
ILCR = incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.2-30 Inhalation Unit Hazard and Unit Cancer Risk Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethane	1.0 E+0	3.2 E+0	1.4 E+0	8.5 E-4
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,3-Butadiene	1.0 E+0	1.1 E+3	4.8 E+2	8.9 E-2
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.9 E-2
Carbon Tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Ethylbenzene	1.0 E+0	2.2 E+0	9.6 E-1	1.3 E-3
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Freon 12	1.0 E+0	1.1 E+1	4.8 E+0	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Methylene Chloride	1.0 E+0	7.5 E-1	3.2 E-1	5.2 E-4
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
trans-1,2-Dichloroethene	1.0 E+0	3.8 E+1	1.6 E+1	NA
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
Vinyl Chloride	1.0 E+0	2.2 E+1	9.6 E+0	4.0 E-2
1,1,1-Trichloroethane	1.0 E+0	4.5 E-1	1.9 E-1	NA
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	2.2 E+1	9.6 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.5 E-1	1.9 E-1	NA
4-Ethyltoluene	1.0 E+0	2.2 E+1	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Cumene	1.0 E+0	5.6 E+0	2.4 E+0	NA
Cyclohexane	1.0 E+0	3.7 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
Freon 11	1.0 E+0	1.1 E+1	4.8 E+0	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
o-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Propylbenzene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Styrene	1.0 E+0	2.5 E+0	1.1 E+0	NA
Toluene	1.0 E+0	7.5 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard Child		9.7 E-4	NA	NA	NA	NA	NA	1.4 E-2	4.5 E-3	NA	NA	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	1.8 E-2	8.9 E-1	8.9 E-1	8.9 E-1	5.5 E-5	1.6 E-4	4.4 E-4	5.8 E-4	5.8 E-4
Unit Hazard Adult		3.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-4	NA	NA	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	7.5 E-3	1.1 E-1	1.1 E-1	1.1 E-1	6.4 E-6	1.9 E-5	5.2 E-5	6.9 E-5	6.9 E-5
Unit Risk		2.6 E-6	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	2.6 E-6	1.6 E-9	5.6 E-8	2.6 E-7	1.6 E-5	2.6 E-6	NA	NA	NA	NA	4.1 E-7	1.1 E-5	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA
03D-AH01	0.01												13600	16	0.14	2.03					1.5				
03D-AH01	3		88	62		48	56			93	6.4	21	13200	15			2.2					170	140		160
03D-AH02	0.01												16900	25							2.1				
03D-AH02	3		110	67		60	63			110		22	12000	11	0.12	21.9						170	123		180
03D-SB01	1	1.0						1.3					36700	34	0.46						11				
03D-SB01	5												32500	13							4.2				
03D-SB01	10												42300	14	0.32						1.3				
03D-SB02	0.01												20400	21	1.3										
03D-SB02	1												25700	8.9	0.19				2.8		6.1				
03D-SB02	3												26600	14	0.26										
03D-SB02	6												19200	9.1	0.18										
03D-SB02	7																				2.8				
03D-SB02	10																				5.8				
03D-SB02	11												20100	6.3	0.15										
03D-SB03	1												23000	10							2.7				
03D-SB03	5												23600	8.1							5.7				
03D-SB03	10							3.1					21500	25	2.9						10				
03D-SB04	0.01												21400	5.8											
03D-SB04	1	2.0											21600	6.2					0.083						
03D-SB04	3												18600												
03D-SB04	5												21500	8.8											
03D-SB04	6																				0.80				
03D-SB04	10	1.0											21100	6.3							7.4				
03D-SB05	0.01												12800	8.0											
03D-SB05	1	0.40											15700						0.122		8.3				
03D-SB05	4												20100	10											
03D-SB05	5												19500	10					2.32		0.80				
03D-SB05	10												17000						0.084		1.9				
03D-SB06	1												23500	7.6					0.051		8.2				
03D-SB06	5												9310								8.9				
03D-SB06	10												206000	5.0					0.43		1.7				
03D-SB07	0.01												23800		0.18										
03D-SB07	1	2.00																							
03D-SB07	5												19500	6.1											
03D-SB07	7																				1.6				
03D-SB07	10																				6.33				
03D-SB08	0.01												23300	10	0.19										
03D-SB08	1												25800	8.6	0.30						5.62				
03D-SB08	3												18100	7.5											
03D-SB08	5												22500	9.3	0.50						7.2				
03D-SB08	10												14400		0.40						1.7				
03D-SB09	5								0.36					12	0.11	0.50								0.074	
03D-SB09	11								0.25					7.9	0.03	0.58									
03D-SB10	5								0.22					4.6	0.012	0.77									
03D-SB10	11								0.28					6.6	0.052	3.1									
03D-SB11	1		0.012						0.42	0.0065				3.1	0.079	0.4			0.037				0.0058		0.0079
03D-SB11	5								0.32					11	0.28	0.65									
03D-SB11	11								0.52					4.3	0.46	2.4									
03D-SB12	5		0.024					0.62	0.22	0.021				6.5	0.063	0.34							0.016		
03D-SB12	11		0.045					0.36	0.30	0.026				4.0	0.098	0.80							0.021		
03D-SB13	6							0.35	0.36					6.2	0.040	0.36									
03D-SB13	11.5							0.25	0.31					2.9	0.010	0.21								0.30	
03D-SB14	3.5							0.32	0.18					2.9	0.037	0.25								0.59	
03D-SB14	7.5							0.35	0.24					3.0	0.023	0.56								0.36	
03D-SB14	11								0.47					3.2	0.007	0.40									
03D-SB15	3							0.44						5.6	0.043									0.66	
03D-SB15	6							0.32						2.8	0.37	1.6									
03D-SB15	11.5							0.35						3.9	0.019	0.18								0.23	
03D-SB16	5							0.78	0.46					8.9	0.065	0.56								1.3	
03D-SB16	11.5							0.41	0.27					3.5	0.028	0.43									
03D-SB17	1		0.13						0.59					5.8	0.28	1.5								2.7	
03D-SB17	5													4.9	0.069	0.45									
03D-SB17	11								0.19					5.8	0.037	0.4									

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard Child		9.7 E-4	NA	NA	NA	NA	NA	1.4 E-2	4.5 E-3	NA	NA	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	1.8 E-2	8.9 E-1	8.9 E-1	8.9 E-1	5.5 E-5	1.6 E-4	4.4 E-4	5.8 E-4	5.8 E-4
Unit Hazard Adult		3.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-4	NA	NA	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	7.5 E-3	1.1 E-1	1.1 E-1	1.1 E-1	6.4 E-6	1.9 E-5	5.2 E-5	6.9 E-5	6.9 E-5
Unit Risk		2.6 E-6	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	2.6 E-6	1.6 E-9	5.6 E-8	2.6 E-7	1.6 E-5	2.6 E-6	NA	NA	NA	NA	4.1 E-7	1.1 E-5	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA
03D-SB18	11							0.36	0.45					5.4	0.060	0.29							0.015		
03D-SB19	7.5							0.32	0.20					3.9	0.026	1.5								0.18	
03D-SB19	11.5							0.37	0.14					3.3	0.021	0.36									
03D-SB20	5							0.50	0.22					2.8	0.10	0.45				0.011				0.29	
03D-SB20	11								0.29					6.1	0.026	0.83			0.43						
03D-SB22	7.75							0.30	0.22					3.8	0.018	0.19		0.26						1.0	
03D-SB22	11							0.44	0.61					7.0										0.22	
03D-SB23	6							0.39	0.19					3.4	0.015	0.20								0.47	
03D-SB23	11							0.39	0.14					3.5	0.013	0.26								0.39	
03D-SB24	7.5							0.34	0.31					5.1	0.021	2.0								0.55	
03D-SB24	11.5													4.6	0.029	0.79									
03D-SB25	1								0.49					5.2	0.074	1.0									
03D-SB25	5								0.72					5.4	0.029	0.98								0.086	
03D-SB25	11								1.5					8.3	0.056	0.49									
03D-SB26	1		0.0058						0.14	0.0051				4.5	0.016	0.57							0.0069	0.34	
03D-SB26	5								0.23					5.2	0.017	0.42								1.7	
03D-SB26	11								0.72					6.8	0.037	0.60									
03D-SB27	1		0.023	0.0061	0.011				0.25	0.013				7.4	0.056	0.56						0.0079	0.024	1.0	0.021
03D-SB27	5								0.28					6.4	0.0097	0.50									
03D-SB27	11								0.59					4.6	0.072	0.41									
03D-SB30	5							0.33	0.60					4.6	0.11	0.28									
03D-SB30	11							0.39	1.1					6.4	0.072	0.50									
03D-SB31	1.5							0.48	0.35					4.2	0.076	0.49							0.0025	0.57	
03D-SB31	5.5							0.39	0.27					3.0	0.019	1.6								0.17	
03D-SB31	11.5							0.54	0.61					9.3	0.13	0.33									
03D-SB32	5								0.36					12	0.079	0.60								0.21	
03D-SB32	11								0.24					3.4	0.032	0.88									
03D-SB33	5								0.37					8.4		4.8			47						
03D-SB33	11								0.18					8.0	0.067	0.56			0.098						
03D-SB35	5							0.39	0.47					4.0	0.036	0.25									
03D-SB35	11							0.39	0.13					6.3	0.020	0.46									
03D-SB36	1		0.042						0.42	0.017				4.4	0.041	1.3				0.014			0.020	0.057	0.025
03D-SB36	5								0.63					8.9	0.051	1.4									
03D-SB36	11				0.011				0.58	0.022				3.7	0.021	0.55						0.0021	0.017	1.0	0.0078
03D-SB37	5							0.47	0.66					4.6	0.022	0.47			0.14						
03D-SB37	11							0.53	0.37					6.9	0.052	0.82									
03D-SB38	1							0.49	0.097					7.3	0.017	0.15								2.3	
03D-SB38	5							0.45	0.40					4.8	0.040	7.4								1.1	
03D-SB38	11							0.32						3.3	0.0091	0.43									
03D-SB39	3.5							0.47	0.20					2.9	0.026	19								0.33	
03D-SB39	5							0.29	0.18					3.8		0.18									
03D-SB39	11.5													2.8	0.0041	0.61									
03D-SB40	3.75							0.37	0.38					3.7	0.0093	0.39									
03D-SB40	7.5							0.31	0.30					4.3	0.028	0.52								0.19	
03D-SB40	11.75																								
03D-SB41	3							0.38	0.11					4.7	0.0081	0.32								0.35	
03D-SB41	6							0.32						4.2	0.023	0.26								0.18	
03D-SB41	11.75														0.0099										
03D-SB42	1													7.6	0.065	0.71			0.024				0.0026		
03D-SB42	5								0.4					5.2	0.032	0.46									
03D-SB42	11							0.41	0.22					14	0.078	0.93							0.0041		
03D-SB43	5							0.27	0.52					3.3	0.076	0.42			0.11						
03D-SB43	11							0.25	0.53					2.6	0.038	0.24			0.037						
03D-SB44	5							0.36	0.42					4.1	0.018	2.2									
03D-SB44	11							0.32	0.21					3.7	0.0044										
03D-SB45	5								0.35					5.1	0.020	0.90	0.28					0.017	0.85		0.048
03D-SB46	5								0.41					5.9	0.061	1.1	1.9						2.7		0.24
03D-SB46	11													7.4	0.025	0.81	0.09		11				0.076		
03D-SB47	7.5							0.48	0.28					8.0	0.0099	1.3								0.22	
03D-SB47	11.5							0.41	0.24					4.7	0.012	2.3								0.57	
03D-SB48	5							0.39	0.94					9.0	0.013	0.92									
03D-SB48	11		0.0045					0.44	0.12					6.3	0.036	6.5									
03D-SB49	5							0.35	0.17					1.9		0.54								0.17	

		Concentrations (mg/kg)																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene
Unit Hazard Child		9.7 E-4	NA	NA	NA	NA	NA	1.4 E-2	4.5 E-3	NA	NA	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	1.8 E-2	8.9 E-1	8.9 E-1	8.9 E-1	5.5 E-5	1.6 E-4	4.4 E-4	5.8 E-4	5.8 E-4
Unit Hazard Adult		3.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-4	NA	NA	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	7.5 E-3	1.1 E-1	1.1 E-1	1.1 E-1	6.4 E-6	1.9 E-5	5.2 E-5	6.9 E-5	6.9 E-5
Unit Risk		2.6 E-6	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	2.6 E-6	1.6 E-9	5.6 E-8	2.6 E-7	1.6 E-5	2.6 E-6	NA	NA	NA	NA	4.1 E-7	1.1 E-5	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA
03D-SB49	11.5							0.38	0.20					5.0		0.32									
03D-SB50	1								1.0					11	0.14	0.72				0.065					
03D-SB50	5								0.43					8.1	0.016	0.74									
03D-SB50	11								0.23					5.2	0.0099	0.81									
03D-SB51	5								0.71					12	0.18	1.5									
03D-SB51	11								0.63					3.6	0.012	0.46									
03D-SB52	1							0.28						23	0.11	1.3			0.048						
03D-SB52	5								0.19					4.1	0.011	0.79								0.079	
03D-SB52	11													8.0		0.41									
03D-SB53	5								0.50					4.1	0.012	0.59								1.1	
03D-SB53	11								0.37					10	0.0092	0.67									
03D-SB54	1													9.1	0.043	0.58				0.022					
03D-SB54	5								1.0					10	0.026	0.54									
03D-SB54	11								0.31					8.2	0.0095	0.32									
03D-SB55	1								0.61					9.4	0.045	0.48							0.0043		
03D-SB55	5								0.84					11	0.083	0.47								0.13	
03D-SB55	11								0.77					11	0.012	0.54									
03D-SB56	5							0.38	0.26					4.0		0.47									
03D-SB56	11		0.0081					0.37	0.59	0.0067				5.7		1.5							0.010		
03D-SB57	5							0.29	0.28					3.4	0.019	0.67									
03D-SB57	11							0.32	0.28	0.0050				5.5		0.57			0.027			0.0025	0.0032		
03D-SB61	5							0.67	0.33					9.2	0.13	0.58									
03D-SB61	11							0.26	0.43					4.0	0.0057	0.45									
03D-SB62	5													11	0.060	0.65									
03D-SB62	11													5.7	0.021	0.70									
03D-SB63	1																		0.024						
03D-SB63	5																								
03D-SB63	10																		0.046						
03D-SB64	1																		0.050						
03D-SB64	5																		0.047						
03D-SB64	10																		0.019						
03D-SB65	1																								
03D-SB65	5																								
03D-SB65	12																		0.055						
03D-SB66	1																								
03D-SB66	5																								
03D-SB66	10																		0.051						
03D-SB67	1																		0.51						
03D-SB67	5																								
03D-SB67	10																		0.14						
03D-SB68	1																		1.7						
03D-SB68	5																		0.086						
03D-SB68	10																		0.32						
03D-SB69	1																		0.37						
03D-SB69	5																		0.021						
03D-SB69	10																								
03D-SNS02	0.01												19500		0.12										
03D-SNS02	3												21500	5.6											
03D-SNS03	0.01												16600												
03D-SNS03	3												17300												
03D-SNS04	0.01												19500	8.2											
03D-SNS04	3												16300												
03D-SNS05	0.01												19100	5.4											
03D-SNS05	3												18700	8.6											
03D-SNS06	0.01												22400	6.6											
03D-SNS34	0.25		0.042	0.038	0.088			3.5	4.0	0.083				110	0.11	2.0	0.0026		0.42	1.5		0.11	0.21		0.18
03D-SNS35	0.25							1.4	0.99					10	0.025	2.0	0.011								
11D-SB01	1								0.51					12	0.018	0.6									
11D-SB01	5								0.65					5.1		0.30									
11D-SB01	11								0.14					5.1	0.0067	1.2									
11D-SB02	1								0.83					11	0.090	0.79								2.1	
11D-SB02	5								0.078					7.2	0.035	0.52									
11D-SB02	11								0.14					6.1	0.018	7.5									

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene
Unit Hazard Child		9.7 E-4	NA	NA	NA	NA	NA	1.4 E-2	4.5 E-3	NA	NA	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	1.8 E-2	8.9 E-1	8.9 E-1	8.9 E-1	5.5 E-5	1.6 E-4	4.4 E-4	5.8 E-4	5.8 E-4
Unit Hazard Adult		3.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-4	NA	NA	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	7.5 E-3	1.1 E-1	1.1 E-1	1.1 E-1	6.4 E-6	1.9 E-5	5.2 E-5	6.9 E-5	6.9 E-5
Unit Risk		2.6 E-6	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	2.6 E-6	1.6 E-9	5.6 E-8	2.6 E-7	1.6 E-5	2.6 E-6	NA	NA	NA	NA	4.1 E-7	1.1 E-5	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA
11D-SB03	1								0.35					4.5	0.060	0.65								0.20	
11D-SB03	5								0.3																
11D-SB03	11								0.29																
11D-SB04	1		0.014		0.018			0.43	0.34	0.021				5.6	0.38	1.3			0.014			0.0066	0.023		0.034
11D-SB04	5							0.56	0.43	0.0063				10	0.89	0.66							0.0038		
11D-SB04	11							0.40	0.38					4.4	0.22	0.67									
11D-SB05	1		0.0086	0.0062				0.28	0.069	0.028				4.2	0.0094	0.88						0.021	0.048	7.3	0.044
11D-SB05	5							0.51	0.38					4.5	0.033	0.51								0.29	
11D-SB05	11							0.38	0.34					6.0	0.015	0.24									
11D-SB06	1																			1.6				0.44	
11D-SB06	5																							3.5	
11D-SB06	11																								
11D-SB07	1																							1.6	
11D-SB07	5																							0.36	
11D-SB08	1								0.81					8.5	0.022	0.66									
11D-SB08	5								0.57					8.1	0.0092	0.72									
11D-SB09	1								0.19					4.1	0.023	0.40									
11D-SB09	5							0.59	0.59					8.4	0.0074	0.31									
11D-SB09	11								0.26					10		0.56									
11D-SNS01	0.01												15100	10.3											
11D-SNS02	0.01							5.9					30100	379	0.35										
11D-SNS12	0.5							0.91	0.24					36	0.12	1.5		0.027	0.16	0.33		0.0043			
11D-SNS12	2.5		0.0046		0.014			1.0	0.86	0.0077				45	0.16	2.7			0.16	0.34		0.011	0.0084		0.014
11D-SNS13	0.5		0.0046		0.020			0.15	0.45	0.013				16	0.024				0.12	0.31		0.0096	0.0042		0.0092
11D-SNS13	2.5							0.045	0.17					7.2	0.013									3.4	
11D-SNS14	0.5		0.0070	0.0070	0.018			1.4	0.22	0.012				17	0.028	8.7			0.15			0.018	0.020		0.028
11D-SNS14	2.5													8.3	0.0056										
11D-SNS15	0.5		0.0088	0.010	0.030			2.7	0.98	0.015				150	0.21	6.1			10			0.021	0.0071		0.019
11D-SNS15	2.5							0.97	0.19					11	0.086	1.4			0.029						
11D-SNS16	0.5							2.0	0.34					17	0.21	2.5				1.1					
11D-SNS16	2.5							2.4	0.45					28	0.21	2.7				0.041					
11D-SNS17	0.5		0.026	0.041	0.064			1.1	0.47	0.033		0.017		5.8	0.077	2.7	0.0018	0.011		0.15		0.029	0.026	0.34	0.056
11D-SNS17	2.5							0.65	0.31					8.7	0.044					0.015					
11D-SNS18	0.5				0.013			0.22	0.15					9.0	0.0051	0.41				0.042					
11D-SNS18	2.5							0.077	0.17					4.4		0.42				0.045					
11D-SNS19	0.5		0.0062	0.0084	0.030			1.8	0.32	0.014				46	0.032	1.5						0.015	0.0053	0.29	0.012
11D-SNS19	2.5							0.12	0.12					11	0.0042	0.38				0.12					
11D-SNS20	0.5							0.33	0.41					47	0.024	0.38									
11D-SNS20	2.5																								
11D-SNS21	0.5							0.28	0.25					8.1	0.031										
11D-SNS21	2.5							0.32						8.8	0.042										
11D-SNS22	0.5		0.0085	0.0090	0.019			3.7	0.35	0.012				23	0.053	2.8				1.3		0.014	0.0085		0.013
11D-SNS22	2.5		0.015	0.015	0.030			0.77	0.26	0.018				7.2	0.052	1.7						0.026	0.013	0.24	0.020
11D-SNS23	3.5							0.10	0.11					5.8	0.036	0.93									
11D-SNS23	4.5							0.092	0.11					4.7	0.011									0.70	
11D-SNS24	0.5																								
11D-SNS24	2.5																								
11D-SNS25	0.5													5.3											
11D-SNS25	2.5													5.5											
11D-SNS26	0.5													9.2											
11D-SNS26	2.5													5.8											
11D-SNS27	0.5													9.6											
11D-SNS27	2.5													8.5											
11D-SNS28	0.5													9.1											
11D-SNS28	2.5													13											
50D-SB01	1																								
50D-SB02	1																				4.92				
50D-SB03	1																				8.1				
50D-SB03	5																				3.7				
50D-SB03	10																				13.4				
50D-SB04	5													4.0	0.063	0.45									
50D-SB04	11									0.0052				4.4	0.035	0.38	0.0034					0.0026	0.024	0.059	0.059
51D-SB01	2																				2.3				

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard Child		9.7 E-4	NA	NA	NA	NA	NA	1.4 E-2	4.5 E-3	NA	NA	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	1.8 E-2	8.9 E-1	8.9 E-1	8.9 E-1	5.5 E-5	1.6 E-4	4.4 E-4	5.8 E-4	5.8 E-4
Unit Hazard Adult		3.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-4	NA	NA	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	7.5 E-3	1.1 E-1	1.1 E-1	1.1 E-1	6.4 E-6	1.9 E-5	5.2 E-5	6.9 E-5	6.9 E-5
Unit Risk		2.6 E-6	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	2.6 E-6	1.6 E-9	5.6 E-8	2.6 E-7	1.6 E-5	2.6 E-6	NA	NA	NA	NA	4.1 E-7	1.1 E-5	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA
51D-SB01	10																				1.2				
51D-SB02	1	2.0																			2.12				
51D-SB02	5																				1.72				
51D-SB02	10																				51				
51D-SB03	1																				3.1				
51D-SB03	10																				17				
51D-SB04	1	3.0																			2.7				
51D-SB04	1.5																				2.7				
51D-SB04	5																				38.5				
51D-SB04	11																				8.3				
51D-SB05	5								0.16					5.5	0.026	0.69									
51D-SB05	9								0.21					4.8	0.024	2.0									
51D-SB06	5								0.13					6.0	0.15	0.69								0.23	
51D-SB06	9							2.2						7.1	0.046	0.48								0.37	
51D-SB07	5								0.17					3.5	0.0094	0.69									
51D-SB07	9								0.15					3.2	0.024	9.5									
51D-SB08	5								0.43					9.7	0.013	0.73								0.069	
51D-SB08	9								0.38					4.2	0.018	0.57									
51D-SB09	5								0.26					2.7	0.044	0.68								2.5	
51D-SB09	9								0.25					9.5	0.096	2.1								0.12	
51D-SB10	5		0.0055		0.016				0.48	0.0077				6.0	0.042	1.3						0.0095	0.052		0.0095
51D-SB10	9								0.54					6.5	0.055	0.51									
A20-B34-SB01	1							0.53	0.89					8.4	0.060	0.51									
A20-B34-SB01	5							0.34	0.85					7.5	0.017	0.42									
A20-B34-SB01	11								0.27					6.6	0.0059	0.44									
A20-B34-SB02	1		0.0046						0.35					8.0	0.027	0.45						0.0061	0.0046		
A20-B34-SB02	5								0.46					8.6	0.032	0.58									
A20-B34-SB02	11								0.26					9.3	0.0088	0.53									
A20-RB37-SB01	1			0.016				1.6	0.57			0.0073		210	0.14	100			3.1					0.38	
A20-RB37-SB01	5								0.6					9.7	0.017	0.41									
A20-RB37-SB01	11								0.4					6.2		0.45									
A20-RB37-SB02	1							0.59	0.55					15	0.033	9.6			2.0			0.0027		0.97	
A20-RB37-SB02	5							0.36	0.42					7.7	0.017	1.2								0.23	
A20-RB37-SB02	11							0.26	0.81					5.3	0.011	0.49									
A20-RB37-SB03	1								0.26	0.013				10	0.053	0.65			0.21				0.010		0.0093
A20-RB37-SB03	5								0.16					9.4	0.012	0.62									
A20-RB37-SB03	11													5.5		0.59									
A20-RB37-SB04	1							0.33	0.5	0.0083				6.3	0.032	0.58							0.0064		
A20-RB37-SB04	5							0.29	0.34					8.1	0.017	0.70									
A20-RB37-SB04	11							0.34	0.65					9.3	0.031	0.19									
A20-RC29-SB01	1							0.31	0.13					4.4	0.011				0.059						
A20-RC29-SB01	5							0.52	0.26					10	0.029										
A20-RC29-SB01	11							0.40	0.16					3.9	0.0069	1.8									
A20-RX73-SB01	1		0.0042						0.20					4.3	0.051	1.4							0.0053	0.088	
A20-RX73-SB01	5								0.40					2.9	0.026	0.53				0.016				0.057	
A20-RX73-SB01	11								0.36					4.3	0.012	0.73									
A20-RX73-SB02	1								0.64					6.5	0.078	0.36									
A20-RX73-SB02	5								0.68					3.5	0.3	1.3									
A20-RX73-SB02	11								0.25					4.1	0.15	5.8									
A20-RX73-SB03	1		0.010	0.0074	0.011			0.19	0.41	0.011				4.4	0.018	1.6						0.0042	0.020		0.011
A20-RX73-SB03	5								0.77					7.0	0.33	0.84									
A20-RX73-SB03	11								0.19					5.5	0.078	0.85									
A20-ST01-SB01	1								0.71					10	0.061	0.63									
A20-ST01-SB01	5								0.58					7.3	0.087	0.57									
A20-ST01-SB01	11								0.32					6.6	0.059	0.43			0.030						
A20-ST01-SB02	1		0.0049		0.021					0.022				7.2	0.061	0.56	0.0022					0.0037	0.022		0.011
A20-ST01-SB02	5								0.069					17	0.44	0.35									
A20-ST01-SB02	11							0.52						3.7	0.042	0.38									
A20-ST01-SB03	1								0.21	0.005				11	0.15	0.62			0.13			0.0043	0.0032		
A20-ST01-SB03	5								0.11					3.6	0.096	0.60								0.17	
A20-ST01-SB03	11							0.37						2.1	0.011	0.19									
A20-ST02-SB01	1								0.29					4.7	0.091	0.76									
A20-ST02-SB01	5								0.14	0.0052				4.1	0.025	0.75							0.0082		

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard Child		9.7 E-4	NA	NA	NA	NA	NA	1.4 E-2	4.5 E-3	NA	NA	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	1.8 E-2	8.9 E-1	8.9 E-1	8.9 E-1	5.5 E-5	1.6 E-4	4.4 E-4	5.8 E-4	5.8 E-4
Unit Hazard Adult		3.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-4	NA	NA	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	7.5 E-3	1.1 E-1	1.1 E-1	1.1 E-1	6.4 E-6	1.9 E-5	5.2 E-5	6.9 E-5	6.9 E-5
Unit Risk		2.6 E-6	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	2.6 E-6	1.6 E-9	5.6 E-8	2.6 E-7	1.6 E-5	2.6 E-6	NA	NA	NA	NA	4.1 E-7	1.1 E-5	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA
A20-ST02-SB01	11								0.25					3.8	0.0037	0.85									
A20-ST05-SB01	1							0.37	0.22	0.011				5.7	0.025	0.46						0.0021	0.013		0.0067
A20-ST05-SB01	5							0.37	0.47					7.3	0.012	0.52									
A20-ST05-SB01	11								0.73					10	0.010	0.50									
A20-ST05-SB02	1							0.43	0.65	0.0081				7.3	0.019	0.32						0.0032	0.0041		
A20-ST05-SB02	5							0.29	0.48					6.7	0.039	0.41									
A20-ST05-SB02	11								0.62																
A20-ST06-SB01	1								0.45	0.0049				10	0.10	0.46									
A20-ST06-SB01	5								0.30	0.007				7.7	0.036	0.36									
A20-ST06-SB01	11													3.3		0.22									
A20-ST14-SB01	1								0.28					2.9	0.020	2.2								0.13	
A20-ST14-SB01	5								0.46					3.8	0.060	0.63									
A20-ST14-SB01	11								0.076					3.9	0.21	0.53									
A20-ST20-SB01	1								0.68					3.3	0.160	0.470									
A20-ST20-SB01	5								0.69					16	0.95	0.53									
A20-ST20-SB01	11								0.14					9.6	1.4	0.68									
A20-ST22-SB01	1							0.43	0.14					4.9	0.071	0.44						0.0018	0.0025	0.57	
A20-ST22-SB01	5							0.53	0.091					9.1	0.051	1.9								1.8	
A20-ST22-SB01	11							0.19						2.2	0.0084	0.69									

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
03D-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	6.1 E-3	5.2 E-3	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	2.6 E-1
03D-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	2.8 E-2	6.1 E-2	NA	9.3 E-2	4.6 E-1
03D-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	3.1 E-1
03D-AH02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	NA	4.9 E-3	5.6 E-2	NA	NA	NA	NA	NA	2.8 E-2	5.4 E-2	NA	1.0 E-1	4.7 E-1
03D-SB01	1	9.7 E-4	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	6.7 E-1	NA	1.9 E-2	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	7.1 E-1
03D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-1	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	5.9 E-1
03D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-1	NA	1.4 E-2	NA	NA	NA	NA	NA	7.1 E-5	NA	NA	NA	NA	7.9 E-1
03D-SB02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	5.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1
03D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-1	NA	8.3 E-3	NA	NA	NA	2.5 E+0	NA	3.3 E-4	NA	NA	NA	NA	3.0 E+0
03D-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-1	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-1
03D-SB02	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1
03D-SB02	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	1.5 E-4
03D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	3.2 E-4
03D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1
03D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-1	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	4.2 E-1
03D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	4.3 E-1
03D-SB03	10	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	3.9 E-1	NA	1.3 E-1	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	5.6 E-1
03D-SB04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1
03D-SB04	1	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	7.4 E-2	NA	NA	NA	NA	NA	NA	4.7 E-1
03D-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-1
03D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1
03D-SB04	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	4.4 E-5
03D-SB04	10	9.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	3.9 E-1
03D-SB05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1
03D-SB05	1	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-1	NA	NA	NA	NA	NA	1.1 E-1	NA	4.5 E-4	NA	NA	NA	NA	4.0 E-1
03D-SB05	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1
03D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	NA	NA	2.1 E+0	NA	4.4 E-5	NA	NA	NA	NA	2.4 E+0
03D-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	NA	NA	NA	7.5 E-2	NA	1.0 E-4	NA	NA	NA	NA	3.9 E-1
03D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	NA	NA	NA	NA	4.5 E-2	NA	4.5 E-4	NA	NA	NA	NA	4.8 E-1
03D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	1.7 E-1
03D-SB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E+0	NA	NA	NA	NA	NA	3.8 E-1	NA	9.3 E-5	NA	NA	NA	NA	4.1 E+0
03D-SB07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	7.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-1
03D-SB07	1	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
03D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1
03D-SB07	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	NA	NA	NA	NA	8.7 E-5
03D-SB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	3.5 E-4
03D-SB08	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1
03D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-1	NA	1.3 E-2	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	4.8 E-1
03D-SB08	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-1
03D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	2.1 E-2	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	4.3 E-1
03D-SB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1	NA	1.7 E-2	NA	NA	NA	NA	NA	9.3 E-5	NA	NA	NA	NA	2.8 E-1
03D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	4.7 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	7.6 E-3
03D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	1.3 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-3
03D-SB10	5	NA	NA	NA	NA	NA	NA	NA	9.8 E-4	NA	NA	NA	NA	NA	5.1 E-4	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3
03D-SB10	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	2.2 E-3	7.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB11	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	3.4 E-3	1.0 E-3	NA	NA	3.3 E-2	NA	NA	NA	2.5 E-6	NA	4.6 E-6	3.9 E-2
03D-SB11	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	1.2 E-2	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SB11	11	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	2.0 E-2	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
03D-SB12	5	NA	NA	NA	NA	NA	NA	8.8 E-3	9.8 E-4	NA	NA	NA	NA	NA	2.7 E-3	8.7 E-4	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	1.3 E-2
03D-SB12	11	NA	NA	NA	NA	NA	NA	5.1 E-3	1.3 E-3	NA	NA	NA	NA	NA	4.2 E-3	2.0 E-3	NA	NA	NA	NA	NA	NA	9.2 E-6	NA	NA	1.3 E-2
03D-SB13	6	NA	NA	NA	NA	NA	NA	5.0 E-3	1.6 E-3	NA	NA	NA	NA	NA	1.7 E-3	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-3
03D-SB13	11.5	NA	NA	NA	NA	NA	NA	3.6 E-3	1.4 E-3	NA	NA	NA	NA	NA	4.3 E-4	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	6.1 E-3
03D-SB14	3.5	NA	NA	NA	NA	NA	NA	4.5 E-3	8.1 E-4	NA	NA	NA	NA	NA	1.6 E-3	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	7.9 E-3
03D-SB14	7.5	NA	NA	NA	NA	NA	NA	5.0 E-3	1.1 E-3	NA	NA	NA	NA	NA	9.8 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	8.7 E-3
03D-SB14	11	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	3.0 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3
03D-SB15	3	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	8.5 E-3
03D-SB15	6	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	1.6 E-2	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
03D-SB15	11.5	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	8.1 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	6.4 E-3
03D-SB16	5	NA	NA	NA	NA	NA	NA	1.1 E-2	2.1 E-3	NA	NA	NA	NA	NA	2.8 E-3	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	1.8 E-2
03D-SB16	11.5	NA	NA	NA	NA	NA	NA	5.8 E-3	1.2 E-3	NA	NA	NA	NA	NA	1.2 E-3	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-3
03D-SB17	1	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	1.2 E-2	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	2.0 E-2
03D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3
03D-SB17	11	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
03D-SB18	11	NA	NA	NA	NA	NA	NA	5.1 E-3	2.0 E-3	NA	NA	NA	NA	NA	2.6 E-3	7.4 E-4	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	1.0 E-2
03D-SB19	7.5	NA	NA	NA	NA	NA	NA	4.5 E-3	9.0 E-4	NA	NA	NA	NA	NA	1.1 E-3	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	1.0 E-2
03D-SB19	11.5	NA	NA	NA	NA	NA	NA	5.3 E-3	6.3 E-4	NA	NA	NA	NA	NA	9.0 E-4	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-3
03D-SB20	5	NA	NA	NA	NA	NA	NA	7.1 E-3	9.8 E-4	NA	NA	NA	NA	NA	4.3 E-3	1.2 E-3	NA	NA	NA	9.8 E-3	NA	NA	NA	1.7 E-4	NA	2.3 E-2
03D-SB20	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.1 E-3	2.1 E-3	NA	NA	3.8 E-1	NA	NA	NA	NA	NA	NA	3.9 E-1
03D-SB22	7.75	NA	NA	NA	NA	NA	NA	4.3 E-3	9.8 E-4	NA	NA	NA	NA	NA	7.7 E-4	4.9 E-4	NA	2.3 E-1	NA	NA	NA	NA	NA	5.8 E-4	NA	2.4 E-1
03D-SB22	11	NA	NA	NA	NA	NA	NA	6.3 E-3	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	9.1 E-3
03D-SB23	6	NA	NA	NA	NA	NA	NA	5.5 E-3	8.5 E-4	NA	NA	NA	NA	NA	6.4 E-4	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	7.8 E-3
03D-SB23	11	NA	NA	NA	NA	NA	NA	5.5 E-3	6.3 E-4	NA	NA	NA	NA	NA	5.5 E-4	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	7.6 E-3
03D-SB24	7.5	NA	NA	NA	NA	NA	NA	4.8 E-3	1.4 E-3	NA	NA	NA	NA	NA	9.0 E-4	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	1.3 E-2
03D-SB24	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3
03D-SB25	1	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	3.2 E-3	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-3
03D-SB25	5	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	1.2 E-3	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	5.0 E-5	NA	7.0 E-3
03D-SB25	11	NA	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	2.4 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2
03D-SB26	1	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	6.8 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	3.0 E-6	2.0 E-4	NA	3.0 E-3
03D-SB26	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	7.2 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	3.8 E-3
03D-SB26	11	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	1.6 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
03D-SB27	1	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	2.4 E-3	1.4 E-3	NA	NA	NA	NA	NA	1.3 E-6	1.0 E-5	5.8 E-4	1.2 E-5	5.5 E-3
03D-SB27	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	4.1 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
03D-SB27	11	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-3
03D-SB30	5	NA	NA	NA	NA	NA	NA	4.7 E-3	2.7 E-3	NA	NA	NA	NA	NA	4.7 E-3	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
03D-SB30	11	NA	NA	NA	NA	NA	NA	5.5 E-3	4.9 E-3	NA	NA	NA	NA	NA	3.1 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SB31	1.5	NA	NA	NA	NA	NA	NA	6.8 E-3	1.6 E-3	NA	NA	NA	NA	NA	3.2 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	1.1 E-6	3.3 E-4	NA	1.3 E-2
03D-SB31	5.5	NA	NA	NA	NA	NA	NA	5.5 E-3	1.2 E-3	NA	NA	NA	NA	NA	8.1 E-4	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	1.2 E-2
03D-SB31	11.5	NA	NA	NA	NA	NA	NA	7.7 E-3	2.7 E-3	NA	NA	NA	NA	NA	5.5 E-3	8.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
03D-SB32	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	3.4 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	6.6 E-3
03D-SB32	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	1.4 E-3	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-3
03D-SB33	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	4.2 E+1	NA	NA	NA	NA	NA	NA	4.2 E+1
03D-SB33	11	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	NA	NA	NA	NA	NA	2.9 E-3	1.4 E-3	NA	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	9.2 E-2
03D-SB35	5	NA	NA	NA	NA	NA	NA	5.5 E-3	2.1 E-3	NA	NA	NA	NA	NA	1.5 E-3	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-3
03D-SB35	11	NA	NA	NA	NA	NA	NA	5.5 E-3	5.8 E-4	NA	NA	NA	NA	NA	8.5 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-3
03D-SB36	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	1.7 E-3	3.3 E-3	NA	NA	NA	1.2 E-2	NA	NA	8.7 E-6	3.3 E-5	1.5 E-5	1.9 E-2
03D-SB36	5	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	2.2 E-3	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-3
03D-SB36	11	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	9.0 E-4	1.4 E-3	NA	NA	NA	NA	NA	3.4 E-7	7.4 E-6	5.8 E-4	4.5 E-6	5.5 E-3
03D-SB37	5	NA	NA	NA	NA	NA	NA	6.7 E-3	3.0 E-3	NA	NA	NA	NA	NA	9.4 E-4	1.2 E-3	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	1.4 E-1
03D-SB37	11	NA	NA	NA	NA	NA	NA	7.5 E-3	1.7 E-3	NA	NA	NA	NA	NA	2.2 E-3	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SB38	1	NA	NA	NA	NA	NA	NA	7.0 E-3	4.3 E-4	NA	NA	NA	NA	NA	7.2 E-4	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	9.8 E-3
03D-SB38	5	NA	NA	NA	NA	NA	NA	6.4 E-3	1.8 E-3	NA	NA	NA	NA	NA	1.7 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	2.9 E-2
03D-SB38	11	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	3.9 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-3
03D-SB39	3.5	NA	NA	NA	NA	NA	NA	6.7 E-3	9.0 E-4	NA	NA	NA	NA	NA	1.1 E-3	4.9 E-2	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	5.7 E-2
03D-SB39	5	NA	NA	NA	NA	NA	NA	4.1 E-3	8.1 E-4	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-3
03D-SB39	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
03D-SB40	3.75	NA	NA	NA	NA	NA	NA	5.3 E-3	1.7 E-3	NA	NA	NA	NA	NA	4.0 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-3
03D-SB40	7.5	NA	NA	NA	NA	NA	NA	4.4 E-3	1.3 E-3	NA	NA	NA	NA	NA	1.2 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	8.4 E-3
03D-SB40	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB41	3	NA	NA	NA	NA	NA	NA	5.4 E-3	4.9 E-4	NA	NA	NA	NA	NA	3.5 E-4	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	7.3 E-3
03D-SB41	6	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	9.8 E-4	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	6.3 E-3
03D-SB41	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4
03D-SB42	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	1.8 E-3	NA	NA	2.1 E-2	NA	NA	NA	1.1 E-6	NA	NA	2.6 E-2
03D-SB42	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	1.4 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-3
03D-SB42	11	NA	NA	NA	NA	NA	NA	5.8 E-3	9.8 E-4	NA	NA	NA	NA	NA	3.3 E-3	2.4 E-3	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	1.3 E-2
03D-SB43	5	NA	NA	NA	NA	NA	NA	3.8 E-3	2.3 E-3	NA	NA	NA	NA	NA	3.2 E-3	1.1 E-3	NA	NA	9.8 E-2	NA	NA	NA	NA	NA	NA	1.1 E-1
03D-SB43	11	NA	NA	NA	NA	NA	NA	3.6 E-3	2.4 E-3	NA	NA	NA	NA	NA	1.6 E-3	6.1 E-4	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	4.1 E-2
03D-SB44	5	NA	NA	NA	NA	NA	NA	5.1 E-3	1.9 E-3	NA	NA	NA	NA	NA	7.7 E-4	5.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
03D-SB44	11	NA	NA	NA	NA	NA	NA	4.5 E-3	9.4 E-4	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3
03D-SB45	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	8.5 E-4	2.3 E-3	5.1 E-3	NA	NA	NA	NA	2.8 E-6	3.7 E-4	NA	2.8 E-5	1.0 E-2
03D-SB46	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	2.6 E-3	2.8 E-3	3.4 E-2	NA	NA	NA	NA	NA	1.2 E-3	NA	1.4 E-4	4.3 E-2
03D-SB46	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.1 E-3	1.6 E-3	NA	9.8 E+0	NA	NA	NA	3.3 E-5	NA	NA	9.8 E+0
03D-SB47	7.5	NA	NA	NA	NA	NA	NA	6.8 E-3	1.3 E-3	NA	NA	NA	NA	NA	4.2 E-4	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	1.2 E-2
03D-SB47	11.5	NA	NA	NA	NA	NA	NA	5.8 E-3	1.1 E-3	NA	NA	NA	NA	NA	5.1 E-4	5.9 E-3	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	1.4 E-2
03D-SB48	5	NA	NA	NA	NA	NA	NA	5.5 E-3	4.2 E-3	NA	NA	NA	NA	NA	5.5 E-4	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
03D-SB48	11	NA	NA	NA	NA	NA	NA	6.3 E-3	5.4 E-4	NA	NA	NA	NA	NA	1.5 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
03D-SB49	5	NA	NA	NA	NA	NA	NA	5.0 E-3	7.6 E-4	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	7.2 E-3

		Child Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
03D-SB49	11.5	NA	NA	NA	NA	NA	NA	5.4 E-3	9.0 E-4	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3
03D-SB50	1	NA	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	6.0 E-3	1.8 E-3	NA	NA	NA	5.8 E-2	NA	NA	NA	NA	NA	7.0 E-2
03D-SB50	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	6.8 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-3
03D-SB50	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	4.2 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3
03D-SB51	5	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	7.7 E-3	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SB51	11	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	5.1 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-3
03D-SB52	1	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	4.7 E-3	3.3 E-3	NA	NA	4.3 E-2	NA	NA	NA	NA	NA	NA	5.5 E-2
03D-SB52	5	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	4.7 E-4	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	3.4 E-3
03D-SB52	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
03D-SB53	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	5.1 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	4.9 E-3
03D-SB53	11	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	3.9 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3
03D-SB54	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	1.5 E-3	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	2.3 E-2
03D-SB54	5	NA	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	1.1 E-3	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-3
03D-SB54	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	4.0 E-4	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
03D-SB55	1	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	5.9 E-3
03D-SB55	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	3.5 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	8.6 E-3
03D-SB55	11	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA	NA	5.1 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-3
03D-SB56	5	NA	NA	NA	NA	NA	NA	5.4 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-3
03D-SB56	11	NA	NA	NA	NA	NA	NA	5.3 E-3	2.6 E-3	NA	NA	NA	NA	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	1.2 E-2
03D-SB57	5	NA	NA	NA	NA	NA	NA	4.1 E-3	1.3 E-3	NA	NA	NA	NA	NA	8.1 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-3
03D-SB57	11	NA	NA	NA	NA	NA	NA	4.5 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	2.4 E-2	NA	NA	4.1 E-7	1.4 E-6	NA	NA	3.1 E-2
03D-SB61	5	NA	NA	NA	NA	NA	NA	9.5 E-3	1.5 E-3	NA	NA	NA	NA	NA	5.5 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
03D-SB61	11	NA	NA	NA	NA	NA	NA	3.7 E-3	1.9 E-3	NA	NA	NA	NA	NA	2.4 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-3
03D-SB62	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-3
03D-SB62	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3
03D-SB63	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	2.1 E-2
03D-SB63	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB63	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	NA	NA	NA	NA	NA	4.1 E-2
03D-SB64	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	4.4 E-2
03D-SB64	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	4.2 E-2
03D-SB64	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	1.7 E-2
03D-SB65	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-2	NA	NA	NA	NA	NA	NA	4.9 E-2
03D-SB66	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	NA	NA	4.5 E-2
03D-SB67	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-1	NA	NA	NA	NA	NA	NA	4.5 E-1
03D-SB67	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB67	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	1.2 E-1
03D-SB68	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E+0	NA	NA	NA	NA	NA	NA	1.5 E+0
03D-SB68	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-2	NA	NA	NA	NA	NA	NA	7.7 E-2
03D-SB68	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	2.8 E-1
03D-SB69	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-1	NA	NA	NA	NA	NA	NA	3.3 E-1
03D-SB69	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	1.9 E-2
03D-SB69	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1
03D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-1
03D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1
03D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-1
03D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1
03D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1
03D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1
03D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-1
03D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1
03D-SNS34	0.25	NA	NA	NA	NA	NA	NA	5.0 E-2	1.8 E-2	NA	NA	NA	NA	NA	4.7 E-3	5.1 E-3	4.7 E-5	NA	3.7 E-1	1.3 E+0	NA	1.8 E-5	9.2 E-5	NA	1.0 E-4	1.8 E+0
03D-SNS35	0.25	NA	NA	NA	NA	NA	NA	2.0 E-2	4.4 E-3	NA	NA	NA	NA	NA	1.1 E-3	5.1 E-3	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2
11D-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	7.7 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-3
11D-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-3
11D-SB01	11	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	2.9 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3
11D-SB02	1	NA	NA	NA	NA	NA	NA	NA	3.7 E-3	NA	NA	NA	NA	NA	3.8 E-3	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	1.1 E-2
11D-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	1.5 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-3
11D-SB02	11	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	7.7 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2

		Child Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
11D-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	2.6 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	5.9 E-3
11D-SB03	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
11D-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
11D-SB04	1	NA	NA	NA	NA	NA	NA	6.1 E-3	1.5 E-3	NA	NA	NA	NA	NA	1.6 E-2	3.3 E-3	NA	NA	1.2 E-2	NA	NA	1.1 E-6	1.0 E-5	NA	2.0 E-5	4.0 E-2
11D-SB04	5	NA	NA	NA	NA	NA	NA	8.0 E-3	1.9 E-3	NA	NA	NA	NA	NA	3.8 E-2	1.7 E-3	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	5.0 E-2
11D-SB04	11	NA	NA	NA	NA	NA	NA	5.7 E-3	1.7 E-3	NA	NA	NA	NA	NA	9.4 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
11D-SB05	1	NA	NA	NA	NA	NA	NA	4.0 E-3	3.1 E-4	NA	NA	NA	NA	NA	4.0 E-4	2.3 E-3	NA	NA	NA	NA	NA	3.4 E-6	2.1 E-5	4.2 E-3	2.6 E-5	1.1 E-2
11D-SB05	5	NA	NA	NA	NA	NA	NA	7.3 E-3	1.7 E-3	NA	NA	NA	NA	NA	1.4 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	1.2 E-2
11D-SB05	11	NA	NA	NA	NA	NA	NA	5.4 E-3	1.5 E-3	NA	NA	NA	NA	NA	6.4 E-4	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-3
11D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E+0	NA	NA	NA	2.6 E-4	NA	1.4 E+0
11D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	2.0 E-3
11D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	9.3 E-4
11D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	2.1 E-4
11D-SB08	1	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	NA	NA	9.4 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
11D-SB08	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	3.9 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3
11D-SB09	1	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	9.8 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
11D-SB09	5	NA	NA	NA	NA	NA	NA	8.4 E-3	2.6 E-3	NA	NA	NA	NA	NA	3.2 E-4	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
11D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
11D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1
11D-SNS02	0.01	NA	NA	NA	NA	NA	NA	8.4 E-2	NA	NA	NA	NA	5.5 E-1	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-1
11D-SNS12	0.5	NA	NA	NA	NA	NA	NA	1.3 E-2	1.1 E-3	NA	NA	NA	NA	NA	5.1 E-3	3.8 E-3	NA	2.4 E-2	1.4 E-1	2.9 E-1	NA	7.0 E-7	NA	NA	NA	4.8 E-1
11D-SNS12	2.5	NA	NA	NA	NA	NA	NA	1.4 E-2	3.8 E-3	NA	NA	NA	NA	NA	6.8 E-3	6.9 E-3	NA	NA	1.4 E-1	3.0 E-1	NA	1.8 E-6	3.7 E-6	NA	8.1 E-6	4.8 E-1
11D-SNS13	0.5	NA	NA	NA	NA	NA	NA	2.1 E-3	2.0 E-3	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	1.1 E-1	2.8 E-1	NA	1.6 E-6	1.8 E-6	NA	5.3 E-6	3.9 E-1
11D-SNS13	2.5	NA	NA	NA	NA	NA	NA	6.4 E-4	7.6 E-4	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	3.9 E-3
11D-SNS14	0.5	NA	NA	NA	NA	NA	NA	2.0 E-2	9.8 E-4	NA	NA	NA	NA	NA	1.2 E-3	2.2 E-2	NA	NA	1.3 E-1	NA	NA	2.9 E-6	8.7 E-6	NA	1.6 E-5	1.8 E-1
11D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4
11D-SNS15	0.5	NA	NA	NA	NA	NA	NA	3.8 E-2	4.4 E-3	NA	NA	NA	NA	NA	9.0 E-3	1.6 E-2	NA	NA	8.9 E+0	NA	NA	3.4 E-6	3.1 E-6	NA	1.1 E-5	9.0 E+0
11D-SNS15	2.5	NA	NA	NA	NA	NA	NA	1.4 E-2	8.5 E-4	NA	NA	NA	NA	NA	3.7 E-3	3.6 E-3	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	4.8 E-2
11D-SNS16	0.5	NA	NA	NA	NA	NA	NA	2.8 E-2	1.5 E-3	NA	NA	NA	NA	NA	9.0 E-3	6.4 E-3	NA	NA	NA	9.8 E-1	NA	NA	NA	NA	NA	1.0 E+0
11D-SNS16	2.5	NA	NA	NA	NA	NA	NA	3.4 E-2	2.0 E-3	NA	NA	NA	NA	NA	9.0 E-3	6.9 E-3	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	8.8 E-2
11D-SNS17	0.5	NA	NA	NA	NA	NA	NA	1.6 E-2	2.1 E-3	NA	NA	NA	NA	NA	3.3 E-3	6.9 E-3	3.3 E-5	9.8 E-3	NA	1.3 E-1	NA	4.7 E-6	1.1 E-5	2.0 E-4	3.3 E-5	1.7 E-1
11D-SNS17	2.5	NA	NA	NA	NA	NA	NA	9.2 E-3	1.4 E-3	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	2.6 E-2
11D-SNS18	0.5	NA	NA	NA	NA	NA	NA	3.1 E-3	6.7 E-4	NA	NA	NA	NA	NA	2.2 E-4	1.0 E-3	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	4.2 E-2
11D-SNS18	2.5	NA	NA	NA	NA	NA	NA	1.1 E-3	7.6 E-4	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	4.3 E-2
11D-SNS19	0.5	NA	NA	NA	NA	NA	NA	2.6 E-2	1.4 E-3	NA	NA	NA	NA	NA	1.4 E-3	3.8 E-3	NA	NA	NA	NA	NA	2.5 E-6	2.3 E-6	1.7 E-4	7.0 E-6	3.2 E-2
11D-SNS19	2.5	NA	NA	NA	NA	NA	NA	1.7 E-3	5.4 E-4	NA	NA	NA	NA	NA	1.8 E-4	9.7 E-4	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	1.1 E-1
11D-SNS20	0.5	NA	NA	NA	NA	NA	NA	4.7 E-3	1.8 E-3	NA	NA	NA	NA	NA	1.0 E-3	9.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-3
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	NA	NA	NA	NA	NA	NA	4.0 E-3	1.1 E-3	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-3
11D-SNS21	2.5	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
11D-SNS22	0.5	NA	NA	NA	NA	NA	NA	5.3 E-2	1.6 E-3	NA	NA	NA	NA	NA	2.3 E-3	7.2 E-3	NA	NA	NA	1.2 E+0	NA	2.3 E-6	3.7 E-6	NA	7.6 E-6	1.2 E+0
11D-SNS22	2.5	NA	NA	NA	NA	NA	NA	1.1 E-2	1.2 E-3	NA	NA	NA	NA	NA	2.2 E-3	4.3 E-3	NA	NA	NA	NA	NA	4.3 E-6	5.7 E-6	1.4 E-4	1.2 E-5	1.9 E-2
11D-SNS23	3.5	NA	NA	NA	NA	NA	NA	1.4 E-3	4.9 E-4	NA	NA	NA	NA	NA	1.5 E-3	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-3
11D-SNS23	4.5	NA	NA	NA	NA	NA	NA	1.3 E-3	4.9 E-4	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	2.7 E-3
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	2.7 E-4
50D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	4.4 E-4
50D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	2.0 E-4
50D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	7.3 E-4
50D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3
50D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	9.7 E-4	6.2 E-5	NA	NA	NA	NA	4.3 E-7	1.0 E-5	3.4 E-5	3.4 E-5	2.6 E-3
51D-SB01	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	1.3 E-4

		Child Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
51D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	NA	NA	NA	6.5 E-5
51D-SB02	1	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	2.1 E-3
51D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-5	NA	NA	NA	NA	9.4 E-5
51D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	2.8 E-3
51D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	1.7 E-4
51D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	9.3 E-4
51D-SB04	1	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	3.1 E-3
51D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	1.5 E-4
51D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	2.1 E-3
51D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	4.5 E-4
51D-SB05	5	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	1.1 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3
51D-SB05	9	NA	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	NA	1.0 E-3	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3
51D-SB06	5	NA	NA	NA	NA	NA	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	6.4 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	8.9 E-3
51D-SB06	9	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	2.0 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	3.5 E-2
51D-SB07	5	NA	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	4.0 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
51D-SB07	9	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	1.0 E-3	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2
51D-SB08	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	5.5 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	4.4 E-3
51D-SB08	9	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	7.7 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-3
51D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	6.2 E-3
51D-SB09	9	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	4.1 E-3	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	7.0 E-5	NA	1.1 E-2
51D-SB10	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	1.8 E-3	3.3 E-3	NA	NA	NA	NA	NA	1.6 E-6	2.3 E-5	NA	5.5 E-6	7.3 E-3
51D-SB10	9	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	2.3 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-3
A20-B34-SB01	1	NA	NA	NA	NA	NA	NA	7.5 E-3	4.0 E-3	NA	NA	NA	NA	NA	2.6 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
A20-B34-SB01	5	NA	NA	NA	NA	NA	NA	4.8 E-3	3.8 E-3	NA	NA	NA	NA	NA	7.2 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2
A20-B34-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	2.5 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
A20-B34-SB02	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.2 E-3	1.2 E-3	NA	NA	NA	NA	NA	1.0 E-6	2.0 E-6	NA	NA	3.9 E-3
A20-B34-SB02	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	1.4 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-3
A20-B34-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	3.8 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
A20-RB37-SB01	1	NA	NA	NA	NA	NA	NA	2.3 E-2	2.6 E-3	NA	NA	NA	NA	NA	6.0 E-3	2.6 E-1	NA	NA	2.8 E+0	NA	NA	NA	NA	2.2 E-4	NA	3.0 E+0
A20-RB37-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	7.2 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-3
A20-RB37-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
A20-RB37-SB02	1	NA	NA	NA	NA	NA	NA	8.4 E-3	2.5 E-3	NA	NA	NA	NA	NA	1.4 E-3	2.5 E-2	NA	NA	1.8 E+0	NA	NA	4.4 E-7	NA	5.6 E-4	NA	1.8 E+0
A20-RB37-SB02	5	NA	NA	NA	NA	NA	NA	5.1 E-3	1.9 E-3	NA	NA	NA	NA	NA	7.2 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	1.1 E-2
A20-RB37-SB02	11	NA	NA	NA	NA	NA	NA	3.7 E-3	3.6 E-3	NA	NA	NA	NA	NA	4.7 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-3
A20-RB37-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	2.3 E-3	1.7 E-3	NA	NA	1.9 E-1	NA	NA	NA	4.4 E-6	NA	5.4 E-6	1.9 E-1
A20-RB37-SB03	5	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	5.1 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
A20-RB37-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
A20-RB37-SB04	1	NA	NA	NA	NA	NA	NA	4.7 E-3	2.2 E-3	NA	NA	NA	NA	NA	1.4 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	9.8 E-3
A20-RB37-SB04	5	NA	NA	NA	NA	NA	NA	4.1 E-3	1.5 E-3	NA	NA	NA	NA	NA	7.2 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-3
A20-RB37-SB04	11	NA	NA	NA	NA	NA	NA	4.8 E-3	2.9 E-3	NA	NA	NA	NA	NA	1.3 E-3	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-3
A20-RC29-SB01	1	NA	NA	NA	NA	NA	NA	4.4 E-3	5.8 E-4	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA	5.3 E-2	NA	NA	NA	NA	NA	NA	5.8 E-2
A20-RC29-SB01	5	NA	NA	NA	NA	NA	NA	7.4 E-3	1.2 E-3	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-3
A20-RC29-SB01	11	NA	NA	NA	NA	NA	NA	5.7 E-3	7.2 E-4	NA	NA	NA	NA	NA	2.9 E-4	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
A20-RX73-SB01	1	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	2.2 E-3	3.6 E-3	NA	NA	NA	NA	NA	NA	2.3 E-6	5.1 E-5	NA	6.7 E-3
A20-RX73-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	1.1 E-3	1.4 E-3	NA	NA	NA	1.4 E-2	NA	NA	NA	3.3 E-5	NA	1.9 E-2
A20-RX73-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	5.1 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3
A20-RX73-SB02	1	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	3.3 E-3	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3
A20-RX73-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	1.3 E-2	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
A20-RX73-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	6.4 E-3	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2
A20-RX73-SB03	1	NA	NA	NA	NA	NA	NA	2.7 E-3	1.8 E-3	NA	NA	NA	NA	NA	7.7 E-4	4.1 E-3	NA	NA	NA	NA	NA	6.9 E-7	8.7 E-6	NA	6.4 E-6	9.4 E-3
A20-RX73-SB03	5	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA	NA	1.4 E-2	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
A20-RX73-SB03	11	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	3.3 E-3	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
A20-ST01-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	2.6 E-3	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-3
A20-ST01-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	3.7 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-3
A20-ST01-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	2.5 E-3	1.1 E-3	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	3.2 E-2
A20-ST01-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	1.4 E-3	4.0 E-5	NA	NA	NA	NA	6.1 E-7	9.6 E-6	NA	6.4 E-6	4.1 E-3
A20-ST01-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	NA	1.9 E-2	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
A20-ST01-SB02	11	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	1.8 E-3	9.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2
A20-ST01-SB03	1	NA	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	NA	6.4 E-3	1.6 E-3	NA	NA	1.2 E-1	NA	NA	7.0 E-7	1.4 E-6	NA	NA	1.2 E-1
A20-ST01-SB03	5	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	4.1 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	6.2 E-3
A20-ST01-SB03	11	NA	NA	NA	NA	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	NA	4.7 E-4	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-3
A20-ST02-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	3.9 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3
A20-ST02-SB01	5	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	1.1 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	3.6 E-3

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
A20-ST02-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3
A20-ST05-SB01	1	NA	NA	NA	NA	NA	NA	5.3 E-3	9.8 E-4	NA	NA	NA	NA	NA	1.1 E-3	1.2 E-3	NA	NA	NA	NA	NA	3.4 E-7	5.7 E-6	NA	3.9 E-6	8.5 E-3
A20-ST05-SB01	5	NA	NA	NA	NA	NA	NA	5.3 E-3	2.1 E-3	NA	NA	NA	NA	NA	5.1 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-3
A20-ST05-SB01	11	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	4.3 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-3
A20-ST05-SB02	1	NA	NA	NA	NA	NA	NA	6.1 E-3	2.9 E-3	NA	NA	NA	NA	NA	8.1 E-4	8.2 E-4	NA	NA	NA	NA	NA	5.2 E-7	1.8 E-6	NA	NA	1.1 E-2
A20-ST05-SB02	5	NA	NA	NA	NA	NA	NA	4.1 E-3	2.1 E-3	NA	NA	NA	NA	NA	1.7 E-3	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-3
A20-ST05-SB02	11	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
A20-ST06-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	4.3 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-3
A20-ST06-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.5 E-3	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3
A20-ST06-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4
A20-ST14-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	8.5 E-4	5.6 E-3	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	7.8 E-3
A20-ST14-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	2.6 E-3	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-3
A20-ST14-SB01	11	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	9.0 E-3	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
A20-ST20-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	6.8 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
A20-ST20-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	4.0 E-2	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2
A20-ST20-SB01	11	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	6.0 E-2	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-2
A20-ST22-SB01	1	NA	NA	NA	NA	NA	NA	6.1 E-3	6.3 E-4	NA	NA	NA	NA	NA	3.0 E-3	1.1 E-3	NA	NA	NA	NA	NA	2.9 E-7	1.1 E-6	3.3 E-4	NA	1.1 E-2
A20-ST22-SB01	5	NA	NA	NA	NA	NA	NA	7.5 E-3	4.1 E-4	NA	NA	NA	NA	NA	2.2 E-3	4.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	1.6 E-2
A20-ST22-SB01	11	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
03D-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	6.6 E-4	5.6 E-4	NA	NA	NA	NA	9.6 E-6	NA	NA	NA	NA	2.8 E-2
03D-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	3.3 E-3	7.3 E-3	NA	1.1 E-2	6.4 E-2
03D-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	3.3 E-2
03D-AH02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	5.3 E-4	6.0 E-3	NA	NA	NA	NA	NA	3.3 E-3	6.4 E-3	NA	1.2 E-2	5.2 E-2
03D-SB01	1	3.5 E-4	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	7.2 E-2	NA	2.1 E-3	NA	NA	NA	NA	NA	7.0 E-5	NA	NA	NA	NA	7.6 E-2
03D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-2	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	6.4 E-2
03D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-2	NA	1.5 E-3	NA	NA	NA	NA	NA	8.3 E-6	NA	NA	NA	NA	8.4 E-2
03D-SB02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	5.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2
03D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	8.9 E-4	NA	NA	NA	3.0 E-1	NA	3.9 E-5	NA	NA	NA	NA	3.5 E-1
03D-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-2
03D-SB02	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2
03D-SB02	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	1.8 E-5
03D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA	3.7 E-5
03D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
03D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	4.5 E-2
03D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	NA	4.6 E-2
03D-SB03	10	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	4.2 E-2	NA	1.3 E-2	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	6.1 E-2
03D-SB04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2
03D-SB04	1	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	8.9 E-3	NA	NA	NA	NA	NA	NA	5.2 E-2
03D-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2
03D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2
03D-SB04	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	5.1 E-6
03D-SB04	10	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	4.2 E-2
03D-SB05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
03D-SB05	1	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	1.3 E-2	NA	5.3 E-5	NA	NA	NA	NA	4.4 E-2
03D-SB05	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
03D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	2.5 E-1	NA	5.1 E-6	NA	NA	NA	NA	2.9 E-1
03D-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	9.0 E-3	NA	1.2 E-5	NA	NA	NA	NA	4.2 E-2
03D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	5.4 E-3	NA	5.2 E-5	NA	NA	NA	NA	5.1 E-2
03D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	NA	NA	1.8 E-2
03D-SB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	NA	NA	NA	NA	NA	4.6 E-2	NA	1.1 E-5	NA	NA	NA	NA	4.5 E-1
03D-SB07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2
03D-SB07	1	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4
03D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2
03D-SB07	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	1.0 E-5
03D-SB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	NA	NA	4.0 E-5
03D-SB08	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2
03D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	1.4 E-3	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	NA	5.2 E-2
03D-SB08	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
03D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	2.3 E-3	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	NA	NA	4.6 E-2
03D-SB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	1.8 E-3	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	3.0 E-2
03D-SB09	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	5.0 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	8.4 E-4
03D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	1.4 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4
03D-SB10	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	5.5 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4
03D-SB10	11	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	2.4 E-4	8.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SB11	1	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	3.6 E-4	1.1 E-4	NA	NA	4.0 E-3	NA	NA	NA	3.0 E-7	NA	5.5 E-7	4.7 E-3
03D-SB11	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	1.3 E-3	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
03D-SB11	11	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	2.1 E-3	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-3
03D-SB12	5	NA	NA	NA	NA	NA	NA	9.8 E-4	1.2 E-4	NA	NA	NA	NA	NA	2.9 E-4	9.3 E-5	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	1.5 E-3
03D-SB12	11	NA	NA	NA	NA	NA	NA	5.7 E-4	1.6 E-4	NA	NA	NA	NA	NA	4.5 E-4	2.2 E-4	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	1.4 E-3
03D-SB13	6	NA	NA	NA	NA	NA	NA	5.6 E-4	2.0 E-4	NA	NA	NA	NA	NA	1.8 E-4	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
03D-SB13	11.5	NA	NA	NA	NA	NA	NA	4.0 E-4	1.7 E-4	NA	NA	NA	NA	NA	4.6 E-5	5.8 E-5	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	6.9 E-4
03D-SB14	3.5	NA	NA	NA	NA	NA	NA	5.1 E-4	9.9 E-5	NA	NA	NA	NA	NA	1.7 E-4	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	8.9 E-4
03D-SB14	7.5	NA	NA	NA	NA	NA	NA	5.6 E-4	1.3 E-4	NA	NA	NA	NA	NA	1.1 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	9.7 E-4
03D-SB14	11	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	3.2 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4
03D-SB15	3	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	9.4 E-4
03D-SB15	6	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	1.7 E-3	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
03D-SB15	11.5	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	8.7 E-5	4.9 E-5	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	7.1 E-4
03D-SB16	5	NA	NA	NA	NA	NA	NA	1.2 E-3	2.5 E-4	NA	NA	NA	NA	NA	3.0 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	NA	2.0 E-3
03D-SB16	11.5	NA	NA	NA	NA	NA	NA	6.5 E-4	1.5 E-4	NA	NA	NA	NA	NA	1.3 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
03D-SB17	1	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	1.3 E-3	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	2.2 E-3
03D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4
03D-SB17	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	1.7 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4

		Adult Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
03D-SB18	11	NA	NA	NA	NA	NA	NA	5.7 E-4	2.5 E-4	NA	NA	NA	NA	NA	2.7 E-4	7.9 E-5	NA	NA	NA	NA	NA	NA	7.8 E-7	NA	NA	1.2 E-3
03D-SB19	7.5	NA	NA	NA	NA	NA	NA	5.1 E-4	1.1 E-4	NA	NA	NA	NA	NA	1.2 E-4	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	1.2 E-3
03D-SB19	11.5	NA	NA	NA	NA	NA	NA	5.9 E-4	7.7 E-5	NA	NA	NA	NA	NA	9.6 E-5	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-4
03D-SB20	5	NA	NA	NA	NA	NA	NA	7.9 E-4	1.2 E-4	NA	NA	NA	NA	NA	4.6 E-4	1.2 E-4	NA	NA	NA	1.2 E-3	NA	NA	NA	2.0 E-5	NA	2.7 E-3
03D-SB20	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	1.2 E-4	2.3 E-4	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	NA	4.6 E-2
03D-SB22	7.75	NA	NA	NA	NA	NA	NA	4.8 E-4	1.2 E-4	NA	NA	NA	NA	NA	8.2 E-5	5.2 E-5	NA	2.8 E-2	NA	NA	NA	NA	NA	6.9 E-5	NA	2.9 E-2
03D-SB22	11	NA	NA	NA	NA	NA	NA	7.0 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	1.0 E-3
03D-SB23	6	NA	NA	NA	NA	NA	NA	6.2 E-4	1.0 E-4	NA	NA	NA	NA	NA	6.9 E-5	5.5 E-5	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	8.8 E-4
03D-SB23	11	NA	NA	NA	NA	NA	NA	6.2 E-4	7.7 E-5	NA	NA	NA	NA	NA	5.9 E-5	7.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	8.5 E-4
03D-SB24	7.5	NA	NA	NA	NA	NA	NA	5.4 E-4	1.7 E-4	NA	NA	NA	NA	NA	9.6 E-5	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	1.4 E-3
03D-SB24	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4
03D-SB25	1	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	3.4 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4
03D-SB25	5	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	1.3 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	8.0 E-4
03D-SB25	11	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	2.6 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SB26	1	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	7.3 E-5	1.6 E-4	NA	NA	NA	NA	NA	NA	3.6 E-7	2.4 E-5	NA	3.3 E-4
03D-SB26	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	7.8 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	4.4 E-4
03D-SB26	11	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	1.7 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4
03D-SB27	1	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	2.6 E-4	1.5 E-4	NA	NA	NA	NA	NA	1.5 E-7	1.2 E-6	6.9 E-5	1.5 E-6	6.2 E-4
03D-SB27	5	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	4.4 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4
03D-SB27	11	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	3.3 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-4
03D-SB30	5	NA	NA	NA	NA	NA	NA	5.2 E-4	3.3 E-4	NA	NA	NA	NA	NA	5.0 E-4	7.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
03D-SB30	11	NA	NA	NA	NA	NA	NA	6.2 E-4	6.0 E-4	NA	NA	NA	NA	NA	3.3 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
03D-SB31	1.5	NA	NA	NA	NA	NA	NA	7.6 E-4	1.9 E-4	NA	NA	NA	NA	NA	3.5 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	1.3 E-7	4.0 E-5	NA	1.5 E-3
03D-SB31	5.5	NA	NA	NA	NA	NA	NA	6.2 E-4	1.5 E-4	NA	NA	NA	NA	NA	8.7 E-5	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	1.3 E-3
03D-SB31	11.5	NA	NA	NA	NA	NA	NA	8.6 E-4	3.3 E-4	NA	NA	NA	NA	NA	5.9 E-4	9.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
03D-SB32	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	3.6 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	7.4 E-4
03D-SB32	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	1.5 E-4	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4
03D-SB33	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	5.0 E+0	NA	NA	NA	NA	NA	NA	5.0 E+0
03D-SB33	11	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	NA	NA	NA	NA	3.1 E-4	1.5 E-4	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB35	5	NA	NA	NA	NA	NA	NA	6.2 E-4	2.6 E-4	NA	NA	NA	NA	NA	1.6 E-4	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SB35	11	NA	NA	NA	NA	NA	NA	6.2 E-4	7.1 E-5	NA	NA	NA	NA	NA	9.1 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-4
03D-SB36	1	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	1.9 E-4	3.6 E-4	NA	NA	NA	1.5 E-3	NA	NA	1.0 E-6	4.0 E-6	1.7 E-6	2.3 E-3
03D-SB36	5	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	2.3 E-4	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-4
03D-SB36	11	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	9.6 E-5	1.5 E-4	NA	NA	NA	NA	NA	4.0 E-8	8.8 E-7	6.9 E-5	5.4 E-7	6.4 E-4
03D-SB37	5	NA	NA	NA	NA	NA	NA	7.5 E-4	3.6 E-4	NA	NA	NA	NA	NA	1.0 E-4	1.3 E-4	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	1.6 E-2
03D-SB37	11	NA	NA	NA	NA	NA	NA	8.4 E-4	2.0 E-4	NA	NA	NA	NA	NA	2.4 E-4	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
03D-SB38	1	NA	NA	NA	NA	NA	NA	7.8 E-4	5.3 E-5	NA	NA	NA	NA	NA	7.8 E-5	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	1.1 E-3
03D-SB38	5	NA	NA	NA	NA	NA	NA	7.1 E-4	2.2 E-4	NA	NA	NA	NA	NA	1.8 E-4	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	3.2 E-3
03D-SB38	11	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	4.2 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4
03D-SB39	3.5	NA	NA	NA	NA	NA	NA	7.5 E-4	1.1 E-4	NA	NA	NA	NA	NA	1.2 E-4	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	6.2 E-3
03D-SB39	5	NA	NA	NA	NA	NA	NA	4.6 E-4	9.9 E-5	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4
03D-SB39	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4
03D-SB40	3.75	NA	NA	NA	NA	NA	NA	5.9 E-4	2.1 E-4	NA	NA	NA	NA	NA	4.2 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-4
03D-SB40	7.5	NA	NA	NA	NA	NA	NA	4.9 E-4	1.6 E-4	NA	NA	NA	NA	NA	1.3 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	9.4 E-4
03D-SB40	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB41	3	NA	NA	NA	NA	NA	NA	6.0 E-4	6.0 E-5	NA	NA	NA	NA	NA	3.7 E-5	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	8.1 E-4
03D-SB41	6	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	7.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	7.0 E-4
03D-SB41	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5
03D-SB42	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	1.9 E-4	NA	NA	2.6 E-3	NA	NA	NA	1.4 E-7	NA	NA	3.1 E-3
03D-SB42	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	1.5 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4
03D-SB42	11	NA	NA	NA	NA	NA	NA	6.5 E-4	1.2 E-4	NA	NA	NA	NA	NA	3.6 E-4	2.5 E-4	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	1.4 E-3
03D-SB43	5	NA	NA	NA	NA	NA	NA	4.3 E-4	2.9 E-4	NA	NA	NA	NA	NA	3.5 E-4	1.2 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.3 E-2
03D-SB43	11	NA	NA	NA	NA	NA	NA	4.0 E-4	2.9 E-4	NA	NA	NA	NA	NA	1.7 E-4	6.6 E-5	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	4.9 E-3
03D-SB44	5	NA	NA	NA	NA	NA	NA	5.7 E-4	2.3 E-4	NA	NA	NA	NA	NA	8.2 E-5	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
03D-SB44	11	NA	NA	NA	NA	NA	NA	5.1 E-4	1.2 E-4	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4
03D-SB45	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	9.1 E-5	2.5 E-4	2.1 E-3	NA	NA	NA	NA	3.3 E-7	4.4 E-5	NA	3.3 E-6	2.7 E-3
03D-SB46	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	2.8 E-4	3.0 E-4	1.4 E-2	NA	NA	NA	NA	NA	1.4 E-4	NA	1.7 E-5	1.5 E-2
03D-SB46	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.2 E-4	6.8 E-4	NA	1.2 E+0	NA	NA	NA	4.0 E-6	NA	NA	1.2 E+0
03D-SB47	7.5	NA	NA	NA	NA	NA	NA	7.6 E-4	1.5 E-4	NA	NA	NA	NA	NA	4.5 E-5	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	1.3 E-3
03D-SB47	11.5	NA	NA	NA	NA	NA	NA	6.5 E-4	1.3 E-4	NA	NA	NA	NA	NA	5.5 E-5	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	1.5 E-3
03D-SB48	5	NA	NA	NA	NA	NA	NA	6.2 E-4	5.2 E-4	NA	NA	NA	NA	NA	5.9 E-5	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
03D-SB48	11	NA	NA	NA	NA	NA	NA	7.0 E-4	6.6 E-5	NA	NA	NA	NA	NA	1.6 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3
03D-SB49	5	NA	NA	NA	NA	NA	NA	5.6 E-4	9.3 E-5	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	8.1 E-4

		Adult Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
03D-SB49	11.5	NA	NA	NA	NA	NA	NA	6.0 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-4
03D-SB50	1	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	6.4 E-4	2.0 E-4	NA	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	8.3 E-3
03D-SB50	5	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	7.3 E-5	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4
03D-SB50	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	4.5 E-5	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4
03D-SB51	5	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	8.2 E-4	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
03D-SB51	11	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	5.5 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4
03D-SB52	1	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	5.0 E-4	3.6 E-4	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	NA	6.4 E-3
03D-SB52	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	5.0 E-5	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	5.5 E-6	NA	3.8 E-4
03D-SB52	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4
03D-SB53	5	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	5.5 E-5	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	5.7 E-4
03D-SB53	11	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	4.2 E-5	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4
03D-SB54	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	1.6 E-4	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	2.7 E-3
03D-SB54	5	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	1.2 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4
03D-SB54	11	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	4.3 E-5	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4
03D-SB55	1	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	2.1 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	6.7 E-4
03D-SB55	5	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	3.8 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	9.0 E-6	NA	9.8 E-4
03D-SB55	11	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	5.5 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4
03D-SB56	5	NA	NA	NA	NA	NA	NA	6.0 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4
03D-SB56	11	NA	NA	NA	NA	NA	NA	5.9 E-4	3.2 E-4	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	1.3 E-3
03D-SB57	5	NA	NA	NA	NA	NA	NA	4.6 E-4	1.5 E-4	NA	NA	NA	NA	NA	8.7 E-5	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4
03D-SB57	11	NA	NA	NA	NA	NA	NA	5.1 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	2.9 E-3	NA	NA	4.8 E-8	1.7 E-7	NA	NA	3.7 E-3
03D-SB61	5	NA	NA	NA	NA	NA	NA	1.1 E-3	1.8 E-4	NA	NA	NA	NA	NA	5.9 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
03D-SB61	11	NA	NA	NA	NA	NA	NA	4.1 E-4	2.4 E-4	NA	NA	NA	NA	NA	2.6 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-4
03D-SB62	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4
03D-SB62	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4
03D-SB63	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	2.6 E-3
03D-SB63	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB63	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-3	NA	NA	NA	NA	NA	NA	4.9 E-3
03D-SB64	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	NA	5.3 E-3
03D-SB64	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	5.0 E-3
03D-SB64	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	2.0 E-3
03D-SB65	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	5.9 E-3
03D-SB66	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3
03D-SB67	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	NA	NA	NA	NA	5.4 E-2
03D-SB67	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB67	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SB68	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	1.8 E-1
03D-SB68	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-3	NA	NA	NA	NA	NA	NA	9.2 E-3
03D-SB68	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	NA	NA	3.4 E-2
03D-SB69	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	4.0 E-2
03D-SB69	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	2.2 E-3
03D-SB69	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
03D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-2
03D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
03D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2
03D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2
03D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
03D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2
03D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2
03D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2
03D-SNS34	0.25	NA	NA	NA	NA	NA	NA	5.6 E-3	2.2 E-3	NA	NA	NA	NA	NA	5.0 E-4	5.5 E-4	2.0 E-5	NA	4.5 E-2	1.6 E-1	NA	2.1 E-6	1.1 E-5	NA	1.2 E-5	2.1 E-1
03D-SNS35	0.25	NA	NA	NA	NA	NA	NA	2.2 E-3	5.4 E-4	NA	NA	NA	NA	NA	1.1 E-4	5.5 E-4	8.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3
11D-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	8.2 E-5	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4
11D-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4
11D-SB01	11	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	3.1 E-5	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4
11D-SB02	1	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	4.1 E-4	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	1.2 E-3
11D-SB02	5	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	NA	NA	1.6 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4
11D-SB02	11	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	8.2 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
11D-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	2.7 E-4	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	6.6 E-4
11D-SB03	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4
11D-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4
11D-SB04	1	NA	NA	NA	NA	NA	NA	6.8 E-4	1.9 E-4	NA	NA	NA	NA	NA	1.7 E-3	3.6 E-4	NA	NA	1.5 E-3	NA	NA	1.3 E-7	1.2 E-6	NA	2.4 E-6	4.5 E-3
11D-SB04	5	NA	NA	NA	NA	NA	NA	8.9 E-4	2.4 E-4	NA	NA	NA	NA	NA	4.1 E-3	1.8 E-4	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	5.4 E-3
11D-SB04	11	NA	NA	NA	NA	NA	NA	6.4 E-4	2.1 E-4	NA	NA	NA	NA	NA	1.0 E-3	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
11D-SB05	1	NA	NA	NA	NA	NA	NA	4.4 E-4	3.8 E-5	NA	NA	NA	NA	NA	4.3 E-5	2.4 E-4	NA	NA	NA	NA	NA	4.0 E-7	2.5 E-6	5.1 E-4	3.1 E-6	1.3 E-3
11D-SB05	5	NA	NA	NA	NA	NA	NA	8.1 E-4	2.1 E-4	NA	NA	NA	NA	NA	1.5 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	1.3 E-3
11D-SB05	11	NA	NA	NA	NA	NA	NA	6.0 E-4	1.9 E-4	NA	NA	NA	NA	NA	6.9 E-5	6.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-4
11D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	3.1 E-5	NA	1.7 E-1
11D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	2.4 E-4
11D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	1.1 E-4
11D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	2.5 E-5
11D-SB08	1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	1.0 E-4	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4
11D-SB08	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	NA	4.2 E-5	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4
11D-SB09	1	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	1.1 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4
11D-SB09	5	NA	NA	NA	NA	NA	NA	9.4 E-4	3.2 E-4	NA	NA	NA	NA	NA	3.4 E-5	8.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
11D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4
11D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
11D-SNS02	0.01	NA	NA	NA	NA	NA	NA	9.4 E-3	NA	NA	NA	NA	5.9 E-2	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-2
11D-SNS12	0.5	NA	NA	NA	NA	NA	NA	1.4 E-3	1.3 E-4	NA	NA	NA	NA	NA	5.5 E-4	4.1 E-4	NA	2.9 E-3	1.7 E-2	3.5 E-2	NA	8.2 E-8	NA	NA	NA	5.8 E-2
11D-SNS12	2.5	NA	NA	NA	NA	NA	NA	1.6 E-3	4.7 E-4	NA	NA	NA	NA	NA	7.3 E-4	7.4 E-4	NA	NA	1.7 E-2	3.6 E-2	NA	2.1 E-7	4.4 E-7	NA	9.7 E-7	5.7 E-2
11D-SNS13	0.5	NA	NA	NA	NA	NA	NA	2.4 E-4	2.5 E-4	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	1.3 E-2	3.3 E-2	NA	1.8 E-7	2.2 E-7	NA	6.4 E-7	4.7 E-2
11D-SNS13	2.5	NA	NA	NA	NA	NA	NA	7.1 E-5	9.3 E-5	NA	NA	NA	NA	NA	5.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	4.6 E-4
11D-SNS14	0.5	NA	NA	NA	NA	NA	NA	2.2 E-3	1.2 E-4	NA	NA	NA	NA	NA	1.3 E-4	2.4 E-3	NA	NA	1.6 E-2	NA	NA	3.4 E-7	1.0 E-6	NA	1.9 E-6	2.1 E-2
11D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5
11D-SNS15	0.5	NA	NA	NA	NA	NA	NA	4.3 E-3	5.4 E-4	NA	NA	NA	NA	NA	9.6 E-4	1.7 E-3	NA	NA	1.1 E+0	NA	NA	4.0 E-7	3.7 E-7	NA	1.3 E-6	1.1 E+0
11D-SNS15	2.5	NA	NA	NA	NA	NA	NA	1.5 E-3	1.0 E-4	NA	NA	NA	NA	NA	3.9 E-4	3.8 E-4	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	5.5 E-3
11D-SNS16	0.5	NA	NA	NA	NA	NA	NA	3.2 E-3	1.9 E-4	NA	NA	NA	NA	NA	9.6 E-4	6.9 E-4	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	1.2 E-1
11D-SNS16	2.5	NA	NA	NA	NA	NA	NA	3.8 E-3	2.5 E-4	NA	NA	NA	NA	NA	9.6 E-4	7.4 E-4	NA	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	1.0 E-2
11D-SNS17	0.5	NA	NA	NA	NA	NA	NA	1.7 E-3	2.6 E-4	NA	NA	NA	NA	NA	3.5 E-4	7.4 E-4	1.4 E-5	1.2 E-3	NA	1.6 E-2	NA	5.6 E-7	1.4 E-6	2.4 E-5	3.9 E-6	2.0 E-2
11D-SNS17	2.5	NA	NA	NA	NA	NA	NA	1.0 E-3	1.7 E-4	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	3.0 E-3
11D-SNS18	0.5	NA	NA	NA	NA	NA	NA	3.5 E-4	8.2 E-5	NA	NA	NA	NA	NA	2.3 E-5	1.1 E-4	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	5.1 E-3
11D-SNS18	2.5	NA	NA	NA	NA	NA	NA	1.2 E-4	9.3 E-5	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	5.1 E-3
11D-SNS19	0.5	NA	NA	NA	NA	NA	NA	2.9 E-3	1.8 E-4	NA	NA	NA	NA	NA	1.5 E-4	4.1 E-4	NA	NA	NA	NA	NA	2.9 E-7	2.8 E-7	2.0 E-5	8.3 E-7	3.6 E-3
11D-SNS19	2.5	NA	NA	NA	NA	NA	NA	1.9 E-4	6.6 E-5	NA	NA	NA	NA	NA	1.9 E-5	1.0 E-4	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	1.3 E-2
11D-SNS20	0.5	NA	NA	NA	NA	NA	NA	5.2 E-4	2.2 E-4	NA	NA	NA	NA	NA	1.1 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-4
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	NA	NA	NA	NA	NA	NA	4.4 E-4	1.4 E-4	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4
11D-SNS21	2.5	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4
11D-SNS22	0.5	NA	NA	NA	NA	NA	NA	5.9 E-3	1.9 E-4	NA	NA	NA	NA	NA	2.4 E-4	7.7 E-4	NA	NA	NA	1.4 E-1	NA	2.7 E-7	4.4 E-7	NA	9.0 E-7	1.5 E-1
11D-SNS22	2.5	NA	NA	NA	NA	NA	NA	1.2 E-3	1.4 E-4	NA	NA	NA	NA	NA	2.4 E-4	4.7 E-4	NA	NA	NA	NA	NA	5.0 E-7	6.8 E-7	1.7 E-5	1.4 E-6	2.1 E-3
11D-SNS23	3.5	NA	NA	NA	NA	NA	NA	1.6 E-4	6.0 E-5	NA	NA	NA	NA	NA	1.6 E-4	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4
11D-SNS23	4.5	NA	NA	NA	NA	NA	NA	1.5 E-4	6.0 E-5	NA	NA	NA	NA	NA	5.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	3.1 E-4
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	3.1 E-5
50D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	5.2 E-5
50D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	2.4 E-5
50D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	NA	NA	NA	NA	8.6 E-5
50D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4
50D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	1.0 E-4	2.6 E-5	NA	NA	NA	NA	5.0 E-8	1.2 E-6	4.1 E-6	4.1 E-6	3.0 E-4
51D-SB01	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	1.5 E-5

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Unit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
51D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	NA	NA	NA	7.7 E-6
51D-SB02	1	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	7.1 E-4
51D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	1.1 E-5
51D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	3.3 E-4
51D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	2.0 E-5
51D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	1.1 E-4
51D-SB04	1	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.1 E-3
51D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.7 E-5
51D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	2.5 E-4
51D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	NA	NA	5.3 E-5
51D-SB05	5	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	NA	1.2 E-4	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4
51D-SB05	9	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	1.1 E-4	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4
51D-SB06	5	NA	NA	NA	NA	NA	NA	NA	7.1 E-5	NA	NA	NA	NA	NA	6.9 E-4	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	9.6 E-4
51D-SB06	9	NA	NA	NA	NA	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	3.9 E-3
51D-SB07	5	NA	NA	NA	NA	NA	NA	NA	9.3 E-5	NA	NA	NA	NA	NA	4.3 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4
51D-SB07	9	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	NA	1.1 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
51D-SB08	5	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	5.9 E-5	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	5.0 E-4
51D-SB08	9	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	8.2 E-5	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4
51D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	2.0 E-4	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	7.0 E-4
51D-SB09	9	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	4.4 E-4	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	8.3 E-6	NA	1.2 E-3
51D-SB10	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	1.9 E-4	3.6 E-4	NA	NA	NA	NA	NA	1.8 E-7	2.7 E-6	NA	6.6 E-7	8.1 E-4
51D-SB10	9	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	2.5 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4
A20-B34-SB01	1	NA	NA	NA	NA	NA	NA	8.4 E-4	4.9 E-4	NA	NA	NA	NA	NA	2.7 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
A20-B34-SB01	5	NA	NA	NA	NA	NA	NA	5.4 E-4	4.7 E-4	NA	NA	NA	NA	NA	7.8 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
A20-B34-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	2.7 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4
A20-B34-SB02	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	1.2 E-4	1.2 E-4	NA	NA	NA	NA	NA	1.2 E-7	2.4 E-7	NA	NA	4.4 E-4
A20-B34-SB02	5	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	1.5 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4
A20-B34-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	4.0 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4
A20-RB37-SB01	1	NA	NA	NA	NA	NA	NA	2.5 E-3	3.1 E-4	NA	NA	NA	NA	NA	6.4 E-4	2.7 E-2	NA	NA	3.3 E-1	NA	NA	NA	NA	2.6 E-5	NA	3.6 E-1
A20-RB37-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	7.8 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4
A20-RB37-SB01	11	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4
A20-RB37-SB02	1	NA	NA	NA	NA	NA	NA	9.4 E-4	3.0 E-4	NA	NA	NA	NA	NA	1.5 E-4	2.6 E-3	NA	NA	2.1 E-1	NA	NA	5.2 E-8	NA	6.7 E-5	NA	2.2 E-1
A20-RB37-SB02	5	NA	NA	NA	NA	NA	NA	5.7 E-4	2.3 E-4	NA	NA	NA	NA	NA	7.8 E-5	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	1.2 E-3
A20-RB37-SB02	11	NA	NA	NA	NA	NA	NA	4.1 E-4	4.4 E-4	NA	NA	NA	NA	NA	5.0 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
A20-RB37-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	2.4 E-4	1.8 E-4	NA	NA	2.2 E-2	NA	NA	NA	5.2 E-7	NA	6.4 E-7	2.3 E-2
A20-RB37-SB03	5	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	NA	5.5 E-5	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
A20-RB37-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4
A20-RB37-SB04	1	NA	NA	NA	NA	NA	NA	5.2 E-4	2.7 E-4	NA	NA	NA	NA	NA	1.5 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	1.1 E-3
A20-RB37-SB04	5	NA	NA	NA	NA	NA	NA	4.6 E-4	1.9 E-4	NA	NA	NA	NA	NA	7.8 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-4
A20-RB37-SB04	11	NA	NA	NA	NA	NA	NA	5.4 E-4	3.6 E-4	NA	NA	NA	NA	NA	1.4 E-4	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
A20-RC29-SB01	1	NA	NA	NA	NA	NA	NA	4.9 E-4	7.1 E-5	NA	NA	NA	NA	NA	5.0 E-5	NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	6.9 E-3
A20-RC29-SB01	5	NA	NA	NA	NA	NA	NA	8.3 E-4	1.4 E-4	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
A20-RC29-SB01	11	NA	NA	NA	NA	NA	NA	6.4 E-4	8.8 E-5	NA	NA	NA	NA	NA	3.2 E-5	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
A20-RX73-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	2.3 E-4	3.8 E-4	NA	NA	NA	NA	NA	NA	2.8 E-7	6.1 E-6	NA	7.3 E-4
A20-RX73-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	1.2 E-4	1.5 E-4	NA	NA	NA	1.7 E-3	NA	NA	NA	4.0 E-6	NA	2.2 E-3
A20-RX73-SB01	11	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	5.5 E-5	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4
A20-RX73-SB02	1	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	3.6 E-4	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4
A20-RX73-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	1.4 E-3	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
A20-RX73-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	6.9 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3
A20-RX73-SB03	1	NA	NA	NA	NA	NA	NA	3.0 E-4	2.2 E-4	NA	NA	NA	NA	NA	8.2 E-5	4.4 E-4	NA	NA	NA	NA	NA	8.0 E-8	1.0 E-6	NA	7.6 E-7	1.0 E-3
A20-RX73-SB03	5	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	1.5 E-3	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
A20-RX73-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	3.6 E-4	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4
A20-ST01-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	2.8 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4
A20-ST01-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	4.0 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-4
A20-ST01-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	2.7 E-4	1.2 E-4	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	3.8 E-3
A20-ST01-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	1.5 E-4	1.7 E-5	NA	NA	NA	NA	7.1 E-8	1.1 E-6	NA	7.6 E-7	4.5 E-4
A20-ST01-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	2.0 E-3	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
A20-ST01-SB02	11	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	1.9 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
A20-ST01-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	6.9 E-4	1.7 E-4	NA	NA	1.4 E-2	NA	NA	8.2 E-8	1.7 E-7	NA	NA	1.5 E-2
A20-ST01-SB03	5	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	NA	NA	NA	4.4 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	6.8 E-4
A20-ST01-SB03	11	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	5.0 E-5	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4
A20-ST02-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	4.2 E-4	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-4
A20-ST02-SB01	5	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	1.1 E-4	2.1 E-4	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	4.0 E-4

		Adult Non-Cancer Hazard Index																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**	**HI**
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
A20-ST02-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	1.7 E-5	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4
A20-ST05-SB01	1	NA	NA	NA	NA	NA	NA	5.9 E-4	1.2 E-4	NA	NA	NA	NA	NA	1.1 E-4	1.3 E-4	NA	NA	NA	NA	NA	4.0 E-8	6.8 E-7	NA	4.6 E-7	9.5 E-4
A20-ST05-SB01	5	NA	NA	NA	NA	NA	NA	5.9 E-4	2.6 E-4	NA	NA	NA	NA	NA	5.5 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
A20-ST05-SB01	11	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	4.6 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4
A20-ST05-SB02	1	NA	NA	NA	NA	NA	NA	6.8 E-4	3.6 E-4	NA	NA	NA	NA	NA	8.7 E-5	8.8 E-5	NA	NA	NA	NA	NA	6.1 E-8	2.1 E-7	NA	NA	1.2 E-3
A20-ST05-SB02	5	NA	NA	NA	NA	NA	NA	4.6 E-4	2.6 E-4	NA	NA	NA	NA	NA	1.8 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
A20-ST05-SB02	11	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4
A20-ST06-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	4.6 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-4
A20-ST06-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	1.6 E-4	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4
A20-ST06-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-5
A20-ST14-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	9.1 E-5	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	9.0 E-6	NA	8.6 E-4
A20-ST14-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	2.7 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4
A20-ST14-SB01	11	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	NA	9.6 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
A20-ST20-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	7.3 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
A20-ST20-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	4.3 E-3	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-3
A20-ST20-SB01	11	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	6.4 E-3	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-3
A20-ST22-SB01	1	NA	NA	NA	NA	NA	NA	6.8 E-4	7.7 E-5	NA	NA	NA	NA	NA	3.2 E-4	1.2 E-4	NA	NA	NA	NA	NA	3.4 E-8	1.3 E-7	4.0 E-5	NA	1.2 E-3
A20-ST22-SB01	5	NA	NA	NA	NA	NA	NA	8.4 E-4	5.0 E-5	NA	NA	NA	NA	NA	2.3 E-4	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	1.8 E-3
A20-ST22-SB01	11	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	3.8 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																								Blood Lead	
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
03D-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3	3.4
03D-AH01	3	NA	1.4 E-4	1.6 E-3	NA	1.3 E-4	1.5 E-4	NA	NA	2.5 E-5	1.0 E-4	5.6 E-5	NA	NA	NA	NA	9.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2 E-3	5.3	3.4
03D-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7	3.5
03D-AH02	3	NA	1.8 E-4	1.8 E-3	NA	1.6 E-4	1.7 E-4	NA	NA	2.9 E-5	NA	5.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-3	5.1	3.4
03D-SB01	1	2.6 E-6	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	6.1	3.5
03D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
03D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
03D-SB02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5	3.5
03D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	3 E-5	5.0	3.4
03D-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3	3.4
03D-SB02	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB02	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
03D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB03	10	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	5.7	3.5
03D-SB04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SB04	1	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-7	NA	NA	NA	NA	NA	NA	6 E-6	4.9	3.4
03D-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB04	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB04	10	2.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	4.9	3.4
03D-SB05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB05	1	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	2 E-6	NA	NA
03D-SB05	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
03D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	3 E-5	5.1	3.4
03D-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-7	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA
03D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	6 E-7	5.0	3.4
03D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	5 E-6	4.9	3.4
03D-SB07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB07	1	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	NA	NA
03D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SB07	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB08	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
03D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB08	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB09	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.2	3.4
03D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.0	3.4
03D-SB10	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB10	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
03D-SB11	1	NA	1.9 E-8	NA	NA	NA	NA	NA	2.3 E-8	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	5 E-7	4.8	3.4
03D-SB11	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.1	3.4
03D-SB11	11	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
03D-SB12	5	NA	3.9 E-8	NA	NA	NA	NA	1.0 E-9	1.2 E-8	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	4.9	3.4
03D-SB12	11	NA	7.3 E-8	NA	NA	NA	NA	5.9 E-10	1.7 E-8	6.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	4.8	3.4
03D-SB13	6	NA	NA	NA	NA	NA	NA	5.7 E-10	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
03D-SB13	11.5	NA	NA	NA	NA	NA	NA	4.1 E-10	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB14	3.5	NA	NA	NA	NA	NA	NA	5.2 E-10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB14	7.5	NA	NA	NA	NA	NA	NA	5.7 E-10	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB14	11	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
03D-SB15	3	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.9	3.4
03D-SB15	6	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
03D-SB15	11.5	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.8	3.4
03D-SB16	5	NA	NA	NA	NA	NA	NA	1.3 E-9	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
03D-SB16	11.5	NA	NA	NA	NA	NA	NA	6.7 E-10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB17	1	NA	2.1 E-7	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	4.9	3.4
03D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SB17	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																								Blood Lead	
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
03D-SB18	11	NA	NA	NA	NA	NA	NA	5.9 E-10	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.9	3.4
03D-SB19	7.5	NA	NA	NA	NA	NA	NA	5.2 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB19	11.5	NA	NA	NA	NA	NA	NA	6.1 E-10	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	4.8	3.4
03D-SB20	5	NA	NA	NA	NA	NA	NA	8.2 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	1 E-7	4.8	3.4
03D-SB20	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	5 E-6	4.9	3.4
03D-SB22	7.75	NA	NA	NA	NA	NA	NA	4.9 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	3 E-6	4.8	3.4
03D-SB22	11	NA	NA	NA	NA	NA	NA	7.2 E-10	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.9	3.4
03D-SB23	6	NA	NA	NA	NA	NA	NA	6.4 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB23	11	NA	NA	NA	NA	NA	NA	6.4 E-10	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	4.8	3.4
03D-SB24	7.5	NA	NA	NA	NA	NA	NA	5.6 E-10	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
03D-SB24	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
03D-SB25	1	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.9	3.4
03D-SB25	5	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.9	3.4
03D-SB25	11	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	5.0	3.4
03D-SB26	1	NA	9.3 E-9	NA	NA	NA	NA	NA	7.8 E-9	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB26	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4
03D-SB26	11	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.9	3.4
03D-SB27	1	NA	3.7 E-8	1.6 E-7	2.9 E-8	NA	NA	NA	1.4 E-8	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	5.0	3.4
03D-SB27	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
03D-SB27	11	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
03D-SB30	5	NA	NA	NA	NA	NA	NA	5.4 E-10	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
03D-SB30	11	NA	NA	NA	NA	NA	NA	6.4 E-10	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	4.9	3.4
03D-SB31	1.5	NA	NA	NA	NA	NA	NA	7.9 E-10	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB31	5.5	NA	NA	NA	NA	NA	NA	6.4 E-10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB31	11.5	NA	NA	NA	NA	NA	NA	8.9 E-10	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
03D-SB32	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.2	3.4
03D-SB32	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB33	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	5 E-4	5.0	3.4
03D-SB33	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	1 E-6	5.0	3.4
03D-SB35	5	NA	NA	NA	NA	NA	NA	6.4 E-10	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
03D-SB35	11	NA	NA	NA	NA	NA	NA	6.4 E-10	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	4.9	3.4
03D-SB36	1	NA	6.8 E-8	NA	NA	NA	NA	NA	2.3 E-8	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	3 E-7	4.8	3.4
03D-SB36	5	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.0	3.4
03D-SB36	11	NA	NA	NA	2.9 E-8	NA	NA	NA	3.2 E-8	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	4.8	3.4
03D-SB37	5	NA	NA	NA	NA	NA	NA	7.7 E-10	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	2 E-6	4.8	3.4
03D-SB37	11	NA	NA	NA	NA	NA	NA	8.7 E-10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
03D-SB38	1	NA	NA	NA	NA	NA	NA	8.0 E-10	5.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	5.0	3.4
03D-SB38	5	NA	NA	NA	NA	NA	NA	7.4 E-10	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
03D-SB38	11	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
03D-SB39	3.5	NA	NA	NA	NA	NA	NA	7.7 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB39	5	NA	NA	NA	NA	NA	NA	4.8 E-10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB39	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
03D-SB40	3.75	NA	NA	NA	NA	NA	NA	6.1 E-10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB40	7.5	NA	NA	NA	NA	NA	NA	5.1 E-10	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB40	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB41	3	NA	NA	NA	NA	NA	NA	6.2 E-10	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	4.8	3.4
03D-SB41	6	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
03D-SB41	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB42	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	3 E-7	5.0	3.4
03D-SB42	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
03D-SB42	11	NA	NA	NA	NA	NA	NA	6.7 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.2	3.4
03D-SB43	5	NA	NA	NA	NA	NA	NA	4.4 E-10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	1 E-6	4.8	3.4
03D-SB43	11	NA	NA	NA	NA	NA	NA	4.1 E-10	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	4 E-7	4.8	3.4
03D-SB44	5	NA	NA	NA	NA	NA	NA	5.9 E-10	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB44	11	NA	NA	NA	NA	NA	NA	5.2 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB45	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	4.9	3.4
03D-SB46	5	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	7.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	4.9	3.4
03D-SB46	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	1 E-4	5.0	3.4
03D-SB47	7.5	NA	NA	NA	NA	NA	NA	7.9 E-10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
03D-SB47	11.5	NA	NA	NA	NA	NA	NA	6.7 E-10	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB48	5	NA	NA	NA	NA	NA	NA	6.4 E-10	5.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	5.0	3.4
03D-SB48	11	NA	7.3 E-9	NA	NA	NA	NA	7.2 E-10	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4
03D-SB49	5	NA	NA	NA	NA	NA	NA	5.7 E-10	9.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.7	3.4

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																								Blood Lead	
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
03D-SB49	11.5	NA	NA	NA	NA	NA	NA	6.2 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4
03D-SB50	1	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	NA	NA	NA	NA	8 E-7	5.1	3.4
03D-SB50	5	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
03D-SB50	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4
03D-SB51	5	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.2	3.4
03D-SB51	11	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.8	3.4
03D-SB52	1	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	NA	NA	5 E-7	5.6	3.5
03D-SB52	5	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
03D-SB52	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SB53	5	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
03D-SB53	11	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.1	3.4
03D-SB54	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	2 E-7	5.0	3.4
03D-SB54	5	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	5.1	3.4
03D-SB54	11	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
03D-SB55	1	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
03D-SB55	5	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	5.1	3.4
03D-SB55	11	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.1	3.4
03D-SB56	5	NA	NA	NA	NA	NA	NA	6.2 E-10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB56	11	NA	1.3 E-8	NA	NA	NA	NA	6.1 E-10	3.3 E-8	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	4.9	3.4
03D-SB57	5	NA	NA	NA	NA	NA	NA	4.8 E-10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB57	11	NA	NA	NA	NA	NA	NA	5.2 E-10	1.6 E-8	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	3 E-7	4.9	3.4
03D-SB61	5	NA	NA	NA	NA	NA	NA	1.1 E-9	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
03D-SB61	11	NA	NA	NA	NA	NA	NA	4.3 E-10	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
03D-SB62	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
03D-SB62	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SB63	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	3 E-7	NA	NA
03D-SB63	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB63	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	5 E-7	NA	NA
03D-SB64	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	NA	NA	6 E-7	NA	NA
03D-SB64	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	NA	NA	NA	5 E-7	NA	NA
03D-SB64	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA
03D-SB65	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	NA	NA	NA	NA	NA	NA	6 E-7	NA	NA
03D-SB66	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	6 E-7	NA	NA
03D-SB67	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	NA	NA	NA	NA	NA	6 E-6	NA	NA
03D-SB67	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB67	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	2 E-6	NA	NA
03D-SB68	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	2 E-5	NA	NA
03D-SB68	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-7	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA
03D-SB68	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA
03D-SB69	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA
03D-SB69	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA
03D-SB69	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
03D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
03D-SNS34	0.25	NA	6.8 E-8	1.0 E-6	2.3 E-7	NA	NA	5.7 E-9	2.2 E-7	2.2 E-8	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	4.7 E-6	1.7 E-5	NA	NA	NA	NA	NA	2 E-5	9.3	3.9
03D-SNS35	0.25	NA	NA	NA	NA	NA	NA	2.3 E-9	5.5 E-8	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	5.1	3.4
11D-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.2	3.4
11D-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.9	3.4
11D-SB01	11	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	4.9	3.4
11D-SB02	1	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	5.1	3.4
11D-SB02	5	NA	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	5.0	3.4
11D-SB02	11	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	4.9	3.4

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																								Blood Lead	
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
11D-SB03	1	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
11D-SB03	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	NA	NA
11D-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	NA	NA
11D-SB04	1	NA	2.3 E-8	NA	4.8 E-8	NA	NA	7.1 E-10	1.9 E-8	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	3 E-7	4.9	3.4
11D-SB04	5	NA	NA	NA	NA	NA	NA	9.2 E-10	2.4 E-8	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.1	3.4
11D-SB04	11	NA	NA	NA	NA	NA	NA	6.6 E-10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
11D-SB05	1	NA	1.4 E-8	1.6 E-7	NA	NA	NA	4.6 E-10	3.8 E-9	7.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	4.8	3.4
11D-SB05	5	NA	NA	NA	NA	NA	NA	8.4 E-10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
11D-SB05	11	NA	NA	NA	NA	NA	NA	6.2 E-10	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
11D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	2 E-5	NA	NA
11D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB08	1	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	5.0	3.4
11D-SB08	5	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
11D-SB09	1	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
11D-SB09	5	NA	NA	NA	NA	NA	NA	9.7 E-10	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
11D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.1	3.4
11D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
11D-SNS02	0.01	NA	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	20.7	5.4
11D-SNS12	0.5	NA	NA	NA	NA	NA	NA	1.5 E-9	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	1.8 E-6	3.7 E-6	NA	NA	NA	NA	NA	6 E-6	6.2	3.5
11D-SNS12	2.5	NA	7.4 E-9	NA	3.7 E-8	NA	NA	1.6 E-9	4.8 E-8	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	3.8 E-6	NA	NA	NA	NA	NA	6 E-6	6.5	3.6
11D-SNS13	0.5	NA	7.4 E-9	NA	5.3 E-8	NA	NA	2.5 E-10	2.5 E-8	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	3.5 E-6	NA	NA	NA	NA	NA	5 E-6	5.3	3.4
11D-SNS13	2.5	NA	NA	NA	NA	NA	NA	7.4 E-11	9.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.0	3.4
11D-SNS14	0.5	NA	1.1 E-8	1.9 E-7	4.8 E-8	NA	NA	2.3 E-9	1.2 E-8	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	2 E-6	5.4	3.4
11D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
11D-SNS15	0.5	NA	1.4 E-8	2.6 E-7	7.9 E-8	NA	NA	4.4 E-9	5.5 E-8	4.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	1 E-4	11.0	4.2
11D-SNS15	2.5	NA	NA	NA	NA	NA	NA	1.6 E-9	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	3 E-7	5.1	3.4
11D-SNS16	0.5	NA	NA	NA	NA	NA	NA	3.3 E-9	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	1 E-5	5.4	3.4
11D-SNS16	2.5	NA	NA	NA	NA	NA	NA	3.9 E-9	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA	NA	NA	NA	5 E-7	5.8	3.5
11D-SNS17	0.5	NA	4.2 E-8	1.1 E-6	1.7 E-7	NA	NA	1.8 E-9	2.6 E-8	8.7 E-9	NA	4.5 E-8	NA	NA	NA	NA	7.4 E-10	1.2 E-7	NA	1.7 E-6	NA	NA	NA	NA	NA	3 E-6	4.9	3.4
11D-SNS17	2.5	NA	NA	NA	NA	NA	NA	1.1 E-9	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	2 E-7	5.0	3.4
11D-SNS18	0.5	NA	NA	NA	3.4 E-8	NA	NA	3.6 E-10	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	NA	5 E-7	5.0	3.4
11D-SNS18	2.5	NA	NA	NA	NA	NA	NA	1.3 E-10	9.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	5 E-7	4.8	3.4
11D-SNS19	0.5	NA	1.0 E-8	2.2 E-7	7.9 E-8	NA	NA	3.0 E-9	1.8 E-8	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	6.6	3.6
11D-SNS19	2.5	NA	NA	NA	NA	NA	NA	2.0 E-10	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	1 E-6	5.1	3.4
11D-SNS20	0.5	NA	NA	NA	NA	NA	NA	5.4 E-10	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	6.6	3.6
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	NA	NA	NA	NA	NA	NA	4.6 E-10	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.0	3.4
11D-SNS21	2.5	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	5.0	3.4
11D-SNS22	0.5	NA	1.4 E-8	2.4 E-7	5.0 E-8	NA	NA	6.1 E-9	2.0 E-8	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	2 E-5	5.6	3.5
11D-SNS22	2.5	NA	2.4 E-8	4.0 E-7	7.9 E-8	NA	NA	1.3 E-9	1.5 E-8	4.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	5.0	3.4
11D-SNS23	3.5	NA	NA	NA	NA	NA	NA	1.6 E-10	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	4.9	3.4
11D-SNS23	4.5	NA	NA	NA	NA	NA	NA	1.5 E-10	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	4.8	3.4
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
50D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	4.8	3.4
51D-SB01	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																									Blood Lead	
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
51D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB02	1	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	NA	NA
51D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	1	7.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-6	NA	NA
51D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB05	5	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	4.9	3.4
51D-SB05	9	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4
51D-SB06	5	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	4.9	3.4
51D-SB06	9	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	4.9	3.4
51D-SB07	5	NA	NA	NA	NA	NA	NA	NA	9.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	4.8	3.4
51D-SB07	9	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	4.8	3.4
51D-SB08	5	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.1	3.4
51D-SB08	9	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
51D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
51D-SB09	9	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.0	3.4
51D-SB10	5	NA	8.9 E-9	NA	4.2 E-8	NA	NA	NA	2.7 E-8	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	4.9	3.4
51D-SB10	9	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.9	3.4
A20-B34-SB01	1	NA	NA	NA	NA	NA	NA	8.7 E-10	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	5.0	3.4
A20-B34-SB01	5	NA	NA	NA	NA	NA	NA	5.6 E-10	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	5.0	3.4
A20-B34-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
A20-B34-SB02	1	NA	7.4 E-9	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
A20-B34-SB02	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
A20-B34-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.0	3.4
A20-RB37-SB01	1	NA	NA	4.2 E-7	NA	NA	NA	2.6 E-9	3.2 E-8	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	NA	4 E-5	13.5	4.5
A20-RB37-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.1	3.4
A20-RB37-SB01	11	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
A20-RB37-SB02	1	NA	NA	NA	NA	NA	NA	9.7 E-10	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	2 E-5	5.3	3.4
A20-RB37-SB02	5	NA	NA	NA	NA	NA	NA	5.9 E-10	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
A20-RB37-SB02	11	NA	NA	NA	NA	NA	NA	4.3 E-10	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	4.9	3.4
A20-RB37-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	2 E-6	5.1	3.4
A20-RB37-SB03	5	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	5.0	3.4
A20-RB37-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
A20-RB37-SB04	1	NA	NA	NA	NA	NA	NA	5.4 E-10	2.8 E-8	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.9	3.4
A20-RB37-SB04	5	NA	NA	NA	NA	NA	NA	4.8 E-10	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
A20-RB37-SB04	11	NA	NA	NA	NA	NA	NA	5.6 E-10	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.0	3.4
A20-RC29-SB01	1	NA	NA	NA	NA	NA	NA	5.1 E-10	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	NA	NA	NA	NA	7 E-7	4.8	3.4
A20-RC29-SB01	5	NA	NA	NA	NA	NA	NA	8.5 E-10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.1	3.4
A20-RC29-SB01	11	NA	NA	NA	NA	NA	NA	6.6 E-10	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
A20-RX73-SB01	1	NA	6.8 E-9	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
A20-RX73-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	2 E-7	4.8	3.4
A20-RX73-SB01	11	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
A20-RX73-SB02	1	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.9	3.4
A20-RX73-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.8	3.4
A20-RX73-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
A20-RX73-SB03	1	NA	1.6 E-8	2.0 E-7	2.9 E-8	NA	NA	3.1 E-10	2.3 E-8	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	4.8	3.4
A20-RX73-SB03	5	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.9	3.4
A20-RX73-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4
A20-ST01-SB01	1	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.1	3.4
A20-ST01-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
A20-ST01-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	NA	4 E-7	4.9	3.4
A20-ST01-SB02	1	NA	7.9 E-9	NA	5.6 E-8	NA	NA	NA	NA	5.8 E-9	NA	NA	NA	NA	NA	NA	9.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	5.0	3.4
A20-ST01-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	5.4	3.4
A20-ST01-SB02	11	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	4.8	3.4
A20-ST01-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	1 E-6	5.1	3.4
A20-ST01-SB03	5	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	4.8	3.4
A20-ST01-SB03	11	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.7	3.4
A20-ST02-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
A20-ST02-SB01	5	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	4.8	3.4

Table 5.2-31
Location-Specific Soil Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																								Blood Lead	
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
A20-ST02-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.8	3.4
A20-ST05-SB01	1	NA	NA	NA	NA	NA	NA	6.1 E-10	1.2 E-8	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
A20-ST05-SB01	5	NA	NA	NA	NA	NA	NA	6.1 E-10	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
A20-ST05-SB01	11	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.1	3.4
A20-ST05-SB02	1	NA	NA	NA	NA	NA	NA	7.1 E-10	3.6 E-8	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.0	3.4
A20-ST05-SB02	5	NA	NA	NA	NA	NA	NA	4.8 E-10	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.9	3.4
A20-ST05-SB02	11	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	NA	NA
A20-ST06-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.1	3.4
A20-ST06-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
A20-ST06-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
A20-ST14-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8	3.4
A20-ST14-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
A20-ST14-SB01	11	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	4.8	3.4
A20-ST20-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4.8	3.4
A20-ST20-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.3	3.4
A20-ST20-SB01	11	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	5.1	3.4
A20-ST22-SB01	1	NA	NA	NA	NA	NA	NA	7.1 E-10	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	4.9	3.4
A20-ST22-SB01	5	NA	NA	NA	NA	NA	NA	8.7 E-10	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	5.0	3.4
A20-ST22-SB01	11	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	4.7	3.4

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	1.1 E+3	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	4.8 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	8.9 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
03D-SP100	10													47000					430000		
03D-SP100	20	21												300					41000		
03D-SP102	10													59000					30000000		
03D-SP102	28						8700							29000					5900000		
03D-SP103	10										500			95000					830000		
03D-SP103	20													22000					130000		
03D-SP104	10		990									360		170000					640000		
03D-SP104	20		2600									820		250000					1600000		
03D-SP105	10		560									2000		140000					580000		
03D-SP106	15	180					11	32			9.2	41	27	5900		100	15		7200		
03D-SP106	25		120000											64000000					480000		
03D-SP106	30	1500	15000				16000					11000		2800000			1700		270000		
03D-SP107	10		3600				5600							1200000					98000		
03D-SP107	20		640											470000					12000		
03D-SP107	29		4900											340000					340000		
03D-SP108	10											140		86000			30		8700		
03D-SP109	10		1200											630000					16000		
03D-SP109	20		54000				41000							17000000			6400		500000		
03D-SP109	30		94			35	21	17				16	13	15000		36	46		2400	35	
03D-SP110	10		49								26	14		11000	10				11000		
03D-SP110	20		28					11			5.6	16		1600		13	51		2900		
03D-SP111	10		28					30						7200			30		56000		
03D-SP111	20							4.2						310			14		1300	5.3	
03D-SP112	10													23					240		
03D-SP112	20							27					14	130		13	18		190		
03D-SP113	10							15			340		6.9	9.2		16	22		270		
03D-SP113	20						18000							4600000			5100		2500		
03D-SP114	10							4.8			57			1200			7.8				
03D-SP114	20						18	16			57		6.5	2300		18	36				
03D-SP115	10		51								890			42000					650		
03D-SP116	10							6.7			400		18	100		15	16		150		
03D-SP117	10		5.3					27			62		16	2200		33	80		1000		
03D-SP118	10		6.9				17	11					10	10000		14	29		14000	12	
03D-SP118	20					88		110					15	24000		66	1100		3700		
03D-SP119	10	57	150				53					140	26	38000	53		20		10000		160
03D-SP119	20	830	2200					46				9100	32	48000		29	400		10000		15000
03D-SP119	29		11000				210000					5700		13000000	30000		5100		310000		
03D-SP120	10							8.6					15	310		5.1	14		180		
03D-SP120	20		6.2					200					33	3200		220	360		160		
03D-SP121	15											2300		3800000					320000		
03D-SP121	25						40000							15000000					68000		
03D-SP122	10	120	570					11			18	260		1800		56	120		9800		
03D-SP122	20	8100	19000									2800		3400000	8800				8200		
03D-SP122	30	9800	28000									2200		3400000			1000				
03D-SP123	10							5.5			16			650		5.3	6.5		180		
03D-SP123	20						24	9.3					8.6			14	11		190		
03D-SP124	10							7.6					17	1300	7.2		16		14		
03D-SP124	20							8.1					30	4800	12	10	16		56		
03D-SP125	10						15	54				4.7	14		110	110	210		33		
03D-SP125	20		26				26	45			110	46	19	73	37	130	220		140		21
03D-SP126	10						13												59	7.5	
03D-SP126	20	5.2	6.6					7.5				26	6.9	350		14	19		30		
03D-SP127	10															5.2	5.7		190		
03D-SP127	20							4.9					7.7			9.2	10		170	6.8	
03D-SP128	10																		25		
03D-SP128	20	64	1000					32			140	510	51	9800		85	340		99		580
03D-SP128	30	1400	770	54							750	18000		1800		53	55		170		3500
03D-SP129	15						19	12				8.6	15			30	19		55		

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	1.1 E+3	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	4.8 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	8.9 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
03D-SP129	25											8600							710		900
03D-SP130	10															5.4			36		
03D-SP130	20							5.2								10	9.7		33	5.0	
03D-SP131	10							7.2					17			24	9.6		350		
03D-SP131	20							5.4					6.5			7.1	9.8		160		
03D-SP132	10							8.6								5.3	7.8		170		
03D-SP132	20																				
03D-SP132	30		10			21	36	150			32	6.5	37	240		620	590		160	50	
03D-SP133	10							5.4						91			9.2		18		
03D-SP133	20							5.2					12			6.0	26			9.4	
03D-SP134	10						150	5.2					9.5			18	7.8		11	12	
03D-SP134	20		8.0				48	400				24	960			1000	2900		20		
03D-SP135	10	6.0	7.2					19			480	14	17	280		21	100		8600		
03D-SP135	20											120	290	150		5100	27000		940		
03D-SP136	10						55				25		12			7.1	5.8			14	
03D-SP137	10		6.0					6.8			670		17	560			26		740		
03D-SP138	10		28					19			23	27	7.2	12000	61	22	72		60	38	
03D-SP138	19	32	160					17			79	290		58000	270		45		140	31	
03D-SP138	30	13	39			37	41	61			22	190	8.3	11000	35	39	87		15000	60	29
03D-SP139	10																6.6		39	11	
03D-SP139	20					30		16								50	130		80	54	
03D-SP139	28		5.7				20	160					8.4	12		160	230		860	38	
03D-SP140	10																		31		
03D-SP140	20							14					14			30	21		22	6.4	
03D-SP141	10																7.4		48	17	
03D-SP141	20					19	14	57					14	30		190	200		51	37	
03D-SP142	10							11			50			56000	63	18	30		790	8.6	
03D-SP142	20							49			42		17	39000		94	170		510		
03D-SP142	30		1300									1700		1100000					4100		
03D-SP143	10							5.2			340			710			11		1000	12	
03D-SP143	20							16			380	4.9	6.0	640		14	27		720	21	
03D-SP143	30							120						300000				160	1100		
03D-SP144	10							7.8									4.3		1100	4.0	
03D-SP144	20							7.6								5.4	7.7		1600	4.9	
03D-SP144	30	210	100					41				800	23			1700	9400		1500		
03D-SP145	10								14		500			1300		5.8	16		98	6.4	
03D-SP145	20							16			55			110		12	20		12	9.9	
03D-SP146	10	7.1	41				50	9.2			7.8	58		81000	180	5.2	8.6		6200	5.1	110
03D-SP146	20	36	87					26				350		65000	150	26	56		4800	22	420
03D-SP146	27	270	860									1600		530000	680				2300		690
03D-SP147	10										390	76		10000					1100		
03D-SP147	20		5.7				35	16			28	48		630		12	31		110	22	
03D-SP147	27	300	450								440	3700		29000			170		760		150
03D-SP148	10							13			56		6.9			9.5	16				
03D-SP148	20																				
03D-SP149	10							10						1100		5.9	6.8			4.8	
03D-SP149	20						26	93					27	65		93	80				
03D-SP150	30							5.0						160			6.0		12		
03D-SP84	15		4.8					23			9.7	6.2		730		14	170		77		
03D-SP84	25							13			12			950		6.0	27		71	21	
03D-SP85	25	2600	810					2300				73000	260	12000		9500	64000		63000		
03D-SP85	30						18	66				7.2	15	43		35	63		140	20	
03D-SP86	10	13						4.8						26			12		30	12	
03D-SP86	20							5.3									12		17	13	
03D-SP87	10							29					30	19		19	33				
03D-SP88	10							8.1			22			110		11	30		580		
03D-SP88	20							19						10		31	54		590		
03D-SP89	10													890					33000		

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	1.1 E+3	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	4.8 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	8.9 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
03D-SP90	10	10	27					23			260	58	50	4900		73	530		270		
03D-SP90	20	7.5	8.8					16			120	25	31	1900		27	170		270		
03D-SP91	10						21	7.9			23		9.5	48		18	8.0		54	30	
03D-SP91	20							5.1			150	16	6.7	170		9.4	5.9		190	10	
03D-SP92	10	7.8						14			24	32	16	680		6.9	18		140		
03D-SP92	20	13	6.9					25			310	72	26	1000		20	45		1000		
03D-SP93	15										210			2400			420		290		
03D-SP93	25							16			8.0		18	160		22	78		11		
03D-SP94	15		5.0					5.3			57	27		1500			5.7		7100		
03D-SP94	25						18	27			26	11	51	240		46	61		3300		
03D-SP95	10		210									1200		25000					150000		
03D-SP95	18		220									1400		18000					130000		
03D-SP96	10						37	36			1200		170	44		130	73		89		
03D-SP96	17						65	28			1600		30	56		67	100		68		
03D-SP99	10		140											41000					280000		
11D-SP26	10							8.6						3200		8.4	12				
11D-SP26	20							6.6						850		6.3	30			6.6	
11D-SP27	10																		130		
11D-SP27	20						18	27					6.9			47	79		13	5.4	
11D-SP28	10						14	17								15	18				
11D-SP28	20	7.6	61								120	11		90					33	3.4	
11D-SP29	10							6.3						290		26	63			14	
11D-SP29	30	10	120			29	15	26				17		3400	9.3	210	1000			44	
11D-SP30	10							7.8			8.3			970	7.2	140	310				
11D-SP30	20	23	20					8.2			46	30		710	8.0	210	910				
11D-SP31	10													55			64			11	
11D-SP31	20							5.0		15	23	7.2		120		6.4	140			18	
11D-SP31	30	27	6.2			16		8.0			37	64		78		180	450			28	
50D-SP01	10							7.4						35		6.7	9.9		140		
50D-SP01	20						14	29					32			67	340		50		
51D-SP04	10							5.8									5.9		110		
51D-SP04	20						18	32					310			140	210		32		
A20-B34-SP01	10							6.9		20							8.0		63		
A20-B34-SP01	20		8.4					20		13			9.7			33	83		45		
A20-B34-SP02	10																		230		
A20-B34-SP02	20						16	11					7.5			20	20		27	9.6	
A20-B34-SP03	10							8.2											870		
A20-B34-SP03	20							44								36	56		860	12	
A20-B34-SP03	29					23	14	28		46	6.5	9.5	6.3			53	81		1000	38	
A20-RB37-SP01	10		300									280		370000					55000		
A20-RB37-SP01	20		500									190		430000					65000		
A20-RB37-SP01	30													490000			410		3100		
A20-RB37-SP02	10		38											24000			11		7000	13	
A20-RB37-SP02	20						21	12					6.8	18		20	34		160	30	
A20-RC29-SP01	10							15						15		10	21		270		
A20-RC29-SP01	20							16						22		12	26		350		
A20-RX73-SP01	10		9.1					5.8			450					30	5.6		100		
A20-RX73-SP01	20		64				34	25			300		8.2	9.5		1100	46		170		
A20-ST01-1-SP01	10	6.8						8.3			11			1300		6.7	10		200		
A20-ST01-1-SP01	20							7.9					7.6			15	15		40		
A20-ST01-2-SP01	10							5.9			24		11	4600		7.7	11		380		
A20-ST01-2-SP01	20						12	41			32		10	1500		68	130		95		
A20-ST01-3-SP01	10							9.0					11			8.3	6.7		64	15	
A20-ST01-3-SP01	20			11			16	77					84			430	2100		71		
A20-ST02-SP01	10																				
A20-ST02-SP01	20							160				33	630			520	1000				
A20-ST02-SP01	30		5.6				14	200				27	23			720	660		62		
A20-ST02-SP02	10													22					76		

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	1.1 E+3	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	4.8 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	8.9 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
A20-ST02-SP02	20							12					7.8			8.0	14		75		
A20-ST02-SP02	30						60	57					14	9.9		90	240		47		
A20-ST02-SP03	20						16	3.8					6.4				8.4		23	8.7	
A20-ST02-SP03	30						15	24								12	27		24	22	
A20-ST02-SP04	30						810	41					5.6			39	67				
A20-ST05-SP01	10						20														
A20-ST05-SP01	20	2900	2900								1700	27000		3900			41		470	42	420
A20-ST05-SP01	30	4500	3100	100							1600	37000		23000		32	44		190	59	120
A20-ST05-SP02	10							6.0								5.9	9.2		120	13	
A20-ST05-SP02	20						23	5.4					7.5	9.9		11	19		170	21	
A20-ST05-SP03	10	74	110				14	5.3			33	260		4600		13	150		320		
A20-ST05-SP04	10							9.7						88		15	33		15	9.4	
A20-ST05-SP05	10							18								11	25			7.1	
A20-ST06-SP01	10							3.7						1500		49	25		900		
A20-ST06-SP01	20							11					5.6	2500		11	16		850		
A20-ST14-SP01	10		21					5.3			58			18000			7.1		840		
A20-ST14-SP01	20							12			32			11000		9.3	26		150	24	
A20-ST14-SP02	10							7.7						720		11	20		760	11	
A20-ST14-SP02	20							20						770		30	53		1100	22	
A20-ST20-SP01	10																				
A20-ST20-SP01	20							4.3						320			6.9		15	6.3	
A20-ST22-SP01	10							3.5									5.1				
A20-ST22-SP01	20						17	6.4								4.9	14			5.0	

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP100	10	580		640																
03D-SP100	20									510										
03D-SP102	10																			
03D-SP102	28	12000																		
03D-SP103	10	1700		800																
03D-SP103	20	330		140																
03D-SP104	10	14000		2200																
03D-SP104	20	57000		7600																
03D-SP105	10	14000		1600																
03D-SP106	15	78	240	17	26	12	52	27		160	15	5.9	17			65	36			120
03D-SP106	25	190000	120000										23000							
03D-SP106	30	140000	8400	6400		2700					2000		2900							1300
03D-SP107	10	86000		3300							3100		610							
03D-SP107	20	12000		430																
03D-SP107	29	250000		5100																710
03D-SP108	10	320	51	78								51	33							
03D-SP109	10	2300	550																	
03D-SP109	20	110000	25000								31000									
03D-SP109	30	430	40	14			290		20	800	6.4		5.4	37		29	9.9			52
03D-SP110	10	910		120																
03D-SP110	20	460		24		7.5	43			200	12		5.7	13		7.8				17
03D-SP111	10	410		120		160														23
03D-SP111	20					1100	22			140										13
03D-SP112	10					350										12				10
03D-SP112	20					970	38	6.2		220	8.7		5.6			30	11			76
03D-SP113	10	18				910		5.9		58	9.0		7.6			20	10			29
03D-SP113	20		940			4000					1800		2000							1500
03D-SP114	10						26			110				9.7		8.2				9.8
03D-SP114	20						110		6.8	460	5.4			45		14	6.0			97
03D-SP115	10	250									18									
03D-SP116	10	70			33	580		32			9.3		11	20		81	32			58
03D-SP117	10	140		19	8.8	2300		11	5.8	120	42		26	15		54	15		15	110
03D-SP118	10	130		38		1600				160	16		20	35		33	11		27	55
03D-SP118	20	93				5200			12	340	38		580	64		35	12		31	180
03D-SP119	10	6400		33	28	990		29			22					100	31			92
03D-SP119	20	46000	89		35	1000		34			25		370			120	48			130
03D-SP119	29	170000									29000		6700			7800				7300
03D-SP120	10	100		8.9	22	670		24		89	26		14	18		66	21		9.2	48
03D-SP120	20	53		10	18	1600		15		91	22			25		92	24		32	460
03D-SP121	15	10000	2500	3100																
03D-SP121	25										22000		9400							
03D-SP122	10	140	240			100							340			12				16
03D-SP122	20	1700	1600								1100		1900							
03D-SP122	30	6400		4700																
03D-SP123	10										20				18	11				17
03D-SP123	20				6.1		78	7.7		250				36		26	11			110
03D-SP124	10				43	760		38			18			16		80	32	6.4		53
03D-SP124	20	36			34	1400		37			69		9.9	12		130	51	7.6		94
03D-SP125	10	270				3700			13	500	200				170	34	9.9		19	130
03D-SP125	20	15000				4900					170		41		51	44	17		61	160
03D-SP126	10	50	7.5											13		5.7				12
03D-SP126	20	110	60				49			260	6.4			16		17	5.9			38
03D-SP127	10	18			6.2			6.3			11					15	6.6			16
03D-SP127	20	12			6.8		46	7.8		200			4.6	14		24	10			29
03D-SP128	10	13								56										9.9
03D-SP128	20	60000	25								42					86	39			55
03D-SP128	30	210000			84		350	100			160			130		58				98
03D-SP129	15	220			12		100	9.8	5.6	270				35		34	16			66

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP129	25						220													
03D-SP130	10						29			200				14		5.8				20
03D-SP130	20						94			610				26		7.0			6.6	17
03D-SP131	10				23	16		23			55					45	17	6.7		1200
03D-SP131	20				8.3		41	7.9		230				12		22	10			28
03D-SP132	10	250		46						84	6.6					9.7				18
03D-SP132	20																			
03D-SP132	30	140					390			1500	360	29	140	69		29	14			170
03D-SP133	10									92	4.8					12				14
03D-SP133	20						26			140	3.7			17		35	16			34
03D-SP134	10	10			7.5			7.2	6.5	61	5.4	5.5	8.2	32		18	5.6			26
03D-SP134	20		40		11	2600	37			170	98	430	4300	9.3		26	11	110		40
03D-SP135	10	170	71	45	9.7	1500		11		57	20	6.3	78	10		52	17		12	76
03D-SP135	20		21000			9900						540	21000			110		110		120
03D-SP136	10				18			11		30		14	7.4	32		20		10		22
03D-SP137	10	490		18	20	1300		22		66	16		16			72	30			61
03D-SP138	10	3400		26	10	68	23	8.4	8.7	96	75		39	22	22	24	8.4		5.6	49
03D-SP138	19	16000		30		49					100		18	100	97	30				64
03D-SP138	30	9700					160			2600	36			100	20	12				99
03D-SP139	10															9.4				59
03D-SP139	20	180					34		5.7	120	8.3		6.2	14		8.6				33
03D-SP139	28	660					120		7.6	840	23		17	35		12	5.4			110
03D-SP140	10	25														9.6				11
03D-SP140	20	22					86			570				13		29	11			85
03D-SP141	10						19			140				9.9		5.6				21
03D-SP141	20	28				24	240			800	120	13	29	23		21	7.3	14		260
03D-SP142	10	30		10							13				9.9	9.6				57
03D-SP142	20	22					110			460	17		14	53		21				200
03D-SP142	30	37000													790					
03D-SP143	10	250		18							5.7					6.1				19
03D-SP143	20	200		17						95	9.0					13				40
03D-SP143	30	1300								1400										210
03D-SP144	10										17								11	8.4
03D-SP144	20						22			670				8.9		6.6			5.4	15
03D-SP144	30		13000			5800				760		66	7300							21
03D-SP145	10	46									14									12
03D-SP145	20	6.7					27			150	5.4			12		6.6				21
03D-SP146	10	4100		47						240	14			44	22	6.2				12
03D-SP146	20	5800		35						860				51						49
03D-SP146	27	18000																		
03D-SP147	10	140000																		
03D-SP147	20	10000					18			330	6.4					6.3				32
03D-SP147	27	230000																		
03D-SP148	10										7.9					15				150
03D-SP148	20																			
03D-SP149	10	11					22			130	20			27	9.3					11
03D-SP149	20	6.9					170	6.4	19	980	9.0		7.9	110		49	21		5.3	180
03D-SP150	30	7.2								90	3.8			45						6.7
03D-SP84	15	95	420			260	67			260	17		310			7.3				54
03D-SP84	25	46	48			12				93	30		30							16
03D-SP85	25	8300	170000			18000						2600	60000				960	530		
03D-SP85	30	50	6.1				420		18	1500	13		15	29		24	12			120
03D-SP86	10	18		16			29			140	14									10
03D-SP86	20	28					34			190				13						20
03D-SP87	10				11	1100		16			7.8		8.3	150		110	25		28	200
03D-SP88	10	180		36							17					6.3				13
03D-SP88	20	13					28			150	7.3		5.9			14	5.8			30
03D-SP89	10	410		22																

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP90	10	560	250	27	13	1700		22		270	11		270	35		170	41		13	220
03D-SP90	20	370	87	18	15	510		21		1100	4.4		91	29		110	31		22	130
03D-SP91	10	310	28		7.6		18	7.4	17	77	42		5.7			31	9.6		5.4	67
03D-SP91	20	340	94	10	8.7			8.6	12		17					22	7.4		5.8	35
03D-SP92	10	120	190	27	15	1000		16			19		8.5			62	18		12	72
03D-SP92	20	660	300	33	7.7	2500		11		130	25		9.5			90	26		10	160
03D-SP93	15					2000							160							
03D-SP93	25				12	540		15					50	71		70	21			100
03D-SP94	15	300		13	13			6.4			14					15	6.2			10
03D-SP94	25	49			20		52	19			9.9		23	10		140	47			120
03D-SP95	10	5700	1500	510		1200														60
03D-SP95	18	6900	2000	500		1700					66									53
03D-SP96	10	42			43	310		87	17	78	50	12	150	64		530	190	24		2700
03D-SP96	17	89			19	240	67	18		240	57		100	62		67	21		14	720
03D-SP99	10	920		1100		960														
11D-SP26	10	6.6								68	5.3		5.8			7.1				14
11D-SP26	20						27			160				15						6.1
11D-SP27	10	23		15							5.0					9.7				8.1
11D-SP27	20	7.8		12			79		4.7	370	20		8.6	43		17	5.8			56
11D-SP28	10	30		27						86	13			13		12				34
11D-SP28	20	420		100										9.4		10				6.5
11D-SP29	10	17		37						190	19			12		5.3				54
11D-SP29	30	280					29			410	46			32		7.4				85
11D-SP30	10	13		38		9.6				69	47		13	9.7		5.4				45
11D-SP30	20	28		39		11				100	23			14		5.3				45
11D-SP31	10									82	33			15						43
11D-SP31	20	11								82	72			9.8						50
11D-SP31	30	25				6.8				140	26		19	14		5.5				30
50D-SP01	10						24			90	6.8		5.8			10				19
50D-SP01	20					170	130	6.9		500	10	29	350	22		34	15	23	5.3	94
51D-SP04	10			8.3							8.3					7				9.6
51D-SP04	20					110	55	9.1		230	10	290	160	19		27	14	190		63
A20-B34-SP01	10	140		120									5.0			12				13
A20-B34-SP01	20	220		160		5.8	62			250	44	8.4	15			22	7.6	7.9		40
A20-B34-SP02	10															7.6				6.8
A20-B34-SP02	20						69			310				22		20	7.5			48
A20-B34-SP03	10									380	4.6									11
A20-B34-SP03	20						29			710	9.1		4.6	10		7.2			11	31
A20-B34-SP03	29	18					140			700	9.0		4.6	28		9.9				71
A20-RB37-SP01	10	5500		270							150									
A20-RB37-SP01	20	6500		500																
A20-RB37-SP01	30	1500																		
A20-RB37-SP02	10	930		51							10									9.3
A20-RB37-SP02	20	30					52			310	47			20		14	7.0			45
A20-RC29-SP01	10	24		9.0						66	28					7.4				16
A20-RC29-SP01	20	140		16			36			160	140			18		11				13
A20-RX73-SP01	10	69		39						57	15					6.6				48
A20-RX73-SP01	20	250		33			78			360	16		150	66		18	7.8			240
A20-ST01-1-SP01	10	55	26	9.5							7.4					9.1				17
A20-ST01-1-SP01	20	20					65			270				20		18	7.9			35
A20-ST01-2-SP01	10	47		14	8.4			17			14					29	9.8	7.5		79
A20-ST01-2-SP01	20	22					62		5.4	270	15		19			20	8.1			93
A20-ST01-3-SP01	10	19					22			110	6.7			10		28	10			32
A20-ST01-3-SP01	20	32				990	110			420	18	110	2100			34	12	59		110
A20-ST02-SP01	10																			
A20-ST02-SP01	20	360	13			4400						390	3000					49		47
A20-ST02-SP01	30	51	7.1			1500	310			1100	34	38	400	20		20	11			78
A20-ST02-SP02	10									220										

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP02	20	19				530				93		230				5.7	9.8	46		16
A20-ST02-SP02	30	13			5.7	100	340	6.3		1900	8.1	24	13	75		19	10	7.0	14	88
A20-ST02-SP03	20	63					57			210				17		13	6.1			80
A20-ST02-SP03	30	150					67			400				20		7.9				63
A20-ST02-SP04	30				15		87	8.2		650	12		7.9	68		19	8.3			44
A20-ST05-SP01	10																			
A20-ST05-SP01	20	700000								500										45
A20-ST05-SP01	30	34000	160								24									25
A20-ST05-SP02	10	16														12				14
A20-ST05-SP02	20	25					56			260				31		23	8.9			26
A20-ST05-SP03	10	99	17			12				120	77		18	11		6.1				100
A20-ST05-SP04	10	33					59			300	17									21
A20-ST05-SP05	10						32			240	5.1			22		10				33
A20-ST06-SP01	10									82	4.5					9.2				8.3
A20-ST06-SP01	20						28			120	23					17	5.5			27
A20-ST14-SP01	10	400		33			7.5			42	52									5.8
A20-ST14-SP01	20	29		9.9			19			130	12			9.4		5.5				20
A20-ST14-SP02	10	7.1		9.8							24									14
A20-ST14-SP02	20	17		13						90	30					10				28
A20-ST20-SP01	10	99					30			200				14		9.5				11
A20-ST20-SP01	20	31		8.0							12					7.6				8.6
A20-ST22-SP01	10			9.3						57	7.1				9.2					7.8
A20-ST22-SP01	20						69			280				17		7.5				39

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	1.2 E+1	NA
03D-SP100	20	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-6	NA	NA	NA	NA	6.2 E-1	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	8.5 E+2	NA
03D-SP102	28	NA	NA	NA	NA	NA	4.5 E-1	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	6.5 E+1	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	3.3 E-3	NA	NA	NA	NA	2.3 E+1	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	2.0 E+0	NA
03D-SP104	10	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	5.9 E-3	NA	NA	NA	NA	1.8 E+1	NA
03D-SP104	20	NA	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	5.0 E-3	NA	NA	NA	NA	2.4 E+1	NA
03D-SP105	10	NA	9.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-2	NA	4.9 E-3	NA	NA	NA	NA	1.6 E+1	NA
03D-SP106	15	1.8 E-4	NA	NA	NA	NA	1.0 E-3	8.7 E-4	NA	NA	1.9 E-4	8.2 E-4	1.9 E-5	1.4 E-4	NA	2.2 E-4	3.4 E-5	NA	1.4 E-1	NA
03D-SP106	25	NA	9.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-1	NA	NA	NA	NA	5.9 E+0	NA
03D-SP106	30	8.0 E-4	9.5 E-2	NA	NA	NA	7.8 E-1	NA	NA	NA	NA	1.2 E-1	NA	3.6 E-2	NA	NA	2.2 E-3	NA	2.8 E+0	NA
03D-SP107	10	NA	6.1 E-2	NA	NA	NA	7.2 E-1	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	2.8 E+0	NA
03D-SP107	20	NA	6.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-3	NA	NA	NA	NA	1.8 E-1	NA
03D-SP107	29	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	3.6 E+0	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	3.0 E-3	NA	NA	8.9 E-5	NA	2.5 E-1	NA
03D-SP109	10	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	4.5 E-1	NA
03D-SP109	20	NA	5.2 E-1	NA	NA	NA	3.0 E+0	NA	NA	NA	NA	NA	NA	3.4 E-1	NA	NA	1.1 E-2	NA	7.6 E+0	NA
03D-SP109	30	NA	6.0 E-4	NA	NA	5.9 E-6	1.0 E-3	2.5 E-4	NA	NA	NA	1.7 E-4	4.9 E-6	1.9 E-4	NA	4.6 E-5	5.9 E-5	NA	2.5 E-2	6.0 E-5
03D-SP110	10	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.5 E-4	4.0 E-4	NA	3.8 E-4	4.6 E-5	NA	NA	NA	3.1 E-1	NA
03D-SP110	20	NA	2.7 E-4	NA	NA	NA	NA	2.3 E-4	NA	NA	9.0 E-5	2.6 E-4	NA	3.2 E-5	NA	2.4 E-5	9.1 E-5	NA	4.4 E-2	NA
03D-SP111	10	NA	4.7 E-4	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	8.9 E-5	NA	1.6 E+0	NA
03D-SP111	20	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	NA	6.1 E-6	NA	NA	2.5 E-5	NA	2.0 E-2	1.4 E-5
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	NA	NA	6.8 E-3	NA
03D-SP112	20	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	7.7 E-6	2.6 E-6	NA	2.4 E-5	3.2 E-5	NA	2.9 E-3	NA
03D-SP113	10	NA	NA	NA	NA	NA	NA	5.8 E-4	NA	NA	9.9 E-3	NA	7.0 E-6	3.2 E-7	NA	4.7 E-5	6.5 E-5	NA	7.6 E-3	NA
03D-SP113	20	NA	NA	NA	NA	NA	1.3 E+0	NA	NA	NA	NA	NA	NA	9.1 E-2	NA	NA	9.1 E-3	NA	3.8 E-2	NA
03D-SP114	10	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	1.7 E-3	NA	NA	4.2 E-5	NA	NA	2.3 E-5	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	1.3 E-3	3.4 E-4	NA	NA	9.2 E-4	NA	3.6 E-6	4.6 E-5	NA	3.4 E-5	6.5 E-5	NA	NA	NA
03D-SP115	10	NA	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	1.5 E-3	NA	NA	NA	NA	1.8 E-2	NA
03D-SP116	10	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	1.2 E-2	NA	1.8 E-5	3.5 E-6	NA	4.5 E-5	4.7 E-5	NA	4.2 E-3	NA
03D-SP117	10	NA	8.9 E-5	NA	NA	NA	NA	1.0 E-3	NA	NA	1.8 E-3	NA	1.6 E-5	7.7 E-5	NA	9.8 E-5	2.4 E-4	NA	2.8 E-2	NA
03D-SP118	10	NA	1.2 E-4	NA	NA	NA	2.2 E-3	4.2 E-4	NA	NA	NA	NA	1.0 E-5	3.5 E-4	NA	4.2 E-5	8.6 E-5	NA	3.9 E-1	5.3 E-5
03D-SP118	20	NA	NA	NA	NA	2.3 E-5	NA	2.3 E-3	NA	NA	NA	NA	8.2 E-6	4.8 E-4	NA	1.2 E-4	2.0 E-3	NA	5.6 E-2	NA
03D-SP119	10	8.2 E-5	2.5 E-3	NA	NA	NA	6.8 E-3	NA	NA	NA	NA	4.0 E-3	2.7 E-5	1.3 E-3	2.4 E-4	NA	5.9 E-5	NA	2.8 E-1	NA
03D-SP119	20	6.4 E-4	2.1 E-2	NA	NA	NA	NA	9.7 E-4	NA	NA	NA	1.5 E-1	1.8 E-5	9.5 E-4	NA	5.4 E-5	7.2 E-4	NA	1.5 E-1	NA
03D-SP119	29	NA	7.2 E-2	NA	NA	NA	1.1 E+1	NA	NA	NA	NA	6.2 E-2	NA	1.7 E-1	5.2 E-2	NA	6.7 E-3	NA	3.3 E+0	NA
03D-SP120	10	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	1.5 E-5	1.1 E-5	NA	1.5 E-5	4.2 E-5	NA	5.1 E-3	NA
03D-SP120	20	NA	6.0 E-5	NA	NA	NA	NA	4.2 E-3	NA	NA	NA	NA	1.8 E-5	6.3 E-5	NA	4.1 E-4	6.5 E-4	NA	2.4 E-3	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	9.3 E-2	NA	NA	NA	NA	6.3 E+0	NA
03D-SP121	25	NA	NA	NA	NA	NA	2.3 E+0	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	8.3 E-1	NA
03D-SP122	10	1.7 E-4	9.6 E-3	NA	NA	NA	NA	4.2 E-4	NA	NA	5.2 E-4	7.5 E-3	NA	6.3 E-5	NA	1.7 E-4	3.6 E-4	NA	2.8 E-1	NA
03D-SP122	20	6.3 E-3	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2	NA	6.7 E-2	2.3 E-2	NA	NA	NA	1.2 E-1	NA
03D-SP122	30	5.2 E-3	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	4.4 E-2	NA	NA	1.3 E-3	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	4.6 E-4	NA	NA	2.3 E-5	NA	1.6 E-5	1.9 E-5	NA	5.1 E-3	NA
03D-SP123	20	NA	NA	NA	NA	NA	1.8 E-3	2.0 E-4	NA	NA	NA	NA	4.7 E-6	NA	NA	2.6 E-5	2.0 E-5	NA	2.9 E-3	NA
03D-SP124	10	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	1.7 E-5	4.5 E-5	3.3 E-5	NA	4.7 E-5	NA	3.9 E-4	NA
03D-SP124	20	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	1.6 E-5	9.5 E-5	3.1 E-5	1.9 E-5	2.9 E-5	NA	8.5 E-4	NA
03D-SP125	10	NA	NA	NA	NA	NA	1.9 E-3	2.1 E-3	NA	NA	NA	1.3 E-4	1.4 E-5	NA	5.1 E-4	3.3 E-4	6.2 E-4	NA	9.3 E-4	NA
03D-SP125	20	NA	2.5 E-4	NA	NA	NA	1.9 E-3	9.5 E-4	NA	NA	1.8 E-3	7.4 E-4	1.0 E-5	1.4 E-6	9.6 E-5	2.4 E-4	3.9 E-4	NA	2.1 E-3	NA
03D-SP126	10	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.3 E-5
03D-SP126	20	4.0 E-6	6.4 E-5	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	4.2 E-4	3.8 E-6	6.9 E-6	NA	2.6 E-5	3.4 E-5	NA	4.5 E-4	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	1.7 E-5	NA	5.4 E-3	NA
03D-SP127	20	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	4.2 E-6	NA	NA	1.7 E-5	1.8 E-5	NA	2.6 E-3	1.8 E-5
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4	NA
03D-SP128	20	5.0 E-5	9.7 E-3	NA	NA	NA	NA	6.7 E-4	NA	NA	2.3 E-3	8.2 E-3	2.8 E-5	1.9 E-4	NA	1.6 E-4	6.1 E-4	NA	1.5 E-3	NA
03D-SP128	30	7.4 E-4	4.9 E-3	5.6 E-3	NA	NA	NA	NA	NA	NA	8.4 E-3	1.9 E-1	NA	2.3 E-5	NA	6.8 E-5	7.1 E-5	NA	1.8 E-3	NA
03D-SP129	15	NA	NA	NA	NA	NA	1.7 E-3	3.3 E-4	NA	NA	NA	1.7 E-4	1.1 E-5	NA	NA	6.7 E-5	4.2 E-5	NA	1.1 E-3	NA

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	8.7 E-3	NA
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	1.0 E-3	NA
03D-SP130	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	1.7 E-5	NA	5.0 E-4	1.3 E-5
03D-SP131	10	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	1.7 E-5	NA	NA	7.1 E-5	2.8 E-5	NA	9.9 E-3	NA
03D-SP131	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	3.6 E-6	NA	NA	1.3 E-5	1.8 E-5	NA	2.4 E-3	NA
03D-SP132	10	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	2.3 E-5	NA	4.8 E-3	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	6.4 E-5	NA	NA	3.6 E-6	1.7 E-3	2.2 E-3	NA	NA	3.6 E-4	6.9 E-5	1.4 E-5	3.1 E-6	NA	8.0 E-4	7.6 E-4	NA	1.7 E-3	8.6 E-5
03D-SP133	10	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	2.7 E-5	NA	5.1 E-4	NA
03D-SP133	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	6.6 E-6	NA	NA	1.1 E-5	4.7 E-5	NA	NA	2.4 E-5
03D-SP134	10	NA	NA	NA	NA	NA	1.9 E-2	2.0 E-4	NA	NA	NA	NA	9.7 E-6	NA	NA	5.3 E-5	2.3 E-5	NA	3.1 E-4	5.3 E-5
03D-SP134	20	NA	7.7 E-5	NA	NA	NA	3.5 E-3	8.4 E-3	NA	NA	NA	3.9 E-4	5.3 E-4	NA	NA	1.9 E-3	5.2 E-3	NA	3.0 E-4	NA
03D-SP135	10	8.7 E-6	1.2 E-4	NA	NA	NA	NA	7.3 E-4	NA	NA	1.4 E-2	4.0 E-4	1.7 E-5	9.8 E-6	NA	6.2 E-5	3.0 E-4	NA	2.4 E-1	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	1.6 E-4	3.0 E-6	NA	9.5 E-3	4.8 E-2	NA	1.4 E-2	NA
03D-SP136	10	NA	NA	NA	NA	NA	7.1 E-3	NA	NA	NA	7.2 E-4	NA	1.2 E-5	NA	NA	2.1 E-5	1.7 E-5	NA	NA	6.2 E-5
03D-SP137	10	NA	1.0 E-4	NA	NA	NA	NA	2.6 E-4	NA	NA	1.9 E-2	NA	1.7 E-5	2.0 E-5	NA	NA	7.7 E-5	NA	2.1 E-2	NA
03D-SP138	10	NA	4.7 E-4	NA	NA	NA	NA	7.3 E-4	NA	NA	6.7 E-4	7.7 E-4	7.3 E-6	4.2 E-4	2.8 E-4	6.5 E-5	2.1 E-4	NA	1.7 E-3	1.7 E-4
03D-SP138	19	2.6 E-5	1.5 E-3	NA	NA	NA	NA	3.7 E-4	NA	NA	1.3 E-3	4.7 E-3	NA	1.1 E-3	7.0 E-4	NA	8.4 E-5	NA	2.2 E-3	8.0 E-5
03D-SP138	30	6.9 E-6	2.5 E-4	NA	NA	6.3 E-6	2.0 E-3	8.8 E-4	NA	NA	2.5 E-4	2.0 E-3	3.1 E-6	1.4 E-4	5.9 E-5	5.0 E-5	1.1 E-4	NA	1.5 E-1	1.0 E-4
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	1.1 E-3	4.9 E-5
03D-SP139	20	NA	NA	NA	NA	7.7 E-6	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	9.3 E-5	2.3 E-4	NA	1.2 E-3	1.4 E-4
03D-SP139	28	NA	3.9 E-5	NA	NA	NA	1.0 E-3	2.5 E-3	NA	NA	NA	NA	3.4 E-6	1.7 E-7	NA	2.2 E-4	3.1 E-4	NA	9.5 E-3	6.9 E-5
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-4	NA
03D-SP140	20	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	7.7 E-6	NA	NA	5.6 E-5	3.8 E-5	NA	3.3 E-4	1.7 E-5
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	1.4 E-3	7.5 E-5
03D-SP141	20	NA	NA	NA	NA	4.9 E-6	1.0 E-3	1.2 E-3	NA	NA	NA	NA	7.7 E-6	5.9 E-7	NA	3.5 E-4	3.6 E-4	NA	7.7 E-4	9.6 E-5
03D-SP142	10	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	1.4 E-3	NA	NA	2.0 E-3	2.9 E-4	5.3 E-5	8.9 E-5	NA	2.2 E-2	3.8 E-5
03D-SP142	20	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	6.8 E-4	NA	9.3 E-6	7.7 E-4	NA	1.8 E-4	3.0 E-4	NA	7.7 E-3	NA
03D-SP142	30	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	1.4 E-2	NA	NA	NA	NA	4.2 E-2	NA
03D-SP143	10	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	9.9 E-3	NA	NA	2.5 E-5	NA	NA	3.3 E-5	NA	2.8 E-2	5.3 E-5
03D-SP143	20	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	6.1 E-3	7.9 E-5	3.3 E-6	1.3 E-5	NA	2.6 E-5	4.8 E-5	NA	1.1 E-2	5.4 E-5
03D-SP143	30	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	3.9 E-3	NA	NA	NA	2.6 E-5	1.1 E-2	NA
03D-SP144	10	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	3.1 E-2	1.8 E-5
03D-SP144	20	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	1.4 E-5	NA	2.4 E-2	1.3 E-5
03D-SP144	30	1.1 E-4	6.4 E-4	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	8.4 E-3	8.6 E-6	NA	NA	2.2 E-3	1.2 E-2	NA	1.5 E-2	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	1.4 E-2	NA	NA	4.5 E-5	NA	1.7 E-5	4.7 E-5	NA	2.8 E-3	2.8 E-5
03D-SP145	20	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	8.9 E-4	NA	NA	2.2 E-6	NA	2.2 E-5	3.6 E-5	NA	1.8 E-4	2.6 E-5
03D-SP146	10	1.0 E-5	6.9 E-4	NA	NA	NA	6.4 E-3	3.5 E-4	NA	NA	2.3 E-4	1.7 E-3	NA	2.8 E-3	8.3 E-4	1.5 E-5	2.6 E-5	NA	1.7 E-1	2.3 E-5
03D-SP146	20	2.8 E-5	8.4 E-4	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	5.7 E-3	NA	1.3 E-3	3.9 E-4	4.9 E-5	1.0 E-4	NA	7.3 E-2	5.7 E-5
03D-SP146	27	1.6 E-4	6.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	7.6 E-3	1.3 E-3	NA	NA	NA	2.6 E-2	NA
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	2.2 E-3	NA	3.5 E-4	NA	NA	NA	NA	3.1 E-2	NA
03D-SP147	20	NA	5.5 E-5	NA	NA	NA	2.6 E-3	3.4 E-4	NA	NA	4.5 E-4	7.8 E-4	NA	1.2 E-5	NA	2.2 E-5	5.6 E-5	NA	1.7 E-3	5.7 E-5
03D-SP147	27	1.8 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	5.4 E-3	4.3 E-2	NA	4.1 E-4	NA	NA	2.4 E-4	NA	8.7 E-3	NA
03D-SP148	10	NA	NA	NA	NA	NA	NA	5.0 E-4	NA	NA	1.6 E-3	NA	7.0 E-6	NA	NA	2.8 E-5	4.7 E-5	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	3.8 E-5	NA	1.8 E-5	2.0 E-5	NA	NA	2.1 E-5
03D-SP149	20	NA	NA	NA	NA	NA	1.9 E-3	2.0 E-3	NA	NA	NA	NA	1.5 E-5	1.3 E-6	NA	1.7 E-4	1.4 E-4	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	7.7 E-6	NA	1.2 E-4	NA
03D-SP84	15	NA	5.7 E-5	NA	NA	NA	NA	6.3 E-4	NA	NA	2.0 E-4	1.2 E-4	NA	1.8 E-5	NA	3.1 E-5	3.8 E-4	NA	1.5 E-3	NA
03D-SP84	25	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	1.6 E-4	NA	NA	1.5 E-5	NA	9.0 E-6	4.0 E-5	NA	8.7 E-4	4.2 E-5
03D-SP85	25	1.6 E-3	6.1 E-3	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	9.1 E-1	1.2 E-4	1.8 E-4	NA	1.4 E-2	9.6 E-2	NA	7.7 E-1	NA
03D-SP85	30	NA	NA	NA	NA	NA	8.7 E-4	9.6 E-4	NA	NA	NA	7.6 E-5	5.6 E-6	5.6 E-7	NA	4.5 E-5	8.1 E-5	NA	1.4 E-3	3.4 E-5
03D-SP86	10	1.9 E-5	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	9.1 E-7	NA	NA	3.6 E-5	NA	8.5 E-4	5.3 E-5
03D-SP86	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	2.6 E-4	3.4 E-5
03D-SP87	10	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	3.1 E-5	6.6 E-7	NA	5.6 E-5	9.8 E-5	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	6.4 E-4	NA	NA	3.8 E-6	NA	3.3 E-5	8.9 E-5	NA	1.6 E-2	NA
03D-SP88	20	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	2.0 E-7	NA	5.8 E-5	9.7 E-5	NA	8.9 E-3	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	9.3 E-1	NA

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
03D-SP90	10	1.4 E-5	4.5 E-4	NA	NA	NA	NA	8.9 E-4	NA	NA	7.5 E-3	1.7 E-3	5.1 E-5	1.7 E-4	NA	2.2 E-4	1.6 E-3	NA	7.6 E-3	NA
03D-SP90	20	5.8 E-6	8.5 E-5	NA	NA	NA	NA	3.4 E-4	NA	NA	1.9 E-3	4.0 E-4	1.7 E-5	3.8 E-5	NA	5.0 E-5	3.0 E-4	NA	4.1 E-3	NA
03D-SP91	10	NA	NA	NA	NA	NA	2.7 E-3	3.0 E-4	NA	NA	6.7 E-4	NA	9.7 E-6	1.7 E-6	NA	5.3 E-5	2.4 E-5	NA	1.5 E-3	1.3 E-4
03D-SP91	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.4 E-3	2.6 E-4	3.7 E-6	3.4 E-6	NA	1.8 E-5	1.1 E-5	NA	2.9 E-3	2.6 E-5
03D-SP92	10	1.1 E-5	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	7.0 E-4	9.2 E-4	1.6 E-5	2.4 E-5	NA	2.0 E-5	5.3 E-5	NA	3.9 E-3	NA
03D-SP92	20	1.0 E-5	6.7 E-5	NA	NA	NA	NA	5.3 E-4	NA	NA	5.0 E-3	1.2 E-3	1.4 E-5	2.0 E-5	NA	3.7 E-5	8.1 E-5	NA	1.5 E-2	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-3	NA	NA	5.9 E-5	NA	NA	9.4 E-4	NA	5.7 E-3	NA
03D-SP93	25	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	1.1 E-4	NA	8.0 E-6	2.5 E-6	NA	3.3 E-5	1.2 E-4	NA	1.4 E-4	NA
03D-SP94	15	NA	6.0 E-5	NA	NA	NA	NA	1.4 E-4	NA	NA	1.2 E-3	5.4 E-4	NA	3.7 E-5	NA	NA	1.3 E-5	NA	1.4 E-1	NA
03D-SP94	25	NA	NA	NA	NA	NA	1.0 E-3	4.6 E-4	NA	NA	3.4 E-4	1.4 E-4	2.3 E-5	3.7 E-6	NA	6.9 E-5	9.1 E-5	NA	4.1 E-2	NA
03D-SP95	10	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	8.7 E-4	NA	NA	NA	NA	4.2 E+0	NA
03D-SP95	18	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	3.7 E-4	NA	NA	NA	NA	2.2 E+0	NA
03D-SP96	10	NA	NA	NA	NA	NA	4.8 E-3	1.4 E-3	NA	NA	3.5 E-2	NA	1.7 E-4	1.5 E-6	NA	3.9 E-4	2.2 E-4	NA	2.5 E-3	NA
03D-SP96	17	NA	NA	NA	NA	NA	5.3 E-3	6.8 E-4	NA	NA	3.0 E-2	NA	1.9 E-5	1.2 E-6	NA	1.4 E-4	2.0 E-4	NA	1.2 E-3	NA
03D-SP99	10	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	7.9 E+0	NA
11D-SP26	10	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	1.1 E-4	NA	2.5 E-5	3.6 E-5	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	1.7 E-5	NA	1.2 E-5	5.4 E-5	NA	NA	1.7 E-5
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-3	NA
11D-SP27	20	NA	NA	NA	NA	NA	1.3 E-3	5.7 E-4	NA	NA	NA	NA	3.8 E-6	NA	NA	8.8 E-5	1.4 E-4	NA	2.0 E-4	1.4 E-5
11D-SP28	10	NA	NA	NA	NA	NA	1.8 E-3	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	5.3 E-5	NA	NA	NA
11D-SP28	20	5.9 E-6	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	1.8 E-4	NA	1.8 E-6	NA	NA	NA	NA	5.0 E-4	8.8 E-6
11D-SP29	10	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	1.0 E-5	NA	7.7 E-5	1.9 E-4	NA	NA	6.2 E-5
11D-SP29	30	5.3 E-6	7.6 E-4	NA	NA	4.9 E-6	7.3 E-4	3.8 E-4	NA	NA	NA	1.8 E-4	NA	4.4 E-5	1.6 E-5	2.7 E-4	1.3 E-3	NA	NA	7.5 E-5
11D-SP30	10	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	2.4 E-4	NA	NA	3.4 E-5	3.3 E-5	4.2 E-4	9.2 E-4	NA	NA	NA
11D-SP30	20	1.8 E-5	1.9 E-4	NA	NA	NA	NA	1.7 E-4	NA	NA	7.4 E-4	4.9 E-4	NA	1.4 E-5	2.1 E-5	3.9 E-4	1.6 E-3	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	1.9 E-4	NA	NA	4.9 E-5
11D-SP31	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	2.1 E-4	3.7 E-4	1.2 E-4	NA	2.4 E-6	NA	1.2 E-5	2.5 E-4	NA	NA	4.6 E-5
11D-SP31	30	1.4 E-5	3.9 E-5	NA	NA	2.7 E-6	NA	1.2 E-4	NA	NA	4.1 E-4	6.8 E-4	NA	1.0 E-6	NA	2.3 E-4	5.8 E-4	NA	NA	4.8 E-5
50D-SP01	10	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	1.2 E-6	NA	2.0 E-5	2.9 E-5	NA	3.9 E-3	NA
50D-SP01	20	NA	NA	NA	NA	NA	1.0 E-3	6.1 E-4	NA	NA	NA	NA	1.8 E-5	NA	NA	1.3 E-4	6.1 E-4	NA	7.6 E-4	NA
51D-SP04	10	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	3.1 E-3	NA
51D-SP04	20	NA	NA	NA	NA	NA	1.3 E-3	6.7 E-4	NA	NA	NA	NA	1.7 E-4	NA	NA	2.6 E-4	3.8 E-4	NA	4.8 E-4	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	1.8 E-3	NA
A20-B34-SP01	20	NA	8.1 E-5	NA	NA	NA	NA	4.2 E-4	NA	1.8 E-4	NA	NA	5.3 E-6	NA	NA	6.2 E-5	1.5 E-4	NA	6.8 E-4	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-3	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	1.2 E-3	2.3 E-4	NA	NA	NA	NA	4.1 E-6	NA	NA	3.7 E-5	3.6 E-5	NA	4.1 E-4	2.5 E-5
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	1.0 E-4	NA	1.3 E-2	3.1 E-5
A20-B34-SP03	29	NA	NA	NA	NA	4.0 E-6	7.0 E-4	4.2 E-4	NA	4.6 E-4	7.5 E-5	1.0 E-4	2.4 E-6	NA	NA	7.0 E-5	1.1 E-4	NA	1.1 E-2	6.7 E-5
A20-RB37-SP01	10	NA	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-3	NA	1.3 E-2	NA	NA	NA	NA	1.5 E+0	NA
A20-RB37-SP01	20	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	8.5 E-3	NA	NA	NA	NA	9.8 E-1	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	5.3 E-4	NA	3.2 E-2	NA
A20-RB37-SP02	10	NA	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	NA	3.3 E-5	NA	2.0 E-1	5.8 E-5
A20-RB37-SP02	20	NA	NA	NA	NA	NA	1.6 E-3	2.5 E-4	NA	NA	NA	NA	3.7 E-6	3.6 E-7	NA	3.7 E-5	6.1 E-5	NA	2.4 E-3	7.7 E-5
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	5.2 E-7	NA	3.0 E-5	6.2 E-5	NA	7.6 E-3	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	4.4 E-7	NA	2.2 E-5	4.7 E-5	NA	5.3 E-3	NA
A20-RX73-SP01	10	NA	1.5 E-4	NA	NA	NA	NA	2.2 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	8.9 E-5	1.7 E-5	NA	2.8 E-3	NA
A20-RX73-SP01	20	NA	6.2 E-4	NA	NA	NA	2.5 E-3	5.3 E-4	NA	NA	4.8 E-3	NA	4.5 E-6	1.9 E-7	NA	2.1 E-3	8.2 E-5	NA	2.6 E-3	NA
A20-ST01-1-SP01	10	9.8 E-6	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	3.2 E-4	NA	NA	4.5 E-5	NA	2.0 E-5	3.0 E-5	NA	5.6 E-3	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	4.2 E-6	NA	NA	2.8 E-5	2.7 E-5	NA	6.0 E-4	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	7.0 E-4	NA	1.1 E-5	1.6 E-4	NA	2.3 E-5	3.3 E-5	NA	1.1 E-2	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	8.9 E-4	8.6 E-4	NA	NA	5.2 E-4	NA	5.5 E-6	3.0 E-5	NA	1.3 E-4	2.3 E-4	NA	1.4 E-3	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	1.1 E-5	NA	NA	2.5 E-5	2.0 E-5	NA	1.8 E-3	6.7 E-5
A20-ST01-3-SP01	20	NA	NA	1.6 E-3	NA	NA	1.2 E-3	1.6 E-3	NA	NA	NA	NA	4.6 E-5	NA	NA	8.0 E-4	3.8 E-3	NA	1.1 E-3	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	5.3 E-4	3.5 E-4	NA	NA	9.7 E-4	1.8 E-3	NA	NA	NA
A20-ST02-SP01	30	NA	3.6 E-5	NA	NA	NA	6.8 E-4	2.9 E-3	NA	NA	NA	2.8 E-4	8.6 E-6	NA	NA	9.3 E-4	8.5 E-4	NA	6.4 E-4	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	2.1 E-3	NA

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	4.3 E-6	NA	NA	1.5 E-5	2.5 E-5	NA	1.1 E-3	NA
A20-ST02-SP02	30	NA	NA	NA	NA	NA	2.9 E-3	8.2 E-4	NA	NA	NA	NA	5.3 E-6	1.3 E-7	NA	1.2 E-4	3.1 E-4	NA	4.9 E-4	NA
A20-ST02-SP03	20	NA	NA	NA	NA	NA	1.2 E-3	8.0 E-5	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	1.5 E-5	NA	3.5 E-4	2.2 E-5
A20-ST02-SP03	30	NA	NA	NA	NA	NA	7.3 E-4	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	3.5 E-5	NA	2.5 E-4	3.8 E-5
A20-ST02-SP04	30	NA	NA	NA	NA	NA	3.9 E-2	5.9 E-4	NA	NA	NA	NA	2.1 E-6	NA	NA	5.0 E-5	8.6 E-5	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	2.3 E-3	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	4.4 E-1	NA	7.7 E-5	NA	NA	7.4 E-5	NA	7.1 E-3	1.1 E-4
A20-ST05-SP01	30	2.4 E-3	2.0 E-2	1.0 E-2	NA	NA	NA	NA	NA	NA	1.8 E-2	3.9 E-1	NA	3.0 E-4	NA	4.1 E-5	5.7 E-5	NA	2.0 E-3	1.0 E-4
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	2.7 E-5	NA	3.4 E-3	5.8 E-5
A20-ST05-SP02	20	NA	NA	NA	NA	NA	1.7 E-3	1.1 E-4	NA	NA	NA	NA	4.1 E-6	2.0 E-7	NA	2.1 E-5	3.4 E-5	NA	2.6 E-3	5.4 E-5
A20-ST05-SP03	10	1.1 E-4	1.9 E-3	NA	NA	NA	1.8 E-3	2.0 E-4	NA	NA	9.6 E-4	7.5 E-3	NA	1.6 E-4	NA	3.9 E-5	4.5 E-4	NA	9.0 E-3	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	3.1 E-6	NA	4.5 E-5	9.8 E-5	NA	4.2 E-4	4.2 E-5
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	7.4 E-5	NA	NA	3.1 E-5
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	5.2 E-5	NA	1.5 E-4	7.4 E-5	NA	2.5 E-2	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	3.1 E-6	5.0 E-5	NA	2.1 E-5	2.9 E-5	NA	1.3 E-2	NA
A20-ST14-SP01	10	NA	3.5 E-4	NA	NA	NA	NA	2.0 E-4	NA	NA	1.7 E-3	NA	NA	6.3 E-4	NA	NA	2.1 E-5	NA	2.4 E-2	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	5.2 E-4	NA	NA	2.2 E-4	NA	1.7 E-5	4.7 E-5	NA	2.3 E-3	6.2 E-5
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	2.5 E-5	NA	3.3 E-5	5.9 E-5	NA	2.1 E-2	4.9 E-5
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	1.5 E-5	NA	5.6 E-5	9.5 E-5	NA	1.7 E-2	5.7 E-5
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	9.0 E-5	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	1.2 E-5	NA	2.3 E-4	1.6 E-5
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	1.3 E-3	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	9.1 E-6	2.5 E-5	NA	NA	1.3 E-5

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																				
Sample Name	Depth	trans-1,2-Dichloroethene	Trichloroethylene	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	HI
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
03D-SP100	10	NA	1.0 E-3	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+1
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-1
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E+2
03D-SP102	28	NA	8.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E+1
03D-SP103	10	NA	3.0 E-3	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E+1
03D-SP103	20	NA	3.3 E-4	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E+0
03D-SP104	10	NA	2.5 E-2	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E+1
03D-SP104	20	NA	5.8 E-2	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E+1
03D-SP105	10	NA	2.5 E-2	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E+1
03D-SP106	15	NA	9.8 E-5	2.3 E-3	2.5 E-6	2.2 E-3	9.7 E-5	8.0 E-6	2.2 E-4	NA	5.6 E-5	2.0 E-5	9.3 E-6	2.1 E-6	NA	NA	4.7 E-4	2.9 E-4	NA	NA	3.2 E-4	1.5 E-1
03D-SP106	25	NA	1.5 E-1	7.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	8.7 E+0
03D-SP106	30	NA	9.3 E-2	4.3 E-2	5.0 E-4	NA	1.2 E-2	NA	NA	NA	NA	1.4 E-3	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	1.9 E-3	4.0 E+0
03D-SP107	10	NA	1.5 E-1	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	5.8 E-3	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	3.7 E+0
03D-SP107	20	NA	1.2 E-2	NA	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1
03D-SP107	29	NA	1.7 E-1	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	3.8 E+0
03D-SP108	10	NA	5.7 E-4	6.8 E-4	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	5.9 E-6	NA	NA	NA	NA	NA	NA	NA	2.5 E-1
03D-SP109	10	NA	4.1 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-1
03D-SP109	20	NA	1.1 E-1	1.9 E-1	NA	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+1
03D-SP109	30	NA	2.8 E-4	2.1 E-4	1.1 E-6	NA	NA	2.4 E-5	NA	2.5 E-6	1.5 E-4	4.6 E-6	NA	3.6 E-7	1.7 E-5	NA	1.1 E-4	4.3 E-5	NA	NA	7.5 E-5	2.8 E-2
03D-SP110	10	NA	1.6 E-3	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1
03D-SP110	20	NA	4.7 E-4	NA	2.9 E-6	NA	4.9 E-5	5.3 E-6	NA	NA	5.7 E-5	1.3 E-5	NA	5.8 E-7	8.6 E-6	NA	4.6 E-5	NA	NA	NA	3.7 E-5	4.6 E-2
03D-SP111	10	NA	7.3 E-4	NA	2.5 E-5	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	1.6 E+0
03D-SP111	20	NA	NA	NA	NA	NA	7.2 E-3	2.7 E-6	NA	NA	4.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	2.7 E-2
03D-SP112	10	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	3.8 E-5	1.1 E-2
03D-SP112	20	NA	NA	NA	NA	NA	6.4 E-3	4.7 E-6	4.1 E-5	NA	6.3 E-5	9.5 E-6	NA	5.7 E-7	NA	NA	1.8 E-4	7.2 E-5	NA	NA	1.7 E-4	1.0 E-2
03D-SP113	10	NA	3.2 E-5	NA	NA	NA	1.0 E-2	NA	6.8 E-5	NA	2.8 E-5	1.7 E-5	NA	1.4 E-6	NA	NA	2.1 E-4	1.1 E-4	NA	NA	1.1 E-4	2.9 E-2
03D-SP113	20	NA	NA	7.3 E-3	NA	NA	2.6 E-2	NA	NA	NA	NA	2.0 E-3	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	3.3 E-3	1.5 E+0
03D-SP114	10	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	5.3 E-5	NA	NA	NA	1.0 E-5	NA	8.5 E-5	NA	NA	NA	3.8 E-5	2.1 E-3
03D-SP114	20	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	1.3 E-6	1.3 E-4	5.9 E-6	NA	NA	3.0 E-5	NA	8.2 E-5	3.9 E-5	NA	NA	2.1 E-4	3.2 E-3
03D-SP115	10	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2
03D-SP116	10	NA	1.3 E-4	NA	NA	4.0 E-3	6.7 E-3	NA	3.7 E-4	NA	NA	1.8 E-5	NA	2.0 E-6	2.2 E-5	NA	8.4 E-4	3.7 E-4	NA	NA	2.2 E-4	2.9 E-2
03D-SP117	10	NA	2.5 E-4	NA	4.0 E-6	1.1 E-3	2.6 E-2	NA	1.3 E-4	2.0 E-6	5.8 E-5	7.9 E-5	NA	4.7 E-6	1.6 E-5	NA	5.6 E-4	1.7 E-4	NA	1.6 E-5	4.2 E-4	6.1 E-2
03D-SP118	10	NA	2.3 E-4	NA	8.0 E-6	NA	1.8 E-2	NA	NA	NA	7.7 E-5	3.0 E-5	NA	3.6 E-6	3.8 E-5	NA	3.4 E-4	1.3 E-4	NA	2.9 E-5	2.1 E-4	4.2 E-1
03D-SP118	20	NA	9.4 E-5	NA	NA	NA	3.4 E-2	NA	NA	2.3 E-6	9.7 E-5	4.2 E-5	NA	5.9 E-5	4.2 E-5	NA	2.1 E-4	7.9 E-5	NA	1.9 E-5	3.9 E-4	9.6 E-2
03D-SP119	10	2.6 E-3	1.1 E-2	NA	6.9 E-6	3.4 E-3	1.1 E-2	NA	3.3 E-4	NA	NA	4.1 E-5	NA	NA	NA	NA	1.0 E-3	3.6 E-4	NA	NA	3.5 E-4	3.3 E-1
03D-SP119	20	1.4 E-1	4.7 E-2	6.9 E-4	NA	2.4 E-3	6.6 E-3	NA	2.2 E-4	NA	NA	2.7 E-5	NA	3.8 E-5	NA	NA	7.1 E-4	3.2 E-4	NA	NA	2.8 E-4	5.2 E-1
03D-SP119	29	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	4.6 E-4	NA	NA	3.1 E-2	NA	NA	NA	1.1 E-2	1.4 E+1
03D-SP120	10	NA	1.8 E-4	NA	1.9 E-6	2.7 E-3	7.7 E-3	NA	2.8 E-4	NA	4.3 E-5	4.9 E-5	NA	2.5 E-6	1.9 E-5	NA	6.9 E-4	2.4 E-4	NA	1.0 E-5	1.8 E-4	1.8 E-2
03D-SP120	20	NA	5.4 E-5	NA	1.2 E-6	1.2 E-3	1.1 E-2	NA	9.9 E-5	NA	2.6 E-5	2.4 E-5	NA	NA	1.7 E-5	NA	5.4 E-4	1.6 E-4	NA	1.9 E-5	1.0 E-3	2.1 E-2
03D-SP121	15	NA	1.3 E-2	2.4 E-2	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E+0
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	3.4 E+0
03D-SP122	10	NA	2.5 E-4	3.2 E-3	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	6.1 E-5	NA	NA	1.2 E-4	NA	NA	NA	6.1 E-5	3.0 E-1
03D-SP122	20	NA	1.7 E-3	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	4.6 E-1
03D-SP122	30	NA	4.2 E-3	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	1.0 E-4	1.1 E-4	NA	NA	NA	6.5 E-5	6.1 E-3
03D-SP123	20	NA	NA	NA	NA	4.1 E-4	NA	9.7 E-6	5.1 E-5	NA	7.1 E-5	NA	NA	NA	2.4 E-5	NA	1.5 E-4	7.2 E-5	NA	NA	2.4 E-4	5.9 E-3
03D-SP124	10	NA	NA	NA	NA	5.2 E-3	8.7 E-3	NA	4.4 E-4	NA	NA	3.4 E-5	NA	NA	1.7 E-5	NA	8.3 E-4	3.7 E-4	1.6 E-4	NA	2.0 E-4	1.7 E-2
03D-SP124	20	NA	3.6 E-5	NA	NA	2.3 E-3	9.2 E-3	NA	2.4 E-4	NA	NA	7.6 E-5	NA	1.0 E-6	8.0 E-6	NA	7.7 E-4	3.3 E-4	1.0 E-4	NA	2.1 E-4	1.4 E-2
03D-SP125	10	NA	4.8 E-4	NA	NA	NA	4.2 E-2	NA	NA	4.4 E-6	2.4 E-4	3.8 E-4	NA	NA	NA	9.8 E-4	3.5 E-4	1.1 E-4	NA	2.1 E-5	5.0 E-4	5.2 E-2
03D-SP125	20	1.9 E-4	1.5 E-2	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	1.9 E-4	NA	4.2 E-6	NA	1.7 E-4	2.6 E-4	1.1 E-4	NA	3.7 E-5	3.5 E-4	5.7 E-2
03D-SP126	10	NA	8.9 E-5	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	5.9 E-5	NA	NA	NA	4.6 E-5	3.7 E-3
03D-SP126	20	NA	1.1 E-4	4.7 E-4	NA	NA	NA	6.1 E-6	NA	NA	7.4 E-5	7.0 E-6	NA	NA	1.1 E-5	NA	1.0 E-4	3.9 E-5	NA	NA	8.3 E-5	2.1 E-3
03D-SP127	10	NA	3.2 E-5	NA	NA	7.6 E-4	NA	NA	7.2 E-5	NA	NA	2.1 E-5	NA	NA	NA	NA	1.6 E-4	7.6 E-5	NA	NA	6.1 E-5	6.6 E-3
03D-SP127	20	NA	1.2 E-5	NA	NA	4.6 E-4	NA	5.7 E-6	5.1 E-5	NA	5.7 E-5	NA	NA	4.7 E-7	9.3 E-6	NA	1.4 E-4	6.6 E-5	NA	NA	6.3 E-5	3.6 E-3
03D-SP128	10	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	7.9 E-4
03D-SP128	20	5.3 E-3	6.1 E-2	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	NA	NA	5.1 E-4	2.6 E-4	NA	NA	1.2 E-4	9.1 E-2
03D-SP128	30	2.1 E-2	1.4 E-1	NA	NA	3.7 E-3	NA	2.8 E-5	4.3 E-4	NA	NA	1.2 E-4	NA	NA	5.9 E-5	NA	2.2 E-4	NA	NA	NA	1.4 E-4	3.8 E-1
03D-SP129	15	NA	2.8 E-4	NA	NA	1.0 E-3	NA	1.5 E-5	7.9 E-5	1.3 E-6	9.4 E-5	NA	NA	NA	2.8 E-5	NA	2.5 E-4	1.3 E-4	NA	NA	1.8 E-4	5.5 E-3

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																				
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
03D-SP129	25	6.4 E-3	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1
03D-SP130	10	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	9.6 E-5	NA	NA	NA	1.5 E-5	NA	6.0 E-5	NA	NA	NA	7.7 E-5	1.3 E-3
03D-SP130	20	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	1.7 E-4	NA	NA	NA	1.7 E-5	NA	4.1 E-5	NA	NA	4.0 E-6	3.7 E-5	9.4 E-4
03D-SP131	10	NA	NA	NA	NA	2.8 E-3	1.8 E-4	NA	2.6 E-4	NA	NA	1.0 E-4	NA	NA	NA	NA	4.7 E-4	2.0 E-4	1.6 E-4	NA	4.6 E-3	1.9 E-2
03D-SP131	20	NA	NA	NA	NA	5.6 E-4	NA	5.1 E-6	5.2 E-5	NA	6.6 E-5	NA	NA	NA	8.0 E-6	NA	1.3 E-4	6.6 E-5	NA	NA	6.1 E-5	3.5 E-3
03D-SP132	10	NA	4.5 E-4	NA	9.7 E-6	NA	NA	NA	NA	NA	4.0 E-5	1.2 E-5	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	6.9 E-5	5.8 E-3
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	9.3 E-5	NA	NA	NA	NA	3.2 E-5	NA	NA	2.9 E-4	2.6 E-4	2.4 E-5	9.3 E-6	3.1 E-5	NA	1.1 E-4	6.0 E-5	NA	NA	2.4 E-4	8.9 E-3
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	9.0 E-6	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	5.4 E-5	9.8 E-4
03D-SP133	20	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	4.0 E-5	4.1 E-6	NA	NA	1.1 E-5	NA	2.1 E-4	1.1 E-4	NA	NA	7.4 E-5	6.4 E-4
03D-SP134	10	NA	1.8 E-5	NA	NA	9.2 E-4	NA	NA	8.3 E-5	2.2 E-6	2.9 E-5	1.0 E-5	1.2 E-5	1.5 E-6	3.4 E-5	NA	1.9 E-4	6.4 E-5	NA	NA	1.0 E-4	2.1 E-2
03D-SP134	20	NA	NA	3.1 E-4	NA	7.5 E-4	1.7 E-2	4.6 E-6	NA	NA	4.8 E-5	1.1 E-4	5.4 E-4	4.4 E-4	6.2 E-6	NA	1.5 E-4	7.2 E-5	1.5 E-3	NA	8.8 E-5	4.1 E-2
03D-SP135	10	NA	3.0 E-4	9.5 E-4	9.5 E-6	1.2 E-3	1.7 E-2	NA	1.3 E-4	NA	2.7 E-5	3.8 E-5	1.4 E-5	1.4 E-5	1.1 E-5	NA	5.4 E-4	2.0 E-4	NA	1.3 E-5	2.9 E-4	2.8 E-1
03D-SP135	20	NA	NA	1.6 E-1	NA	NA	6.5 E-2	NA	NA	NA	NA	NA	6.8 E-4	2.1 E-3	NA	NA	6.5 E-4	NA	1.5 E-3	NA	2.6 E-4	3.1 E-1
03D-SP136	10	NA	NA	NA	NA	2.2 E-3	NA	NA	1.3 E-4	NA	1.4 E-5	NA	3.2 E-5	1.3 E-6	3.4 E-5	NA	2.1 E-4	NA	2.4 E-4	NA	8.4 E-5	1.1 E-2
03D-SP137	10	NA	8.8 E-4	NA	3.8 E-6	2.4 E-3	1.5 E-2	NA	2.5 E-4	NA	3.2 E-5	3.0 E-5	NA	2.9 E-6	NA	NA	7.5 E-4	3.4 E-4	NA	NA	2.3 E-4	6.1 E-2
03D-SP138	10	NA	6.1 E-3	NA	5.5 E-6	1.2 E-3	7.8 E-4	5.0 E-6	9.6 E-5	3.0 E-6	4.6 E-5	1.4 E-4	NA	7.0 E-6	2.4 E-5	1.3 E-4	2.5 E-4	9.6 E-5	NA	6.1 E-6	1.9 E-4	1.5 E-2
03D-SP138	19	NA	1.6 E-2	NA	3.6 E-6	NA	3.2 E-4	NA	NA	NA	NA	1.1 E-4	NA	1.8 E-6	6.6 E-5	3.2 E-4	1.8 E-4	NA	NA	NA	1.4 E-4	3.0 E-2
03D-SP138	30	1.7 E-4	6.4 E-3	NA	NA	NA	NA	1.3 E-5	NA	NA	5.0 E-4	2.6 E-5	NA	NA	4.5 E-5	4.3 E-5	4.6 E-5	NA	NA	NA	1.4 E-4	1.7 E-1
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA	2.3 E-4	1.5 E-3
03D-SP139	20	NA	1.8 E-4	NA	NA	NA	NA	4.2 E-6	NA	1.1 E-6	3.4 E-5	9.1 E-6	NA	6.3 E-7	9.3 E-6	NA	5.1 E-5	NA	NA	NA	7.2 E-5	2.4 E-3
03D-SP139	28	NA	4.7 E-4	NA	NA	NA	NA	1.0 E-5	NA	1.0 E-6	1.7 E-4	1.8 E-5	NA	1.2 E-6	1.7 E-5	NA	4.9 E-5	2.5 E-5	NA	NA	1.7 E-4	1.5 E-2
03D-SP140	10	NA	4.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	4.2 E-5	1.1 E-3
03D-SP140	20	NA	2.2 E-5	NA	NA	NA	NA	1.1 E-5	NA	NA	1.6 E-4	NA	NA	NA	8.6 E-6	NA	1.7 E-4	7.2 E-5	NA	NA	1.9 E-4	1.4 E-3
03D-SP141	10	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	6.7 E-5	NA	NA	NA	1.1 E-5	NA	5.8 E-5	NA	NA	NA	8.0 E-5	1.7 E-3
03D-SP141	20	NA	2.8 E-5	NA	NA	NA	1.6 E-4	3.0 E-5	NA	NA	2.3 E-4	1.3 E-4	1.6 E-5	2.9 E-6	1.5 E-5	NA	1.2 E-4	4.8 E-5	1.9 E-4	NA	5.7 E-4	5.4 E-3
03D-SP142	10	NA	5.4 E-5	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	5.7 E-5	1.0 E-4	NA	NA	NA	2.2 E-4	2.7 E-2
03D-SP142	20	NA	2.2 E-5	NA	NA	NA	NA	1.4 E-5	NA	NA	1.3 E-4	1.9 E-5	NA	1.4 E-6	3.5 E-5	NA	1.2 E-4	NA	NA	NA	4.4 E-4	1.1 E-2
03D-SP142	30	NA	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	1.1 E-1
03D-SP143	10	NA	4.5 E-4	NA	3.8 E-6	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	6.3 E-5	NA	NA	NA	7.3 E-5	3.9 E-2
03D-SP143	20	NA	2.0 E-4	NA	2.0 E-6	NA	NA	NA	NA	NA	2.7 E-5	9.9 E-6	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	8.8 E-5	1.8 E-2
03D-SP143	30	NA	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	1.8 E-2
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	3.2 E-5	3.1 E-2
03D-SP144	20	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	1.9 E-4	NA	NA	NA	5.9 E-6	NA	3.9 E-5	NA	NA	3.3 E-6	3.3 E-5	2.5 E-2
03D-SP144	30	NA	NA	6.7 E-2	NA	NA	2.5 E-2	NA	NA	NA	1.4 E-4	NA	5.4 E-5	4.9 E-4	NA	NA	NA	NA	NA	NA	3.0 E-5	1.3 E-1
03D-SP145	10	NA	8.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	1.8 E-2
03D-SP145	20	NA	6.8 E-6	NA	NA	NA	NA	3.3 E-6	NA	NA	4.3 E-5	5.9 E-6	NA	NA	8.0 E-6	NA	3.9 E-5	NA	NA	NA	4.6 E-5	1.6 E-3
03D-SP146	10	1.8 E-3	7.3 E-3	NA	9.9 E-6	NA	NA	NA	NA	NA	1.2 E-4	2.6 E-5	NA	NA	4.7 E-5	1.3 E-4	6.5 E-5	NA	NA	NA	4.6 E-5	2.0 E-1
03D-SP146	20	3.9 E-3	5.9 E-3	NA	4.2 E-6	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	1.1 E-4	9.2 E-2
03D-SP146	27	4.6 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-2
03D-SP147	10	NA	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1
03D-SP147	20	NA	1.0 E-2	NA	NA	NA	NA	2.2 E-6	NA	NA	9.4 E-5	7.0 E-6	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	7.0 E-5	1.6 E-2
03D-SP147	27	9.9 E-4	1.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	5.7 E-4	3.0 E-3
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	2.0 E-5	NA	NA	NA	NA	4.8 E-6	NA	NA	6.2 E-5	3.8 E-5	NA	NA	2.9 E-5	5.4 E-5	NA	NA	NA	NA	4.2 E-5	7.3 E-4
03D-SP149	20	NA	7.0 E-6	NA	NA	NA	NA	2.1 E-5	4.2 E-5	3.7 E-6	2.8 E-4	9.9 E-6	NA	8.0 E-7	7.3 E-5	NA	2.9 E-4	1.4 E-4	NA	3.2 E-6	3.9 E-4	5.5 E-3
03D-SP150	30	NA	4.8 E-6	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	2.8 E-6	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	9.6 E-6	2.6 E-4
03D-SP84	15	NA	1.2 E-4	4.0 E-3	NA	NA	2.1 E-3	1.0 E-5	NA	NA	9.0 E-5	2.3 E-5	NA	3.9 E-5	NA	NA	5.3 E-5	NA	NA	NA	1.5 E-4	9.6 E-3
03D-SP84	25	NA	3.6 E-5	2.9 E-4	NA	NA	6.1 E-5	NA	NA	NA	2.1 E-5	2.6 E-5	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	2.7 E-5	1.8 E-3
03D-SP85	25	NA	6.5 E-3	1.0 E+0	NA	NA	9.2 E-2	NA	NA	NA	NA	NA	2.5 E-3	4.7 E-3	NA	NA	NA	4.9 E-3	5.5 E-3	NA	NA	3.0 E+0
03D-SP85	30	NA	3.3 E-5	3.1 E-5	NA	NA	NA	3.4 E-5	NA	2.3 E-6	2.9 E-4	9.4 E-6	NA	1.0 E-6	1.3 E-5	NA	9.2 E-5	5.2 E-5	NA	NA	1.7 E-4	4.2 E-3
03D-SP86	10	NA	3.2 E-5	NA	3.4 E-6	NA	NA	6.3 E-6	NA	NA	6.7 E-5	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	1.3 E-3
03D-SP86	20	NA	2.8 E-5	NA	NA	NA	NA	4.2 E-6	NA	NA	5.4 E-5	NA	NA	NA	8.6 E-6	NA	NA	NA	NA	NA	4.4 E-5	5.6 E-4
03D-SP87	10	NA	NA	NA	NA	1.3 E-3	1.3 E-2	NA	1.8 E-4	NA	NA	1.5 E-5	NA	1.5 E-6	1.6 E-4	NA	1.1 E-3	2.9 E-4	NA	3.0 E-5	7.7 E-4	1.8 E-2
03D-SP88	10	NA	3.2 E-4	NA	7.6 E-6	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	6.6 E-5	NA	NA	NA	5.0 E-5	1.8 E-2
03D-SP88	20	NA	1.3 E-5	NA	NA	NA	NA	3.5 E-6	NA	NA	4.3 E-5	8.0 E-6	NA	6.0 E-7	NA	NA	8.2 E-5	3.8 E-5	NA	NA	6.6 E-5	9.7 E-3
03D-SP89	10	NA	7.3 E-4	NA	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-1

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																				
Sample Name	Depth	trans-1,2-Dichloroethene	Trichloroethylene	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	HI
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
03D-SP90	10	NA	1.0 E-3	3.3 E-3	5.7 E-6	1.6 E-3	2.0 E-2	NA	2.5 E-4	NA	1.3 E-4	2.1 E-5	NA	4.8 E-5	3.8 E-5	NA	1.8 E-3	4.7 E-4	NA	1.4 E-5	8.4 E-4	4.9 E-2
03D-SP90	20	NA	3.7 E-4	6.8 E-4	2.1 E-6	1.0 E-3	3.3 E-3	NA	1.4 E-4	NA	3.1 E-4	4.8 E-6	NA	9.2 E-6	1.9 E-5	NA	6.5 E-4	2.0 E-4	NA	1.3 E-5	2.8 E-4	1.4 E-2
03D-SP91	10	NA	5.5 E-4	3.7 E-4	NA	9.3 E-4	NA	3.9 E-6	8.5 E-5	5.8 E-6	3.7 E-5	7.9 E-5	NA	1.0 E-6	NA	NA	3.2 E-4	1.1 E-4	NA	5.8 E-6	2.6 E-4	8.2 E-3
03D-SP91	20	NA	3.4 E-4	7.3 E-4	1.2 E-6	5.9 E-4	NA	NA	5.6 E-5	2.3 E-6	NA	1.9 E-5	NA	NA	NA	NA	1.3 E-4	4.9 E-5	NA	3.5 E-6	7.7 E-5	7.7 E-3
03D-SP92	10	NA	2.1 E-4	2.5 E-3	5.7 E-6	1.8 E-3	1.1 E-2	NA	1.8 E-4	NA	NA	3.6 E-5	NA	1.5 E-6	NA	NA	6.5 E-4	2.1 E-4	NA	1.3 E-5	2.8 E-4	2.4 E-2
03D-SP92	20	NA	6.7 E-4	2.3 E-3	3.9 E-6	5.2 E-4	1.6 E-2	NA	7.2 E-5	NA	3.7 E-5	2.7 E-5	NA	9.7 E-7	NA	NA	5.3 E-4	1.7 E-4	NA	6.1 E-6	3.5 E-4	4.3 E-2
03D-SP93	15	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
03D-SP93	25	NA	NA	NA	NA	6.3 E-4	2.8 E-3	NA	7.7 E-5	NA	NA	NA	NA	3.9 E-6	3.7 E-5	NA	3.2 E-4	1.1 E-4	NA	NA	1.7 E-4	4.8 E-3
03D-SP94	15	NA	3.8 E-4	NA	1.9 E-6	1.1 E-3	NA	NA	5.2 E-5	NA	NA	1.9 E-5	NA	NA	NA	NA	1.1 E-4	5.0 E-5	NA	NA	2.7 E-5	1.4 E-1
03D-SP94	25	NA	3.9 E-5	NA	NA	1.0 E-3	NA	5.0 E-6	9.7 E-5	NA	NA	8.5 E-6	NA	1.8 E-6	5.3 E-6	NA	6.4 E-4	2.4 E-4	NA	NA	2.0 E-4	4.5 E-2
03D-SP95	10	NA	1.0 E-2	2.0 E-2	1.1 E-4	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	4.3 E+0
03D-SP95	18	NA	7.3 E-3	1.6 E-2	6.3 E-5	NA	1.2 E-2	NA	NA	NA	NA	7.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.2 E+0
03D-SP96	10	NA	7.5 E-5	NA	NA	5.2 E-3	3.6 E-3	NA	1.0 E-3	5.8 E-6	3.7 E-5	9.4 E-5	2.7 E-5	2.7 E-5	6.9 E-5	NA	5.5 E-3	2.2 E-3	5.8 E-4	NA	1.0 E-2	7.3 E-2
03D-SP96	17	NA	1.0 E-4	NA	NA	1.4 E-3	1.7 E-3	9.2 E-6	1.3 E-4	NA	7.5 E-5	6.9 E-5	NA	1.1 E-5	4.5 E-5	NA	4.4 E-4	1.5 E-4	NA	9.4 E-6	1.7 E-3	4.3 E-2
03D-SP99	10	NA	1.6 E-3	NA	2.3 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E+0
11D-SP26	10	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	1.0 E-5	NA	1.0 E-6	NA	NA	7.4 E-5	NA	NA	NA	5.4 E-5	6.9 E-4
11D-SP26	20	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	4.6 E-5	NA	NA	NA	9.9 E-6	NA	NA	NA	NA	NA	1.3 E-5	3.1 E-4
11D-SP27	10	NA	4.1 E-5	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	3.1 E-5	3.8 E-3
11D-SP27	20	NA	7.9 E-6	NA	1.4 E-6	NA	NA	9.8 E-6	NA	9.0 E-7	1.1 E-4	2.2 E-5	NA	8.7 E-7	2.9 E-5	NA	1.0 E-4	3.8 E-5	NA	NA	1.2 E-4	2.8 E-3
11D-SP28	10	NA	5.4 E-5	NA	5.7 E-6	NA	NA	NA	NA	NA	4.1 E-5	2.4 E-5	NA	NA	1.4 E-5	NA	1.2 E-4	NA	NA	NA	1.3 E-4	3.0 E-3
11D-SP28	20	NA	4.3 E-4	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-6	NA	5.9 E-5	NA	NA	NA	1.4 E-5	3.7 E-3
11D-SP29	10	NA	3.0 E-5	NA	7.8 E-6	NA	NA	NA	NA	NA	9.1 E-5	3.6 E-5	NA	NA	1.3 E-5	NA	5.5 E-5	NA	NA	NA	2.1 E-4	1.0 E-3
11D-SP29	30	NA	1.9 E-4	NA	NA	NA	NA	2.4 E-6	NA	NA	7.8 E-5	3.3 E-5	NA	NA	1.4 E-5	NA	2.8 E-5	NA	NA	NA	1.2 E-4	4.2 E-3
11D-SP30	10	NA	2.3 E-5	NA	8.0 E-6	NA	1.1 E-4	NA	NA	NA	3.3 E-5	8.9 E-5	NA	2.3 E-6	1.0 E-5	NA	5.6 E-5	NA	NA	NA	1.7 E-4	2.4 E-3
11D-SP30	20	NA	2.8 E-5	NA	4.6 E-6	NA	7.2 E-5	NA	NA	NA	2.9 E-5	2.5 E-5	NA	NA	9.3 E-6	NA	3.1 E-5	NA	NA	NA	9.8 E-5	4.0 E-3
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	6.2 E-5	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	1.6 E-4	5.2 E-4
11D-SP31	20	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	7.9 E-5	NA	NA	6.5 E-6	NA	NA	NA	NA	NA	1.1 E-4	1.3 E-3
11D-SP31	30	NA	1.7 E-5	NA	NA	NA	2.9 E-5	NA	NA	NA	2.7 E-5	1.9 E-5	NA	1.3 E-6	6.3 E-6	NA	2.1 E-5	NA	NA	NA	4.3 E-5	2.3 E-3
50D-SP01	10	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	4.3 E-5	1.3 E-5	NA	1.0 E-6	NA	NA	1.0 E-4	NA	NA	NA	7.3 E-5	4.5 E-3
50D-SP01	20	NA	NA	NA	NA	NA	1.1 E-3	1.6 E-5	4.5 E-5	NA	1.4 E-4	1.1 E-5	3.7 E-5	3.6 E-5	1.5 E-5	NA	2.0 E-4	9.9 E-5	3.1 E-4	3.2 E-6	2.1 E-4	5.4 E-3
51D-SP04	10	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	7.3 E-5	NA	NA	NA	3.7 E-5	3.5 E-3
51D-SP04	20	NA	NA	NA	NA	NA	7.2 E-4	6.8 E-6	6.0 E-5	NA	6.6 E-5	1.1 E-5	3.7 E-4	1.6 E-5	1.3 E-5	NA	1.6 E-4	9.2 E-5	2.6 E-3	NA	1.4 E-4	7.5 E-3
A20-B34-SP01	10	NA	2.5 E-4	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-7	NA	NA	1.2 E-4	NA	NA	NA	5.0 E-5	3.0 E-3
A20-B34-SP01	20	NA	2.2 E-4	NA	1.9 E-5	NA	3.8 E-5	7.7 E-6	NA	NA	7.1 E-5	4.8 E-5	1.1 E-5	1.5 E-6	NA	NA	1.3 E-4	5.0 E-5	1.1 E-4	NA	8.8 E-5	2.4 E-3
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-5	NA	NA	NA	2.6 E-5	6.6 E-3
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	8.8 E-5	NA	NA	NA	1.5 E-5	NA	1.2 E-4	4.9 E-5	NA	NA	1.1 E-4	2.3 E-3
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	8.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	2.5 E-2
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	2.0 E-4	1.0 E-5	NA	4.7 E-7	6.6 E-6	NA	4.2 E-5	NA	NA	6.7 E-6	6.8 E-5	1.4 E-2
A20-B34-SP03	29	NA	1.2 E-5	NA	NA	NA	NA	1.2 E-5	NA	NA	1.4 E-4	6.7 E-6	NA	3.2 E-7	1.3 E-5	NA	3.9 E-5	NA	NA	NA	1.1 E-4	1.3 E-2
A20-RB37-SP01	10	NA	9.8 E-3	NA	5.7 E-5	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E+0
A20-RB37-SP01	20	NA	6.6 E-3	NA	6.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+0
A20-RB37-SP01	30	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
A20-RB37-SP02	10	NA	1.7 E-3	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	2.0 E-1
A20-RB37-SP02	20	NA	3.0 E-5	NA	NA	NA	NA	6.4 E-6	NA	NA	8.8 E-5	5.2 E-5	NA	NA	1.3 E-5	NA	8.2 E-5	4.6 E-5	NA	NA	9.8 E-5	4.8 E-3
A20-RC29-SP01	10	NA	4.3 E-5	NA	1.9 E-6	NA	NA	NA	NA	NA	3.2 E-5	5.3 E-5	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	6.1 E-5	8.5 E-3
A20-RC29-SP01	20	NA	1.4 E-4	NA	1.9 E-6	NA	NA	4.5 E-6	NA	NA	4.6 E-5	1.5 E-4	NA	NA	1.2 E-5	NA	6.5 E-5	NA	NA	NA	2.8 E-5	6.1 E-3
A20-RX73-SP01	10	NA	1.2 E-4	NA	8.2 E-6	NA	NA	NA	NA	NA	2.7 E-5	2.8 E-5	NA	NA	NA	NA	6.9 E-5	NA	NA	NA	1.8 E-4	1.7 E-2
A20-RX73-SP01	20	NA	2.5 E-4	NA	3.9 E-6	NA	NA	9.7 E-6	NA	NA	1.0 E-4	1.8 E-5	NA	1.5 E-5	4.4 E-5	NA	1.1 E-4	5.1 E-5	NA	NA	5.3 E-4	1.4 E-2
A20-ST01-1-SP01	10	NA	9.8 E-5	3.5 E-4	2.0 E-6	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	9.5 E-5	NA	NA	NA	6.5 E-5	7.0 E-3
A20-ST01-1-SP01	20	NA	2.0 E-5	NA	NA	NA	NA	8.1 E-6	NA	NA	7.7 E-5	NA	NA	NA	1.3 E-5	NA	1.1 E-4	5.2 E-5	NA	NA	7.7 E-5	1.2 E-3
A20-ST01-2-SP01	10	NA	8.4 E-5	NA	2.9 E-6	1.0 E-3	NA	NA	2.0 E-4	NA	NA	2.6 E-5	NA	NA	NA	NA	3.0 E-4	1.1 E-4	1.8 E-4	NA	3.0 E-4	1.4 E-2
A20-ST01-2-SP01	20	NA	2.2 E-5	NA	NA	NA	NA	7.7 E-6	NA	1.0 E-6	7.7 E-5	1.6 E-5	NA	1.9 E-6	NA	NA	1.2 E-4	5.3 E-5	NA	NA	2.0 E-4	4.6 E-3
A20-ST01-3-SP01	10	NA	3.4 E-5	NA	NA	NA	NA	4.8 E-6	NA	NA	5.3 E-5	1.3 E-5	NA	NA	1.1 E-5	NA	2.9 E-4	1.1 E-4	NA	NA	1.2 E-4	2.9 E-3
A20-ST01-3-SP01	20	NA	3.2 E-5	NA	NA	NA	6.5 E-3	1.4 E-5	NA	NA	1.2 E-4	2.0 E-5	1.4 E-4	2.1 E-4	NA	NA	2.0 E-4	7.9 E-5	7.9 E-4	NA	2.4 E-4	1.8 E-2
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	3.6 E-4	1.0 E-4	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	4.9 E-4	3.0 E-4	NA	NA	NA	NA	6.6 E-4	NA	1.0 E-4	3.8 E-2
A20-ST02-SP01	30	NA	3.4 E-5	3.7 E-5	NA	NA	6.5 E-3	2.5 E-5	NA	NA	2.1 E-4	2.5 E-5	3.1 E-5	2.7 E-5	9.0 E-6	NA	7.7 E-5	4.7 E-5	NA	NA	1.1 E-4	1.3 E-2
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3

		Child Non-Cancer Hazard Index																				
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
A20-ST02-SP02	20	NA	1.9 E-5	NA	NA	NA	3.5 E-3	NA	NA	NA	2.7 E-5	NA	2.9 E-4	NA	NA	NA	3.4 E-5	6.4 E-5	6.2 E-4	NA	3.5 E-5	6.0 E-3
A20-ST02-SP02	30	NA	8.6 E-6	NA	NA	2.5 E-4	4.3 E-4	2.8 E-5	2.7 E-5	NA	3.6 E-4	5.9 E-6	2.0 E-5	8.6 E-7	3.4 E-5	NA	7.3 E-5	4.3 E-5	6.1 E-5	5.6 E-6	1.3 E-4	6.1 E-3
A20-ST02-SP03	20	NA	6.4 E-5	NA	NA	NA	NA	7.1 E-6	NA	NA	6.0 E-5	NA	NA	NA	1.1 E-5	NA	7.7 E-5	4.0 E-5	NA	NA	1.8 E-4	2.1 E-3
A20-ST02-SP03	30	NA	9.9 E-5	NA	NA	NA	NA	5.4 E-6	NA	NA	7.6 E-5	NA	NA	NA	9.0 E-6	NA	3.0 E-5	NA	NA	NA	9.1 E-5	1.7 E-3
A20-ST02-SP04	30	NA	NA	NA	NA	6.6 E-4	NA	7.1 E-6	3.5 E-5	NA	1.2 E-4	8.7 E-6	NA	5.3 E-7	3.1 E-5	NA	7.3 E-5	3.6 E-5	NA	NA	6.3 E-5	4.1 E-2
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
A20-ST05-SP01	20	3.9 E-3	7.1 E-1	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	1.2 E+0
A20-ST05-SP01	30	7.2 E-4	2.3 E-2	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	4.7 E-1
A20-ST05-SP02	10	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	5.4 E-5	3.9 E-3
A20-ST05-SP02	20	NA	2.5 E-5	NA	NA	NA	NA	6.9 E-6	NA	NA	7.4 E-5	NA	NA	NA	2.1 E-5	NA	1.4 E-4	5.8 E-5	NA	NA	5.7 E-5	4.9 E-3
A20-ST05-SP03	10	NA	1.8 E-4	2.3 E-4	NA	NA	1.4 E-4	NA	NA	NA	5.8 E-5	1.5 E-4	NA	3.2 E-6	1.2 E-5	NA	6.3 E-5	NA	NA	NA	3.8 E-4	2.3 E-2
A20-ST05-SP04	10	NA	5.9 E-5	NA	NA	NA	NA	1.3 E-5	NA	NA	1.4 E-4	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-5	1.3 E-3
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	1.2 E-4	9.6 E-6	NA	NA	2.4 E-5	NA	1.0 E-4	NA	NA	NA	1.3 E-4	1.2 E-3
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	8.5 E-6	NA	NA	NA	NA	9.6 E-5	NA	NA	NA	3.2 E-5	2.6 E-2
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	3.4 E-5	2.5 E-5	NA	NA	NA	NA	1.0 E-4	3.6 E-5	NA	NA	5.9 E-5	1.3 E-2
A20-ST14-SP01	10	NA	7.1 E-4	NA	6.9 E-6	NA	NA	1.6 E-6	NA	NA	2.0 E-5	9.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	2.7 E-2
A20-ST14-SP01	20	NA	2.9 E-5	NA	1.2 E-6	NA	NA	2.4 E-6	NA	NA	3.7 E-5	1.3 E-5	NA	NA	6.2 E-6	NA	3.2 E-5	NA	NA	NA	4.4 E-5	3.5 E-3
A20-ST14-SP02	10	NA	1.3 E-5	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	2.2 E-2
A20-ST14-SP02	20	NA	1.7 E-5	NA	1.5 E-6	NA	NA	NA	NA	NA	2.6 E-5	3.3 E-5	NA	NA	NA	NA	5.9 E-5	NA	NA	NA	6.1 E-5	1.7 E-2
A20-ST20-SP01	10	NA	1.8 E-4	NA	NA	NA	NA	6.5 E-6	NA	NA	9.6 E-5	NA	NA	NA	1.5 E-5	NA	9.9 E-5	NA	NA	NA	4.2 E-5	4.4 E-4
A20-ST20-SP01	20	NA	3.1 E-5	NA	9.5 E-7	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	1.9 E-5	4.6 E-4
A20-ST22-SP01	10	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	2.7 E-5	1.3 E-5	NA	NA	NA	5.3 E-5	NA	NA	NA	NA	3.0 E-5	2.8 E-4
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	8.0 E-5	NA	NA	NA	1.1 E-5	NA	4.4 E-5	NA	NA	NA	8.5 E-5	1.7 E-3

		Adult Non-Cancer Hazard Index																			
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	5.2 E+0	NA	NA
03D-SP100	20	7.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	2.7 E-1	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4	NA	NA	NA	NA	3.6 E+2	NA	NA
03D-SP102	28	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	2.8 E+1	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-3	NA	NA	1.4 E-3	NA	NA	NA	NA	1.0 E+1	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	8.4 E-1	NA	NA
03D-SP104	10	NA	7.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	2.5 E-3	NA	NA	NA	NA	7.7 E+0	NA	NA
03D-SP104	20	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3	NA	2.1 E-3	NA	NA	NA	NA	1.0 E+1	NA	NA
03D-SP105	10	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	NA	2.1 E-3	NA	NA	NA	NA	7.0 E+0	NA	NA
03D-SP106	15	7.8 E-5	NA	NA	NA	NA	4.3 E-4	3.7 E-4	NA	NA	8.2 E-5	3.5 E-4	8.3 E-6	6.2 E-5	NA	9.6 E-5	1.4 E-5	NA	6.1 E-2	NA	NA
03D-SP106	25	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-1	NA	NA	NA	NA	2.5 E+0	NA	NA
03D-SP106	30	3.4 E-4	4.1 E-2	NA	NA	NA	3.3 E-1	NA	NA	NA	NA	5.0 E-2	NA	1.6 E-2	NA	NA	9.4 E-4	NA	1.2 E+0	NA	NA
03D-SP107	10	NA	2.6 E-2	NA	NA	NA	3.1 E-1	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	1.2 E+0	NA	NA
03D-SP107	20	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	7.8 E-2	NA	NA
03D-SP107	29	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	1.6 E+0	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	1.3 E-3	NA	NA	3.8 E-5	NA	1.1 E-1	NA	NA
03D-SP109	10	NA	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-3	NA	NA	NA	NA	1.9 E-1	NA	NA
03D-SP109	20	NA	2.2 E-1	NA	NA	NA	1.3 E+0	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	4.9 E-3	NA	3.2 E+0	NA	NA
03D-SP109	30	NA	2.6 E-4	NA	NA	2.5 E-6	4.4 E-4	1.1 E-4	NA	NA	NA	7.2 E-5	2.1 E-6	8.3 E-5	NA	2.0 E-5	2.5 E-5	NA	1.1 E-2	2.6 E-5	NA
03D-SP110	10	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	1.7 E-4	NA	1.6 E-4	2.0 E-5	NA	NA	NA	1.3 E-1	NA	NA
03D-SP110	20	NA	1.2 E-4	NA	NA	NA	NA	9.9 E-5	NA	NA	3.9 E-5	1.1 E-4	NA	1.4 E-5	NA	1.0 E-5	3.9 E-5	NA	1.9 E-2	NA	NA
03D-SP111	10	NA	2.0 E-4	NA	NA	NA	NA	5.0 E-4	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	3.8 E-5	NA	6.8 E-1	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	2.6 E-6	NA	NA	1.1 E-5	NA	8.4 E-3	5.9 E-6	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	2.9 E-3	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	3.3 E-6	1.1 E-6	NA	1.0 E-5	1.4 E-5	NA	1.2 E-3	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	4.2 E-3	NA	3.0 E-6	1.4 E-7	NA	2.0 E-5	2.8 E-5	NA	3.3 E-3	NA	NA
03D-SP113	20	NA	NA	NA	NA	NA	5.7 E-1	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	3.9 E-3	NA	1.6 E-2	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	NA	7.9 E-5	NA	NA	7.1 E-4	NA	NA	1.8 E-5	NA	NA	9.9 E-6	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	5.7 E-4	1.4 E-4	NA	NA	3.9 E-4	NA	1.5 E-6	2.0 E-5	NA	1.4 E-5	2.8 E-5	NA	NA	NA	NA
03D-SP115	10	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	6.3 E-4	NA	NA	NA	NA	7.8 E-3	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	5.0 E-3	NA	7.9 E-6	1.5 E-6	NA	1.9 E-5	2.0 E-5	NA	1.8 E-3	NA	NA
03D-SP117	10	NA	3.8 E-5	NA	NA	NA	NA	4.5 E-4	NA	NA	7.7 E-4	NA	7.0 E-6	3.3 E-5	NA	4.2 E-5	1.0 E-4	NA	1.2 E-2	NA	NA
03D-SP118	10	NA	5.0 E-5	NA	NA	NA	9.4 E-4	1.8 E-4	NA	NA	NA	NA	4.4 E-6	1.5 E-4	NA	1.8 E-5	3.7 E-5	NA	1.7 E-1	2.3 E-5	NA
03D-SP118	20	NA	NA	NA	NA	9.7 E-6	NA	9.9 E-4	NA	NA	NA	NA	3.5 E-6	2.0 E-4	NA	5.3 E-5	8.5 E-4	NA	2.4 E-2	NA	NA
03D-SP119	10	3.5 E-5	1.1 E-3	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	1.7 E-3	1.1 E-5	5.7 E-4	1.0 E-4	NA	2.5 E-5	NA	1.2 E-1	NA	1.1 E-3
03D-SP119	20	2.8 E-4	9.1 E-3	NA	NA	NA	NA	4.1 E-4	NA	NA	NA	6.3 E-2	7.5 E-6	4.1 E-4	NA	2.3 E-5	3.1 E-4	NA	6.5 E-2	NA	5.9 E-2
03D-SP119	29	NA	3.1 E-2	NA	NA	NA	4.5 E+0	NA	NA	NA	NA	2.7 E-2	NA	7.4 E-2	2.2 E-2	NA	2.9 E-3	NA	1.4 E+0	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	6.6 E-6	4.6 E-6	NA	6.5 E-6	1.8 E-5	NA	2.2 E-3	NA	NA
03D-SP120	20	NA	2.6 E-5	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	7.8 E-6	2.7 E-5	NA	1.8 E-4	2.8 E-4	NA	1.0 E-3	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	4.0 E-2	NA	NA	NA	NA	2.7 E+0	NA	NA
03D-SP121	25	NA	NA	NA	NA	NA	9.9 E-1	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	3.6 E-1	NA	NA
03D-SP122	10	7.4 E-5	4.1 E-3	NA	NA	NA	NA	1.8 E-4	NA	NA	2.2 E-4	3.2 E-3	NA	2.7 E-5	NA	7.1 E-5	1.5 E-4	NA	1.2 E-1	NA	NA
03D-SP122	20	2.7 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	2.9 E-2	9.7 E-3	NA	NA	NA	5.3 E-2	NA	NA
03D-SP122	30	2.2 E-3	7.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-3	NA	1.9 E-2	NA	NA	5.5 E-4	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	NA	2.0 E-4	NA	NA	9.7 E-6	NA	6.7 E-6	8.3 E-6	NA	2.2 E-3	NA	NA
03D-SP123	20	NA	NA	NA	NA	NA	7.6 E-4	8.4 E-5	NA	NA	NA	NA	2.0 E-6	NA	NA	1.1 E-5	8.5 E-6	NA	1.2 E-3	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	7.4 E-6	1.9 E-5	1.4 E-5	NA	2.0 E-5	NA	1.7 E-4	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	NA	NA	NA	7.1 E-6	4.1 E-5	1.3 E-5	8.0 E-6	1.2 E-5	NA	3.6 E-4	NA	NA
03D-SP125	10	NA	NA	NA	NA	NA	8.3 E-4	8.9 E-4	NA	NA	NA	5.8 E-5	6.1 E-6	NA	2.2 E-4	1.4 E-4	2.7 E-4	NA	4.0 E-4	NA	NA
03D-SP125	20	NA	1.1 E-4	NA	NA	NA	8.2 E-4	4.1 E-4	NA	NA	7.6 E-4	3.2 E-4	4.5 E-6	6.2 E-7	4.1 E-5	1.0 E-4	1.7 E-4	NA	9.1 E-4	NA	8.3 E-5
03D-SP126	10	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	1.4 E-5	NA
03D-SP126	20	1.7 E-6	2.7 E-5	NA	NA	NA	NA	6.8 E-5	NA	NA	NA	1.8 E-4	1.6 E-6	3.0 E-6	NA	1.1 E-5	1.5 E-5	NA	1.9 E-4	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	7.2 E-6	NA	2.3 E-3	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	1.8 E-6	NA	NA	7.4 E-6	7.7 E-6	NA	1.1 E-3	7.5 E-6	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA
03D-SP128	20	2.1 E-5	4.1 E-3	NA	NA	NA	NA	2.9 E-4	NA	NA	9.7 E-4	3.5 E-3	1.2 E-5	8.3 E-5	NA	6.8 E-5	2.6 E-4	NA	6.4 E-4	NA	2.3 E-3
03D-SP128	30	3.2 E-4	2.1 E-3	2.4 E-3	NA	NA	NA	NA	NA	NA	3.6 E-3	8.1 E-2	NA	1.0 E-5	NA	2.9 E-5	3.0 E-5	NA	7.5 E-4	NA	9.0 E-3
03D-SP129	15	NA	NA	NA	NA	NA	7.4 E-4	1.4 E-4	NA	NA	NA	7.4 E-5	4.6 E-6	NA	NA	2.9 E-5	1.8 E-5	NA	4.6 E-4	NA	NA

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	NA	3.7 E-3	NA	2.7 E-3
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	NA	NA	4.3 E-4	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	8.0 E-6	7.5 E-6	NA	2.1 E-4	5.5 E-6	NA
03D-SP131	10	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	7.4 E-6	NA	NA	3.1 E-5	1.2 E-5	NA	4.2 E-3	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	NA	1.5 E-6	NA	NA	5.7 E-6	7.5 E-6	NA	1.0 E-3	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	9.9 E-6	NA	2.1 E-3	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	2.7 E-5	NA	NA	1.5 E-6	7.5 E-4	9.3 E-4	NA	NA	1.5 E-4	2.9 E-5	6.0 E-6	1.3 E-6	NA	3.4 E-4	3.2 E-4	NA	7.1 E-4	3.7 E-5	NA
03D-SP133	10	NA	NA	NA	NA	NA	NA	8.9 E-5	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	1.2 E-5	NA	2.2 E-4	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	2.8 E-6	NA	NA	4.8 E-6	2.0 E-5	NA	NA	1.0 E-5	NA
03D-SP134	10	NA	NA	NA	NA	NA	8.3 E-3	8.6 E-5	NA	NA	NA	NA	4.2 E-6	NA	NA	2.3 E-5	9.9 E-6	NA	1.3 E-4	2.3 E-5	NA
03D-SP134	20	NA	3.3 E-5	NA	NA	NA	1.5 E-3	3.6 E-3	NA	NA	NA	1.7 E-4	2.3 E-4	NA	NA	8.0 E-4	2.2 E-3	NA	1.3 E-4	NA	NA
03D-SP135	10	3.7 E-6	5.2 E-5	NA	NA	NA	NA	3.1 E-4	NA	NA	6.0 E-3	1.7 E-4	7.4 E-6	4.2 E-6	NA	2.7 E-5	1.3 E-4	NA	1.0 E-1	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-4	6.8 E-5	1.3 E-6	NA	4.1 E-3	2.1 E-2	NA	6.1 E-3	NA	NA
03D-SP136	10	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	NA	3.1 E-4	NA	5.2 E-6	NA	NA	9.0 E-6	7.4 E-6	NA	NA	2.7 E-5	NA
03D-SP137	10	NA	4.3 E-5	NA	NA	NA	NA	1.1 E-4	NA	NA	8.3 E-3	NA	7.4 E-6	8.4 E-6	NA	NA	3.3 E-5	NA	8.9 E-3	NA	NA
03D-SP138	10	NA	2.0 E-4	NA	NA	NA	NA	3.1 E-4	NA	NA	2.9 E-4	3.3 E-4	3.1 E-6	1.8 E-4	1.2 E-4	2.8 E-5	9.2 E-5	NA	7.2 E-4	7.2 E-5	NA
03D-SP138	19	1.1 E-5	6.6 E-4	NA	NA	NA	NA	1.6 E-4	NA	NA	5.7 E-4	2.0 E-3	NA	4.9 E-4	3.0 E-4	NA	3.6 E-5	NA	9.5 E-4	3.4 E-5	NA
03D-SP138	30	3.0 E-6	1.1 E-4	NA	NA	2.7 E-6	8.5 E-4	3.8 E-4	NA	NA	1.1 E-4	8.6 E-4	1.3 E-6	6.1 E-5	2.5 E-5	2.1 E-5	4.8 E-5	NA	6.6 E-2	4.4 E-5	7.4 E-5
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	4.7 E-4	2.1 E-5	NA
03D-SP139	20	NA	NA	NA	NA	3.3 E-6	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	1.0 E-4	NA	5.2 E-4	6.0 E-5	NA
03D-SP139	28	NA	1.7 E-5	NA	NA	NA	4.4 E-4	1.1 E-3	NA	NA	NA	NA	1.4 E-6	7.1 E-8	NA	9.3 E-5	1.3 E-4	NA	4.1 E-3	3.0 E-5	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	3.3 E-6	NA	NA	2.4 E-5	1.6 E-5	NA	1.4 E-4	7.1 E-6	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	5.8 E-4	3.2 E-5	NA
03D-SP141	20	NA	NA	NA	NA	2.1 E-6	4.4 E-4	5.1 E-4	NA	NA	NA	NA	3.3 E-6	2.5 E-7	NA	1.5 E-4	1.5 E-4	NA	3.3 E-4	4.1 E-5	NA
03D-SP142	10	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	6.2 E-4	NA	NA	8.4 E-4	1.2 E-4	2.3 E-5	3.8 E-5	NA	9.5 E-3	1.6 E-5	NA
03D-SP142	20	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	2.9 E-4	NA	4.0 E-6	3.3 E-4	NA	7.5 E-5	1.3 E-4	NA	3.3 E-3	NA	NA
03D-SP142	30	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	6.1 E-3	NA	NA	NA	NA	1.8 E-2	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	NA	8.6 E-5	NA	NA	4.2 E-3	NA	NA	1.1 E-5	NA	NA	1.4 E-5	NA	1.2 E-2	2.3 E-5	NA
03D-SP143	20	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.6 E-3	3.4 E-5	1.4 E-6	5.4 E-6	NA	1.1 E-5	2.1 E-5	NA	4.7 E-3	2.3 E-5	NA
03D-SP143	30	NA	NA	NA	NA	NA	NA	7.4 E-4	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	1.1 E-5	4.9 E-3	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-6	NA	1.3 E-2	7.6 E-6	NA
03D-SP144	20	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	4.3 E-6	5.9 E-6	NA	1.0 E-2	5.4 E-6	NA
03D-SP144	30	4.8 E-5	2.7 E-4	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	3.6 E-3	3.7 E-6	NA	NA	9.4 E-4	5.2 E-3	NA	6.6 E-3	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	6.2 E-3	NA	NA	1.9 E-5	NA	7.4 E-6	2.0 E-5	NA	1.2 E-3	1.2 E-5	NA
03D-SP145	20	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	3.8 E-4	NA	NA	9.3 E-7	NA	9.6 E-6	1.5 E-5	NA	7.8 E-5	1.1 E-5	NA
03D-SP146	10	4.4 E-6	3.0 E-4	NA	NA	NA	2.8 E-3	1.5 E-4	NA	NA	9.7 E-5	7.1 E-4	NA	1.2 E-3	3.6 E-4	6.6 E-6	1.1 E-5	NA	7.5 E-2	9.7 E-6	7.7 E-4
03D-SP146	20	1.2 E-5	3.6 E-4	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	2.4 E-3	NA	5.5 E-4	1.7 E-4	2.1 E-5	4.3 E-5	NA	3.1 E-2	2.4 E-5	1.7 E-3
03D-SP146	27	6.8 E-5	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-3	NA	3.2 E-3	5.4 E-4	NA	NA	NA	1.1 E-2	NA	2.0 E-3
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3	9.3 E-4	NA	1.5 E-4	NA	NA	NA	NA	1.3 E-2	NA	NA
03D-SP147	20	NA	2.4 E-5	NA	NA	NA	1.1 E-3	1.4 E-4	NA	NA	1.9 E-4	3.3 E-4	NA	5.3 E-6	NA	9.6 E-6	2.4 E-5	NA	7.1 E-4	2.4 E-5	NA
03D-SP147	27	7.5 E-5	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	1.8 E-2	NA	1.8 E-4	NA	NA	1.0 E-4	NA	3.7 E-3	NA	4.2 E-4
03D-SP148	10	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	7.0 E-4	NA	3.0 E-6	NA	NA	1.2 E-5	2.0 E-5	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	1.6 E-5	NA	7.5 E-6	8.6 E-6	NA	NA	9.1 E-6	NA
03D-SP149	20	NA	NA	NA	NA	NA	8.2 E-4	8.4 E-4	NA	NA	NA	NA	6.4 E-6	5.5 E-7	NA	7.4 E-5	6.1 E-5	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	NA	8.9 E-7	NA	NA	3.3 E-6	NA	5.3 E-5	NA	NA
03D-SP84	15	NA	2.5 E-5	NA	NA	NA	NA	2.7 E-4	NA	NA	8.6 E-5	5.3 E-5	NA	7.7 E-6	NA	1.3 E-5	1.6 E-4	NA	6.5 E-4	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	6.8 E-5	NA	NA	6.3 E-6	NA	3.8 E-6	1.7 E-5	NA	3.7 E-4	1.8 E-5	NA
03D-SP85	25	7.0 E-4	2.6 E-3	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	3.9 E-1	5.0 E-5	7.9 E-5	NA	6.1 E-3	4.1 E-2	NA	3.3 E-1	NA	NA
03D-SP85	30	NA	NA	NA	NA	NA	3.7 E-4	4.1 E-4	NA	NA	NA	3.3 E-5	2.4 E-6	2.4 E-7	NA	1.9 E-5	3.5 E-5	NA	6.2 E-4	1.5 E-5	NA
03D-SP86	10	8.0 E-6	NA	NA	NA	NA	NA	7.9 E-5	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	1.5 E-5	NA	3.6 E-4	2.3 E-5	NA
03D-SP86	20	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-6	NA	1.1 E-4	1.4 E-5	NA
03D-SP87	10	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA	NA	1.3 E-5	2.8 E-7	NA	2.4 E-5	4.2 E-5	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	2.7 E-4	NA	NA	1.6 E-6	NA	1.4 E-5	3.8 E-5	NA	7.0 E-3	NA	NA
03D-SP88	20	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	8.5 E-8	NA	2.5 E-5	4.1 E-5	NA	3.8 E-3	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	4.0 E-1	NA	NA

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP90	10	6.2 E-6	1.9 E-4	NA	NA	NA	NA	3.8 E-4	NA	NA	3.2 E-3	7.1 E-4	2.2 E-5	7.3 E-5	NA	9.3 E-5	6.7 E-4	NA	3.3 E-3	NA	NA
03D-SP90	20	2.5 E-6	3.6 E-5	NA	NA	NA	NA	1.4 E-4	NA	NA	8.3 E-4	1.7 E-4	7.3 E-6	1.6 E-5	NA	2.2 E-5	1.3 E-4	NA	1.7 E-3	NA	NA
03D-SP91	10	NA	NA	NA	NA	NA	1.2 E-3	1.3 E-4	NA	NA	2.9 E-4	NA	4.2 E-6	7.2 E-7	NA	2.3 E-5	1.0 E-5	NA	6.5 E-4	5.7 E-5	NA
03D-SP91	20	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	1.0 E-3	1.1 E-4	1.6 E-6	1.4 E-6	NA	7.5 E-6	4.5 E-6	NA	1.2 E-3	1.1 E-5	NA
03D-SP92	10	4.8 E-6	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	3.0 E-4	3.9 E-4	7.0 E-6	1.0 E-5	NA	8.8 E-6	2.3 E-5	NA	1.7 E-3	NA	NA
03D-SP92	20	4.3 E-6	2.9 E-5	NA	NA	NA	NA	2.3 E-4	NA	NA	2.1 E-3	5.0 E-4	6.1 E-6	8.5 E-6	NA	1.6 E-5	3.5 E-5	NA	6.5 E-3	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	2.5 E-5	NA	NA	4.0 E-4	NA	2.4 E-3	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	4.5 E-5	NA	3.4 E-6	1.1 E-6	NA	1.4 E-5	5.0 E-5	NA	5.8 E-5	NA	NA
03D-SP94	15	NA	2.6 E-5	NA	NA	NA	NA	6.2 E-5	NA	NA	5.1 E-4	2.3 E-4	NA	1.6 E-5	NA	NA	5.5 E-6	NA	6.0 E-2	NA	NA
03D-SP94	25	NA	NA	NA	NA	NA	4.4 E-4	2.0 E-4	NA	NA	1.5 E-4	5.9 E-5	9.8 E-6	1.6 E-6	NA	3.0 E-5	3.9 E-5	NA	1.7 E-2	NA	NA
03D-SP95	10	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	3.7 E-4	NA	NA	NA	NA	1.8 E+0	NA	NA
03D-SP95	18	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	1.6 E-4	NA	NA	NA	NA	9.3 E-1	NA	NA
03D-SP96	10	NA	NA	NA	NA	NA	2.0 E-3	5.9 E-4	NA	NA	1.5 E-2	NA	7.4 E-5	6.6 E-7	NA	1.7 E-4	9.3 E-5	NA	1.1 E-3	NA	NA
03D-SP96	17	NA	NA	NA	NA	NA	2.3 E-3	2.9 E-4	NA	NA	1.3 E-2	NA	8.2 E-6	5.3 E-7	NA	5.8 E-5	8.7 E-5	NA	5.1 E-4	NA	NA
03D-SP99	10	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	3.4 E+0	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	4.8 E-5	NA	1.1 E-5	1.5 E-5	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	NA	NA	NA	7.2 E-6	NA	5.0 E-6	2.3 E-5	NA	NA	7.3 E-6	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA
11D-SP27	20	NA	NA	NA	NA	NA	5.7 E-4	2.4 E-4	NA	NA	NA	NA	1.6 E-6	NA	NA	3.8 E-5	6.1 E-5	NA	8.4 E-5	6.0 E-6	NA
11D-SP28	10	NA	NA	NA	NA	NA	7.7 E-4	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	2.3 E-5	NA	NA	NA	NA
11D-SP28	20	2.5 E-6	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	8.3 E-4	7.6 E-5	NA	7.6 E-7	NA	NA	NA	NA	2.1 E-4	3.8 E-6	NA
11D-SP29	10	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	4.3 E-6	NA	3.3 E-5	8.0 E-5	NA	NA	2.7 E-5	NA
11D-SP29	30	2.3 E-6	3.3 E-4	NA	NA	2.1 E-6	3.1 E-4	1.6 E-4	NA	NA	NA	7.7 E-5	NA	1.9 E-5	6.7 E-6	1.2 E-4	5.5 E-4	NA	NA	3.2 E-5	NA
11D-SP30	10	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	1.0 E-4	NA	NA	1.5 E-5	1.4 E-5	1.8 E-4	3.9 E-4	NA	NA	NA	NA
11D-SP30	20	7.7 E-6	8.3 E-5	NA	NA	NA	NA	7.4 E-5	NA	NA	3.2 E-4	2.1 E-4	NA	6.0 E-6	8.9 E-6	1.7 E-4	7.0 E-4	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-7	NA	NA	8.1 E-5	NA	NA	2.1 E-5	NA
11D-SP31	20	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	9.1 E-5	1.6 E-4	5.0 E-5	NA	1.0 E-6	NA	5.1 E-6	1.1 E-4	NA	NA	2.0 E-5	NA
11D-SP31	30	6.1 E-6	1.7 E-5	NA	NA	1.2 E-6	NA	5.0 E-5	NA	NA	1.8 E-4	2.9 E-4	NA	4.3 E-7	NA	9.9 E-5	2.5 E-4	NA	NA	2.1 E-5	NA
50D-SP01	10	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	5.2 E-7	NA	8.5 E-6	1.3 E-5	NA	1.7 E-3	NA	NA
50D-SP01	20	NA	NA	NA	NA	NA	4.4 E-4	2.6 E-4	NA	NA	NA	NA	7.5 E-6	NA	NA	5.4 E-5	2.6 E-4	NA	3.2 E-4	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	NA	1.3 E-3	NA	NA
51D-SP04	20	NA	NA	NA	NA	NA	5.7 E-4	2.9 E-4	NA	NA	NA	NA	7.3 E-5	NA	NA	1.1 E-4	1.6 E-4	NA	2.1 E-4	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	7.6 E-4	NA	NA
A20-B34-SP01	20	NA	3.5 E-5	NA	NA	NA	NA	1.8 E-4	NA	7.9 E-5	NA	NA	2.3 E-6	NA	NA	2.6 E-5	6.4 E-5	NA	2.9 E-4	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	5.1 E-4	9.9 E-5	NA	NA	NA	NA	1.8 E-6	NA	NA	1.6 E-5	1.5 E-5	NA	1.7 E-4	1.1 E-5	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	4.3 E-5	NA	5.6 E-3	1.3 E-5	NA
A20-B34-SP03	29	NA	NA	NA	NA	1.7 E-6	3.0 E-4	1.8 E-4	NA	2.0 E-4	3.2 E-5	4.4 E-5	1.0 E-6	NA	NA	3.0 E-5	4.6 E-5	NA	4.6 E-3	2.9 E-5	NA
A20-RB37-SP01	10	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	5.5 E-3	NA	NA	NA	NA	6.6 E-1	NA	NA
A20-RB37-SP01	20	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	3.6 E-3	NA	NA	NA	NA	4.2 E-1	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	2.3 E-4	NA	1.4 E-2	NA	NA
A20-RB37-SP02	10	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	1.4 E-5	NA	8.5 E-2	2.5 E-5	NA
A20-RB37-SP02	20	NA	NA	NA	NA	NA	6.7 E-4	1.1 E-4	NA	NA	NA	NA	1.6 E-6	1.5 E-7	NA	1.6 E-5	2.6 E-5	NA	1.0 E-3	3.3 E-5	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	2.2 E-7	NA	1.3 E-5	2.7 E-5	NA	3.3 E-3	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	1.9 E-7	NA	9.6 E-6	2.0 E-5	NA	2.3 E-3	NA	NA
A20-RX73-SP01	10	NA	6.6 E-5	NA	NA	NA	NA	9.6 E-5	NA	NA	5.6 E-3	NA	NA	NA	NA	3.8 E-5	7.1 E-6	NA	1.2 E-3	NA	NA
A20-RX73-SP01	20	NA	2.7 E-4	NA	NA	NA	1.1 E-3	2.3 E-4	NA	NA	2.1 E-3	NA	1.9 E-6	8.1 E-8	NA	8.8 E-4	3.5 E-5	NA	1.1 E-3	NA	NA
A20-ST01-1-SP01	10	4.2 E-6	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	1.4 E-4	NA	NA	1.9 E-5	NA	8.5 E-6	1.3 E-5	NA	2.4 E-3	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	7.1 E-5	NA	NA	NA	NA	1.8 E-6	NA	NA	1.2 E-5	1.2 E-5	NA	2.6 E-4	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	9.7 E-5	NA	NA	3.0 E-4	NA	4.8 E-6	6.9 E-5	NA	9.8 E-6	1.4 E-5	NA	4.6 E-3	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	3.8 E-4	3.7 E-4	NA	NA	2.2 E-4	NA	2.4 E-6	1.3 E-5	NA	5.4 E-5	1.0 E-4	NA	6.2 E-4	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	4.8 E-6	NA	NA	1.1 E-5	8.5 E-6	NA	7.7 E-4	2.9 E-5	NA
A20-ST01-3-SP01	20	NA	NA	7.1 E-4	NA	NA	5.1 E-4	6.9 E-4	NA	NA	NA	NA	2.0 E-5	NA	NA	3.4 E-4	1.6 E-3	NA	4.6 E-4	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	2.3 E-4	1.5 E-4	NA	NA	4.2 E-4	7.7 E-4	NA	NA	NA	NA
A20-ST02-SP01	30	NA	1.5 E-5	NA	NA	NA	2.9 E-4	1.2 E-3	NA	NA	NA	1.2 E-4	3.7 E-6	NA	NA	4.0 E-4	3.6 E-4	NA	2.7 E-4	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	NA	NA	9.2 E-4	NA	NA

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	1.8 E-6	NA	NA	6.4 E-6	1.1 E-5	NA	4.9 E-4	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	NA	1.2 E-3	3.5 E-4	NA	NA	NA	NA	2.3 E-6	5.5 E-8	NA	5.0 E-5	1.3 E-4	NA	2.1 E-4	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	NA	5.1 E-4	3.4 E-5	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	6.5 E-6	NA	1.5 E-4	9.6 E-6	NA
A20-ST02-SP03	30	NA	NA	NA	NA	NA	3.1 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	1.5 E-5	NA	1.1 E-4	1.6 E-5	NA
A20-ST02-SP04	30	NA	NA	NA	NA	NA	1.7 E-2	2.5 E-4	NA	NA	NA	NA	9.0 E-7	NA	NA	2.1 E-5	3.7 E-5	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	9.7 E-4	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	1.9 E-1	NA	3.3 E-5	NA	NA	3.2 E-5	NA	3.0 E-3	4.6 E-5	1.7 E-3
A20-ST05-SP01	30	1.0 E-3	8.4 E-3	4.4 E-3	NA	NA	NA	NA	NA	NA	7.6 E-3	1.7 E-1	NA	1.3 E-4	NA	1.8 E-5	2.4 E-5	NA	8.4 E-4	4.3 E-5	3.1 E-4
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	1.2 E-5	NA	1.4 E-3	2.5 E-5	NA
A20-ST05-SP02	20	NA	NA	NA	NA	NA	7.3 E-4	4.9 E-5	NA	NA	NA	NA	1.8 E-6	8.4 E-8	NA	8.8 E-6	1.5 E-5	NA	1.1 E-3	2.3 E-5	NA
A20-ST05-SP03	10	4.6 E-5	7.9 E-4	NA	NA	NA	7.7 E-4	8.7 E-5	NA	NA	4.1 E-4	3.2 E-3	NA	6.9 E-5	NA	1.7 E-5	1.9 E-4	NA	3.9 E-3	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	1.3 E-6	NA	1.9 E-5	4.2 E-5	NA	1.8 E-4	1.8 E-5	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	3.2 E-5	NA	NA	1.3 E-5	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	NA	2.2 E-5	NA	6.2 E-5	3.2 E-5	NA	1.1 E-2	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	NA	NA	NA	1.3 E-6	2.1 E-5	NA	8.8 E-6	1.2 E-5	NA	5.5 E-3	NA	NA
A20-ST14-SP01	10	NA	1.5 E-4	NA	NA	NA	NA	8.7 E-5	NA	NA	7.2 E-4	NA	NA	2.7 E-4	NA	NA	9.0 E-6	NA	1.0 E-2	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.2 E-4	NA	NA	9.3 E-5	NA	7.4 E-6	2.0 E-5	NA	9.7 E-4	2.7 E-5	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	1.1 E-5	NA	1.4 E-5	2.5 E-5	NA	9.2 E-3	2.1 E-5	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	6.5 E-6	NA	2.4 E-5	4.1 E-5	NA	7.1 E-3	2.4 E-5	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	5.3 E-6	NA	9.7 E-5	7.0 E-6	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	5.4 E-4	5.8 E-5	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	1.1 E-5	NA	NA	5.5 E-6	NA

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP100	10	4.4 E-4	NA	5.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E+0
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-1
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E+2
03D-SP102	28	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E+1
03D-SP103	10	1.3 E-3	NA	7.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+1
03D-SP103	20	1.4 E-4	NA	7.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-1
03D-SP104	10	1.1 E-2	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E+0
03D-SP104	20	2.5 E-2	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+1
03D-SP105	10	1.1 E-2	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E+0
03D-SP106	15	4.2 E-5	9.8 E-4	1.1 E-6	9.4 E-4	4.2 E-5	3.4 E-6	9.4 E-5	NA	2.4 E-5	8.7 E-6	4.0 E-6	9.2 E-7	NA	NA	2.0 E-4	1.3 E-4	NA	NA	1.4 E-4	6.5 E-2
03D-SP106	25	6.4 E-2	3.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	NA	NA	3.7 E+0
03D-SP106	30	4.0 E-2	1.9 E-2	2.1 E-4	NA	5.0 E-3	NA	NA	NA	NA	6.2 E-4	NA	8.3 E-5	NA	NA	NA	NA	NA	NA	8.0 E-4	1.7 E+0
03D-SP107	10	6.6 E-2	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	1.6 E+0
03D-SP107	20	5.2 E-3	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2
03D-SP107	29	7.3 E-2	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	1.6 E+0
03D-SP108	10	2.5 E-4	2.9 E-4	7.0 E-6	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-1
03D-SP109	10	1.8 E-3	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1
03D-SP109	20	4.8 E-2	8.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E+0
03D-SP109	30	1.2 E-4	8.9 E-5	4.7 E-7	NA	NA	1.0 E-5	NA	1.1 E-6	6.5 E-5	2.0 E-6	NA	1.5 E-7	7.2 E-6	NA	4.8 E-5	1.8 E-5	NA	NA	3.2 E-5	1.2 E-2
03D-SP110	10	7.0 E-4	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1
03D-SP110	20	2.0 E-4	NA	1.2 E-6	NA	2.1 E-5	2.3 E-6	NA	NA	2.4 E-5	5.6 E-6	NA	2.5 E-7	3.7 E-6	NA	2.0 E-5	NA	NA	NA	1.6 E-5	2.0 E-2
03D-SP111	10	3.1 E-4	NA	1.1 E-5	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	6.8 E-1
03D-SP111	20	NA	NA	NA	NA	3.1 E-3	1.2 E-6	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	1.2 E-2
03D-SP112	10	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	1.6 E-5	4.7 E-3
03D-SP112	20	NA	NA	NA	NA	2.7 E-3	2.0 E-6	1.7 E-5	NA	2.7 E-5	4.1 E-6	NA	2.4 E-7	NA	NA	7.6 E-5	3.1 E-5	NA	NA	7.1 E-5	4.5 E-3
03D-SP113	10	1.4 E-5	NA	NA	NA	4.5 E-3	NA	2.9 E-5	NA	1.2 E-5	7.3 E-6	NA	5.8 E-7	NA	NA	8.9 E-5	4.9 E-5	NA	NA	4.8 E-5	1.3 E-2
03D-SP113	20	NA	3.1 E-3	NA	NA	1.1 E-2	NA	NA	NA	NA	8.5 E-4	NA	8.7 E-5	NA	NA	NA	NA	NA	NA	1.4 E-3	6.5 E-1
03D-SP114	10	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	2.3 E-5	NA	NA	NA	4.5 E-6	NA	3.7 E-5	NA	NA	NA	1.6 E-5	9.0 E-4
03D-SP114	20	NA	NA	NA	NA	NA	5.8 E-6	NA	5.6 E-7	5.6 E-5	2.5 E-6	NA	NA	1.3 E-5	NA	3.5 E-5	1.7 E-5	NA	NA	9.1 E-5	1.4 E-3
03D-SP115	10	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
03D-SP116	10	5.4 E-5	NA	NA	1.7 E-3	2.9 E-3	NA	1.6 E-4	NA	NA	7.5 E-6	NA	8.4 E-7	9.2 E-6	NA	3.6 E-4	1.6 E-4	NA	NA	9.5 E-5	1.2 E-2
03D-SP117	10	1.1 E-4	NA	1.7 E-6	4.6 E-4	1.1 E-2	NA	5.4 E-5	8.5 E-7	2.5 E-5	3.4 E-5	NA	2.0 E-6	6.9 E-6	NA	2.4 E-4	7.4 E-5	NA	7.0 E-6	1.8 E-4	2.6 E-2
03D-SP118	10	1.0 E-4	NA	3.4 E-6	NA	7.9 E-3	NA	NA	NA	3.3 E-5	1.3 E-5	NA	1.5 E-6	1.6 E-5	NA	1.5 E-4	5.4 E-5	NA	1.3 E-5	9.0 E-5	1.8 E-1
03D-SP118	20	4.0 E-5	NA	NA	NA	1.5 E-2	NA	NA	9.9 E-7	4.2 E-5	1.8 E-5	NA	2.5 E-5	1.8 E-5	NA	8.8 E-5	3.4 E-5	NA	8.1 E-6	1.7 E-4	4.1 E-2
03D-SP119	10	4.9 E-3	NA	3.0 E-6	1.5 E-3	4.9 E-3	NA	1.4 E-4	NA	NA	1.8 E-5	NA	NA	NA	NA	4.5 E-4	1.5 E-4	NA	NA	1.5 E-4	1.4 E-1
03D-SP119	20	2.0 E-2	3.0 E-4	NA	1.0 E-3	2.8 E-3	NA	9.6 E-5	NA	NA	1.2 E-5	NA	1.6 E-5	NA	NA	3.0 E-4	1.4 E-4	NA	NA	1.2 E-4	2.2 E-1
03D-SP119	29	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-3	NA	2.0 E-4	NA	NA	1.3 E-2	NA	NA	NA	4.6 E-3	6.2 E+0
03D-SP120	10	7.7 E-5	NA	8.0 E-7	1.2 E-3	3.3 E-3	NA	1.2 E-4	NA	1.8 E-5	2.1 E-5	NA	1.1 E-6	8.3 E-6	NA	2.9 E-4	1.0 E-4	NA	4.3 E-6	7.9 E-5	7.5 E-3
03D-SP120	20	2.3 E-5	NA	5.1 E-7	5.2 E-4	4.5 E-3	NA	4.2 E-5	NA	1.1 E-5	1.0 E-5	NA	NA	7.1 E-6	NA	2.3 E-4	6.8 E-5	NA	8.4 E-6	4.3 E-4	9.2 E-3
03D-SP121	15	5.4 E-3	1.0 E-2	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E+0
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E+0
03D-SP122	10	1.1 E-4	1.4 E-3	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	5.4 E-5	NA	NA	NA	2.6 E-5	1.3 E-1
03D-SP122	20	7.4 E-4	5.3 E-3	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	8.3 E-5	NA	NA	NA	NA	NA	NA	NA	2.0 E-1
03D-SP122	30	1.8 E-3	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	4.4 E-5	4.9 E-5	NA	NA	NA	2.8 E-5	2.6 E-3
03D-SP123	20	NA	NA	NA	1.8 E-4	NA	4.1 E-6	2.2 E-5	NA	3.1 E-5	NA	NA	NA	1.0 E-5	NA	6.6 E-5	3.1 E-5	NA	NA	1.0 E-4	2.5 E-3
03D-SP124	10	NA	NA	NA	2.2 E-3	3.7 E-3	NA	1.9 E-4	NA	NA	1.5 E-5	NA	NA	7.4 E-6	NA	3.6 E-4	1.6 E-4	6.6 E-5	NA	8.7 E-5	7.2 E-3
03D-SP124	20	1.6 E-5	NA	NA	9.9 E-4	3.9 E-3	NA	1.0 E-4	NA	NA	3.2 E-5	NA	4.3 E-7	3.4 E-6	NA	3.3 E-4	1.4 E-4	4.4 E-5	NA	8.8 E-5	6.2 E-3
03D-SP125	10	2.1 E-4	NA	NA	NA	1.8 E-2	NA	NA	1.9 E-6	1.0 E-4	1.6 E-4	NA	NA	NA	4.2 E-4	1.5 E-4	4.9 E-5	NA	8.8 E-6	2.1 E-4	2.2 E-2
03D-SP125	20	6.5 E-3	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	8.0 E-5	NA	1.8 E-6	NA	7.2 E-5	1.1 E-4	4.8 E-5	NA	1.6 E-5	1.5 E-4	2.5 E-2
03D-SP126	10	3.8 E-5	4.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	2.5 E-5	NA	NA	NA	2.0 E-5	1.6 E-3
03D-SP126	20	4.8 E-5	2.0 E-4	NA	NA	NA	2.6 E-6	NA	NA	3.2 E-5	3.0 E-6	NA	NA	4.5 E-6	NA	4.3 E-5	1.7 E-5	NA	NA	3.6 E-5	8.9 E-4
03D-SP127	10	1.4 E-5	NA	NA	3.2 E-4	NA	NA	3.1 E-5	NA	NA	8.9 E-6	NA	NA	NA	NA	6.7 E-5	3.2 E-5	NA	NA	2.6 E-5	2.8 E-3
03D-SP127	20	5.2 E-6	NA	NA	2.0 E-4	NA	2.4 E-6	2.2 E-5	NA	2.4 E-5	NA	NA	2.0 E-7	4.0 E-6	NA	6.1 E-5	2.8 E-5	NA	NA	2.7 E-5	1.5 E-3
03D-SP128	10	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	3.4 E-4
03D-SP128	20	2.6 E-2	8.4 E-5	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	2.2 E-4	1.1 E-4	NA	NA	5.2 E-5	3.9 E-2
03D-SP128	30	6.0 E-2	NA	NA	1.6 E-3	NA	1.2 E-5	1.8 E-4	NA	NA	5.0 E-5	NA	NA	2.5 E-5	NA	9.6 E-5	NA	NA	NA	6.0 E-5	1.6 E-1
03D-SP129	15	1.2 E-4	NA	NA	4.3 E-4	NA	6.6 E-6	3.4 E-5	5.7 E-7	4.0 E-5	NA	NA	NA	1.2 E-5	NA	1.1 E-4	5.6 E-5	NA	NA	7.6 E-5	2.4 E-3

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP129	25	NA	NA	NA	NA	NA	9.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-2
03D-SP130	10	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	4.1 E-5	NA	NA	NA	6.5 E-6	NA	2.6 E-5	NA	NA	NA	3.3 E-5	5.5 E-4
03D-SP130	20	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	7.5 E-5	NA	NA	NA	7.4 E-6	NA	1.8 E-5	NA	NA	1.7 E-6	1.6 E-5	4.0 E-4
03D-SP131	10	NA	NA	NA	1.2 E-3	7.9 E-5	NA	1.1 E-4	NA	NA	4.4 E-5	NA	NA	NA	NA	2.0 E-4	8.4 E-5	7.0 E-5	NA	2.0 E-3	8.2 E-3
03D-SP131	20	NA	NA	NA	2.4 E-4	NA	2.2 E-6	2.2 E-5	NA	2.8 E-5	NA	NA	NA	3.4 E-6	NA	5.5 E-5	2.8 E-5	NA	NA	2.6 E-5	1.5 E-3
03D-SP132	10	1.9 E-4	NA	4.1 E-6	NA	NA	NA	NA	NA	1.7 E-5	5.3 E-6	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	3.0 E-5	2.5 E-3
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	4.0 E-5	NA	NA	NA	NA	1.4 E-5	NA	NA	1.2 E-4	1.1 E-4	1.0 E-5	4.0 E-6	1.3 E-5	NA	4.8 E-5	2.6 E-5	NA	NA	1.0 E-4	3.8 E-3
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	3.9 E-6	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	2.3 E-5	4.2 E-4
03D-SP133	20	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	1.7 E-5	1.7 E-6	NA	NA	4.8 E-6	NA	8.8 E-5	4.5 E-5	NA	NA	3.2 E-5	2.8 E-4
03D-SP134	10	7.7 E-6	NA	NA	3.9 E-4	NA	NA	3.5 E-5	9.5 E-7	1.3 E-5	4.4 E-6	5.3 E-6	6.3 E-7	1.5 E-5	NA	8.0 E-5	2.8 E-5	NA	NA	4.3 E-5	9.2 E-3
03D-SP134	20	NA	1.3 E-4	NA	3.2 E-4	7.3 E-3	2.0 E-6	NA	NA	2.1 E-5	4.6 E-5	2.3 E-4	1.9 E-4	2.6 E-6	NA	6.6 E-5	3.1 E-5	6.3 E-4	NA	3.8 E-5	1.8 E-2
03D-SP135	10	1.3 E-4	4.1 E-4	4.1 E-6	5.1 E-4	7.4 E-3	NA	5.4 E-5	NA	1.2 E-5	1.6 E-5	6.1 E-6	6.0 E-6	4.6 E-6	NA	2.3 E-4	8.4 E-5	NA	5.6 E-6	1.2 E-4	1.2 E-1
03D-SP135	20	NA	7.0 E-2	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	2.9 E-4	9.1 E-4	NA	NA	2.8 E-4	NA	6.3 E-4	NA	1.1 E-4	1.3 E-1
03D-SP136	10	NA	NA	NA	9.4 E-4	NA	NA	5.4 E-5	NA	6.2 E-6	NA	1.4 E-5	5.7 E-7	1.5 E-5	NA	8.9 E-5	NA	1.0 E-4	NA	3.6 E-5	4.7 E-3
03D-SP137	10	3.8 E-4	NA	1.6 E-6	1.0 E-3	6.4 E-3	NA	1.1 E-4	NA	1.4 E-5	1.3 E-5	NA	1.2 E-6	NA	NA	3.2 E-4	1.5 E-4	NA	NA	1.0 E-4	2.6 E-2
03D-SP138	10	2.6 E-3	NA	2.3 E-6	5.2 E-4	3.3 E-4	2.1 E-6	4.1 E-5	1.3 E-6	2.0 E-5	6.1 E-5	NA	3.0 E-6	1.0 E-5	5.4 E-5	1.1 E-4	4.1 E-5	NA	2.6 E-6	8.0 E-5	6.2 E-3
03D-SP138	19	6.9 E-3	NA	1.5 E-6	NA	1.4 E-4	NA	NA	NA	NA	4.7 E-5	NA	7.8 E-7	2.8 E-5	1.4 E-4	7.6 E-5	NA	NA	NA	6.0 E-5	1.3 E-2
03D-SP138	30	2.8 E-3	NA	NA	NA	NA	5.6 E-6	NA	NA	2.1 E-4	1.1 E-5	NA	NA	1.9 E-5	1.9 E-5	2.0 E-5	NA	NA	NA	6.1 E-5	7.2 E-2
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	9.7 E-5	6.4 E-4
03D-SP139	20	7.8 E-5	NA	NA	NA	NA	1.8 E-6	NA	4.7 E-7	1.5 E-5	3.9 E-6	NA	2.7 E-7	4.0 E-6	NA	2.2 E-5	NA	NA	NA	3.1 E-5	1.0 E-3
03D-SP139	28	2.0 E-4	NA	NA	NA	NA	4.5 E-6	NA	4.4 E-7	7.3 E-5	7.6 E-6	NA	5.2 E-7	7.2 E-6	NA	2.1 E-5	1.1 E-5	NA	NA	7.2 E-5	6.2 E-3
03D-SP140	10	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	1.8 E-5	4.5 E-4
03D-SP140	20	9.6 E-6	NA	NA	NA	NA	4.6 E-6	NA	NA	7.0 E-5	NA	NA	NA	3.7 E-6	NA	7.3 E-5	3.1 E-5	NA	NA	8.0 E-5	5.9 E-4
03D-SP141	10	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	2.9 E-5	NA	NA	NA	4.6 E-6	NA	2.5 E-5	NA	NA	NA	3.4 E-5	7.2 E-4
03D-SP141	20	1.2 E-5	NA	NA	NA	6.8 E-5	1.3 E-5	NA	NA	9.8 E-5	5.6 E-5	7.0 E-6	1.3 E-6	6.5 E-6	NA	5.3 E-5	2.1 E-5	8.1 E-5	NA	2.4 E-4	2.3 E-3
03D-SP142	10	2.3 E-5	NA	9.0 E-7	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	2.4 E-5	4.3 E-5	NA	NA	NA	9.4 E-5	1.2 E-2
03D-SP142	20	9.6 E-6	NA	NA	NA	NA	5.8 E-6	NA	NA	5.6 E-5	8.0 E-6	NA	6.1 E-7	1.5 E-5	NA	5.3 E-5	NA	NA	NA	1.9 E-4	4.9 E-3
03D-SP142	30	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	4.7 E-2
03D-SP143	10	1.9 E-4	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	4.6 E-6	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	3.1 E-5	1.7 E-2
03D-SP143	20	8.7 E-5	NA	8.7 E-7	NA	NA	NA	NA	NA	1.2 E-5	4.2 E-6	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	3.8 E-5	7.7 E-3
03D-SP143	30	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	7.9 E-3
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	1.4 E-5	1.3 E-2
03D-SP144	20	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	8.2 E-5	NA	NA	NA	2.5 E-6	NA	1.7 E-5	NA	NA	1.4 E-6	1.4 E-5	1.1 E-2
03D-SP144	30	NA	2.9 E-2	NA	NA	1.1 E-2	NA	NA	NA	6.2 E-5	NA	2.3 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	1.3 E-5	5.7 E-2
03D-SP145	10	3.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	7.6 E-3
03D-SP145	20	2.9 E-6	NA	NA	NA	NA	1.4 E-6	NA	NA	1.8 E-5	2.5 E-6	NA	NA	3.4 E-6	NA	1.7 E-5	NA	NA	NA	2.0 E-5	7.0 E-4
03D-SP146	10	3.1 E-3	NA	4.2 E-6	NA	NA	NA	NA	NA	4.9 E-5	1.1 E-5	NA	NA	2.0 E-5	5.4 E-5	2.8 E-5	NA	NA	NA	2.0 E-5	8.5 E-2
03D-SP146	20	2.5 E-3	NA	1.8 E-6	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	4.6 E-5	3.9 E-2
03D-SP146	27	5.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
03D-SP147	10	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1
03D-SP147	20	4.3 E-3	NA	NA	NA	NA	9.6 E-7	NA	NA	4.0 E-5	3.0 E-6	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	3.0 E-5	7.0 E-3
03D-SP147	27	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	6.7 E-5	NA	NA	NA	2.5 E-4	1.3 E-3
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	8.4 E-6	NA	NA	NA	NA	2.1 E-6	NA	NA	2.7 E-5	1.6 E-5	NA	NA	1.2 E-5	2.3 E-5	NA	NA	NA	NA	1.8 E-5	3.1 E-4
03D-SP149	20	3.0 E-6	NA	NA	NA	NA	9.0 E-6	1.8 E-5	1.6 E-6	1.2 E-4	4.2 E-6	NA	3.4 E-7	3.1 E-5	NA	1.2 E-4	5.9 E-5	NA	1.4 E-6	1.7 E-4	2.3 E-3
03D-SP150	30	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	7.3 E-6	1.2 E-6	NA	NA	8.7 E-6	NA	NA	NA	NA	NA	4.1 E-6	1.1 E-4
03D-SP84	15	5.1 E-5	1.7 E-3	NA	NA	9.0 E-4	4.4 E-6	NA	NA	3.9 E-5	9.8 E-6	NA	1.7 E-5	NA	NA	2.3 E-5	NA	NA	NA	6.3 E-5	4.1 E-3
03D-SP84	25	1.6 E-5	1.3 E-4	NA	NA	2.6 E-5	NA	NA	NA	8.9 E-6	1.1 E-5	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	1.2 E-5	7.8 E-4
03D-SP85	25	2.8 E-3	4.4 E-1	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	1.1 E-3	2.0 E-3	NA	NA	NA	2.1 E-3	2.4 E-3	NA	NA	1.3 E+0
03D-SP85	30	1.4 E-5	1.3 E-5	NA	NA	NA	1.5 E-5	NA	9.7 E-7	1.2 E-4	4.0 E-6	NA	4.3 E-7	5.6 E-6	NA	4.0 E-5	2.2 E-5	NA	NA	7.4 E-5	1.8 E-3
03D-SP86	10	1.4 E-5	NA	1.4 E-6	NA	NA	2.7 E-6	NA	NA	2.9 E-5	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	5.6 E-4
03D-SP86	20	1.2 E-5	NA	NA	NA	NA	1.8 E-6	NA	NA	2.3 E-5	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	NA	1.9 E-5	2.4 E-4
03D-SP87	10	NA	NA	NA	5.8 E-4	5.4 E-3	NA	7.9 E-5	NA	NA	6.3 E-6	NA	6.4 E-7	6.9 E-5	NA	4.9 E-4	1.2 E-4	NA	1.3 E-5	3.3 E-4	7.7 E-3
03D-SP88	10	1.4 E-4	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	2.1 E-5	7.7 E-3
03D-SP88	20	5.6 E-6	NA	NA	NA	NA	1.5 E-6	NA	NA	1.8 E-5	3.4 E-6	NA	2.6 E-7	NA	NA	3.5 E-5	1.6 E-5	NA	NA	2.8 E-5	4.2 E-3
03D-SP89	10	3.1 E-4	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP90	10	4.3 E-4	1.4 E-3	2.4 E-6	6.8 E-4	8.4 E-3	NA	1.1 E-4	NA	5.6 E-5	8.9 E-6	NA	2.1 E-5	1.6 E-5	NA	7.6 E-4	2.0 E-4	NA	6.0 E-6	3.6 E-4	2.1 E-2
03D-SP90	20	1.6 E-4	2.9 E-4	9.2 E-7	4.4 E-4	1.4 E-3	NA	5.9 E-5	NA	1.3 E-4	2.1 E-6	NA	4.0 E-6	8.2 E-6	NA	2.8 E-4	8.7 E-5	NA	5.7 E-6	1.2 E-4	6.1 E-3
03D-SP91	10	2.4 E-4	1.6 E-4	NA	4.0 E-4	NA	1.7 E-6	3.6 E-5	2.5 E-6	1.6 E-5	3.4 E-5	NA	4.4 E-7	NA	NA	1.4 E-4	4.7 E-5	NA	2.5 E-6	1.1 E-4	3.5 E-3
03D-SP91	20	1.5 E-4	3.1 E-4	5.1 E-7	2.5 E-4	NA	NA	2.4 E-5	9.9 E-7	NA	8.0 E-6	NA	NA	NA	NA	5.5 E-5	2.1 E-5	NA	1.5 E-6	3.3 E-5	3.3 E-3
03D-SP92	10	9.2 E-5	1.1 E-3	2.4 E-6	7.8 E-4	4.9 E-3	NA	7.9 E-5	NA	NA	1.5 E-5	NA	6.5 E-7	NA	NA	2.8 E-4	8.9 E-5	NA	5.6 E-6	1.2 E-4	1.0 E-2
03D-SP92	20	2.9 E-4	1.0 E-3	1.7 E-6	2.2 E-4	7.0 E-3	NA	3.1 E-5	NA	1.6 E-5	1.2 E-5	NA	4.1 E-7	NA	NA	2.3 E-4	7.3 E-5	NA	2.6 E-6	1.5 E-4	1.9 E-2
03D-SP93	15	NA	NA	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SP93	25	NA	NA	NA	2.7 E-4	1.2 E-3	NA	3.3 E-5	NA	NA	NA	NA	1.7 E-6	1.6 E-5	NA	1.4 E-4	4.6 E-5	NA	NA	7.3 E-5	2.0 E-3
03D-SP94	15	1.6 E-4	NA	8.2 E-7	4.7 E-4	NA	NA	2.2 E-5	NA	NA	8.1 E-6	NA	NA	NA	NA	4.7 E-5	2.2 E-5	NA	NA	1.2 E-5	6.1 E-2
03D-SP94	25	1.7 E-5	NA	NA	4.5 E-4	NA	2.1 E-6	4.2 E-5	NA	NA	3.6 E-6	NA	7.8 E-7	2.3 E-6	NA	2.7 E-4	1.0 E-4	NA	NA	8.8 E-5	1.9 E-2
03D-SP95	10	4.4 E-3	8.6 E-3	4.6 E-5	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	1.8 E+0
03D-SP95	18	3.1 E-3	7.0 E-3	2.7 E-5	NA	5.0 E-3	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	9.5 E-1
03D-SP96	10	3.2 E-5	NA	NA	2.2 E-3	1.5 E-3	NA	4.3 E-4	2.5 E-6	1.6 E-5	4.0 E-5	1.2 E-5	1.2 E-5	3.0 E-5	NA	2.4 E-3	9.4 E-4	2.5 E-4	NA	4.4 E-3	3.1 E-2
03D-SP96	17	4.3 E-5	NA	NA	6.1 E-4	7.5 E-4	3.9 E-6	5.6 E-5	NA	3.2 E-5	3.0 E-5	NA	4.8 E-6	1.9 E-5	NA	1.9 E-4	6.5 E-5	NA	4.0 E-6	7.5 E-4	1.9 E-2
03D-SP99	10	7.0 E-4	NA	9.9 E-5	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E+0
11D-SP26	10	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	4.3 E-6	NA	4.4 E-7	NA	NA	3.2 E-5	NA	NA	NA	2.3 E-5	2.9 E-4
11D-SP26	20	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	2.0 E-5	NA	NA	NA	4.3 E-6	NA	NA	NA	NA	NA	5.7 E-6	1.3 E-4
11D-SP27	10	1.8 E-5	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	1.3 E-5	1.6 E-3
11D-SP27	20	3.4 E-6	NA	6.1 E-7	NA	NA	4.2 E-6	NA	3.9 E-7	4.5 E-5	9.4 E-6	NA	3.7 E-7	1.2 E-5	NA	4.3 E-5	1.6 E-5	NA	NA	5.3 E-5	1.2 E-3
11D-SP28	10	2.3 E-5	NA	2.4 E-6	NA	NA	NA	NA	NA	1.8 E-5	1.0 E-5	NA	NA	6.0 E-6	NA	5.4 E-5	NA	NA	NA	5.6 E-5	1.3 E-3
11D-SP28	20	1.8 E-4	NA	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	2.5 E-5	NA	NA	NA	6.1 E-6	1.6 E-3
11D-SP29	10	1.3 E-5	NA	3.3 E-6	NA	NA	NA	NA	NA	3.9 E-5	1.5 E-5	NA	NA	5.5 E-6	NA	2.4 E-5	NA	NA	NA	8.9 E-5	4.4 E-4
11D-SP29	30	8.0 E-5	NA	NA	NA	NA	1.0 E-6	NA	NA	3.3 E-5	1.4 E-5	NA	NA	6.2 E-6	NA	1.2 E-5	NA	NA	NA	5.2 E-5	1.8 E-3
11D-SP30	10	1.0 E-5	NA	3.4 E-6	NA	4.7 E-5	NA	NA	NA	1.4 E-5	3.8 E-5	NA	1.0 E-6	4.5 E-6	NA	2.4 E-5	NA	NA	NA	7.4 E-5	1.0 E-3
11D-SP30	20	1.2 E-5	NA	2.0 E-6	NA	3.1 E-5	NA	NA	NA	1.2 E-5	1.1 E-5	NA	NA	4.0 E-6	NA	1.3 E-5	NA	NA	NA	4.2 E-5	1.7 E-3
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	2.7 E-5	NA	NA	6.9 E-6	NA	NA	NA	NA	NA	7.1 E-5	2.2 E-4
11D-SP31	20	4.8 E-6	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	3.4 E-5	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	4.7 E-5	5.8 E-4
11D-SP31	30	7.1 E-6	NA	NA	NA	1.3 E-5	NA	NA	NA	1.1 E-5	8.1 E-6	NA	5.4 E-7	2.7 E-6	NA	9.1 E-6	NA	NA	NA	1.8 E-5	9.8 E-4
50D-SP01	10	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	1.9 E-5	5.5 E-6	NA	4.4 E-7	NA	NA	4.5 E-5	NA	NA	NA	3.1 E-5	1.9 E-3
50D-SP01	20	NA	NA	NA	NA	4.8 E-4	6.9 E-6	1.9 E-5	NA	6.1 E-5	4.7 E-6	1.6 E-5	1.5 E-5	6.3 E-6	NA	8.6 E-5	4.2 E-5	1.3 E-4	1.4 E-6	8.8 E-5	2.3 E-3
51D-SP04	10	NA	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	1.6 E-5	1.5 E-3
51D-SP04	20	NA	NA	NA	NA	3.1 E-4	2.9 E-6	2.6 E-5	NA	2.8 E-5	4.7 E-6	1.6 E-4	7.0 E-6	5.4 E-6	NA	6.8 E-5	3.9 E-5	1.1 E-3	NA	5.9 E-5	3.2 E-3
A20-B34-SP01	10	1.1 E-4	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	5.4 E-5	NA	NA	NA	2.1 E-5	1.3 E-3
A20-B34-SP01	20	9.6 E-5	NA	8.2 E-6	NA	1.6 E-5	3.3 E-6	NA	NA	3.1 E-5	2.1 E-5	4.6 E-6	6.5 E-7	NA	NA	5.5 E-5	2.1 E-5	4.6 E-5	NA	3.8 E-5	1.0 E-3
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	1.1 E-5	2.8 E-3
A20-B34-SP02	20	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	3.8 E-5	NA	NA	NA	6.3 E-6	NA	5.0 E-5	2.1 E-5	NA	NA	4.5 E-5	9.9 E-4
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	3.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	1.1 E-2
A20-B34-SP03	20	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	8.7 E-5	4.3 E-6	NA	2.0 E-7	2.8 E-6	NA	1.8 E-5	NA	NA	2.9 E-6	2.9 E-5	6.2 E-3
A20-B34-SP03	29	5.3 E-6	NA	NA	NA	NA	5.0 E-6	NA	NA	5.9 E-5	2.9 E-6	NA	1.4 E-7	5.6 E-6	NA	1.7 E-5	NA	NA	NA	4.5 E-5	5.6 E-3
A20-RB37-SP01	10	4.2 E-3	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-1
A20-RB37-SP01	20	2.8 E-3	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1
A20-RB37-SP01	30	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
A20-RB37-SP02	10	7.1 E-4	NA	4.6 E-6	NA	NA	NA	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	8.6 E-2
A20-RB37-SP02	20	1.3 E-5	NA	NA	NA	NA	2.8 E-6	NA	NA	3.8 E-5	2.2 E-5	NA	NA	5.7 E-6	NA	3.5 E-5	2.0 E-5	NA	NA	4.2 E-5	2.1 E-3
A20-RC29-SP01	10	1.8 E-5	NA	8.1 E-7	NA	NA	NA	NA	NA	1.4 E-5	2.3 E-5	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	2.6 E-5	3.7 E-3
A20-RC29-SP01	20	6.1 E-5	NA	8.2 E-7	NA	NA	1.9 E-6	NA	NA	2.0 E-5	6.6 E-5	NA	NA	5.1 E-6	NA	2.8 E-5	NA	NA	NA	1.2 E-5	2.6 E-3
A20-RX73-SP01	10	5.3 E-5	NA	3.5 E-6	NA	NA	NA	NA	NA	1.2 E-5	1.2 E-5	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	7.9 E-5	7.2 E-3
A20-RX73-SP01	20	1.1 E-4	NA	1.7 E-6	NA	NA	4.1 E-6	NA	NA	4.4 E-5	7.5 E-6	NA	6.5 E-6	1.9 E-5	NA	4.5 E-5	2.2 E-5	NA	NA	2.3 E-4	6.1 E-3
A20-ST01-1-SP01	10	4.2 E-5	1.5 E-4	8.6 E-7	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	2.8 E-5	3.0 E-3
A20-ST01-1-SP01	20	8.7 E-6	NA	NA	NA	NA	3.5 E-6	NA	NA	3.3 E-5	NA	NA	NA	5.7 E-6	NA	4.5 E-5	2.2 E-5	NA	NA	3.3 E-5	5.1 E-4
A20-ST01-2-SP01	10	3.6 E-5	NA	1.3 E-6	4.4 E-4	NA	NA	8.4 E-5	NA	NA	1.1 E-5	NA	NA	NA	NA	1.3 E-4	4.8 E-5	7.8 E-5	NA	1.3 E-4	6.0 E-3
A20-ST01-2-SP01	20	9.6 E-6	NA	NA	NA	NA	3.3 E-6	NA	4.5 E-7	3.3 E-5	7.0 E-6	NA	8.3 E-7	NA	NA	5.0 E-5	2.3 E-5	NA	NA	8.7 E-5	2.0 E-3
A20-ST01-3-SP01	10	1.5 E-5	NA	NA	NA	NA	2.1 E-6	NA	NA	2.3 E-5	5.4 E-6	NA	NA	4.6 E-6	NA	1.2 E-4	4.9 E-5	NA	NA	5.3 E-5	1.2 E-3
A20-ST01-3-SP01	20	1.4 E-5	NA	NA	NA	2.8 E-3	5.8 E-6	NA	NA	5.1 E-5	8.5 E-6	6.0 E-5	9.1 E-5	NA	NA	8.6 E-5	3.4 E-5	3.4 E-4	NA	1.0 E-4	7.9 E-3
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	1.6 E-4	4.3 E-5	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	2.1 E-4	1.3 E-4	NA	NA	NA	NA	2.8 E-4	NA	4.4 E-5	1.6 E-2
A20-ST02-SP01	30	1.4 E-5	1.6 E-5	NA	NA	2.8 E-3	1.1 E-5	NA	NA	9.0 E-5	1.1 E-5	1.3 E-5	1.1 E-5	3.9 E-6	NA	3.3 E-5	2.0 E-5	NA	NA	4.8 E-5	5.7 E-3
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-4

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
A20-ST02-SP02	20	8.3 E-6	NA	NA	NA	1.5 E-3	NA	NA	NA	1.1 E-5	NA	1.2 E-4	NA	NA	NA	1.4 E-5	2.8 E-5	2.7 E-4	NA	1.5 E-5	2.6 E-3
A20-ST02-SP02	30	3.7 E-6	NA	NA	1.1 E-4	1.8 E-4	1.2 E-5	1.2 E-5	NA	1.6 E-4	2.5 E-6	8.4 E-6	3.7 E-7	1.5 E-5	NA	3.1 E-5	1.8 E-5	2.6 E-5	2.4 E-6	5.4 E-5	2.6 E-3
A20-ST02-SP03	20	2.7 E-5	NA	NA	NA	NA	3.0 E-6	NA	NA	2.6 E-5	NA	NA	NA	4.8 E-6	NA	3.3 E-5	1.7 E-5	NA	NA	7.5 E-5	8.9 E-4
A20-ST02-SP03	30	4.3 E-5	NA	NA	NA	NA	2.3 E-6	NA	NA	3.3 E-5	NA	NA	NA	3.9 E-6	NA	1.3 E-5	NA	NA	NA	3.9 E-5	7.4 E-4
A20-ST02-SP04	30	NA	NA	NA	2.8 E-4	NA	3.0 E-6	1.5 E-5	NA	5.3 E-5	3.7 E-6	NA	2.3 E-7	1.3 E-5	NA	3.1 E-5	1.5 E-5	NA	NA	2.7 E-5	1.8 E-2
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
A20-ST05-SP01	20	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	5.2 E-1
A20-ST05-SP01	30	9.7 E-3	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	2.0 E-1
A20-ST05-SP02	10	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	2.3 E-5	1.7 E-3
A20-ST05-SP02	20	1.1 E-5	NA	NA	NA	NA	3.0 E-6	NA	NA	3.2 E-5	NA	NA	NA	8.8 E-6	NA	5.8 E-5	2.5 E-5	NA	NA	2.4 E-5	2.1 E-3
A20-ST05-SP03	10	7.6 E-5	9.8 E-5	NA	NA	5.9 E-5	NA	NA	NA	2.5 E-5	6.2 E-5	NA	1.4 E-6	5.1 E-6	NA	2.7 E-5	NA	NA	NA	1.6 E-4	1.0 E-2
A20-ST05-SP04	10	2.5 E-5	NA	NA	NA	NA	5.5 E-6	NA	NA	6.2 E-5	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	5.6 E-4
A20-ST05-SP05	10	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	4.9 E-5	4.1 E-6	NA	NA	1.0 E-5	NA	4.5 E-5	NA	NA	NA	5.4 E-5	5.2 E-4
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	3.6 E-6	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	1.4 E-5	1.1 E-2
A20-ST06-SP01	20	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	1.5 E-5	1.1 E-5	NA	NA	NA	NA	4.3 E-5	1.5 E-5	NA	NA	2.5 E-5	5.8 E-3
A20-ST14-SP01	10	3.1 E-4	NA	3.0 E-6	NA	NA	7.0 E-7	NA	NA	8.7 E-6	4.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-6	1.2 E-2
A20-ST14-SP01	20	1.3 E-5	NA	5.1 E-7	NA	NA	1.0 E-6	NA	NA	1.6 E-5	5.6 E-6	NA	NA	2.7 E-6	NA	1.4 E-5	NA	NA	NA	1.9 E-5	1.5 E-3
A20-ST14-SP02	10	5.4 E-6	NA	8.8 E-7	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	9.4 E-3
A20-ST14-SP02	20	7.4 E-6	NA	6.6 E-7	NA	NA	NA	NA	NA	1.1 E-5	1.4 E-5	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	2.6 E-5	7.5 E-3
A20-ST20-SP01	10	7.6 E-5	NA	NA	NA	NA	2.8 E-6	NA	NA	4.1 E-5	NA	NA	NA	6.5 E-6	NA	4.2 E-5	NA	NA	NA	1.8 E-5	1.9 E-4
A20-ST20-SP01	20	1.3 E-5	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	5.6 E-6	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	8.1 E-6	2.0 E-4
A20-ST22-SP01	10	NA	NA	8.4 E-7	NA	NA	NA	NA	NA	1.2 E-5	5.7 E-6	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	1.3 E-5	1.2 E-4
A20-ST22-SP01	20	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	3.4 E-5	NA	NA	NA	4.8 E-6	NA	1.9 E-5	NA	NA	NA	3.7 E-5	7.1 E-4

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA
03D-SP100	20	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	NA
03D-SP102	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA
03D-SP104	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4	NA	NA
03D-SP104	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA
03D-SP105	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-4	NA	NA
03D-SP106	15	4.8 E-8	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	4.6 E-8	NA	1.1 E-8	NA	NA	NA	NA	NA	6.9 E-6	NA	NA
03D-SP106	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA
03D-SP106	30	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA
03D-SP107	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA
03D-SP107	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-6	NA	NA
03D-SP107	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA
03D-SP109	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA
03D-SP109	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA
03D-SP109	30	NA	NA	NA	NA	3.2 E-8	NA	4.9 E-8	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA	NA	1.2 E-6	8.1 E-9	NA
03D-SP110	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA
03D-SP110	20	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA
03D-SP111	10	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	1.9 E-9	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	2.4 E-6	NA	4.1 E-9	NA	NA	NA	NA	NA	3.7 E-7	NA	NA
03D-SP113	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	4.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	2.2 E-7	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP115	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	8.9 E-7	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	2.8 E-6	NA	1.1 E-8	NA	NA	NA	NA	NA	2.1 E-7	NA	NA
03D-SP117	10	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	4.4 E-7	NA	9.4 E-9	NA	NA	NA	NA	NA	1.4 E-6	NA	NA
03D-SP118	10	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	5.9 E-9	NA	NA	NA	NA	NA	1.9 E-5	7.2 E-9	NA
03D-SP118	20	NA	NA	NA	NA	1.2 E-7	NA	4.6 E-7	NA	NA	NA	NA	4.8 E-9	NA	NA	NA	NA	NA	2.7 E-6	NA	NA
03D-SP119	10	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	1.4 E-5	NA	NA
03D-SP119	20	1.7 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	7.4 E-6	NA	NA
03D-SP119	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	NA	8.8 E-9	NA	NA	NA	NA	NA	2.5 E-7	NA	NA
03D-SP120	20	NA	NA	NA	NA	NA	NA	8.4 E-7	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	1.2 E-7	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA
03D-SP122	10	4.6 E-8	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA
03D-SP122	20	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-6	NA	NA
03D-SP122	30	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA
03D-SP123	20	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	1.9 E-8	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	9.5 E-9	NA	NA	NA	NA	NA	4.1 E-8	NA	NA
03D-SP125	10	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	4.5 E-8	NA	NA
03D-SP125	20	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	4.3 E-7	NA	6.0 E-9	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
03D-SP126	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-8	4.5 E-9	NA
03D-SP126	20	1.1 E-9	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	2.2 E-8	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	1.3 E-7	2.4 E-9	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA
03D-SP128	20	1.3 E-8	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	5.5 E-7	NA	1.6 E-8	NA	NA	NA	NA	NA	7.3 E-8	NA	NA
03D-SP128	30	2.0 E-7	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	8.6 E-8	NA	NA
03D-SP129	15	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	NA	NA	6.2 E-9	NA	NA	NA	NA	NA	5.3 E-8	NA	NA

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	1.8 E-9	NA
03D-SP131	10	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	4.8 E-7	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	1.2 E-7	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	NA	NA	NA	1.9 E-8	NA	4.3 E-7	NA	NA	8.7 E-8	NA	8.0 E-9	NA	NA	NA	NA	NA	8.1 E-8	1.2 E-8	NA
03D-SP133	10	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA	3.3 E-9	NA
03D-SP134	10	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	5.6 E-9	NA	NA	NA	NA	NA	1.5 E-8	7.2 E-9	NA
03D-SP134	20	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	1.5 E-8	NA	NA
03D-SP135	10	2.3 E-9	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	3.4 E-6	NA	1.0 E-8	NA	NA	NA	NA	NA	1.2 E-5	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	NA	NA	6.9 E-7	NA	NA
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	8.4 E-9	NA
03D-SP137	10	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	4.7 E-6	NA	1.0 E-8	NA	NA	NA	NA	NA	1.0 E-6	NA	NA
03D-SP138	10	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	1.6 E-7	NA	4.2 E-9	NA	NA	NA	NA	NA	8.3 E-8	2.3 E-8	NA
03D-SP138	19	6.9 E-9	NA	NA	NA	NA	NA	7.5 E-8	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	1.1 E-8	NA
03D-SP138	30	1.8 E-9	NA	NA	NA	3.4 E-8	NA	1.8 E-7	NA	NA	6.0 E-8	NA	1.8 E-9	NA	NA	NA	NA	NA	7.6 E-6	1.4 E-8	NA
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	6.6 E-9	NA
03D-SP139	20	NA	NA	NA	NA	4.1 E-8	NA	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	1.9 E-8	NA
03D-SP139	28	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	4.6 E-7	9.4 E-9	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	1.6 E-8	2.2 E-9	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	1.0 E-8	NA
03D-SP141	20	NA	NA	NA	NA	2.6 E-8	NA	2.4 E-7	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	3.8 E-8	1.3 E-8	NA
03D-SP142	10	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	5.2 E-9	NA
03D-SP142	20	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	1.6 E-7	NA	5.4 E-9	NA	NA	NA	NA	NA	3.8 E-7	NA	NA
03D-SP142	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	7.2 E-9	NA
03D-SP143	20	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	1.5 E-6	NA	1.9 E-9	NA	NA	NA	NA	NA	5.3 E-7	7.4 E-9	NA
03D-SP143	30	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	5.6 E-7	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	2.4 E-9	NA
03D-SP144	20	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	1.7 E-9	NA
03D-SP144	30	3.0 E-8	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	7.6 E-7	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	3.9 E-9	NA
03D-SP145	20	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	3.5 E-9	NA
03D-SP146	10	2.7 E-9	NA	NA	NA	NA	NA	7.1 E-8	NA	NA	5.5 E-8	NA	NA	NA	NA	NA	NA	NA	8.5 E-6	3.1 E-9	NA
03D-SP146	20	7.4 E-9	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	7.7 E-9	NA
03D-SP146	27	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA
03D-SP147	20	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	8.1 E-8	7.7 E-9	NA
03D-SP147	27	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA
03D-SP148	10	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	4.0 E-7	NA	4.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA
03D-SP149	20	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	NA
03D-SP84	15	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	5.8 E-9	NA
03D-SP85	25	4.4 E-7	NA	NA	NA	NA	NA	7.9 E-6	NA	NA	NA	NA	6.7 E-8	NA	NA	NA	NA	NA	3.8 E-5	NA	NA
03D-SP85	30	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	NA	7.1 E-8	4.7 E-9	NA
03D-SP86	10	5.0 E-9	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	7.2 E-9	NA
03D-SP86	20	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	4.6 E-9	NA
03D-SP87	10	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA
03D-SP88	20	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP90	10	3.8 E-9	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	1.8 E-6	NA	2.9 E-8	NA	NA	NA	NA	NA	3.7 E-7	NA	NA
03D-SP90	20	1.5 E-9	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	4.7 E-7	NA	9.8 E-9	NA	NA	NA	NA	NA	2.0 E-7	NA	NA
03D-SP91	10	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	1.6 E-7	NA	5.6 E-9	NA	NA	NA	NA	NA	7.4 E-8	1.8 E-8	NA
03D-SP91	20	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	5.9 E-7	NA	2.1 E-9	NA	NA	NA	NA	NA	1.4 E-7	3.5 E-9	NA
03D-SP92	10	3.0 E-9	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	1.7 E-7	NA	9.4 E-9	NA	NA	NA	NA	NA	1.9 E-7	NA	NA
03D-SP92	20	2.7 E-9	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	1.2 E-6	NA	8.3 E-9	NA	NA	NA	NA	NA	7.4 E-7	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA	2.6 E-8	NA	4.6 E-9	NA	NA	NA	NA	NA	6.6 E-9	NA	NA
03D-SP94	15	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	NA	NA
03D-SP94	25	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA	8.3 E-8	NA	1.3 E-8	NA	NA	NA	NA	NA	2.0 E-6	NA	NA
03D-SP95	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA
03D-SP95	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA
03D-SP96	10	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	8.5 E-6	NA	1.0 E-7	NA	NA	NA	NA	NA	1.2 E-7	NA	NA
03D-SP96	17	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	7.2 E-6	NA	1.1 E-8	NA	NA	NA	NA	NA	5.8 E-8	NA	NA
03D-SP99	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA
11D-SP27	20	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	9.6 E-9	1.9 E-9	NA
11D-SP28	10	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP28	20	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	1.2 E-9	NA
11D-SP29	10	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA
11D-SP29	30	1.4 E-9	NA	NA	NA	2.7 E-8	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA
11D-SP30	10	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	NA	5.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP30	20	4.7 E-9	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA
11D-SP31	20	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	8.5 E-8	9.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA
11D-SP31	30	3.8 E-9	NA	NA	NA	1.5 E-8	NA	2.3 E-8	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA
50D-SP01	10	NA	NA	NA	NA	NA	NA	5.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA
50D-SP01	20	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	3.7 E-8	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
51D-SP04	20	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA
A20-B34-SP01	20	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	7.4 E-8	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	2.0 E-8	3.4 E-9	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-7	4.2 E-9	NA
A20-B34-SP03	29	NA	NA	NA	NA	2.2 E-8	NA	8.4 E-8	NA	1.8 E-7	1.8 E-8	NA	1.4 E-9	NA	NA	NA	NA	NA	5.2 E-7	9.1 E-9	NA
A20-RB37-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	NA
A20-RB37-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA
A20-RB37-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-6	7.8 E-9	NA
A20-RB37-SP02	20	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	1.2 E-7	1.1 E-8	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA
A20-RX73-SP01	10	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
A20-RX73-SP01	20	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	1.2 E-6	NA	2.6 E-9	NA	NA	NA	NA	NA	1.3 E-7	NA	NA
A20-ST01-1-SP01	10	2.6 E-9	NA	NA	NA	NA	NA	6.4 E-8	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	3.0 E-8	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	1.7 E-7	NA	6.5 E-9	NA	NA	NA	NA	NA	5.2 E-7	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	1.3 E-7	NA	3.2 E-9	NA	NA	NA	NA	NA	7.0 E-8	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	8.8 E-8	9.1 E-9	NA
A20-ST01-3-SP01	20	NA	NA	4.9 E-8	NA	NA	NA	3.2 E-7	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	5.2 E-8	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	30	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	3.1 E-8	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	5.5 E-8	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	1.7 E-8	3.1 E-9	NA
A20-ST02-SP03	30	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	5.1 E-9	NA
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	6.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	1.5 E-8	NA
A20-ST05-SP01	30	6.3 E-7	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	1.4 E-8	NA
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	7.8 E-9	NA
A20-ST05-SP02	20	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	1.3 E-7	7.4 E-9	NA
A20-ST05-SP03	10	2.8 E-8	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	5.7 E-9	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	6.3 E-7	NA	NA
A20-ST14-SP01	10	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	8.4 E-9	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	6.6 E-9	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-7	7.7 E-9	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	2.2 E-9	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP100	10	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-4
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-2
03D-SP102	28	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-3
03D-SP103	10	8.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-3
03D-SP103	20	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4
03D-SP104	10	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-4
03D-SP104	20	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-3
03D-SP105	10	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-4
03D-SP106	15	2.7 E-8	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP106	25	4.1 E-5	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-3
03D-SP106	30	2.6 E-5	7.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP107	10	4.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP107	20	3.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP107	29	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP108	10	1.6 E-7	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP109	10	1.1 E-6	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-5
03D-SP109	20	3.1 E-5	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-4
03D-SP109	30	7.9 E-8	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP110	10	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP110	20	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP111	10	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-5
03D-SP111	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP112	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP113	10	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP113	20	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP114	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP114	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP115	10	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP116	10	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP117	10	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP118	10	6.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP118	20	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP119	10	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP119	20	1.3 E-5	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP119	29	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP120	10	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP120	20	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP121	15	3.5 E-6	4.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-4
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-5
03D-SP122	10	6.9 E-8	5.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP122	20	4.8 E-7	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5
03D-SP122	30	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP123	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP124	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP124	20	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP125	10	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
03D-SP125	20	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP126	10	2.5 E-8	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP126	20	3.1 E-8	8.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7
03D-SP127	10	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP127	20	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP128	10	6.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP128	20	1.7 E-5	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP128	30	3.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-5
03D-SP129	15	7.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP130	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP131	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP131	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP132	10	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP132	30	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP133	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP134	10	4.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP134	20	NA	5.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP135	10	8.4 E-8	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP135	20	NA	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP137	10	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-6
03D-SP138	10	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP138	19	4.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP138	30	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP139	20	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP139	28	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP140	10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP140	20	6.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
03D-SP141	20	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP142	10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP142	20	6.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
03D-SP142	30	6.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-6
03D-SP143	10	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP143	20	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP143	30	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP144	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP144	30	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4
03D-SP145	10	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP145	20	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP146	10	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP146	20	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP146	27	3.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP147	10	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-5
03D-SP147	20	2.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP147	27	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP149	10	5.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP149	20	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP150	30	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP84	15	3.3 E-8	7.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP84	25	1.0 E-8	5.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
03D-SP85	25	1.8 E-6	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-3
03D-SP85	30	9.2 E-9	5.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP86	10	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP86	20	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP87	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP88	10	8.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP88	20	3.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP89	10	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5

Table 5.2-32
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP90	10	2.8 E-7	6.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-6
03D-SP90	20	1.0 E-7	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP91	10	1.5 E-7	6.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP91	20	9.5 E-8	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP92	10	5.9 E-8	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP92	20	1.9 E-7	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-6
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP93	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP94	15	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP94	25	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP95	10	2.8 E-6	3.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP95	18	2.0 E-6	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4
03D-SP96	10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-6
03D-SP96	17	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP99	10	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-4
11D-SP26	10	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
11D-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
11D-SP27	10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
11D-SP27	20	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
11D-SP28	10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
11D-SP28	20	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
11D-SP29	10	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
11D-SP29	30	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
11D-SP30	10	6.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
11D-SP30	20	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
11D-SP31	20	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
11D-SP31	30	4.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
50D-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
50D-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
51D-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
51D-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-B34-SP01	10	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
A20-B34-SP01	20	6.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
A20-B34-SP03	29	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
A20-RB37-SP01	10	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-5
A20-RB37-SP01	20	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5
A20-RB37-SP01	30	2.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
A20-RB37-SP02	10	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
A20-RB37-SP02	20	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-RC29-SP01	10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
A20-RC29-SP01	20	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
A20-RX73-SP01	10	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
A20-RX73-SP01	20	7.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-ST01-1-SP01	10	2.7 E-8	6.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-ST01-1-SP01	20	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
A20-ST01-2-SP01	10	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
A20-ST01-2-SP01	20	6.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
A20-ST01-3-SP01	10	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST01-3-SP01	20	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST02-SP01	20	1.0 E-7	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-ST02-SP01	30	9.4 E-9	6.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
A20-ST02-SP02	20	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-ST02-SP02	30	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST02-SP03	20	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
A20-ST02-SP03	30	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST05-SP01	20	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
A20-ST05-SP01	30	6.2 E-6	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
A20-ST05-SP02	10	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST05-SP02	20	7.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST05-SP03	10	4.9 E-8	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-ST05-SP04	10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
A20-ST14-SP01	10	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
A20-ST14-SP01	20	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-ST14-SP02	10	3.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-ST14-SP02	20	4.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7
A20-ST20-SP01	10	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
A20-ST20-SP01	20	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
03D-SP100	10												47000					430000		
03D-SP100	20	21											300					41000		
03D-SP102	10												59000					30000000		
03D-SP102	28					8700							29000					5900000		
03D-SP103	10									500			95000					830000		
03D-SP103	20												22000					130000		
03D-SP104	10		990								360		170000					640000		
03D-SP104	20		2600								820		250000					1600000		
03D-SP105	10		560								2000		140000					580000		
03D-SP106	15	180				11	32			9.2	41	27	5900		100	15		7200		
03D-SP106	25		120000										64000000					480000		
03D-SP106	30	1500	15000			16000					11000		2800000			1700		270000		
03D-SP107	10		3600			5600							1200000					98000		
03D-SP107	20		640										470000					12000		
03D-SP107	29		4900										340000					340000		
03D-SP108	10										140		86000			30		8700		
03D-SP109	10		1200										630000					16000		
03D-SP109	20		54000			41000							17000000			6400		500000		
03D-SP109	30		94		35	21	17				16	13	15000		36	46		2400	35	
03D-SP110	10		49							26	14		11000	10				11000		
03D-SP110	20		28				11			5.6	16		1600		13	51		2900		
03D-SP111	10		28				30						7200			30		56000		
03D-SP111	20						4.2						310			14		1300	5.3	
03D-SP112	10												23					240		
03D-SP112	20						27					14	130		13	18		190		
03D-SP113	10						15			340		6.9	9.2		16	22		270		
03D-SP113	20					18000							4600000			5100		2500		
03D-SP114	10						4.8			57			1200			7.8				
03D-SP114	20					18	16			57		6.5	2300		18	36				
03D-SP115	10		51							890			42000					650		
03D-SP116	10						6.7			400		18	100		15	16		150		
03D-SP117	10		5.3				27			62		16	2200		33	80		1000		
03D-SP118	10		6.9			17	11					10	10000		14	29		14000	12	
03D-SP118	20				88		110					15	24000		66	1100		3700		
03D-SP119	10	57	150			53					140	26	38000	53		20		10000		160
03D-SP119	20	830	2200				46				9100	32	48000		29	400		10000		15000
03D-SP119	29		11000			210000					5700		13000000	30000		5100		310000		
03D-SP120	10						8.6					15	310		5.1	14		180		
03D-SP120	20		6.2				200					33	3200		220	360		160		
03D-SP121	15										2300		3800000					320000		
03D-SP121	25					40000							15000000					68000		
03D-SP122	10	120	570				11			18	260		1800		56	120		9800		
03D-SP122	20	8100	19000								2800		3400000	8800				8200		
03D-SP122	30	9800	28000								2200		3400000			1000				
03D-SP123	10						5.5			16			650		5.3	6.5		180		
03D-SP123	20					24	9.3					8.6			14	11		190		
03D-SP124	10						7.6					17	1300	7.2		16		14		
03D-SP124	20						8.1					30	4800	12	10	16		56		
03D-SP125	10					15	54				4.7	14		110	110	210		33		
03D-SP125	20		26			26	45			110	46	19	73	37	130	220		140		21
03D-SP126	10					13												59	7.5	
03D-SP126	20	5.2	6.6				7.5				26	6.9	350		14	19		30		
03D-SP127	10														5.2	5.7		190		
03D-SP127	20						4.9					7.7			9.2	10		170	6.8	
03D-SP128	10																	25		
03D-SP128	20	64	1000				32			140	510	51	9800		85	340		99		580
03D-SP128	30	1400	770	54						750	18000		1800		53	55		170		3500

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
03D-SP129	15					19	12				8.6	15			30	19		55		
03D-SP129	25										8600							710		900
03D-SP130	10														5.4			36		
03D-SP130	20						5.2								10	9.7		33	5.0	
03D-SP131	10						7.2					17			24	9.6		350		
03D-SP131	20						5.4					6.5			7.1	9.8		160		
03D-SP132	10						8.6								5.3	7.8		170		
03D-SP132	20																			
03D-SP132	30		10		21	36	150			32	6.5	37	240		620	590		160	50	
03D-SP133	10						5.4						91			9.2		18		
03D-SP133	20						5.2					12			6	26			9.4	
03D-SP134	10					150	5.2					9.5			18	7.8		11	12	
03D-SP134	20		8.0			48	400				24	960			1000	2900		20		
03D-SP135	10	6.0	7.2				19			480	14	17	280		21	100		8600		
03D-SP135	20										120	290	150		5100	27000		940		
03D-SP136	10					55				25		12			7.1	5.8			14	
03D-SP137	10		6				6.8			670		17	560			26		740		
03D-SP138	10		28				19			23	27	7.2	12000	61	22	72		60	38	
03D-SP138	19	32	160				17			79	290		58000	270		45		140	31	
03D-SP138	30	13	39		37	41	61			22	190	8.3	11000	35	39	87		15000	60	29
03D-SP139	10															6.6		39	11	
03D-SP139	20				30		16								50	130		80	54	
03D-SP139	28		5.7			20	160					8.4	12		160	230		860	38	
03D-SP140	10																	31		
03D-SP140	20						14					14			30	21		22	6.4	
03D-SP141	10															7.4		48	17	
03D-SP141	20				19	14	57					14	30		190	200		51	37	
03D-SP142	10						11			50			56000	63	18	30		790	8.6	
03D-SP142	20						49			42		17	39000		94	170		510		
03D-SP142	30		1300								1700		1100000					4100		
03D-SP143	10						5.2			340			710			11		1000	12	
03D-SP143	20						16			380	4.9	6.0	640		14	27		720	21	
03D-SP143	30						120						300000				160	1100		
03D-SP144	10						7.8									4.3		1100	4.0	
03D-SP144	20						7.6								5.4	7.7		1600	4.9	
03D-SP144	30	210	100				41				800	23			1700	9400		1500		
03D-SP145	10							14		500			1300		5.8	16		98	6.4	
03D-SP145	20						16			55			110		12	20		12	9.9	
03D-SP146	10	7.1	41			50	9.2			7.8	58		81000	180	5.2	8.6		6200	5.1	110
03D-SP146	20	36	87				26				350		65000	150	26	56		4800	22	420
03D-SP146	27	270	860								1600		530000	680				2300		690
03D-SP147	10									390	76		10000					1100		
03D-SP147	20		5.7			35	16			28	48		630		12	31		110	22	
03D-SP147	27	300	450							440	3700		29000			170		760		150
03D-SP148	10						13			56		6.9			9.5	16				
03D-SP148	20																			
03D-SP149	10						10						1100		5.9	6.8			4.8	
03D-SP149	20					26	93					27	65		93	80				
03D-SP150	30						5.0						160			6.0		12		
03D-SP84	15		4.8				23			9.7	6.2		730		14	170		77		
03D-SP84	25						13			12			950		6.0	27		71	21	
03D-SP85	25	2600	810				2300				73000	260	12000		9500	64000		63000		
03D-SP85	30					18	66				7.2	15	43		35	63		140	20	
03D-SP86	10	13					4.8						26			12		30	12	
03D-SP86	20						5.3									12		17	13	
03D-SP87	10						29					30	19		19	33				
03D-SP88	10						8.1			22			110		11	30		580		

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
03D-SP88	20						19						10		31	54		590		
03D-SP89	10												890					33000		
03D-SP90	10	10	27				23			260	58	50	4900		73	530		270		
03D-SP90	20	7.5	8.8				16			120	25	31	1900		27	170		270		
03D-SP91	10					21	7.9			23		9.5	48		18	8.0		54	30	
03D-SP91	20						5.1			150	16	6.7	170		9.4	5.9		190	10	
03D-SP92	10	7.8					14			24	32	16	680		6.9	18		140		
03D-SP92	20	13	6.9				25			310	72	26	1000		20	45		1000		
03D-SP93	15									210			2400			420		290		
03D-SP93	25						16			8.0		18	160		22	78		11		
03D-SP94	15		5.0				5.3			57	27		1500			5.7		7100		
03D-SP94	25					18	27			26	11	51	240		46	61		3300		
03D-SP95	10		210								1200		25000					150000		
03D-SP95	18		220								1400		18000					130000		
03D-SP96	10					37	36			1200		170	44		130	73		89		
03D-SP96	17					65	28			1600		30	56		67	100		68		
03D-SP99	10		140										41000					280000		
11D-SP26	10						8.6						3200		8.4	12				
11D-SP26	20						6.6						850		6.3	30			6.6	
11D-SP27	10																	130		
11D-SP27	20					18	27					6.9			47	79		13	5.4	
11D-SP28	10					14	17								15	18				
11D-SP28	20	7.6	61							120	11		90					33	3.4	
11D-SP29	10						6.3						290		26	63			14	
11D-SP29	30	10	120		29	15	26				17		3400	9.3	210	1000			44	
11D-SP30	10						7.8			8.3			970	7.2	140	310				
11D-SP30	20	23	20				8.2			46	30		710	8.0	210	910				
11D-SP31	10												55			64			11	
11D-SP31	20						5.0		15	23	7.2		120		6.4	140			18	
11D-SP31	30	27	6.2		16		8.0			37	64		78		180	450			28	
50D-SP01	10						7.4						35		6.7	9.9		140		
50D-SP01	20					14	29					32			67	340		50		
51D-SP04	10						5.8									5.9		110		
51D-SP04	20					18	32					310			140	210		32		
A20-B34-SP01	10						6.9		20							8.0		63		
A20-B34-SP01	20		8.4				20		13			9.7			33	83		45		
A20-B34-SP02	10																	230		
A20-B34-SP02	20					16	11					7.5			20	20		27	9.6	
A20-B34-SP03	10						8.2											870		
A20-B34-SP03	20						44								36	56		860	12	
A20-B34-SP03	29				23	14	28		46	6.5	9.5	6.3			53	81		1000	38	
A20-RB37-SP01	10		300								280		370000					55000		
A20-RB37-SP01	20		500								190		430000					65000		
A20-RB37-SP01	30												490000			410		3100		
A20-RB37-SP02	10		38										24000			11		7000	13	
A20-RB37-SP02	20					21	12					6.8	18		20	34		160	30	
A20-RC29-SP01	10						15						15		10	21		270		
A20-RC29-SP01	20						16						22		12	26		350		
A20-RX73-SP01	10		9.1				5.8			450					30	5.6		100		
A20-RX73-SP01	20		64			34	25			300		8.2	9.5		1100	46		170		
A20-ST01-1-SP01	10	6.8					8.3			11			1300		6.7	10		200		
A20-ST01-1-SP01	20						7.9					7.6			15	15		40		
A20-ST01-2-SP01	10						5.9			24		11	4600		7.7	11		380		
A20-ST01-2-SP01	20					12	41			32		10	1500		68	130		95		
A20-ST01-3-SP01	10						9.0					11			8.3	6.7		64	15	
A20-ST01-3-SP01	20			11		16	77					84			430	2100		71		
A20-ST02-SP01	10																			

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	7.5 E-1	2.5 E+2	7.4 E+1	3.2 E+1	5.6 E+1	4.9 E+1	6.4 E+1	2.2 E+0	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	7.5 E-1	6.4 E+1	7.4 E+0	3.8 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	3.2 E-1	1.1 E+2	3.2 E+1	1.4 E+1	2.4 E+1	2.1 E+1	2.7 E+1	9.6 E-1	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	3.2 E-1	2.7 E+1	3.2 E+0	1.6 E+1
Unit Risk		8.5 E-4	NA	1.4 E-2	4.0 E-3	NA	1.5 E-2	1.9 E-2	2.2 E-2	1.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	5.2 E-4	3.1 E-3	1.0 E-3	NA
A20-ST02-SP01	20						160				33	630			520	1000				
A20-ST02-SP01	30		5.6			14	200				27	23			720	660		62		
A20-ST02-SP02	10												22					76		
A20-ST02-SP02	20						12					7.8			8	14		75		
A20-ST02-SP02	30					60	57					14	9.9		90	240		47		
A20-ST02-SP03	20					16	3.8					6.4				8.4		23	8.7	
A20-ST02-SP03	30					15	24								12	27		24	22	
A20-ST02-SP04	30					810	41					5.6			39	67				
A20-ST05-SP01	10					20														
A20-ST05-SP01	20	2900	2900							1700	27000		3900			41		470	42	420
A20-ST05-SP01	30	4500	3100	100						1600	37000		23000		32	44		190	59	120
A20-ST05-SP02	10						6.0								5.9	9.2		120	13	
A20-ST05-SP02	20					23	5.4					7.5	9.9		11	19		170	21	
A20-ST05-SP03	10	74	110			14	5.3			33	260		4600		13	150		320		
A20-ST05-SP04	10						9.7						88		15	33		15	9.4	
A20-ST05-SP05	10						18								11	25			7.1	
A20-ST06-SP01	10						3.7						1500		49	25		900		
A20-ST06-SP01	20						11					5.6	2500		11	16		850		
A20-ST14-SP01	10		21				5.3			58			18000			7.1		840		
A20-ST14-SP01	20						12			32			11000		9.3	26		150	24	
A20-ST14-SP02	10						7.7						720		11	20		760	11	
A20-ST14-SP02	20						20						770		30	53		1100	22	
A20-ST20-SP01	10																			
A20-ST20-SP01	20						4.3						320			6.9		15	6.3	
A20-ST22-SP01	10						3.5									5.1				
A20-ST22-SP01	20					17	6.4								4.9	14			5.0	

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP100	10	580		640																
03D-SP100	20									510										
03D-SP102	10																			
03D-SP102	28	12000																		
03D-SP103	10	1700		800																
03D-SP103	20	330		140																
03D-SP104	10	14000		2200																
03D-SP104	20	57000		7600																
03D-SP105	10	14000		1600																
03D-SP106	15	78	240	17	26	12	52	27		160	15	5.9	17			65	36			120
03D-SP106	25	190000	120000										23000							
03D-SP106	30	140000	8400	6400		2700					2000		2900							1300
03D-SP107	10	86000		3300							3100		610							
03D-SP107	20	12000		430																
03D-SP107	29	250000		5100																710
03D-SP108	10	320	51	78								51	33							
03D-SP109	10	2300	550																	
03D-SP109	20	110000	25000								31000									
03D-SP109	30	430	40	14			290		20	800	6.4		5.4	37		29	9.9			52
03D-SP110	10	910		120																
03D-SP110	20	460		24		7.5	43			200	12		5.7	13		7.8				17
03D-SP111	10	410		120		160														23
03D-SP111	20					1100	22			140										13
03D-SP112	10					350										12				10
03D-SP112	20					970	38	6.2		220	8.7		5.6			30	11			76
03D-SP113	10	18				910		5.9		58	9.0		7.6			20	10			29
03D-SP113	20		940			4000					1800		2000							1500
03D-SP114	10						26			110				9.7		8.2				9.8
03D-SP114	20						110		6.8	460	5.4			45		14	6			97
03D-SP115	10	250									18									
03D-SP116	10	70			33	580		32			9.3		11	20		81	32			58
03D-SP117	10	140		19	8.8	2300		11	5.8	120	42		26	15		54	15		15	110
03D-SP118	10	130		38		1600				160	16		20	35		33	11		27	55
03D-SP118	20	93				5200			12	340	38		580	64		35	12		31	180
03D-SP119	10	6400		33	28	990		29			22					100	31			92
03D-SP119	20	46000	89		35	1000		34			25		370			120	48			130
03D-SP119	29	170000									29000		6700			7800				7300
03D-SP120	10	100		8.9	22	670		24		89	26		14	18		66	21		9.2	48
03D-SP120	20	53		10	18	1600		15		91	22			25		92	24		32	460
03D-SP121	15	10000	2500	3100																
03D-SP121	25										22000		9400							
03D-SP122	10	140	240			100							340			12				16
03D-SP122	20	1700	1600								1100		1900							
03D-SP122	30	6400		4700																
03D-SP123	10										20				18	11				17
03D-SP123	20				6.1		78	7.7		250				36		26	11			110
03D-SP124	10				43	760		38			18			16		80	32	6.4		53
03D-SP124	20	36			34	1400		37			69		9.9	12		130	51	7.6		94
03D-SP125	10	270				3700			13	500	200				170	34	9.9		19	130
03D-SP125	20	15000				4900					170		41		51	44	17		61	160
03D-SP126	10	50	7.5											13		5.7				12
03D-SP126	20	110	60				49			260	6.4			16		17	5.9			38
03D-SP127	10	18			6.2			6.3			11					15	6.6			16
03D-SP127	20	12			6.8		46	7.8		200			4.6	14		24	10			29
03D-SP128	10	13								56										9.9
03D-SP128	20	60000	25								42					86	39			55
03D-SP128	30	210000			84		350	100			160			130		58				98

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP129	15	220			12		100	9.8	5.6	270				35		34	16			66
03D-SP129	25						220													
03D-SP130	10						29			200				14		5.8				20
03D-SP130	20						94			610				26		7			6.6	17
03D-SP131	10				23	16		23			55					45	17	6.7		1200
03D-SP131	20				8.3		41	7.9		230				12		22	10			28
03D-SP132	10	250		46						84	6.6					9.7				18
03D-SP132	20																			
03D-SP132	30	140					390			1500	360	29	140	69		29	14			170
03D-SP133	10									92	4.8					12				14
03D-SP133	20						26			140	3.7			17		35	16			34
03D-SP134	10	10			7.5			7.2	6.5	61	5.4	5.5	8.2	32		18	5.6			26
03D-SP134	20		40		11	2600	37			170	98	430	4300	9.3		26	11	110		40
03D-SP135	10	170	71	45	9.7	1500		11		57	20	6.3	78	10		52	17		12	76
03D-SP135	20		21000			9900						540	21000			110		110		120
03D-SP136	10				18			11		30		14	7.4	32		20		10		22
03D-SP137	10	490		18	20	1300		22		66	16		16			72	30			61
03D-SP138	10	3400		26	10	68	23	8.4	8.7	96	75		39	22	22	24	8.4		5.6	49
03D-SP138	19	16000		30		49					100		18	100	97	30				64
03D-SP138	30	9700					160			2600	36			100	20	12				99
03D-SP139	10															9.4				59
03D-SP139	20	180					34		5.7	120	8.3		6.2	14		8.6				33
03D-SP139	28	660					120		7.6	840	23		17	35		12	5.4			110
03D-SP140	10	25														9.6				11
03D-SP140	20	22					86			570				13		29	11			85
03D-SP141	10						19			140				9.9		5.6				21
03D-SP141	20	28				24	240			800	120	13	29	23		21	7.3	14		260
03D-SP142	10	30		10							13				9.9	9.6				57
03D-SP142	20	22					110			460	17		14	53		21				200
03D-SP142	30	37000													790					
03D-SP143	10	250		18							5.7					6.1				19
03D-SP143	20	200		17						95	9.0					13				40
03D-SP143	30	1300								1400										210
03D-SP144	10										17								11	8.4
03D-SP144	20						22			670				8.9		6.6			5.4	15
03D-SP144	30		13000			5800				760		66	7300							21
03D-SP145	10	46									14									12
03D-SP145	20	6.7					27			150	5.4			12		6.6				21
03D-SP146	10	4100		47						240	14			44	22	6.2				12
03D-SP146	20	5800		35						860				51						49
03D-SP146	27	18000																		
03D-SP147	10	140000																		
03D-SP147	20	10000					18			330	6.4					6.3				32
03D-SP147	27	230000																		
03D-SP148	10										7.9					15				150
03D-SP148	20																			
03D-SP149	10	11					22			130	20			27	9.3					11
03D-SP149	20	6.9					170	6.4	19	980	9		7.9	110		49	21		5.3	180
03D-SP150	30	7.2								90	3.8			45						6.7
03D-SP84	15	95	420			260	67			260	17		310			7.3				54
03D-SP84	25	46	48			12				93	30		30							16
03D-SP85	25	8300	170000			18000						2600	60000				960	530		
03D-SP85	30	50	6.1				420		18	1500	13		15	29		24	12			120
03D-SP86	10	18		16			29			140	14									10
03D-SP86	20	28					34			190				13						20
03D-SP87	10				11	1100		16			7.8		8.3	150		110	25		28	200
03D-SP88	10	180		36							17					6.3				13

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP88	20	13					28			150	7.3		5.9			14	5.8			30
03D-SP89	10	410		22																
03D-SP90	10	560	250	27	13	1700		22		270	11		270	35		170	41		13	220
03D-SP90	20	370	87	18	15	510		21		1100	4.4		91	29		110	31		22	130
03D-SP91	10	310	28		7.6		18	7.4	17	77	42		5.7			31	9.6		5.4	67
03D-SP91	20	340	94	10	8.7			8.6	12		17					22	7.4		5.8	35
03D-SP92	10	120	190	27	15	1000		16			19		8.5			62	18		12	72
03D-SP92	20	660	300	33	7.7	2500		11		130	25		9.5			90	26		10	160
03D-SP93	15					2000							160							
03D-SP93	25				12	540		15					50	71		70	21			100
03D-SP94	15	300		13	13			6.4			14					15	6.2			10
03D-SP94	25	49			20		52	19			9.9		23	10		140	47			120
03D-SP95	10	5700	1500	510		1200														60
03D-SP95	18	6900	2000	500		1700					66									53
03D-SP96	10	42			43	310		87	17	78	50	12	150	64		530	190	24		2700
03D-SP96	17	89			19	240	67	18		240	57		100	62		67	21		14	720
03D-SP99	10	920		1100		960														
11D-SP26	10	6.6								68	5.3		5.8			7.1				14
11D-SP26	20						27			160				15						6.1
11D-SP27	10	23		15							5					9.7				8.1
11D-SP27	20	7.8		12			79		4.7	370	20		8.6	43		17	5.8			56
11D-SP28	10	30		27						86	13			13		12				34
11D-SP28	20	420		100										9.4		10				6.5
11D-SP29	10	17		37						190	19			12		5.3				54
11D-SP29	30	280					29			410	46			32		7.4				85
11D-SP30	10	13		38		9.6				69	47		13	9.7		5.4				45
11D-SP30	20	28		39		11				100	23			14		5.3				45
11D-SP31	10									82	33			15						43
11D-SP31	20	11								82	72			9.8						50
11D-SP31	30	25				6.8				140	26		19	14		5.5				30
50D-SP01	10						24			90	6.8		5.8			10				19
50D-SP01	20					170	130	6.9		500	10	29	350	22		34	15	23	5.3	94
51D-SP04	10			8.3							8.3					7.0				9.6
51D-SP04	20					110	55	9.1		230	10	290	160	19		27	14	190		63
A20-B34-SP01	10	140		120									5.0			12				13
A20-B34-SP01	20	220		160		5.8	62			250	44	8.4	15			22	7.6	7.9		40
A20-B34-SP02	10															7.6				6.8
A20-B34-SP02	20						69			310				22		20	7.5			48
A20-B34-SP03	10									380	4.6									11
A20-B34-SP03	20						29			710	9.1		4.6	10		7.2			11	31
A20-B34-SP03	29	18					140			700	9.0		4.6	28		9.9				71
A20-RB37-SP01	10	5500		270							150									
A20-RB37-SP01	20	6500		500																
A20-RB37-SP01	30	1500																		
A20-RB37-SP02	10	930		51							10									9.3
A20-RB37-SP02	20	30					52			310	47			20		14	7.0			45
A20-RC29-SP01	10	24		9.0						66	28					7.4				16
A20-RC29-SP01	20	140		16			36			160	140			18		11				13
A20-RX73-SP01	10	69		39						57	15					6.6				48
A20-RX73-SP01	20	250		33			78			360	16		150	66		18	7.8			240
A20-ST01-1-SP01	10	55	26	9.5							7.4					9.1				17
A20-ST01-1-SP01	20	20					65			270				20		18	7.9			35
A20-ST01-2-SP01	10	47		14	8.4			17			14					29	9.8	7.5		79
A20-ST01-2-SP01	20	22					62		5.4	270	15		19			20	8.1			93
A20-ST01-3-SP01	10	19					22			110	6.7			10		28	10			32
A20-ST01-3-SP01	20	32				990	110			420	18	110	2100			34	12	59		110
A20-ST02-SP01	10																			

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard Child		3.8 E+0	2.2 E+1	4.5 E-1	3.2 E+2	2.2 E+1	4.5 E-1	2.2 E+1	7.5 E-1	7.1 E-1	3.2 E+0	5.6 E+0	3.7 E-1	1.3 E+0	1.1 E+1	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	7.5 E+0
Unit Hazard Adult		1.6 E+0	9.6 E+0	1.9 E-1	1.4 E+2	9.6 E+0	1.9 E-1	9.6 E+0	3.2 E-1	3.0 E-1	1.4 E+0	2.4 E+0	1.6 E-1	5.5 E-1	4.8 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	3.2 E+0
Unit Risk		1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	360	13			4400						390	3000					49		47
A20-ST02-SP01	30	51	7.1			1500	310			1100	34	38	400	20		20	11			78
A20-ST02-SP02	10									220										
A20-ST02-SP02	20	19				530				93		230				5.7	9.8	46		16
A20-ST02-SP02	30	13			5.7	100	340	6.3		1900	8.1	24	13	75		19	10	7.0	14	88
A20-ST02-SP03	20	63					57			210				17		13	6.1			80
A20-ST02-SP03	30	150					67			400				20		7.9				63
A20-ST02-SP04	30				15		87	8.2		650	12		7.9	68		19	8.3			44
A20-ST05-SP01	10																			
A20-ST05-SP01	20	700000								500										45
A20-ST05-SP01	30	34000	160								24									25
A20-ST05-SP02	10	16														12				14
A20-ST05-SP02	20	25					56			260				31		23	8.9			26
A20-ST05-SP03	10	99	17			12				120	77		18	11		6.1				100
A20-ST05-SP04	10	33					59			300	17									21
A20-ST05-SP05	10						32			240	5.1			22		10				33
A20-ST06-SP01	10									82	4.5					9.2				8.3
A20-ST06-SP01	20						28			120	23					17	5.5			27
A20-ST14-SP01	10	400		33			7.5			42	52									5.8
A20-ST14-SP01	20	29		9.9			19			130	12			9.4		5.5				20
A20-ST14-SP02	10	7.1		9.8							24									14
A20-ST14-SP02	20	17		13						90	30					10				28
A20-ST20-SP01	10	99					30			200				14		9.5				11
A20-ST20-SP01	20	31		8.0							12					7.6				8.6
A20-ST22-SP01	10			9.3						57	7.1				9.2					7.8
A20-ST22-SP01	20						69			280				17		7.5				39

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	1.6 E-1	NA	NA
03D-SP100	20	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	7.5 E-3	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	1.1 E+1	NA	NA
03D-SP102	28	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	NA	NA	7.7 E-1	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	4.4 E-5	NA	NA	NA	NA	3.1 E-1	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	2.4 E-2	NA	NA
03D-SP104	10	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	7.9 E-5	NA	NA	NA	NA	2.4 E-1	NA	NA
03D-SP104	20	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	5.8 E-5	NA	NA	NA	NA	2.9 E-1	NA	NA
03D-SP105	10	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.5 E-4	NA	6.5 E-5	NA	NA	NA	NA	2.1 E-1	NA	NA
03D-SP106	15	2.3 E-6	NA	NA	NA	1.2 E-5	1.1 E-5	NA	NA	2.5 E-6	1.0 E-5	2.4 E-7	1.8 E-6	NA	1.2 E-6	5.1 E-7	NA	1.8 E-3	NA	NA
03D-SP106	25	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	7.1 E-2	NA	NA
03D-SP106	30	9.5 E-6	1.1 E-3	NA	NA	9.0 E-3	NA	NA	NA	NA	1.4 E-3	NA	4.3 E-4	NA	NA	2.9 E-5	NA	3.3 E-2	NA	NA
03D-SP107	10	NA	8.3 E-4	NA	NA	9.5 E-3	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	3.6 E-2	NA	NA
03D-SP107	20	NA	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	2.2 E-3	NA	NA
03D-SP107	29	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	NA	4.3 E-2	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	NA	4.0 E-5	NA	NA	1.5 E-6	NA	3.2 E-3	NA	NA
03D-SP109	10	NA	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	5.9 E-3	NA	NA
03D-SP109	20	NA	6.2 E-3	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	3.9 E-3	NA	NA	1.6 E-4	NA	9.2 E-2	NA	NA
03D-SP109	30	NA	7.2 E-6	NA	6.9 E-8	1.2 E-5	3.0 E-6	NA	NA	NA	2.0 E-6	5.8 E-8	2.3 E-6	NA	2.1 E-7	7.8 E-7	NA	2.9 E-4	7.3 E-7	NA
03D-SP110	10	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	1.1 E-5	5.3 E-6	NA	5.1 E-6	7.1 E-7	NA	NA	NA	4.0 E-3	NA	NA
03D-SP110	20	NA	3.2 E-6	NA	NA	NA	2.9 E-6	NA	NA	1.1 E-6	3.0 E-6	NA	3.7 E-7	NA	1.1 E-7	1.3 E-6	NA	5.3 E-4	NA	NA
03D-SP111	10	NA	6.4 E-6	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	1.5 E-6	NA	2.1 E-2	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	7.2 E-8	NA	NA	3.6 E-7	NA	2.4 E-4	1.7 E-7	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	8.8 E-5	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	7.1 E-6	NA	NA	NA	NA	9.4 E-8	3.0 E-8	NA	1.1 E-7	4.6 E-7	NA	3.5 E-5	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	1.4 E-4	NA	9.2 E-8	4.3 E-9	NA	2.8 E-7	1.1 E-6	NA	9.9 E-5	NA	NA
03D-SP113	20	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	1.3 E-4	NA	4.6 E-4	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	2.3 E-5	NA	NA	5.6 E-7	NA	NA	4.0 E-7	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	1.5 E-5	4.2 E-6	NA	NA	1.2 E-5	NA	4.4 E-8	5.3 E-7	NA	1.6 E-7	9.2 E-7	NA	NA	NA	NA
03D-SP115	10	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	1.9 E-5	NA	NA	NA	NA	2.4 E-4	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	1.6 E-4	NA	2.4 E-7	4.6 E-8	NA	2.6 E-7	8.2 E-7	NA	5.5 E-5	NA	NA
03D-SP117	10	NA	1.2 E-6	NA	NA	NA	1.4 E-5	NA	NA	2.5 E-5	NA	2.1 E-7	1.0 E-6	NA	5.8 E-7	4.1 E-6	NA	3.7 E-4	NA	NA
03D-SP118	10	NA	1.6 E-6	NA	NA	2.9 E-5	5.7 E-6	NA	NA	NA	NA	1.3 E-7	4.6 E-6	NA	2.4 E-7	1.5 E-6	NA	5.1 E-3	7.5 E-7	NA
03D-SP118	20	NA	NA	NA	2.6 E-7	NA	2.9 E-5	NA	NA	NA	NA	1.0 E-7	5.6 E-6	NA	5.8 E-7	2.8 E-5	NA	6.8 E-4	NA	NA
03D-SP119	10	1.1 E-6	3.4 E-5	NA	NA	8.9 E-5	NA	NA	NA	NA	5.3 E-5	3.5 E-7	1.8 E-5	3.8 E-6	NA	1.0 E-6	NA	3.7 E-3	NA	3.4 E-5
03D-SP119	20	7.9 E-6	2.5 E-4	NA	NA	NA	1.2 E-5	NA	NA	NA	1.7 E-3	2.1 E-7	1.1 E-5	NA	2.5 E-7	1.0 E-5	NA	1.8 E-3	NA	1.6 E-3
03D-SP119	29	NA	8.7 E-4	NA	NA	1.2 E-1	NA	NA	NA	NA	7.4 E-4	NA	2.1 E-3	7.4 E-4	NA	9.0 E-5	NA	3.9 E-2	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	4.5 E-6	NA	NA	NA	NA	2.0 E-7	1.4 E-7	NA	8.9 E-8	7.1 E-7	NA	6.6 E-5	NA	NA
03D-SP120	20	NA	7.1 E-7	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	2.2 E-7	7.4 E-7	NA	1.9 E-6	9.2 E-6	NA	2.9 E-5	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4	NA	1.2 E-3	NA	NA	NA	NA	7.8 E-2	NA	NA
03D-SP121	25	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	1.0 E-2	NA	NA
03D-SP122	10	2.3 E-6	1.3 E-4	NA	NA	NA	5.7 E-6	NA	NA	7.4 E-6	9.8 E-5	NA	8.3 E-7	NA	9.8 E-7	6.1 E-6	NA	3.6 E-3	NA	NA
03D-SP122	20	7.7 E-5	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	7.9 E-4	3.1 E-4	NA	NA	NA	1.5 E-3	NA	NA
03D-SP122	30	6.2 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	5.2 E-4	NA	NA	1.7 E-5	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	6.5 E-6	NA	NA	3.0 E-7	NA	9.3 E-8	3.3 E-7	NA	6.6 E-5	NA	NA
03D-SP123	20	NA	NA	NA	NA	2.0 E-5	2.4 E-6	NA	NA	NA	NA	5.8 E-8	NA	NA	1.2 E-7	2.8 E-7	NA	3.5 E-5	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	2.3 E-7	6.0 E-7	5.1 E-7	NA	8.2 E-7	NA	5.1 E-6	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	2.0 E-7	1.1 E-6	4.3 E-7	8.7 E-8	4.1 E-7	NA	1.0 E-5	NA	NA
03D-SP125	10	NA	NA	NA	NA	2.5 E-5	2.8 E-5	NA	NA	NA	1.8 E-6	1.9 E-7	NA	7.9 E-6	1.9 E-6	1.1 E-5	NA	1.2 E-5	NA	NA
03D-SP125	20	NA	3.0 E-6	NA	NA	2.2 E-5	1.2 E-5	NA	NA	2.2 E-5	8.6 E-6	1.3 E-7	1.7 E-8	1.3 E-6	1.1 E-6	5.6 E-6	NA	2.6 E-5	NA	2.2 E-6
03D-SP126	10	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	4.7 E-7	NA
03D-SP126	20	4.9 E-8	7.6 E-7	NA	NA	NA	2.0 E-6	NA	NA	NA	4.9 E-6	4.6 E-8	8.1 E-8	NA	1.2 E-7	4.9 E-7	NA	5.5 E-6	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	2.9 E-7	NA	7.0 E-5	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	5.2 E-8	NA	NA	8.0 E-8	2.6 E-7	NA	3.1 E-5	2.1 E-7	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-6	NA	NA
03D-SP128	20	6.1 E-7	1.1 E-4	NA	NA	NA	8.4 E-6	NA	NA	2.9 E-5	9.6 E-5	3.4 E-7	2.3 E-6	NA	7.4 E-7	8.7 E-6	NA	1.8 E-5	NA	6.2 E-5
03D-SP128	30	8.8 E-6	5.9 E-5	6.8 E-5	NA	NA	NA	NA	NA	1.0 E-4	2.3 E-3	NA	2.8 E-7	NA	3.1 E-7	9.4 E-7	NA	2.1 E-5	NA	2.5 E-4

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
03D-SP129	15	NA	NA	NA	NA	2.1 E-5	4.2 E-6	NA	NA	NA	2.2 E-6	1.3 E-7	NA	NA	3.5 E-7	6.5 E-7	NA	1.3 E-5	NA	NA
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	7.6 E-5
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-8	NA	NA	1.3 E-5	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	2.5 E-7	NA	6.1 E-6	1.6 E-7	NA
03D-SP131	10	NA	NA	NA	NA	NA	3.8 E-6	NA	NA	NA	NA	2.3 E-7	NA	NA	4.2 E-7	4.9 E-7	NA	1.3 E-4	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	4.4 E-8	NA	NA	6.2 E-8	2.5 E-7	NA	2.9 E-5	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	4.5 E-6	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	4.0 E-7	NA	6.2 E-5	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	7.7 E-7	NA	4.1 E-8	2.0 E-5	2.6 E-5	NA	NA	4.4 E-6	8.1 E-7	1.7 E-7	3.7 E-8	NA	3.6 E-6	1.0 E-5	NA	2.0 E-5	1.0 E-6	NA
03D-SP133	10	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	4.7 E-7	NA	6.6 E-6	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	8.0 E-8	NA	NA	5.2 E-8	6.6 E-7	NA	NA	2.9 E-7	NA
03D-SP134	10	NA	NA	NA	NA	2.5 E-4	2.7 E-6	NA	NA	NA	NA	1.3 E-7	NA	NA	3.1 E-7	4.0 E-7	NA	4.0 E-6	7.5 E-7	NA
03D-SP134	20	NA	9.2 E-7	NA	NA	4.1 E-5	1.0 E-4	NA	NA	NA	4.5 E-6	6.4 E-6	NA	NA	8.7 E-6	7.4 E-5	NA	3.7 E-6	NA	NA
03D-SP135	10	1.1 E-7	1.7 E-6	NA	NA	NA	9.9 E-6	NA	NA	2.0 E-4	5.3 E-6	2.3 E-7	1.3 E-7	NA	3.7 E-7	5.1 E-6	NA	3.2 E-3	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	1.9 E-6	3.5 E-8	NA	4.5 E-5	6.9 E-4	NA	1.7 E-4	NA	NA
03D-SP136	10	NA	NA	NA	NA	9.3 E-5	NA	NA	NA	1.0 E-5	NA	1.6 E-7	NA	NA	1.2 E-7	3.0 E-7	NA	NA	8.7 E-7	NA
03D-SP137	10	NA	1.4 E-6	NA	NA	NA	3.6 E-6	NA	NA	2.7 E-4	NA	2.3 E-7	2.6 E-7	NA	NA	1.3 E-6	NA	2.7 E-4	NA	NA
03D-SP138	10	NA	6.4 E-6	NA	NA	NA	9.9 E-6	NA	NA	9.4 E-6	1.0 E-5	9.6 E-8	5.6 E-6	4.4 E-6	3.8 E-7	3.7 E-6	NA	2.2 E-5	2.4 E-6	NA
03D-SP138	19	3.2 E-7	1.9 E-5	NA	NA	NA	4.7 E-6	NA	NA	1.7 E-5	5.7 E-5	NA	1.4 E-5	1.0 E-5	NA	1.2 E-6	NA	2.7 E-5	1.0 E-6	NA
03D-SP138	30	8.2 E-8	3.0 E-6	NA	7.3 E-8	2.3 E-5	1.1 E-5	NA	NA	3.0 E-6	2.4 E-5	3.7 E-8	1.7 E-6	8.3 E-7	2.3 E-7	1.5 E-6	NA	1.8 E-3	1.2 E-6	2.1 E-6
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	1.4 E-5	6.9 E-7	NA
03D-SP139	20	NA	NA	NA	8.8 E-8	NA	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	3.3 E-6	NA	1.5 E-5	1.7 E-6	NA
03D-SP139	28	NA	4.7 E-7	NA	NA	1.2 E-5	3.0 E-5	NA	NA	NA	NA	4.0 E-8	2.0 E-9	NA	1.0 E-6	4.2 E-6	NA	1.1 E-4	8.5 E-7	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	9.4 E-8	NA	NA	2.6 E-7	5.4 E-7	NA	4.0 E-6	2.0 E-7	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	1.8 E-5	1.1 E-6	NA
03D-SP141	20	NA	NA	NA	5.6 E-8	1.2 E-5	1.5 E-5	NA	NA	NA	NA	9.4 E-8	6.9 E-9	NA	1.7 E-6	5.1 E-6	NA	9.4 E-6	1.2 E-6	NA
03D-SP142	10	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	2.0 E-5	NA	NA	2.6 E-5	4.5 E-6	3.1 E-7	1.5 E-6	NA	2.9 E-4	5.4 E-7	NA
03D-SP142	20	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	8.6 E-6	NA	1.1 E-7	9.0 E-6	NA	8.2 E-7	4.3 E-6	NA	9.4 E-5	NA	NA
03D-SP142	30	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	1.7 E-4	NA	NA	NA	NA	5.0 E-4	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	1.4 E-4	NA	NA	3.3 E-7	NA	NA	5.6 E-7	NA	3.7 E-4	7.5 E-7	NA
03D-SP143	20	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	7.8 E-5	9.2 E-7	4.0 E-8	1.5 E-7	NA	1.2 E-7	6.9 E-7	NA	1.3 E-4	6.5 E-7	NA
03D-SP143	30	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	NA	3.2 E-7	1.3 E-4	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	4.0 E-4	2.5 E-7	NA
03D-SP144	20	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	2.0 E-7	NA	2.9 E-4	1.5 E-7	NA
03D-SP144	30	1.3 E-6	7.7 E-6	NA	NA	NA	7.1 E-6	NA	NA	NA	1.0 E-4	1.0 E-7	NA	NA	9.9 E-6	1.6 E-4	NA	1.8 E-4	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	2.0 E-4	NA	NA	6.0 E-7	NA	1.0 E-7	8.2 E-7	NA	3.6 E-5	4.0 E-7	NA
03D-SP145	20	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	1.1 E-5	NA	NA	2.5 E-8	NA	1.0 E-7	5.1 E-7	NA	2.2 E-6	3.1 E-7	NA
03D-SP146	10	1.3 E-7	9.4 E-6	NA	NA	8.4 E-5	4.8 E-6	NA	NA	3.2 E-6	2.2 E-5	NA	3.8 E-5	1.3 E-5	9.1 E-8	4.4 E-7	NA	2.3 E-3	3.2 E-7	2.3 E-5
03D-SP146	20	3.4 E-7	1.0 E-5	NA	NA	NA	6.8 E-6	NA	NA	NA	6.6 E-5	NA	1.5 E-5	5.4 E-6	2.3 E-7	1.4 E-6	NA	8.8 E-4	6.9 E-7	4.5 E-5
03D-SP146	27	1.9 E-6	7.3 E-5	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	9.1 E-5	1.8 E-5	NA	NA	NA	3.1 E-4	NA	5.4 E-5
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.9 E-5	NA	4.6 E-6	NA	NA	NA	NA	4.0 E-4	NA	NA
03D-SP147	20	NA	6.5 E-7	NA	NA	3.0 E-5	4.2 E-6	NA	NA	5.7 E-6	9.0 E-6	NA	1.5 E-7	NA	1.0 E-7	7.9 E-7	NA	2.0 E-5	6.9 E-7	NA
03D-SP147	27	2.1 E-6	3.8 E-5	NA	NA	NA	NA	NA	NA	6.7 E-5	5.1 E-4	NA	5.0 E-6	NA	NA	3.2 E-6	NA	1.0 E-4	NA	1.2 E-5
03D-SP148	10	NA	NA	NA	NA	NA	6.8 E-6	NA	NA	2.3 E-5	NA	9.2 E-8	NA	NA	1.7 E-7	8.2 E-7	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	NA	5.1 E-7	NA	1.0 E-7	3.5 E-7	NA	NA	3.0 E-7	NA
03D-SP149	20	NA	NA	NA	NA	2.2 E-5	2.4 E-5	NA	NA	NA	NA	1.8 E-7	1.5 E-8	NA	8.1 E-7	2.0 E-6	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	8.7 E-7	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	1.0 E-7	NA	1.5 E-6	NA	NA
03D-SP84	15	NA	7.4 E-7	NA	NA	NA	8.0 E-6	NA	NA	2.6 E-6	1.6 E-6	NA	2.3 E-7	NA	1.6 E-7	5.8 E-6	NA	1.9 E-5	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	2.0 E-6	NA	NA	1.8 E-7	NA	4.2 E-8	5.5 E-7	NA	1.0 E-5	5.2 E-7	NA
03D-SP85	25	2.0 E-5	7.4 E-5	NA	NA	NA	4.8 E-4	NA	NA	NA	1.1 E-2	1.4 E-6	2.2 E-6	NA	6.6 E-5	1.3 E-3	NA	9.3 E-3	NA	NA
03D-SP85	30	NA	NA	NA	NA	1.0 E-5	1.1 E-5	NA	NA	NA	9.0 E-7	6.7 E-8	6.6 E-9	NA	2.0 E-7	1.1 E-6	NA	1.7 E-5	4.2 E-7	NA
03D-SP86	10	2.5 E-7	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	6.1 E-7	NA	1.1 E-5	7.5 E-7	NA
03D-SP86	20	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	3.1 E-6	4.1 E-7	NA
03D-SP87	10	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	4.0 E-7	8.8 E-9	NA	3.3 E-7	1.7 E-6	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	9.0 E-6	NA	NA	5.1 E-8	NA	1.9 E-7	1.5 E-6	NA	2.1 E-4	NA	NA

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
03D-SP88	20	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	NA	NA	NA	2.3 E-9	NA	2.7 E-7	1.4 E-6	NA	1.1 E-4	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	1.2 E-2	NA	NA
03D-SP90	10	1.9 E-7	6.2 E-6	NA	NA	NA	1.2 E-5	NA	NA	1.1 E-4	2.2 E-5	6.7 E-7	2.3 E-6	NA	1.3 E-6	2.7 E-5	NA	9.9 E-5	NA	NA
03D-SP90	20	7.1 E-8	1.0 E-6	NA	NA	NA	4.2 E-6	NA	NA	2.5 E-5	4.7 E-6	2.1 E-7	4.4 E-7	NA	2.4 E-7	4.3 E-6	NA	5.0 E-5	NA	NA
03D-SP91	10	NA	NA	NA	NA	3.5 E-5	4.1 E-6	NA	NA	9.4 E-6	NA	1.3 E-7	2.2 E-8	NA	3.1 E-7	4.1 E-7	NA	2.0 E-5	1.9 E-6	NA
03D-SP91	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	3.1 E-5	3.0 E-6	4.5 E-8	3.9 E-8	NA	8.2 E-8	1.5 E-7	NA	3.5 E-5	3.1 E-7	NA
03D-SP92	10	1.5 E-7	NA	NA	NA	NA	7.3 E-6	NA	NA	9.8 E-6	1.2 E-5	2.1 E-7	3.1 E-7	NA	1.2 E-7	9.2 E-7	NA	5.1 E-5	NA	NA
03D-SP92	20	1.2 E-7	7.9 E-7	NA	NA	NA	6.5 E-6	NA	NA	6.3 E-5	1.4 E-5	1.7 E-7	2.3 E-7	NA	1.7 E-7	1.1 E-6	NA	1.8 E-4	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	7.4 E-7	NA	NA	1.4 E-5	NA	7.1 E-5	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	1.3 E-6	NA	9.6 E-8	3.0 E-8	NA	1.5 E-7	1.6 E-6	NA	1.6 E-6	NA	NA
03D-SP94	15	NA	7.7 E-7	NA	NA	NA	1.8 E-6	NA	NA	1.6 E-5	6.8 E-6	NA	4.6 E-7	NA	NA	1.9 E-7	NA	1.7 E-3	NA	NA
03D-SP94	25	NA	NA	NA	NA	1.2 E-5	5.6 E-6	NA	NA	4.2 E-6	1.7 E-6	2.7 E-7	4.4 E-8	NA	3.2 E-7	1.2 E-6	NA	4.9 E-4	NA	NA
03D-SP95	10	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	1.2 E-5	NA	NA	NA	NA	5.5 E-2	NA	NA
03D-SP95	18	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	4.6 E-6	NA	NA	NA	NA	2.7 E-2	NA	NA
03D-SP96	10	NA	NA	NA	NA	6.2 E-5	1.9 E-5	NA	NA	4.9 E-4	NA	2.3 E-6	2.0 E-8	NA	2.3 E-6	3.7 E-6	NA	3.3 E-5	NA	NA
03D-SP96	17	NA	NA	NA	NA	6.5 E-5	8.6 E-6	NA	NA	3.8 E-4	NA	2.4 E-7	1.5 E-8	NA	6.9 E-7	3.0 E-6	NA	1.5 E-5	NA	NA
03D-SP99	10	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	1.0 E-1	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	4.5 E-6	NA	NA	NA	NA	NA	1.5 E-6	NA	1.5 E-7	6.1 E-7	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	2.0 E-7	NA	5.5 E-8	7.7 E-7	NA	NA	2.1 E-7	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA
11D-SP27	20	NA	NA	NA	NA	1.5 E-5	7.1 E-6	NA	NA	NA	NA	4.6 E-8	NA	NA	4.1 E-7	2.0 E-6	NA	2.4 E-6	1.7 E-7	NA
11D-SP28	10	NA	NA	NA	NA	2.4 E-5	8.9 E-6	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	9.2 E-7	NA	NA	NA	NA
11D-SP28	20	7.2 E-8	7.0 E-6	NA	NA	NA	NA	NA	NA	2.5 E-5	2.1 E-6	NA	2.1 E-8	NA	NA	NA	NA	6.1 E-6	1.1 E-7	NA
11D-SP29	10	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	1.3 E-7	NA	4.5 E-7	3.2 E-6	NA	NA	8.7 E-7	NA
11D-SP29	30	6.3 E-8	9.2 E-6	NA	5.7 E-8	8.4 E-6	4.5 E-6	NA	NA	NA	2.1 E-6	NA	5.2 E-7	2.2 E-7	1.2 E-6	1.7 E-5	NA	NA	9.1 E-7	NA
11D-SP30	10	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	3.4 E-6	NA	NA	4.5 E-7	5.1 E-7	2.4 E-6	1.6 E-5	NA	NA	NA	NA
11D-SP30	20	2.2 E-7	2.3 E-6	NA	NA	NA	2.1 E-6	NA	NA	9.4 E-6	5.6 E-6	NA	1.6 E-7	2.9 E-7	1.8 E-6	2.3 E-5	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	3.3 E-6	NA	NA	6.9 E-7	NA
11D-SP31	20	NA	NA	NA	NA	NA	1.3 E-6	NA	2.6 E-6	4.7 E-6	1.4 E-6	NA	2.8 E-8	NA	5.6 E-8	3.6 E-6	NA	NA	5.6 E-7	NA
11D-SP31	30	1.7 E-7	4.7 E-7	NA	3.1 E-8	NA	1.4 E-6	NA	NA	5.0 E-6	8.0 E-6	NA	1.2 E-8	NA	1.0 E-6	7.7 E-6	NA	NA	5.8 E-7	NA
50D-SP01	10	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	1.6 E-8	NA	1.2 E-7	5.1 E-7	NA	5.1 E-5	NA	NA
50D-SP01	20	NA	NA	NA	NA	1.2 E-5	7.6 E-6	NA	NA	NA	NA	2.1 E-7	NA	NA	5.8 E-7	8.7 E-6	NA	9.2 E-6	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	4.0 E-5	NA	NA
51D-SP04	20	NA	NA	NA	NA	1.5 E-5	8.4 E-6	NA	NA	NA	NA	2.1 E-6	NA	NA	1.2 E-6	5.4 E-6	NA	5.9 E-6	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	3.6 E-6	NA	7.0 E-6	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	2.3 E-5	NA	NA
A20-B34-SP01	20	NA	9.6 E-7	NA	NA	NA	5.2 E-6	NA	2.3 E-6	NA	NA	6.5 E-8	NA	NA	2.9 E-7	2.1 E-6	NA	8.3 E-6	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-5	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	1.4 E-5	2.9 E-6	NA	NA	NA	NA	5.0 E-8	NA	NA	1.7 E-7	5.1 E-7	NA	5.0 E-6	3.0 E-7	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	1.4 E-6	NA	1.6 E-4	3.7 E-7	NA
A20-B34-SP03	29	NA	NA	NA	4.7 E-8	8.2 E-6	5.0 E-6	NA	5.5 E-6	9.2 E-7	1.2 E-6	2.9 E-8	NA	NA	3.2 E-7	1.4 E-6	NA	1.3 E-4	8.2 E-7	NA
A20-RB37-SP01	10	NA	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	1.7 E-4	NA	NA	NA	NA	2.0 E-2	NA	NA
A20-RB37-SP01	20	NA	5.7 E-5	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	1.0 E-4	NA	NA	NA	NA	1.2 E-2	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	NA	7.0 E-6	NA	3.8 E-4	NA	NA
A20-RB37-SP02	10	NA	8.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	5.6 E-7	NA	2.6 E-3	8.1 E-7	NA
A20-RB37-SP02	20	NA	NA	NA	NA	1.8 E-5	3.1 E-6	NA	NA	NA	NA	4.6 E-8	4.2 E-9	NA	1.7 E-7	8.7 E-7	NA	2.9 E-5	9.3 E-7	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	NA	NA	6.9 E-9	NA	1.7 E-7	1.1 E-6	NA	9.9 E-5	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	5.1 E-9	NA	1.0 E-7	6.6 E-7	NA	6.4 E-5	NA	NA
A20-RX73-SP01	10	NA	2.1 E-6	NA	NA	NA	3.0 E-6	NA	NA	1.8 E-4	NA	NA	NA	NA	5.2 E-7	2.9 E-7	NA	3.7 E-5	NA	NA
A20-RX73-SP01	20	NA	7.4 E-6	NA	NA	2.9 E-5	6.5 E-6	NA	NA	6.1 E-5	NA	5.5 E-8	2.2 E-9	NA	9.6 E-6	1.2 E-6	NA	3.1 E-5	NA	NA
A20-ST01-1-SP01	10	1.3 E-7	NA	NA	NA	NA	4.3 E-6	NA	NA	4.5 E-6	NA	NA	6.0 E-7	NA	1.2 E-7	5.1 E-7	NA	7.4 E-5	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	5.1 E-8	NA	NA	1.3 E-7	3.8 E-7	NA	7.4 E-6	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	9.8 E-6	NA	1.5 E-7	2.1 E-6	NA	1.3 E-7	5.6 E-7	NA	1.4 E-4	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	1.0 E-5	1.1 E-5	NA	NA	6.5 E-6	NA	6.7 E-8	3.5 E-7	NA	5.9 E-7	3.3 E-6	NA	1.7 E-5	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	4.7 E-6	NA	NA	NA	NA	1.5 E-7	NA	NA	1.4 E-7	3.4 E-7	NA	2.4 E-5	9.3 E-7	NA
A20-ST01-3-SP01	20	NA	NA	2.1 E-5	NA	1.4 E-5	2.0 E-5	NA	NA	NA	NA	5.6 E-7	NA	NA	3.8 E-6	5.4 E-5	NA	1.3 E-5	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
A20-ST02-SP01	20	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	6.2 E-6	4.2 E-6	NA	NA	4.5 E-6	2.6 E-5	NA	NA	NA	NA
A20-ST02-SP01	30	NA	4.3 E-7	NA	NA	7.9 E-6	3.5 E-5	NA	NA	NA	3.4 E-6	1.0 E-7	NA	NA	4.2 E-6	1.1 E-5	NA	7.6 E-6	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	2.8 E-5	NA	NA
A20-ST02-SP02	20	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	5.2 E-8	NA	NA	7.0 E-8	3.6 E-7	NA	1.4 E-5	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	3.4 E-5	9.9 E-6	NA	NA	NA	NA	6.3 E-8	1.5 E-9	NA	5.2 E-7	4.1 E-6	NA	5.8 E-6	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	1.4 E-5	9.9 E-7	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	2.1 E-7	NA	4.2 E-6	2.7 E-7	NA
A20-ST02-SP03	30	NA	NA	NA	NA	8.4 E-6	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	7.0 E-8	4.6 E-7	NA	2.9 E-6	4.6 E-7	NA
A20-ST02-SP04	30	NA	NA	NA	NA	4.6 E-4	7.1 E-6	NA	NA	NA	NA	2.5 E-8	NA	NA	2.3 E-7	1.1 E-6	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	2.7 E-5	3.3 E-4	NA	NA	NA	NA	NA	NA	3.5 E-4	5.1 E-3	NA	9.0 E-7	NA	NA	1.0 E-6	NA	8.6 E-5	1.3 E-6	4.5 E-5
A20-ST05-SP01	30	2.8 E-5	2.4 E-4	1.3 E-4	NA	NA	NA	NA	NA	2.2 E-4	4.6 E-3	NA	3.5 E-6	NA	1.9 E-7	7.5 E-7	NA	2.3 E-5	1.2 E-6	8.5 E-6
A20-ST05-SP02	10	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	4.7 E-7	NA	4.4 E-5	8.1 E-7	NA
A20-ST05-SP02	20	NA	NA	NA	NA	1.9 E-5	1.4 E-6	NA	NA	NA	NA	5.0 E-8	2.3 E-9	NA	9.6 E-8	4.9 E-7	NA	3.1 E-5	6.5 E-7	NA
A20-ST05-SP03	10	1.4 E-6	2.5 E-5	NA	NA	2.4 E-5	2.8 E-6	NA	NA	1.3 E-5	9.8 E-5	NA	2.1 E-6	NA	2.3 E-7	7.7 E-6	NA	1.2 E-4	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	4.1 E-8	NA	2.6 E-7	1.7 E-6	NA	5.5 E-6	5.9 E-7	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	1.3 E-6	NA	NA	4.4 E-7	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	6.9 E-7	NA	8.6 E-7	1.3 E-6	NA	3.3 E-4	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	3.8 E-8	5.8 E-7	NA	9.6 E-8	4.1 E-7	NA	1.6 E-4	NA	NA
A20-ST14-SP01	10	NA	4.8 E-6	NA	NA	NA	2.8 E-6	NA	NA	2.4 E-5	NA	NA	8.3 E-6	NA	NA	3.6 E-7	NA	3.1 E-4	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	6.5 E-6	NA	NA	2.5 E-6	NA	8.1 E-8	6.6 E-7	NA	2.8 E-5	7.5 E-7	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	3.3 E-7	NA	1.9 E-7	1.0 E-6	NA	2.8 E-4	6.9 E-7	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	NA	1.8 E-7	NA	2.6 E-7	1.4 E-6	NA	2.0 E-4	6.9 E-7	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	7.4 E-8	NA	NA	1.8 E-7	NA	2.8 E-6	2.0 E-7	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	1.4 E-5	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	3.6 E-7	NA	NA	1.6 E-7	NA

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP100	10	1.4 E-5	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-3
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E+1
03D-SP102	28	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-1
03D-SP103	10	4.0 E-5	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1
03D-SP103	20	3.9 E-6	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
03D-SP104	10	3.3 E-4	NA	6.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1
03D-SP104	20	6.8 E-4	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1
03D-SP105	10	3.3 E-4	NA	4.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1
03D-SP106	15	1.2 E-6	2.3 E-5	3.2 E-8	2.7 E-5	1.2 E-6	1.0 E-7	2.8 E-6	NA	7.5 E-7	2.7 E-7	1.1 E-7	2.7 E-8	NA	NA	6.0 E-6	3.7 E-6	NA	NA	4.1 E-6	1.9 E-3
03D-SP106	25	1.8 E-3	6.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.0 E-1
03D-SP106	30	1.1 E-3	4.0 E-4	5.9 E-6	NA	1.4 E-4	NA	NA	NA	NA	1.8 E-5	NA	2.3 E-6	NA	NA	NA	NA	NA	NA	2.2 E-5	4.7 E-2
03D-SP107	10	2.0 E-3	NA	9.2 E-6	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	4.9 E-2
03D-SP107	20	1.4 E-4	NA	6.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3
03D-SP107	29	2.0 E-3	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	4.6 E-2
03D-SP108	10	7.6 E-6	7.2 E-6	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	7.9 E-8	NA	NA	NA	NA	NA	NA	NA	3.3 E-3
03D-SP109	10	5.5 E-5	7.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-3
03D-SP109	20	1.3 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1
03D-SP109	30	3.4 E-6	1.9 E-6	1.3 E-8	NA	NA	2.8 E-7	NA	3.0 E-8	1.9 E-6	5.7 E-8	NA	4.3 E-9	2.0 E-7	NA	1.3 E-6	5.1 E-7	NA	NA	9.0 E-7	3.3 E-4
03D-SP110	10	2.2 E-5	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3
03D-SP110	20	5.5 E-6	NA	3.3 E-8	NA	5.8 E-7	6.2 E-8	NA	NA	7.0 E-7	1.6 E-7	NA	6.8 E-9	1.0 E-7	NA	5.4 E-7	NA	NA	NA	4.4 E-7	5.5 E-4
03D-SP111	10	9.7 E-6	NA	3.3 E-7	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	2.1 E-2
03D-SP111	20	NA	NA	NA	NA	8.6 E-5	3.2 E-8	NA	NA	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	3.3 E-4
03D-SP112	10	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	5.2 E-7	1.4 E-4
03D-SP112	20	NA	NA	NA	NA	7.5 E-5	5.5 E-8	4.8 E-7	NA	7.7 E-7	1.2 E-7	NA	6.7 E-9	NA	NA	2.1 E-6	8.6 E-7	NA	NA	2.0 E-6	1.2 E-4
03D-SP113	10	4.3 E-7	NA	NA	NA	1.4 E-4	NA	9.2 E-7	NA	4.1 E-7	2.4 E-7	NA	1.8 E-8	NA	NA	2.7 E-6	1.6 E-6	NA	NA	1.5 E-6	4.0 E-4
03D-SP113	20	NA	6.6 E-5	NA	NA	3.1 E-4	NA	NA	NA	NA	2.4 E-5	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	3.9 E-5	1.7 E-2
03D-SP114	10	NA	NA	NA	NA	NA	7.5 E-8	NA	NA	7.7 E-7	NA	NA	NA	1.6 E-7	NA	1.1 E-6	NA	NA	NA	5.1 E-7	2.9 E-5
03D-SP114	20	NA	NA	NA	NA	NA	1.6 E-7	NA	1.5 E-8	1.6 E-6	7.2 E-8	NA	NA	3.6 E-7	NA	9.6 E-7	4.7 E-7	NA	NA	2.5 E-6	3.9 E-5
03D-SP115	10	5.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4
03D-SP116	10	1.7 E-6	NA	NA	5.1 E-5	9.0 E-5	NA	5.0 E-6	NA	NA	2.5 E-7	NA	2.6 E-8	3.2 E-7	NA	1.1 E-5	5.0 E-6	NA	NA	3.0 E-6	3.9 E-4
03D-SP117	10	3.3 E-6	NA	5.3 E-8	1.4 E-5	3.6 E-4	NA	1.7 E-6	2.6 E-8	8.4 E-7	1.1 E-6	NA	6.2 E-8	2.4 E-7	NA	7.4 E-6	2.3 E-6	NA	2.1 E-7	5.7 E-6	8.1 E-4
03D-SP118	10	3.1 E-6	NA	1.1 E-7	NA	2.5 E-4	NA	NA	NA	1.1 E-6	4.2 E-7	NA	4.8 E-8	5.6 E-7	NA	4.5 E-6	1.7 E-6	NA	3.8 E-7	2.9 E-6	5.5 E-3
03D-SP118	20	1.1 E-6	NA	NA	NA	4.0 E-4	NA	NA	2.7 E-8	1.2 E-6	5.0 E-7	NA	6.9 E-7	5.1 E-7	NA	2.4 E-6	9.3 E-7	NA	2.2 E-7	4.7 E-6	1.2 E-3
03D-SP119	10	1.5 E-4	NA	9.2 E-8	4.3 E-5	1.5 E-4	NA	4.5 E-6	NA	NA	5.8 E-7	NA	NA	NA	NA	1.4 E-5	4.8 E-6	NA	NA	4.8 E-6	4.3 E-3
03D-SP119	20	5.5 E-4	6.3 E-6	NA	2.7 E-5	7.8 E-5	NA	2.6 E-6	NA	NA	3.3 E-7	NA	4.4 E-7	NA	NA	8.2 E-6	3.7 E-6	NA	NA	3.4 E-6	6.1 E-3
03D-SP119	29	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	5.5 E-6	NA	NA	3.7 E-4	NA	NA	NA	1.3 E-4	1.7 E-1
03D-SP120	10	2.4 E-6	NA	2.5 E-8	3.4 E-5	1.0 E-4	NA	3.7 E-6	NA	6.3 E-7	6.9 E-7	NA	3.3 E-8	2.9 E-7	NA	9.1 E-6	3.3 E-6	NA	1.3 E-7	2.5 E-6	2.3 E-4
03D-SP120	20	6.3 E-7	NA	1.4 E-8	1.4 E-5	1.2 E-4	NA	1.2 E-6	NA	3.2 E-7	2.9 E-7	NA	NA	2.0 E-7	NA	6.3 E-6	1.9 E-6	NA	2.3 E-7	1.2 E-5	2.6 E-4
03D-SP121	15	1.6 E-4	2.4 E-4	5.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-2
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	9.0 E-6	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
03D-SP122	10	3.3 E-6	3.4 E-5	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	8.1 E-7	NA	NA	1.6 E-6	NA	NA	NA	8.3 E-7	3.9 E-3
03D-SP122	20	2.0 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	5.5 E-3
03D-SP122	30	5.1 E-5	NA	4.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	1.4 E-6	1.5 E-6	NA	NA	NA	8.8 E-7	8.1 E-5
03D-SP123	20	NA	NA	NA	4.7 E-6	NA	1.1 E-7	6.0 E-7	NA	8.8 E-7	NA	NA	NA	2.9 E-7	NA	1.8 E-6	8.6 E-7	NA	NA	2.9 E-6	7.0 E-5
03D-SP124	10	NA	NA	NA	6.7 E-5	1.2 E-4	NA	5.9 E-6	NA	NA	4.8 E-7	NA	NA	2.6 E-7	NA	1.1 E-5	5.0 E-6	2.0 E-6	NA	2.7 E-6	2.2 E-4
03D-SP124	20	4.3 E-7	NA	NA	2.6 E-5	1.1 E-4	NA	2.9 E-6	NA	NA	9.2 E-7	NA	1.2 E-8	9.6 E-8	NA	8.9 E-6	4.0 E-6	1.2 E-6	NA	2.4 E-6	1.7 E-4
03D-SP125	10	6.4 E-6	NA	NA	NA	5.8 E-4	NA	NA	5.8 E-8	3.5 E-6	5.3 E-6	NA	NA	NA	1.3 E-5	4.7 E-6	1.5 E-6	NA	2.7 E-7	6.7 E-6	7.1 E-4
03D-SP125	20	1.8 E-4	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	2.3 E-6	NA	4.9 E-8	NA	2.0 E-6	3.0 E-6	1.3 E-6	NA	4.3 E-7	4.1 E-6	6.8 E-4
03D-SP126	10	1.2 E-6	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	7.8 E-7	NA	NA	NA	6.2 E-7	4.8 E-5
03D-SP126	20	1.3 E-6	4.2 E-6	NA	NA	NA	7.1 E-8	NA	NA	9.1 E-7	8.5 E-8	NA	NA	1.3 E-7	NA	1.2 E-6	4.6 E-7	NA	NA	9.8 E-7	2.3 E-5
03D-SP127	10	4.3 E-7	NA	NA	9.6 E-6	NA	NA	9.8 E-7	NA	NA	2.9 E-7	NA	NA	NA	NA	2.1 E-6	1.0 E-6	NA	NA	8.3 E-7	8.5 E-5
03D-SP127	20	1.4 E-7	NA	NA	5.3 E-6	NA	6.6 E-8	6.1 E-7	NA	7.0 E-7	NA	NA	5.5 E-9	1.1 E-7	NA	1.6 E-6	7.8 E-7	NA	NA	7.5 E-7	4.3 E-5
03D-SP128	10	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	1.0 E-5
03D-SP128	20	7.1 E-4	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	5.9 E-6	3.0 E-6	NA	NA	1.4 E-6	1.1 E-3
03D-SP128	30	1.7 E-3	NA	NA	4.3 E-5	NA	3.4 E-7	5.2 E-6	NA	NA	1.4 E-6	NA	NA	6.9 E-7	NA	2.7 E-6	NA	NA	NA	1.7 E-6	4.5 E-3

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP129	15	3.5 E-6	NA	NA	1.2 E-5	NA	1.9 E-7	1.0 E-6	1.7 E-8	1.3 E-6	NA	NA	NA	3.7 E-7	NA	3.1 E-6	1.7 E-6	NA	NA	2.3 E-6	6.8 E-5
03D-SP129	25	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
03D-SP130	10	NA	NA	NA	NA	NA	8.4 E-8	NA	NA	1.4 E-6	NA	NA	NA	2.2 E-7	NA	8.0 E-7	NA	NA	NA	1.0 E-6	1.7 E-5
03D-SP130	20	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	2.1 E-6	NA	NA	NA	2.1 E-7	NA	4.8 E-7	NA	NA	4.7 E-8	4.4 E-7	1.1 E-5
03D-SP131	10	NA	NA	NA	3.6 E-5	2.5 E-6	NA	3.6 E-6	NA	NA	1.5 E-6	NA	NA	NA	NA	6.2 E-6	2.6 E-6	2.1 E-6	NA	6.2 E-5	2.5 E-4
03D-SP131	20	NA	NA	NA	6.4 E-6	NA	5.9 E-8	6.1 E-7	NA	8.1 E-7	NA	NA	NA	9.6 E-8	NA	1.5 E-6	7.8 E-7	NA	NA	7.3 E-7	4.2 E-5
03D-SP132	10	5.9 E-6	NA	1.3 E-7	NA	NA	NA	NA	NA	5.9 E-7	1.8 E-7	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	9.3 E-7	7.7 E-5
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	1.1 E-6	NA	NA	NA	NA	3.8 E-7	NA	NA	3.5 E-6	3.2 E-6	2.8 E-7	1.1 E-7	3.7 E-7	NA	1.3 E-6	7.3 E-7	NA	NA	2.9 E-6	1.0 E-4
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-7	1.3 E-7	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	7.3 E-7	1.3 E-5
03D-SP133	20	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	4.9 E-7	4.9 E-8	NA	NA	1.4 E-7	NA	2.4 E-6	1.2 E-6	NA	NA	8.8 E-7	7.7 E-6
03D-SP134	10	2.4 E-7	NA	NA	1.2 E-5	NA	NA	1.1 E-6	2.9 E-8	4.3 E-7	1.4 E-7	1.6 E-7	2.0 E-8	5.1 E-7	NA	2.5 E-6	8.7 E-7	NA	NA	1.3 E-6	2.8 E-4
03D-SP134	20	NA	2.8 E-6	NA	8.5 E-6	2.0 E-4	5.3 E-8	NA	NA	6.0 E-7	1.3 E-6	6.2 E-6	5.1 E-6	7.4 E-8	NA	1.8 E-6	8.6 E-7	1.7 E-5	NA	1.0 E-6	4.9 E-4
03D-SP135	10	4.0 E-6	1.0 E-5	1.3 E-7	1.5 E-5	2.3 E-4	NA	1.7 E-6	NA	4.0 E-7	5.3 E-7	1.8 E-7	1.9 E-7	1.6 E-7	NA	7.1 E-6	2.6 E-6	NA	1.7 E-7	3.9 E-6	3.7 E-3
03D-SP135	20	NA	1.5 E-3	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	7.8 E-6	2.5 E-5	NA	NA	7.6 E-6	NA	1.7 E-5	NA	3.1 E-6	3.2 E-3
03D-SP136	10	NA	NA	NA	2.8 E-5	NA	NA	1.7 E-6	NA	2.1 E-7	NA	4.1 E-7	1.8 E-8	5.1 E-7	NA	2.7 E-6	NA	3.1 E-6	NA	1.1 E-6	1.4 E-4
03D-SP137	10	1.2 E-5	NA	5.0 E-8	3.1 E-5	2.0 E-4	NA	3.4 E-6	NA	4.6 E-7	4.2 E-7	NA	3.8 E-8	NA	NA	9.9 E-6	4.7 E-6	NA	NA	3.2 E-6	8.2 E-4
03D-SP138	10	8.1 E-5	NA	7.2 E-8	1.5 E-5	1.1 E-5	6.6 E-8	1.3 E-6	3.9 E-8	6.8 E-7	2.0 E-6	NA	9.3 E-8	3.5 E-7	1.7 E-6	3.3 E-6	1.3 E-6	NA	7.9 E-8	2.5 E-6	1.9 E-4
03D-SP138	19	2.0 E-4	NA	4.4 E-8	NA	4.0 E-6	NA	NA	NA	NA	1.4 E-6	NA	2.3 E-8	8.4 E-7	4.0 E-6	2.2 E-6	NA	NA	NA	1.7 E-6	3.7 E-4
03D-SP138	30	7.7 E-5	NA	NA	NA	NA	1.5 E-7	NA	NA	6.1 E-6	3.2 E-7	NA	NA	5.3 E-7	5.2 E-7	5.5 E-7	NA	NA	NA	1.7 E-6	2.0 E-3
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	3.1 E-6	2.0 E-5
03D-SP139	20	2.1 E-6	NA	NA	NA	NA	4.9 E-8	NA	1.3 E-8	4.2 E-7	1.1 E-7	NA	7.4 E-9	1.1 E-7	NA	5.9 E-7	NA	NA	NA	8.6 E-7	2.9 E-5
03D-SP139	28	5.6 E-6	NA	NA	NA	NA	1.2 E-7	NA	1.2 E-8	2.1 E-6	2.2 E-7	NA	1.4 E-8	2.0 E-7	NA	5.9 E-7	3.0 E-7	NA	NA	2.0 E-6	1.7 E-4
03D-SP140	10	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	5.7 E-7	1.4 E-5
03D-SP140	20	2.6 E-7	NA	NA	NA	NA	1.2 E-7	NA	NA	2.0 E-6	NA	NA	NA	1.0 E-7	NA	2.0 E-6	8.6 E-7	NA	NA	2.2 E-6	1.6 E-5
03D-SP141	10	NA	NA	NA	NA	NA	5.5 E-8	NA	NA	9.8 E-7	NA	NA	NA	1.6 E-7	NA	7.7 E-7	NA	NA	NA	1.1 E-6	2.2 E-5
03D-SP141	20	3.3 E-7	NA	NA	NA	1.9 E-6	3.5 E-7	NA	NA	2.8 E-6	1.6 E-6	1.9 E-7	3.5 E-8	1.8 E-7	NA	1.4 E-6	5.7 E-7	2.1 E-6	NA	6.7 E-6	6.2 E-5
03D-SP142	10	7.1 E-7	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	7.7 E-7	1.3 E-6	NA	NA	NA	3.0 E-6	3.6 E-4
03D-SP142	20	2.6 E-7	NA	NA	NA	NA	1.6 E-7	NA	NA	1.6 E-6	2.3 E-7	NA	1.7 E-8	4.2 E-7	NA	1.4 E-6	NA	NA	NA	5.2 E-6	1.4 E-4
03D-SP142	30	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	1.3 E-3
03D-SP143	10	5.9 E-6	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	8.4 E-7	NA	NA	NA	9.8 E-7	5.2 E-4
03D-SP143	20	2.4 E-6	NA	2.4 E-8	NA	NA	NA	NA	NA	3.3 E-7	1.2 E-7	NA	NA	NA	NA	8.9 E-7	NA	NA	NA	1.0 E-6	2.2 E-4
03D-SP143	30	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	2.2 E-4
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	4.4 E-7	4.1 E-4
03D-SP144	20	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	2.4 E-6	NA	NA	NA	7.1 E-8	NA	4.5 E-7	NA	NA	3.8 E-8	3.9 E-7	3.0 E-4
03D-SP144	30	NA	6.1 E-4	NA	NA	3.0 E-4	NA	NA	NA	1.8 E-6	NA	6.4 E-7	5.8 E-6	NA	NA	NA	NA	NA	NA	3.6 E-7	1.4 E-3
03D-SP145	10	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	2.5 E-4
03D-SP145	20	7.9 E-8	NA	NA	NA	NA	3.9 E-8	NA	NA	5.3 E-7	7.2 E-8	NA	NA	9.6 E-8	NA	4.5 E-7	NA	NA	NA	5.4 E-7	2.0 E-5
03D-SP146	10	9.7 E-5	NA	1.3 E-7	NA	NA	NA	NA	NA	1.7 E-6	3.7 E-7	NA	NA	7.0 E-7	1.7 E-6	8.5 E-7	NA	NA	NA	6.2 E-7	2.6 E-3
03D-SP146	20	6.9 E-5	NA	4.9 E-8	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	1.3 E-6	1.1 E-3
03D-SP146	27	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4
03D-SP147	10	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-3
03D-SP147	20	1.2 E-4	NA	NA	NA	NA	2.6 E-8	NA	NA	1.2 E-6	8.5 E-8	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	8.3 E-7	1.9 E-4
03D-SP147	27	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	7.8 E-6	4.1 E-5
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	2.6 E-7	NA	NA	NA	NA	6.4 E-8	NA	NA	9.1 E-7	5.3 E-7	NA	NA	4.3 E-7	7.2 E-7	NA	NA	NA	NA	5.7 E-7	1.0 E-5
03D-SP149	20	8.2 E-8	NA	NA	NA	NA	2.5 E-7	5.0 E-7	4.2 E-8	3.4 E-6	1.2 E-7	NA	9.4 E-9	8.8 E-7	NA	3.4 E-6	1.6 E-6	NA	3.7 E-8	4.7 E-6	6.4 E-5
03D-SP150	30	5.7 E-8	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	3.4 E-8	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	1.2 E-7	3.1 E-6
03D-SP84	15	1.5 E-6	4.0 E-5	NA	NA	2.7 E-5	1.3 E-7	NA	NA	1.2 E-6	3.0 E-7	NA	4.9 E-7	NA	NA	6.7 E-7	NA	NA	NA	1.9 E-6	1.1 E-4
03D-SP84	25	4.4 E-7	2.7 E-6	NA	NA	7.5 E-7	NA	NA	NA	2.6 E-7	3.2 E-7	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	3.3 E-7	2.1 E-5
03D-SP85	25	7.9 E-5	9.6 E-3	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	3.0 E-5	5.7 E-5	NA	NA	NA	6.0 E-5	6.5 E-5	NA	NA	3.3 E-2
03D-SP85	30	4.0 E-7	2.9 E-7	NA	NA	NA	4.0 E-7	NA	2.7 E-8	3.5 E-6	1.2 E-7	NA	1.2 E-8	1.5 E-7	NA	1.1 E-6	6.2 E-7	NA	NA	2.1 E-6	5.0 E-5
03D-SP86	10	4.3 E-7	NA	4.5 E-8	NA	NA	8.4 E-8	NA	NA	9.8 E-7	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	1.8 E-5
03D-SP86	20	3.3 E-7	NA	NA	NA	NA	4.9 E-8	NA	NA	6.7 E-7	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	5.2 E-7	6.9 E-6
03D-SP87	10	NA	NA	NA	1.7 E-5	1.7 E-4	NA	2.5 E-6	NA	NA	2.1 E-7	NA	2.0 E-8	2.4 E-6	NA	1.5 E-5	3.9 E-6	NA	3.9 E-7	1.0 E-5	2.4 E-4
03D-SP88	10	4.3 E-6	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	8.7 E-7	NA	NA	NA	6.7 E-7	2.3 E-4

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP88	20	1.5 E-7	NA	NA	NA	NA	4.0 E-8	NA	NA	5.3 E-7	9.7 E-8	NA	7.0 E-9	NA	NA	9.6 E-7	4.5 E-7	NA	NA	7.8 E-7	1.2 E-4
03D-SP89	10	9.7 E-6	NA	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SP90	10	1.3 E-5	3.5 E-5	7.5 E-8	2.0 E-5	2.6 E-4	NA	3.4 E-6	NA	1.9 E-6	2.9 E-7	NA	6.4 E-7	5.6 E-7	NA	2.3 E-5	6.4 E-6	NA	1.8 E-7	1.1 E-5	6.6 E-4
03D-SP90	20	4.4 E-6	6.1 E-6	2.5 E-8	1.2 E-5	4.0 E-5	NA	1.6 E-6	NA	3.9 E-6	5.8 E-8	NA	1.1 E-7	2.3 E-7	NA	7.6 E-6	2.4 E-6	NA	1.6 E-7	3.4 E-6	1.7 E-4
03D-SP91	10	7.4 E-6	4.0 E-6	NA	1.2 E-5	NA	5.2 E-8	1.2 E-6	7.6 E-8	5.4 E-7	1.1 E-6	NA	1.4 E-8	NA	NA	4.3 E-6	1.5 E-6	NA	7.6 E-8	3.5 E-6	1.1 E-4
03D-SP91	20	4.0 E-6	6.6 E-6	1.4 E-8	6.7 E-6	NA	NA	6.7 E-7	2.7 E-8	NA	2.3 E-7	NA	NA	NA	NA	1.5 E-6	5.8 E-7	NA	4.1 E-8	9.1 E-7	9.2 E-5
03D-SP92	10	2.8 E-6	2.7 E-5	7.5 E-8	2.3 E-5	1.6 E-4	NA	2.5 E-6	NA	NA	5.0 E-7	NA	2.0 E-8	NA	NA	8.5 E-6	2.8 E-6	NA	1.7 E-7	3.7 E-6	3.1 E-4
03D-SP92	20	7.8 E-6	2.1 E-5	4.6 E-8	6.0 E-6	1.9 E-4	NA	8.6 E-7	NA	4.6 E-7	3.3 E-7	NA	1.1 E-8	NA	NA	6.2 E-6	2.0 E-6	NA	7.0 E-8	4.1 E-6	5.1 E-4
03D-SP93	15	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	3.5 E-4
03D-SP93	25	NA	NA	NA	7.4 E-6	3.4 E-5	NA	9.3 E-7	NA	NA	NA	NA	4.8 E-8	4.5 E-7	NA	3.8 E-6	1.3 E-6	NA	NA	2.1 E-6	5.8 E-5
03D-SP94	15	4.7 E-6	NA	2.4 E-8	1.3 E-5	NA	NA	6.6 E-7	NA	NA	2.5 E-7	NA	NA	NA	NA	1.4 E-6	6.4 E-7	NA	NA	3.5 E-7	1.8 E-3
03D-SP94	25	4.7 E-7	NA	NA	1.2 E-5	NA	6.0 E-8	1.2 E-6	NA	NA	1.1 E-7	NA	2.2 E-8	6.4 E-8	NA	7.7 E-6	2.9 E-6	NA	NA	2.5 E-6	5.4 E-4
03D-SP95	10	1.4 E-4	2.1 E-4	1.4 E-6	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	5.6 E-2
03D-SP95	18	9.1 E-5	1.6 E-4	7.7 E-7	NA	1.5 E-4	NA	NA	NA	NA	9.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	2.7 E-2
03D-SP96	10	1.0 E-6	NA	NA	6.7 E-5	4.8 E-5	NA	1.4 E-5	7.6 E-8	5.5 E-7	1.3 E-6	3.5 E-7	3.6 E-7	1.0 E-6	NA	7.3 E-5	3.0 E-5	7.4 E-6	NA	1.4 E-4	9.9 E-4
03D-SP96	17	1.2 E-6	NA	NA	1.7 E-5	2.2 E-5	1.1 E-7	1.6 E-6	NA	9.9 E-7	8.9 E-7	NA	1.4 E-7	5.8 E-7	NA	5.4 E-6	1.9 E-6	NA	1.2 E-7	2.2 E-5	5.5 E-4
03D-SP99	10	2.2 E-5	NA	3.1 E-6	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1
11D-SP26	10	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	1.4 E-7	NA	1.4 E-8	NA	NA	9.8 E-7	NA	NA	NA	7.3 E-7	9.2 E-6
11D-SP26	20	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	5.6 E-7	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	1.6 E-7	3.8 E-6
11D-SP27	10	5.5 E-7	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	4.2 E-7	5.0 E-5
11D-SP27	20	9.3 E-8	NA	1.7 E-8	NA	NA	1.1 E-7	NA	1.0 E-8	1.3 E-6	2.7 E-7	NA	1.0 E-8	3.4 E-7	NA	1.2 E-6	4.5 E-7	NA	NA	1.5 E-6	3.3 E-5
11D-SP28	10	7.1 E-7	NA	7.5 E-8	NA	NA	NA	NA	NA	6.0 E-7	3.5 E-7	NA	NA	2.1 E-7	NA	1.6 E-6	NA	NA	NA	1.8 E-6	3.9 E-5
11D-SP28	20	5.0 E-6	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	NA	6.9 E-7	NA	NA	NA	1.7 E-7	4.6 E-5
11D-SP29	10	4.0 E-7	NA	1.0 E-7	NA	NA	NA	NA	NA	1.3 E-6	5.0 E-7	NA	NA	1.9 E-7	NA	7.3 E-7	NA	NA	NA	2.8 E-6	1.4 E-5
11D-SP29	30	2.2 E-6	NA	NA	NA	NA	2.8 E-8	NA	NA	9.6 E-7	4.1 E-7	NA	NA	1.7 E-7	NA	3.4 E-7	NA	NA	NA	1.5 E-6	5.0 E-5
11D-SP30	10	3.1 E-7	NA	1.1 E-7	NA	1.5 E-6	NA	NA	NA	4.9 E-7	1.2 E-6	NA	3.1 E-8	1.6 E-7	NA	7.4 E-7	NA	NA	NA	2.3 E-6	3.4 E-5
11D-SP30	20	3.3 E-7	NA	5.4 E-8	NA	8.6 E-7	NA	NA	NA	3.5 E-7	3.1 E-7	NA	NA	1.1 E-7	NA	3.6 E-7	NA	NA	NA	1.2 E-6	4.9 E-5
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	8.8 E-7	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	2.2 E-6	7.9 E-6
11D-SP31	20	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	9.6 E-7	NA	NA	7.9 E-8	NA	NA	NA	NA	NA	1.3 E-6	1.7 E-5
11D-SP31	30	2.0 E-7	NA	NA	NA	3.5 E-7	NA	NA	NA	3.3 E-7	2.3 E-7	NA	1.5 E-8	7.5 E-8	NA	2.5 E-7	NA	NA	NA	5.2 E-7	2.6 E-5
50D-SP01	10	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	6.3 E-7	1.8 E-7	NA	1.4 E-8	NA	NA	1.4 E-6	NA	NA	NA	9.8 E-7	5.9 E-5
50D-SP01	20	NA	NA	NA	NA	1.3 E-5	1.9 E-7	5.4 E-7	NA	1.8 E-6	1.3 E-7	4.2 E-7	4.2 E-7	1.8 E-7	NA	2.3 E-6	1.2 E-6	3.5 E-6	3.7 E-8	2.4 E-6	6.4 E-5
51D-SP04	10	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	5.0 E-7	4.5 E-5
51D-SP04	20	NA	NA	NA	NA	8.6 E-6	7.9 E-8	7.1 E-7	NA	8.1 E-7	1.3 E-7	4.2 E-6	1.9 E-7	1.5 E-7	NA	1.9 E-6	1.1 E-6	2.9 E-5	NA	1.6 E-6	8.7 E-5
A20-B34-SP01	10	3.3 E-6	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	1.6 E-6	NA	NA	NA	6.7 E-7	4.0 E-5
A20-B34-SP01	20	2.6 E-6	NA	2.2 E-7	NA	4.5 E-7	9.0 E-8	NA	NA	8.8 E-7	5.8 E-7	1.2 E-7	1.8 E-8	NA	NA	1.5 E-6	5.9 E-7	1.2 E-6	NA	1.0 E-6	2.9 E-5
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	3.5 E-7	8.6 E-5
A20-B34-SP02	20	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	1.1 E-6	NA	NA	NA	1.8 E-7	NA	1.4 E-6	5.8 E-7	NA	NA	1.2 E-6	2.7 E-5
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-7	3.3 E-4
A20-B34-SP03	20	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	2.5 E-6	1.2 E-7	NA	5.5 E-9	8.0 E-8	NA	4.9 E-7	NA	NA	7.8 E-8	8.0 E-7	1.8 E-4
A20-B34-SP03	29	1.5 E-7	NA	NA	NA	NA	1.4 E-7	NA	NA	1.7 E-6	8.2 E-8	NA	3.8 E-9	1.5 E-7	NA	4.7 E-7	NA	NA	NA	1.3 E-6	1.5 E-4
A20-RB37-SP01	10	1.3 E-4	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2
A20-RB37-SP01	20	7.7 E-5	NA	7.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
A20-RB37-SP01	30	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4
A20-RB37-SP02	10	2.2 E-5	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	2.6 E-3
A20-RB37-SP02	20	3.6 E-7	NA	NA	NA	NA	7.5 E-8	NA	NA	1.1 E-6	6.2 E-7	NA	NA	1.6 E-7	NA	9.6 E-7	5.4 E-7	NA	NA	1.2 E-6	5.7 E-5
A20-RC29-SP01	10	5.7 E-7	NA	2.5 E-8	NA	NA	NA	NA	NA	4.6 E-7	7.4 E-7	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	8.3 E-7	1.1 E-4
A20-RC29-SP01	20	1.7 E-6	NA	2.2 E-8	NA	NA	5.2 E-8	NA	NA	5.6 E-7	1.9 E-6	NA	NA	1.4 E-7	NA	7.6 E-7	NA	NA	NA	3.4 E-7	7.5 E-5
A20-RX73-SP01	10	1.6 E-6	NA	1.1 E-7	NA	NA	NA	NA	NA	4.0 E-7	4.0 E-7	NA	NA	NA	NA	9.1 E-7	NA	NA	NA	2.5 E-6	2.3 E-4
A20-RX73-SP01	20	3.0 E-6	NA	4.6 E-8	NA	NA	1.1 E-7	NA	NA	1.3 E-6	2.1 E-7	NA	1.8 E-7	5.3 E-7	NA	1.2 E-6	6.1 E-7	NA	NA	6.2 E-6	1.6 E-4
A20-ST01-1-SP01	10	1.3 E-6	3.7 E-6	2.6 E-8	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	8.8 E-7	9.1 E-5
A20-ST01-1-SP01	20	2.4 E-7	NA	NA	NA	NA	9.4 E-8	NA	NA	9.5 E-7	NA	NA	NA	1.6 E-7	NA	1.2 E-6	6.1 E-7	NA	NA	9.1 E-7	1.4 E-5
A20-ST01-2-SP01	10	1.1 E-6	NA	3.9 E-8	1.3 E-5	NA	NA	2.6 E-6	NA	NA	3.7 E-7	NA	NA	NA	NA	4.0 E-6	1.5 E-6	2.3 E-6	NA	4.1 E-6	1.8 E-4
A20-ST01-2-SP01	20	2.6 E-7	NA	NA	NA	NA	9.0 E-8	NA	1.2 E-8	9.5 E-7	2.0 E-7	NA	2.3 E-8	NA	NA	1.4 E-6	6.3 E-7	NA	NA	2.4 E-6	5.5 E-5
A20-ST01-3-SP01	10	4.5 E-7	NA	NA	NA	NA	6.4 E-8	NA	NA	7.7 E-7	1.8 E-7	NA	NA	1.6 E-7	NA	3.8 E-6	1.6 E-6	NA	NA	1.7 E-6	3.8 E-5
A20-ST01-3-SP01	20	3.8 E-7	NA	NA	NA	7.7 E-5	1.6 E-7	NA	NA	1.5 E-6	2.4 E-7	1.6 E-6	2.5 E-6	NA	NA	2.3 E-6	9.3 E-7	9.1 E-6	NA	2.9 E-6	2.2 E-4
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
A20-ST02-SP01	20	4.3 E-6	9.2 E-7	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	5.7 E-6	3.6 E-6	NA	NA	NA	NA	7.5 E-6	NA	1.2 E-6	4.5 E-4
A20-ST02-SP01	30	4.0 E-7	3.3 E-7	NA	NA	7.8 E-5	3.0 E-7	NA	NA	2.6 E-6	3.0 E-7	3.7 E-7	3.2 E-7	1.1 E-7	NA	9.2 E-7	5.7 E-7	NA	NA	1.3 E-6	1.5 E-4
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5
A20-ST02-SP02	20	2.3 E-7	NA	NA	NA	4.1 E-5	NA	NA	NA	3.3 E-7	NA	3.3 E-6	NA	NA	NA	3.9 E-7	7.6 E-7	7.1 E-6	NA	4.1 E-7	7.1 E-5
A20-ST02-SP02	30	1.0 E-7	NA	NA	2.9 E-6	5.2 E-6	3.3 E-7	3.3 E-7	NA	4.5 E-6	7.2 E-8	2.3 E-7	1.0 E-8	4.0 E-7	NA	8.7 E-7	5.2 E-7	7.2 E-7	6.6 E-8	1.5 E-6	7.2 E-5
A20-ST02-SP03	20	7.5 E-7	NA	NA	NA	NA	8.2 E-8	NA	NA	7.4 E-7	NA	NA	NA	1.4 E-7	NA	8.9 E-7	4.7 E-7	NA	NA	2.1 E-6	2.4 E-5
A20-ST02-SP03	30	1.2 E-6	NA	NA	NA	NA	6.4 E-8	NA	NA	9.4 E-7	NA	NA	NA	1.1 E-7	NA	3.6 E-7	NA	NA	NA	1.1 E-6	2.0 E-5
A20-ST02-SP04	30	NA	NA	NA	7.7 E-6	NA	8.4 E-8	4.2 E-7	NA	1.5 E-6	1.1 E-7	NA	6.3 E-9	3.6 E-7	NA	8.7 E-7	4.3 E-7	NA	NA	7.6 E-7	4.8 E-4
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5
A20-ST05-SP01	20	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	1.4 E-2
A20-ST05-SP01	30	2.7 E-4	7.5 E-6	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	5.6 E-3
A20-ST05-SP02	10	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	7.3 E-7	5.1 E-5
A20-ST05-SP02	20	3.0 E-7	NA	NA	NA	NA	8.1 E-8	NA	NA	9.1 E-7	NA	NA	NA	2.5 E-7	NA	1.6 E-6	6.9 E-7	NA	NA	6.7 E-7	5.8 E-5
A20-ST05-SP03	10	2.3 E-6	2.4 E-6	NA	NA	1.9 E-6	NA	NA	NA	8.4 E-7	2.0 E-6	NA	4.3 E-8	1.8 E-7	NA	8.4 E-7	NA	NA	NA	5.2 E-6	3.1 E-4
A20-ST05-SP04	10	7.8 E-7	NA	NA	NA	NA	1.7 E-7	NA	NA	2.1 E-6	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	1.8 E-5
A20-ST05-SP05	10	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	1.7 E-6	1.4 E-7	NA	NA	3.5 E-7	NA	1.4 E-6	NA	NA	NA	1.7 E-6	1.7 E-5
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	1.2 E-7	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	4.3 E-7	3.4 E-4
A20-ST06-SP01	20	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	4.2 E-7	3.1 E-7	NA	NA	NA	NA	1.2 E-6	4.3 E-7	NA	NA	7.0 E-7	1.6 E-4
A20-ST14-SP01	10	9.5 E-6	NA	9.2 E-8	NA	NA	2.2 E-8	NA	NA	3.0 E-7	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	3.6 E-4
A20-ST14-SP01	20	3.4 E-7	NA	1.4 E-8	NA	NA	2.7 E-8	NA	NA	4.6 E-7	1.6 E-7	NA	NA	7.5 E-8	NA	3.8 E-7	NA	NA	NA	5.2 E-7	4.3 E-5
A20-ST14-SP02	10	1.7 E-7	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	6.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	2.9 E-4
A20-ST14-SP02	20	2.0 E-7	NA	1.8 E-8	NA	NA	NA	NA	NA	3.2 E-7	4.0 E-7	NA	NA	NA	NA	6.9 E-7	NA	NA	NA	7.3 E-7	2.1 E-4
A20-ST20-SP01	10	2.3 E-6	NA	NA	NA	NA	8.7 E-8	NA	NA	1.4 E-6	NA	NA	NA	2.2 E-7	NA	1.3 E-6	NA	NA	NA	5.7 E-7	5.9 E-6
A20-ST20-SP01	20	3.7 E-7	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	2.2 E-7	5.6 E-6
A20-ST22-SP01	10	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	4.0 E-7	1.9 E-7	NA	NA	NA	7.2 E-7	NA	NA	NA	NA	4.0 E-7	3.8 E-6
A20-ST22-SP01	20	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	9.8 E-7	NA	NA	NA	1.4 E-7	NA	5.2 E-7	NA	NA	NA	1.0 E-6	1.9 E-5

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	6.8 E-2	NA
03D-SP100	20	8.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	3.2 E-3	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	4.7 E+0	NA
03D-SP102	28	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	3.3 E-1	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	1.9 E-5	NA	NA	NA	NA	1.3 E-1	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	1.0 E-2	NA
03D-SP104	10	NA	9.7 E-5	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	3.4 E-5	NA	NA	NA	NA	1.0 E-1	NA
03D-SP104	20	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	NA	2.5 E-5	NA	NA	NA	NA	1.3 E-1	NA
03D-SP105	10	NA	5.5 E-5	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	2.8 E-5	NA	NA	NA	NA	9.1 E-2	NA
03D-SP106	15	9.7 E-7	NA	NA	NA	5.3 E-6	4.8 E-6	NA	NA	1.1 E-6	4.4 E-6	1.0 E-7	7.8 E-7	NA	5.0 E-7	2.2 E-7	NA	7.6 E-4	NA
03D-SP106	25	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	NA	NA	NA	3.0 E-2	NA
03D-SP106	30	4.1 E-6	4.9 E-4	NA	NA	3.9 E-3	NA	NA	NA	NA	5.9 E-4	NA	1.9 E-4	NA	NA	1.2 E-5	NA	1.4 E-2	NA
03D-SP107	10	NA	3.5 E-4	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	1.5 E-2	NA
03D-SP107	20	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	9.5 E-4	NA
03D-SP107	29	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	1.8 E-2	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	1.7 E-5	NA	NA	6.6 E-7	NA	1.4 E-3	NA
03D-SP109	10	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	2.5 E-3	NA
03D-SP109	20	NA	2.7 E-3	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	7.0 E-5	NA	3.9 E-2	NA
03D-SP109	30	NA	3.1 E-6	NA	2.9 E-8	5.1 E-6	1.3 E-6	NA	NA	NA	8.6 E-7	2.5 E-8	9.9 E-7	NA	9.0 E-8	3.4 E-7	NA	1.3 E-4	3.1 E-7
03D-SP110	10	NA	4.8 E-6	NA	NA	NA	NA	NA	NA	4.6 E-6	2.3 E-6	NA	2.2 E-6	3.1 E-7	NA	NA	NA	1.7 E-3	NA
03D-SP110	20	NA	1.4 E-6	NA	NA	NA	1.2 E-6	NA	NA	4.9 E-7	1.3 E-6	NA	1.6 E-7	NA	4.9 E-8	5.6 E-7	NA	2.3 E-4	NA
03D-SP111	10	NA	2.8 E-6	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	6.6 E-7	NA	8.8 E-3	NA
03D-SP111	20	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	1.5 E-7	NA	1.0 E-4	7.1 E-8
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	NA	NA	NA	NA	3.8 E-5	NA
03D-SP112	20	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	4.0 E-8	1.3 E-8	NA	4.9 E-8	2.0 E-7	NA	1.5 E-5	NA
03D-SP113	10	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	6.0 E-5	NA	4.0 E-8	1.8 E-9	NA	1.2 E-7	4.8 E-7	NA	4.3 E-5	NA
03D-SP113	20	NA	NA	NA	NA	6.5 E-3	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	5.6 E-5	NA	2.0 E-4	NA
03D-SP114	10	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	1.0 E-5	NA	NA	2.4 E-7	NA	NA	1.7 E-7	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	6.5 E-6	1.8 E-6	NA	NA	5.0 E-6	NA	1.9 E-8	2.3 E-7	NA	6.7 E-8	3.9 E-7	NA	NA	NA
03D-SP115	10	NA	5.0 E-6	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	8.3 E-6	NA	NA	NA	NA	1.0 E-4	NA
03D-SP116	10	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	7.0 E-5	NA	1.0 E-7	2.0 E-8	NA	1.1 E-7	3.5 E-7	NA	2.4 E-5	NA
03D-SP117	10	NA	5.2 E-7	NA	NA	NA	6.0 E-6	NA	NA	1.1 E-5	NA	9.2 E-8	4.4 E-7	NA	2.5 E-7	1.8 E-6	NA	1.6 E-4	NA
03D-SP118	10	NA	6.8 E-7	NA	NA	1.2 E-5	2.5 E-6	NA	NA	NA	NA	5.7 E-8	2.0 E-6	NA	1.0 E-7	6.3 E-7	NA	2.2 E-3	3.2 E-7
03D-SP118	20	NA	NA	NA	1.1 E-7	NA	1.2 E-5	NA	NA	NA	NA	4.3 E-8	2.4 E-6	NA	2.5 E-7	1.2 E-5	NA	2.9 E-4	NA
03D-SP119	10	4.6 E-7	1.5 E-5	NA	NA	3.8 E-5	NA	NA	NA	NA	2.3 E-5	1.5 E-7	7.5 E-6	1.6 E-6	NA	4.4 E-7	NA	1.6 E-3	NA
03D-SP119	20	3.4 E-6	1.1 E-4	NA	NA	NA	5.1 E-6	NA	NA	NA	7.3 E-4	9.2 E-8	4.8 E-6	NA	1.1 E-7	4.4 E-6	NA	7.9 E-4	NA
03D-SP119	29	NA	3.7 E-4	NA	NA	5.2 E-2	NA	NA	NA	NA	3.2 E-4	NA	8.9 E-4	3.2 E-4	NA	3.8 E-5	NA	1.7 E-2	NA
03D-SP120	10	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	8.6 E-8	6.2 E-8	NA	3.8 E-8	3.1 E-7	NA	2.8 E-5	NA
03D-SP120	20	NA	3.1 E-7	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	9.5 E-8	3.2 E-7	NA	8.2 E-7	3.9 E-6	NA	1.3 E-5	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	5.0 E-4	NA	NA	NA	NA	3.4 E-2	NA
03D-SP121	25	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	4.3 E-3	NA
03D-SP122	10	9.7 E-7	5.6 E-5	NA	NA	NA	2.5 E-6	NA	NA	3.2 E-6	4.2 E-5	NA	3.6 E-7	NA	4.2 E-7	2.6 E-6	NA	1.5 E-3	NA
03D-SP122	20	3.3 E-5	9.4 E-4	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	3.4 E-4	1.3 E-4	NA	NA	NA	6.5 E-4	NA
03D-SP122	30	2.7 E-5	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	2.2 E-4	NA	NA	7.3 E-6	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	2.8 E-6	NA	NA	1.3 E-7	NA	4.0 E-8	1.4 E-7	NA	2.8 E-5	NA
03D-SP123	20	NA	NA	NA	NA	8.7 E-6	1.0 E-6	NA	NA	NA	NA	2.5 E-8	NA	NA	5.2 E-8	1.2 E-7	NA	1.5 E-5	NA
03D-SP124	10	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	9.8 E-8	2.6 E-7	2.2 E-7	NA	3.5 E-7	NA	2.2 E-6	NA
03D-SP124	20	NA	NA	NA	NA	NA	9.1 E-7	NA	NA	NA	NA	8.6 E-8	4.8 E-7	1.8 E-7	3.7 E-8	1.8 E-7	NA	4.4 E-6	NA
03D-SP125	10	NA	NA	NA	NA	1.1 E-5	1.2 E-5	NA	NA	NA	7.6 E-7	8.0 E-8	NA	3.4 E-6	8.2 E-7	4.6 E-6	NA	5.2 E-6	NA
03D-SP125	20	NA	1.3 E-6	NA	NA	9.4 E-6	5.0 E-6	NA	NA	9.6 E-6	3.7 E-6	5.5 E-8	7.2 E-9	5.7 E-7	4.9 E-7	2.4 E-6	NA	1.1 E-5	NA
03D-SP126	10	NA	NA	NA	NA	9.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	2.0 E-7
03D-SP126	20	2.1 E-8	3.2 E-7	NA	NA	NA	8.4 E-7	NA	NA	NA	2.1 E-6	2.0 E-8	3.5 E-8	NA	5.2 E-8	2.1 E-7	NA	2.4 E-6	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	1.2 E-7	NA	3.0 E-5	NA
03D-SP127	20	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	NA	2.2 E-8	NA	NA	3.4 E-8	1.1 E-7	NA	1.3 E-5	9.1 E-8
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	NA
03D-SP128	20	2.6 E-7	4.9 E-5	NA	NA	NA	3.6 E-6	NA	NA	1.2 E-5	4.1 E-5	1.5 E-7	9.7 E-7	NA	3.2 E-7	3.7 E-6	NA	7.8 E-6	NA
03D-SP128	30	3.8 E-6	2.5 E-5	2.9 E-5	NA	NA	NA	NA	NA	4.4 E-5	9.7 E-4	NA	1.2 E-7	NA	1.3 E-7	4.0 E-7	NA	8.9 E-6	NA

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
03D-SP129	15	NA	NA	NA	NA	9.2 E-6	1.8 E-6	NA	NA	NA	9.2 E-7	5.7 E-8	NA	NA	1.5 E-7	2.8 E-7	NA	5.8 E-6	NA
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	4.5 E-5	NA
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	5.7 E-6	NA
03D-SP130	20	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	1.1 E-7	NA	2.6 E-6	6.7 E-8
03D-SP131	10	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	9.8 E-8	NA	NA	1.8 E-7	2.1 E-7	NA	5.5 E-5	NA
03D-SP131	20	NA	NA	NA	NA	NA	6.0 E-7	NA	NA	NA	NA	1.9 E-8	NA	NA	2.7 E-8	1.1 E-7	NA	1.3 E-5	NA
03D-SP132	10	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	1.7 E-7	NA	2.7 E-5	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	3.3 E-7	NA	1.8 E-8	8.7 E-6	1.1 E-5	NA	NA	1.9 E-6	3.5 E-7	7.1 E-8	1.6 E-8	NA	1.5 E-6	4.3 E-6	NA	8.4 E-6	4.5 E-7
03D-SP133	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	2.0 E-7	NA	2.8 E-6	NA
03D-SP133	20	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	NA	3.4 E-8	NA	NA	2.2 E-8	2.8 E-7	NA	NA	1.3 E-7
03D-SP134	10	NA	NA	NA	NA	1.1 E-4	1.2 E-6	NA	NA	NA	NA	5.5 E-8	NA	NA	1.3 E-7	1.7 E-7	NA	1.7 E-6	3.2 E-7
03D-SP134	20	NA	3.9 E-7	NA	NA	1.7 E-5	4.5 E-5	NA	NA	NA	1.9 E-6	2.8 E-6	NA	NA	3.7 E-6	3.2 E-5	NA	1.6 E-6	NA
03D-SP135	10	4.9 E-8	7.1 E-7	NA	NA	NA	4.3 E-6	NA	NA	8.4 E-5	2.3 E-6	9.8 E-8	5.6 E-8	NA	1.6 E-7	2.2 E-6	NA	1.4 E-3	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-6	8.3 E-7	1.5 E-8	NA	1.9 E-5	3.0 E-4	NA	7.4 E-5	NA
03D-SP136	10	NA	NA	NA	NA	4.0 E-5	NA	NA	NA	4.4 E-6	NA	6.9 E-8	NA	NA	5.3 E-8	1.3 E-7	NA	NA	3.7 E-7
03D-SP137	10	NA	5.9 E-7	NA	NA	NA	1.5 E-6	NA	NA	1.2 E-4	NA	9.8 E-8	1.1 E-7	NA	NA	5.7 E-7	NA	1.2 E-4	NA
03D-SP138	10	NA	2.8 E-6	NA	NA	NA	4.3 E-6	NA	NA	4.0 E-6	4.3 E-6	4.1 E-8	2.4 E-6	1.9 E-6	1.6 E-7	1.6 E-6	NA	9.5 E-6	1.0 E-6
03D-SP138	19	1.4 E-7	8.3 E-6	NA	NA	NA	2.0 E-6	NA	NA	7.3 E-6	2.5 E-5	NA	6.1 E-6	4.4 E-6	NA	5.2 E-7	NA	1.2 E-5	4.4 E-7
03D-SP138	30	3.5 E-8	1.3 E-6	NA	3.1 E-8	9.9 E-6	4.6 E-6	NA	NA	1.3 E-6	1.0 E-5	1.6 E-8	7.3 E-7	3.6 E-7	9.7 E-8	6.3 E-7	NA	7.9 E-4	5.3 E-7
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	6.1 E-6	2.9 E-7
03D-SP139	20	NA	NA	NA	3.8 E-8	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	1.4 E-6	NA	6.3 E-6	7.2 E-7
03D-SP139	28	NA	2.0 E-7	NA	NA	5.2 E-6	1.3 E-5	NA	NA	NA	NA	1.7 E-8	8.5 E-10	NA	4.3 E-7	1.8 E-6	NA	4.8 E-5	3.6 E-7
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA
03D-SP140	20	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	4.0 E-8	NA	NA	1.1 E-7	2.3 E-7	NA	1.7 E-6	8.5 E-8
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	7.6 E-6	4.5 E-7
03D-SP141	20	NA	NA	NA	2.4 E-8	5.1 E-6	6.4 E-6	NA	NA	NA	NA	4.0 E-8	3.0 E-9	NA	7.1 E-7	2.2 E-6	NA	4.0 E-6	4.9 E-7
03D-SP142	10	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	8.8 E-6	NA	NA	1.1 E-5	1.9 E-6	1.3 E-7	6.6 E-7	NA	1.2 E-4	2.3 E-7
03D-SP142	20	NA	NA	NA	NA	NA	5.5 E-6	NA	NA	3.7 E-6	NA	4.9 E-8	3.9 E-6	NA	3.5 E-7	1.9 E-6	NA	4.0 E-5	NA
03D-SP142	30	NA	4.3 E-5	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	7.3 E-5	NA	NA	NA	NA	2.2 E-4	NA
03D-SP143	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	6.0 E-5	NA	NA	1.4 E-7	NA	NA	2.4 E-7	NA	1.6 E-4	3.2 E-7
03D-SP143	20	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	3.3 E-5	3.9 E-7	1.7 E-8	6.4 E-8	NA	5.2 E-8	3.0 E-7	NA	5.7 E-5	2.8 E-7
03D-SP143	30	NA	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	1.4 E-7	5.8 E-5	NA
03D-SP144	10	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-8	NA	1.7 E-4	1.1 E-7
03D-SP144	20	NA	NA	NA	NA	NA	8.5 E-7	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	8.4 E-8	NA	1.3 E-4	6.5 E-8
03D-SP144	30	5.7 E-7	3.3 E-6	NA	NA	NA	3.1 E-6	NA	NA	NA	4.3 E-5	4.4 E-8	NA	NA	4.2 E-6	6.9 E-5	NA	7.9 E-5	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	8.8 E-5	NA	NA	2.6 E-7	NA	4.3 E-8	3.5 E-7	NA	1.5 E-5	1.7 E-7
03D-SP145	20	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	4.8 E-6	NA	NA	1.1 E-8	NA	4.5 E-8	2.2 E-7	NA	9.5 E-7	1.3 E-7
03D-SP146	10	5.8 E-8	4.0 E-6	NA	NA	3.6 E-5	2.1 E-6	NA	NA	1.4 E-6	9.3 E-6	NA	1.6 E-5	5.5 E-6	3.9 E-8	1.9 E-7	NA	9.8 E-4	1.4 E-7
03D-SP146	20	1.5 E-7	4.3 E-6	NA	NA	NA	2.9 E-6	NA	NA	NA	2.8 E-5	NA	6.4 E-6	2.3 E-6	9.7 E-8	6.1 E-7	NA	3.8 E-4	2.9 E-7
03D-SP146	27	8.1 E-7	3.1 E-5	NA	NA	NA	NA	NA	NA	NA	9.5 E-5	NA	3.9 E-5	7.7 E-6	NA	NA	NA	1.3 E-4	NA
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	1.2 E-5	NA	2.0 E-6	NA	NA	NA	NA	1.7 E-4	NA
03D-SP147	20	NA	2.8 E-7	NA	NA	1.3 E-5	1.8 E-6	NA	NA	2.5 E-6	3.9 E-6	NA	6.3 E-8	NA	4.5 E-8	3.4 E-7	NA	8.7 E-6	2.9 E-7
03D-SP147	27	9.0 E-7	1.6 E-5	NA	NA	NA	NA	NA	NA	2.9 E-5	2.2 E-4	NA	2.1 E-6	NA	NA	1.4 E-6	NA	4.4 E-5	NA
03D-SP148	10	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	9.8 E-6	NA	4.0 E-8	NA	NA	7.1 E-8	3.5 E-7	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	2.2 E-7	NA	4.4 E-8	1.5 E-7	NA	NA	1.3 E-7
03D-SP149	20	NA	NA	NA	NA	9.4 E-6	1.0 E-5	NA	NA	NA	NA	7.8 E-8	6.4 E-9	NA	3.5 E-7	8.8 E-7	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	4.4 E-8	NA	6.3 E-7	NA
03D-SP84	15	NA	3.2 E-7	NA	NA	NA	3.4 E-6	NA	NA	1.1 E-6	6.7 E-7	NA	9.7 E-8	NA	7.0 E-8	2.5 E-6	NA	8.1 E-6	NA
03D-SP84	25	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	8.4 E-7	NA	NA	7.5 E-8	NA	1.8 E-8	2.4 E-7	NA	4.5 E-6	2.2 E-7
03D-SP85	25	8.4 E-6	3.2 E-5	NA	NA	NA	2.1 E-4	NA	NA	NA	4.7 E-3	6.0 E-7	9.5 E-7	NA	2.8 E-5	5.6 E-4	NA	4.0 E-3	NA
03D-SP85	30	NA	NA	NA	NA	4.3 E-6	4.9 E-6	NA	NA	NA	3.9 E-7	2.9 E-8	2.8 E-9	NA	8.7 E-8	4.6 E-7	NA	7.4 E-6	1.8 E-7
03D-SP86	10	1.1 E-7	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	2.6 E-7	NA	4.7 E-6	3.2 E-7
03D-SP86	20	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	1.3 E-6	1.7 E-7
03D-SP87	10	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	1.7 E-7	3.8 E-9	NA	1.4 E-7	7.2 E-7	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	3.9 E-6	NA	NA	2.2 E-8	NA	8.2 E-8	6.6 E-7	NA	9.1 E-5	NA

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
03D-SP88	20	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	9.9 E-10	NA	1.2 E-7	5.9 E-7	NA	4.6 E-5	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	5.2 E-3	NA
03D-SP90	10	8.1 E-8	2.7 E-6	NA	NA	NA	5.1 E-6	NA	NA	4.6 E-5	9.3 E-6	2.9 E-7	9.7 E-7	NA	5.5 E-7	1.2 E-5	NA	4.3 E-5	NA
03D-SP90	20	3.0 E-8	4.3 E-7	NA	NA	NA	1.8 E-6	NA	NA	1.1 E-5	2.0 E-6	8.9 E-8	1.9 E-7	NA	1.0 E-7	1.9 E-6	NA	2.1 E-5	NA
03D-SP91	10	NA	NA	NA	NA	1.5 E-5	1.8 E-6	NA	NA	4.0 E-6	NA	5.5 E-8	9.5 E-9	NA	1.3 E-7	1.8 E-7	NA	8.5 E-6	8.0 E-7
03D-SP91	20	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	1.3 E-5	1.3 E-6	1.9 E-8	1.7 E-8	NA	3.5 E-8	6.5 E-8	NA	1.5 E-5	1.3 E-7
03D-SP92	10	6.3 E-8	NA	NA	NA	NA	3.1 E-6	NA	NA	4.2 E-6	5.2 E-6	9.2 E-8	1.3 E-7	NA	5.2 E-8	3.9 E-7	NA	2.2 E-5	NA
03D-SP92	20	5.3 E-8	3.4 E-7	NA	NA	NA	2.8 E-6	NA	NA	2.7 E-5	5.8 E-6	7.5 E-8	9.9 E-8	NA	7.5 E-8	4.9 E-7	NA	7.9 E-5	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	3.2 E-7	NA	NA	6.1 E-6	NA	3.0 E-5	NA
03D-SP93	25	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	5.6 E-7	NA	4.1 E-8	1.3 E-8	NA	6.6 E-8	6.8 E-7	NA	6.9 E-7	NA
03D-SP94	15	NA	3.3 E-7	NA	NA	NA	7.9 E-7	NA	NA	6.7 E-6	2.9 E-6	NA	2.0 E-7	NA	NA	8.3 E-8	NA	7.5 E-4	NA
03D-SP94	25	NA	NA	NA	NA	5.2 E-6	2.4 E-6	NA	NA	1.8 E-6	7.1 E-7	1.2 E-7	1.9 E-8	NA	1.4 E-7	5.3 E-7	NA	2.1 E-4	NA
03D-SP95	10	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	5.0 E-6	NA	NA	NA	NA	2.4 E-2	NA
03D-SP95	18	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	2.0 E-6	NA	NA	NA	NA	1.1 E-2	NA
03D-SP96	10	NA	NA	NA	NA	2.7 E-5	8.1 E-6	NA	NA	2.1 E-4	NA	9.8 E-7	8.7 E-9	NA	9.7 E-7	1.6 E-6	NA	1.4 E-5	NA
03D-SP96	17	NA	NA	NA	NA	2.8 E-5	3.7 E-6	NA	NA	1.6 E-4	NA	1.0 E-7	6.5 E-9	NA	2.9 E-7	1.3 E-6	NA	6.3 E-6	NA
03D-SP99	10	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	4.4 E-2	NA
11D-SP26	10	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	6.4 E-7	NA	6.3 E-8	2.6 E-7	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	7.4 E-7	NA	NA	NA	NA	NA	8.4 E-8	NA	2.4 E-8	3.3 E-7	NA	NA	8.8 E-8
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA
11D-SP27	20	NA	NA	NA	NA	6.5 E-6	3.0 E-6	NA	NA	NA	NA	2.0 E-8	NA	NA	1.8 E-7	8.6 E-7	NA	1.0 E-6	7.2 E-8
11D-SP28	10	NA	NA	NA	NA	1.0 E-5	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	3.9 E-7	NA	NA	NA
11D-SP28	20	3.1 E-8	3.0 E-6	NA	NA	NA	NA	NA	NA	1.1 E-5	8.9 E-7	NA	8.9 E-9	NA	NA	NA	NA	2.6 E-6	4.5 E-8
11D-SP29	10	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	5.8 E-8	NA	1.9 E-7	1.4 E-6	NA	NA	3.7 E-7
11D-SP29	30	2.7 E-8	3.9 E-6	NA	2.4 E-8	3.6 E-6	1.9 E-6	NA	NA	NA	9.1 E-7	NA	2.2 E-7	9.5 E-8	5.2 E-7	7.3 E-6	NA	NA	3.9 E-7
11D-SP30	10	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	1.5 E-6	NA	NA	1.9 E-7	2.2 E-7	1.0 E-6	6.8 E-6	NA	NA	NA
11D-SP30	20	9.3 E-8	9.8 E-7	NA	NA	NA	9.2 E-7	NA	NA	4.0 E-6	2.4 E-6	NA	7.0 E-8	1.2 E-7	7.9 E-7	1.0 E-5	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	1.4 E-6	NA	NA	2.9 E-7
11D-SP31	20	NA	NA	NA	NA	NA	5.6 E-7	NA	1.1 E-6	2.0 E-6	5.8 E-7	NA	1.2 E-8	NA	2.4 E-8	1.5 E-6	NA	NA	2.4 E-7
11D-SP31	30	7.3 E-8	2.0 E-7	NA	1.3 E-8	NA	6.0 E-7	NA	NA	2.2 E-6	3.4 E-6	NA	5.2 E-9	NA	4.5 E-7	3.3 E-6	NA	NA	2.5 E-7
50D-SP01	10	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	6.9 E-9	NA	5.0 E-8	2.2 E-7	NA	2.2 E-5	NA
50D-SP01	20	NA	NA	NA	NA	5.1 E-6	3.2 E-6	NA	NA	NA	NA	9.2 E-8	NA	NA	2.5 E-7	3.7 E-6	NA	3.9 E-6	NA
51D-SP04	10	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	1.7 E-5	NA
51D-SP04	20	NA	NA	NA	NA	6.5 E-6	3.6 E-6	NA	NA	NA	NA	8.9 E-7	NA	NA	5.2 E-7	2.3 E-6	NA	2.5 E-6	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	1.5 E-6	NA	3.0 E-6	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	9.9 E-6	NA
A20-B34-SP01	20	NA	4.1 E-7	NA	NA	NA	2.2 E-6	NA	9.7 E-7	NA	NA	2.8 E-8	NA	NA	1.2 E-7	9.1 E-7	NA	3.5 E-6	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA
A20-B34-SP02	20	NA	NA	NA	NA	5.8 E-6	1.2 E-6	NA	NA	NA	NA	2.2 E-8	NA	NA	7.5 E-8	2.2 E-7	NA	2.1 E-6	1.3 E-7
A20-B34-SP03	10	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	6.1 E-7	NA	6.8 E-5	1.6 E-7
A20-B34-SP03	29	NA	NA	NA	2.0 E-8	3.5 E-6	2.2 E-6	NA	2.4 E-6	3.9 E-7	5.3 E-7	1.2 E-8	NA	NA	1.4 E-7	6.1 E-7	NA	5.4 E-5	3.5 E-7
A20-RB37-SP01	10	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	7.3 E-5	NA	NA	NA	NA	8.7 E-3	NA
A20-RB37-SP01	20	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	4.3 E-5	NA	NA	NA	NA	5.1 E-3	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	3.0 E-6	NA	1.6 E-4	NA
A20-RB37-SP02	10	NA	3.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	2.4 E-7	NA	1.1 E-3	3.5 E-7
A20-RB37-SP02	20	NA	NA	NA	NA	7.6 E-6	1.3 E-6	NA	NA	NA	NA	2.0 E-8	1.8 E-9	NA	7.5 E-8	3.7 E-7	NA	1.3 E-5	4.0 E-7
A20-RC29-SP01	10	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	NA	NA	NA	3.0 E-9	NA	7.5 E-8	4.6 E-7	NA	4.3 E-5	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	2.2 E-9	NA	4.5 E-8	2.8 E-7	NA	2.8 E-5	NA
A20-RX73-SP01	10	NA	9.0 E-7	NA	NA	NA	1.3 E-6	NA	NA	7.9 E-5	NA	NA	NA	NA	2.2 E-7	1.2 E-7	NA	1.6 E-5	NA
A20-RX73-SP01	20	NA	3.2 E-6	NA	NA	1.2 E-5	2.8 E-6	NA	NA	2.6 E-5	NA	2.4 E-8	9.4 E-10	NA	4.1 E-6	5.0 E-7	NA	1.3 E-5	NA
A20-ST01-1-SP01	10	5.5 E-8	NA	NA	NA	NA	1.9 E-6	NA	NA	1.9 E-6	NA	NA	2.6 E-7	NA	5.0 E-8	2.2 E-7	NA	3.2 E-5	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	NA	NA	2.2 E-8	NA	NA	5.6 E-8	1.6 E-7	NA	3.2 E-6	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	4.2 E-6	NA	6.3 E-8	9.1 E-7	NA	5.8 E-8	2.4 E-7	NA	6.0 E-5	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	4.3 E-6	4.6 E-6	NA	NA	2.8 E-6	NA	2.9 E-8	1.5 E-7	NA	2.5 E-7	1.4 E-6	NA	7.5 E-6	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	6.3 E-8	NA	NA	6.2 E-8	1.5 E-7	NA	1.0 E-5	4.0 E-7
A20-ST01-3-SP01	20	NA	NA	8.9 E-6	NA	5.8 E-6	8.6 E-6	NA	NA	NA	NA	2.4 E-7	NA	NA	1.6 E-6	2.3 E-5	NA	5.6 E-6	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
A20-ST02-SP01	20	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	2.7 E-6	1.8 E-6	NA	NA	1.9 E-6	1.1 E-5	NA	NA	NA
A20-ST02-SP01	30	NA	1.8 E-7	NA	NA	3.4 E-6	1.5 E-5	NA	NA	NA	1.4 E-6	4.4 E-8	NA	NA	1.8 E-6	4.8 E-6	NA	3.3 E-6	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	1.2 E-5	NA
A20-ST02-SP02	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	2.2 E-8	NA	NA	3.0 E-8	1.5 E-7	NA	5.9 E-6	NA
A20-ST02-SP02	30	NA	NA	NA	NA	1.4 E-5	4.3 E-6	NA	NA	NA	NA	2.7 E-8	6.5 E-10	NA	2.2 E-7	1.8 E-6	NA	2.5 E-6	NA
A20-ST02-SP03	20	NA	NA	NA	NA	5.8 E-6	4.3 E-7	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	9.2 E-8	NA	1.8 E-6	1.2 E-7
A20-ST02-SP03	30	NA	NA	NA	NA	3.6 E-6	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	2.0 E-7	NA	1.3 E-6	2.0 E-7
A20-ST02-SP04	30	NA	NA	NA	NA	2.0 E-4	3.1 E-6	NA	NA	NA	NA	1.1 E-8	NA	NA	9.7 E-8	4.9 E-7	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	1.2 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	1.5 E-4	2.2 E-3	NA	3.9 E-7	NA	NA	4.5 E-7	NA	3.7 E-5	5.6 E-7
A20-ST05-SP01	30	1.2 E-5	1.0 E-4	5.4 E-5	NA	NA	NA	NA	NA	9.3 E-5	2.0 E-3	NA	1.5 E-6	NA	8.0 E-8	3.2 E-7	NA	1.0 E-5	5.3 E-7
A20-ST05-SP02	10	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	2.0 E-7	NA	1.9 E-5	3.5 E-7
A20-ST05-SP02	20	NA	NA	NA	NA	8.3 E-6	6.0 E-7	NA	NA	NA	NA	2.2 E-8	9.8 E-10	NA	4.1 E-8	2.1 E-7	NA	1.3 E-5	2.8 E-7
A20-ST05-SP03	10	6.0 E-7	1.1 E-5	NA	NA	1.0 E-5	1.2 E-6	NA	NA	5.8 E-6	4.2 E-5	NA	9.1 E-7	NA	9.7 E-8	3.3 E-6	NA	5.0 E-5	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	1.7 E-8	NA	1.1 E-7	7.2 E-7	NA	2.4 E-6	2.5 E-7
A20-ST05-SP05	10	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	8.2 E-8	5.5 E-7	NA	NA	1.9 E-7
A20-ST06-SP01	10	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	NA	NA	NA	3.0 E-7	NA	3.7 E-7	5.5 E-7	NA	1.4 E-4	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	1.6 E-8	2.5 E-7	NA	4.1 E-8	1.8 E-7	NA	6.7 E-5	NA
A20-ST14-SP01	10	NA	2.1 E-6	NA	NA	NA	1.2 E-6	NA	NA	1.0 E-5	NA	NA	3.6 E-6	NA	NA	1.6 E-7	NA	1.3 E-4	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	2.8 E-6	NA	NA	1.1 E-6	NA	3.5 E-8	2.8 E-7	NA	1.2 E-5	3.2 E-7
A20-ST14-SP02	10	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	1.4 E-7	NA	8.2 E-8	4.4 E-7	NA	1.2 E-4	2.9 E-7
A20-ST14-SP02	20	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	7.6 E-8	NA	1.1 E-7	5.8 E-7	NA	8.7 E-5	2.9 E-7
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	7.5 E-8	NA	1.2 E-6	8.4 E-8
A20-ST22-SP01	10	NA	NA	NA	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	6.2 E-6	7.2 E-7	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	1.5 E-7	NA	NA	6.7 E-8

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
03D-SP100	10	NA	5.9 E-6	NA	7.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-2
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-3
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E+0
03D-SP102	28	NA	4.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-1
03D-SP103	10	NA	1.7 E-5	NA	9.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1
03D-SP103	20	NA	1.7 E-6	NA	8.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2
03D-SP104	10	NA	1.4 E-4	NA	2.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1
03D-SP104	20	NA	2.9 E-4	NA	4.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1
03D-SP105	10	NA	1.4 E-4	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-2
03D-SP106	15	NA	5.3 E-7	9.7 E-6	1.4 E-8	1.1 E-5	5.3 E-7	4.3 E-8	1.2 E-6	NA	3.2 E-7	1.1 E-7	4.9 E-8	1.2 E-8	NA	NA	2.6 E-6	1.6 E-6	NA	NA	1.8 E-6	8.0 E-4
03D-SP106	25	NA	7.7 E-4	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	NA	NA	NA	NA	NA	4.4 E-2
03D-SP106	30	NA	4.7 E-4	1.7 E-4	2.5 E-6	NA	6.0 E-5	NA	NA	NA	NA	7.6 E-6	NA	9.9 E-7	NA	NA	NA	NA	NA	NA	9.6 E-6	2.0 E-2
03D-SP107	10	NA	8.7 E-4	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	6.2 E-7	NA	NA	NA	NA	NA	NA	NA	2.1 E-2
03D-SP107	20	NA	6.1 E-5	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SP107	29	NA	8.8 E-4	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	2.0 E-2
03D-SP108	10	NA	3.3 E-6	3.1 E-6	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	6.3 E-7	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
03D-SP109	10	NA	2.3 E-5	3.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
03D-SP109	20	NA	5.6 E-4	7.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-2
03D-SP109	30	NA	1.5 E-6	8.1 E-7	5.6 E-9	NA	NA	1.2 E-7	NA	1.3 E-8	8.0 E-7	2.4 E-8	NA	1.8 E-9	8.5 E-8	NA	5.7 E-7	2.2 E-7	NA	NA	3.8 E-7	1.4 E-4
03D-SP110	10	NA	9.3 E-6	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3
03D-SP110	20	NA	2.3 E-6	NA	1.4 E-8	NA	2.5 E-7	2.7 E-8	NA	NA	3.0 E-7	6.8 E-8	NA	2.9 E-9	4.5 E-8	NA	2.3 E-7	NA	NA	NA	1.9 E-7	2.4 E-4
03D-SP111	10	NA	4.2 E-6	NA	1.4 E-7	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	8.8 E-3
03D-SP111	20	NA	NA	NA	NA	NA	3.7 E-5	1.4 E-8	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	1.4 E-4
03D-SP112	10	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	2.2 E-7	6.2 E-5
03D-SP112	20	NA	NA	NA	NA	NA	3.2 E-5	2.4 E-8	2.1 E-7	NA	3.3 E-7	4.9 E-8	NA	2.9 E-9	NA	NA	8.8 E-7	3.7 E-7	NA	NA	8.4 E-7	5.3 E-5
03D-SP113	10	NA	1.8 E-7	NA	NA	NA	6.1 E-5	NA	3.9 E-7	NA	1.7 E-7	1.0 E-7	NA	7.8 E-9	NA	NA	1.2 E-6	6.7 E-7	NA	NA	6.4 E-7	1.7 E-4
03D-SP113	20	NA	NA	2.8 E-5	NA	NA	1.3 E-4	NA	NA	NA	NA	1.0 E-5	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	1.7 E-5	7.4 E-3
03D-SP114	10	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	3.3 E-7	NA	NA	NA	6.7 E-8	NA	4.8 E-7	NA	NA	NA	2.2 E-7	1.3 E-5
03D-SP114	20	NA	NA	NA	NA	NA	NA	6.8 E-8	NA	6.5 E-9	6.9 E-7	3.1 E-8	NA	NA	1.5 E-7	NA	4.1 E-7	2.0 E-7	NA	NA	1.1 E-6	1.7 E-5
03D-SP115	10	NA	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4
03D-SP116	10	NA	7.1 E-7	NA	NA	2.2 E-5	3.9 E-5	NA	2.1 E-6	NA	NA	1.1 E-7	NA	1.1 E-8	1.4 E-7	NA	4.8 E-6	2.1 E-6	NA	NA	1.3 E-6	1.7 E-4
03D-SP117	10	NA	1.4 E-6	NA	2.3 E-8	5.8 E-6	1.5 E-4	NA	7.3 E-7	1.1 E-8	3.6 E-7	4.8 E-7	NA	2.7 E-8	1.0 E-7	NA	3.2 E-6	1.0 E-6	NA	9.1 E-8	2.4 E-6	3.5 E-4
03D-SP118	10	NA	1.3 E-6	NA	4.5 E-8	NA	1.1 E-4	NA	NA	NA	4.8 E-7	1.8 E-7	NA	2.0 E-8	2.4 E-7	NA	1.9 E-6	7.3 E-7	NA	1.6 E-7	1.2 E-6	2.3 E-3
03D-SP118	20	NA	4.7 E-7	NA	NA	NA	1.7 E-4	NA	NA	1.1 E-8	5.1 E-7	2.2 E-7	NA	3.0 E-7	2.2 E-7	NA	1.0 E-6	4.0 E-7	NA	9.4 E-8	2.0 E-6	5.0 E-4
03D-SP119	10	1.5 E-5	6.5 E-5	NA	3.9 E-8	1.9 E-5	6.6 E-5	NA	1.9 E-6	NA	NA	2.5 E-7	NA	NA	NA	NA	5.9 E-6	2.1 E-6	NA	NA	2.0 E-6	1.8 E-3
03D-SP119	20	6.8 E-4	2.3 E-4	2.7 E-6	NA	1.2 E-5	3.3 E-5	NA	1.1 E-6	NA	NA	1.4 E-7	NA	1.9 E-7	NA	NA	3.5 E-6	1.6 E-6	NA	NA	1.4 E-6	2.6 E-3
03D-SP119	29	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	2.4 E-6	NA	NA	1.6 E-4	NA	NA	NA	5.6 E-5	7.2 E-2
03D-SP120	10	NA	1.0 E-6	NA	1.1 E-8	1.5 E-5	4.5 E-5	NA	1.6 E-6	NA	2.7 E-7	3.0 E-7	NA	1.4 E-8	1.2 E-7	NA	3.9 E-6	1.4 E-6	NA	5.6 E-8	1.1 E-6	1.0 E-4
03D-SP120	20	NA	2.7 E-7	NA	6.0 E-9	6.0 E-6	5.3 E-5	NA	5.0 E-7	NA	1.4 E-7	1.3 E-7	NA	NA	8.6 E-8	NA	2.7 E-6	8.0 E-7	NA	9.7 E-8	5.1 E-6	1.1 E-4
03D-SP121	15	NA	6.8 E-5	1.0 E-4	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
03D-SP122	10	NA	1.4 E-6	1.5 E-5	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	7.1 E-7	NA	NA	NA	3.6 E-7	1.7 E-3
03D-SP122	20	NA	8.6 E-6	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	9.7 E-7	NA	NA	NA	NA	NA	NA	NA	2.4 E-3
03D-SP122	30	NA	2.2 E-5	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	6.0 E-7	6.5 E-7	NA	NA	NA	3.8 E-7	3.5 E-5
03D-SP123	20	NA	NA	NA	NA	2.0 E-6	NA	4.8 E-8	2.6 E-7	NA	3.8 E-7	NA	NA	NA	1.2 E-7	NA	7.7 E-7	3.7 E-7	NA	NA	1.2 E-6	3.0 E-5
03D-SP124	10	NA	NA	NA	NA	2.9 E-5	5.1 E-5	NA	2.5 E-6	NA	NA	2.0 E-7	NA	NA	1.1 E-7	NA	4.7 E-6	2.1 E-6	8.4 E-7	NA	1.2 E-6	9.6 E-5
03D-SP124	20	NA	1.8 E-7	NA	NA	1.1 E-5	4.7 E-5	NA	1.2 E-6	NA	NA	3.9 E-7	NA	5.1 E-9	4.1 E-8	NA	3.8 E-6	1.7 E-6	5.0 E-7	NA	1.0 E-6	7.3 E-5
03D-SP125	10	NA	2.7 E-6	NA	NA	NA	2.5 E-4	NA	NA	2.5 E-8	1.5 E-6	2.3 E-6	NA	NA	NA	5.7 E-6	2.0 E-6	6.6 E-7	NA	1.1 E-7	2.9 E-6	3.0 E-4
03D-SP125	20	9.6 E-7	7.6 E-5	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	9.7 E-7	NA	2.1 E-8	NA	8.5 E-7	1.3 E-6	5.7 E-7	NA	1.8 E-7	1.8 E-6	2.9 E-4
03D-SP126	10	NA	5.1 E-7	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	3.4 E-7	NA	NA	NA	2.7 E-7	2.1 E-5
03D-SP126	20	NA	5.6 E-7	1.8 E-6	NA	NA	NA	3.0 E-8	NA	NA	3.9 E-7	3.6 E-8	NA	NA	5.5 E-8	NA	5.0 E-7	2.0 E-7	NA	NA	4.2 E-7	1.0 E-5
03D-SP127	10	NA	1.8 E-7	NA	NA	4.1 E-6	NA	NA	4.2 E-7	NA	NA	1.3 E-7	NA	NA	NA	NA	8.8 E-7	4.4 E-7	NA	NA	3.6 E-7	3.7 E-5
03D-SP127	20	NA	6.1 E-8	NA	NA	2.3 E-6	NA	2.8 E-8	2.6 E-7	NA	3.0 E-7	NA	NA	2.3 E-9	4.8 E-8	NA	7.1 E-7	3.3 E-7	NA	NA	3.2 E-7	1.9 E-5
03D-SP128	10	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	4.5 E-6
03D-SP128	20	2.6 E-5	3.1 E-4	7.6 E-7	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	2.5 E-6	1.3 E-6	NA	NA	6.1 E-7	4.6 E-4
03D-SP128	30	1.1 E-4	7.1 E-4	NA	NA	1.9 E-5	NA	1.4 E-7	2.2 E-6	NA	NA	6.1 E-7	NA	NA	3.0 E-7	NA	1.1 E-6	NA	NA	NA	7.3 E-7	1.9 E-3

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
03D-SP129	15	NA	1.5 E-6	NA	NA	5.3 E-6	NA	8.3 E-8	4.4 E-7	7.1 E-9	5.4 E-7	NA	NA	NA	1.6 E-7	NA	1.3 E-6	7.1 E-7	NA	NA	9.8 E-7	2.9 E-5
03D-SP129	25	3.3 E-5	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-4
03D-SP130	10	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	6.0 E-7	NA	NA	NA	9.6 E-8	NA	3.4 E-7	NA	NA	NA	4.4 E-7	7.2 E-6
03D-SP130	20	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	9.2 E-7	NA	NA	NA	8.9 E-8	NA	2.1 E-7	NA	NA	2.0 E-8	1.9 E-7	4.9 E-6
03D-SP131	10	NA	NA	NA	NA	1.5 E-5	1.1 E-6	NA	1.5 E-6	NA	NA	6.3 E-7	NA	NA	NA	NA	2.7 E-6	1.1 E-6	8.8 E-7	NA	2.7 E-5	1.1 E-4
03D-SP131	20	NA	NA	NA	NA	2.8 E-6	NA	2.5 E-8	2.6 E-7	NA	3.5 E-7	NA	NA	NA	4.1 E-8	NA	6.5 E-7	3.3 E-7	NA	NA	3.1 E-7	1.8 E-5
03D-SP132	10	NA	2.5 E-6	NA	5.5 E-8	NA	NA	NA	NA	NA	2.5 E-7	7.5 E-8	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	4.0 E-7	3.3 E-5
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	4.7 E-7	NA	NA	NA	NA	1.6 E-7	NA	NA	1.5 E-6	1.4 E-6	1.2 E-7	4.8 E-8	1.6 E-7	NA	5.7 E-7	3.1 E-7	NA	NA	1.3 E-6	4.3 E-5
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	5.5 E-8	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	3.1 E-7	5.6 E-6
03D-SP133	20	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	2.1 E-7	2.1 E-8	NA	NA	5.8 E-8	NA	1.0 E-6	5.3 E-7	NA	NA	3.8 E-7	3.3 E-6
03D-SP134	10	NA	1.0 E-7	NA	NA	5.0 E-6	NA	NA	4.8 E-7	1.2 E-8	1.8 E-7	6.1 E-8	6.8 E-8	8.4 E-9	2.2 E-7	NA	1.1 E-6	3.7 E-7	NA	NA	5.8 E-7	1.2 E-4
03D-SP134	20	NA	NA	1.2 E-6	NA	3.6 E-6	8.7 E-5	2.3 E-8	NA	NA	2.6 E-7	5.6 E-7	2.7 E-6	2.2 E-6	3.2 E-8	NA	7.7 E-7	3.7 E-7	7.2 E-6	NA	4.4 E-7	2.1 E-4
03D-SP135	10	NA	1.7 E-6	4.3 E-6	5.4 E-8	6.4 E-6	1.0 E-4	NA	7.3 E-7	NA	1.7 E-7	2.3 E-7	7.8 E-8	8.0 E-8	6.9 E-8	NA	3.1 E-6	1.1 E-6	NA	7.2 E-8	1.7 E-6	1.6 E-3
03D-SP135	20	NA	NA	6.4 E-4	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	3.4 E-6	1.1 E-5	NA	NA	3.2 E-6	NA	7.2 E-6	NA	1.3 E-6	1.4 E-3
03D-SP136	10	NA	NA	NA	NA	1.2 E-5	NA	NA	7.3 E-7	NA	9.0 E-8	NA	1.7 E-7	7.6 E-9	2.2 E-7	NA	1.2 E-6	NA	1.3 E-6	NA	4.9 E-7	6.1 E-5
03D-SP137	10	NA	5.0 E-6	NA	2.2 E-8	1.3 E-5	8.7 E-5	NA	1.5 E-6	NA	2.0 E-7	1.8 E-7	NA	1.6 E-8	NA	NA	4.2 E-6	2.0 E-6	NA	NA	1.4 E-6	3.5 E-4
03D-SP138	10	NA	3.5 E-5	NA	3.1 E-8	6.6 E-6	4.5 E-6	2.8 E-8	5.6 E-7	1.7 E-8	2.9 E-7	8.5 E-7	NA	4.0 E-8	1.5 E-7	7.3 E-7	1.4 E-6	5.6 E-7	NA	3.4 E-8	1.1 E-6	8.3 E-5
03D-SP138	19	NA	8.6 E-5	NA	1.9 E-8	NA	1.7 E-6	NA	NA	NA	NA	6.0 E-7	NA	9.7 E-9	3.6 E-7	1.7 E-6	9.3 E-7	NA	NA	NA	7.5 E-7	1.6 E-4
03D-SP138	30	8.8 E-7	3.3 E-5	NA	NA	NA	NA	6.6 E-8	NA	NA	2.6 E-6	1.4 E-7	NA	NA	2.3 E-7	2.2 E-7	2.4 E-7	NA	NA	NA	7.3 E-7	8.6 E-4
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	1.3 E-6	8.4 E-6
03D-SP139	20	NA	9.2 E-7	NA	NA	NA	NA	2.1 E-8	NA	5.5 E-9	1.8 E-7	4.7 E-8	NA	3.2 E-9	4.8 E-8	NA	2.5 E-7	NA	NA	NA	3.7 E-7	1.2 E-5
03D-SP139	28	NA	2.4 E-6	NA	NA	NA	NA	5.3 E-8	NA	5.2 E-9	9.0 E-7	9.3 E-8	NA	6.2 E-9	8.6 E-8	NA	2.5 E-7	1.3 E-7	NA	NA	8.7 E-7	7.4 E-5
03D-SP140	10	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	2.4 E-7	5.9 E-6
03D-SP140	20	NA	1.1 E-7	NA	NA	NA	NA	5.3 E-8	NA	NA	8.6 E-7	NA	NA	NA	4.5 E-8	NA	8.5 E-7	3.7 E-7	NA	NA	9.4 E-7	7.0 E-6
03D-SP141	10	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	4.2 E-7	NA	NA	NA	6.8 E-8	NA	3.3 E-7	NA	NA	NA	4.7 E-7	9.5 E-6
03D-SP141	20	NA	1.4 E-7	NA	NA	NA	8.0 E-7	1.5 E-7	NA	NA	1.2 E-6	6.8 E-7	8.1 E-8	1.5 E-8	7.9 E-8	NA	6.2 E-7	2.4 E-7	9.2 E-7	NA	2.9 E-6	2.7 E-5
03D-SP142	10	NA	3.1 E-7	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	3.3 E-7	5.7 E-7	NA	NA	NA	1.3 E-6	1.5 E-4
03D-SP142	20	NA	1.1 E-7	NA	NA	NA	NA	6.8 E-8	NA	NA	6.9 E-7	9.7 E-8	NA	7.1 E-9	1.8 E-7	NA	6.2 E-7	NA	NA	NA	2.2 E-6	5.9 E-5
03D-SP142	30	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	NA	NA	NA	5.6 E-4
03D-SP143	10	NA	2.5 E-6	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	4.2 E-7	2.2 E-4
03D-SP143	20	NA	1.0 E-6	NA	1.0 E-8	NA	NA	NA	NA	NA	1.4 E-7	5.1 E-8	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	4.4 E-7	9.5 E-5
03D-SP143	30	NA	4.4 E-6	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	9.4 E-5
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	1.9 E-7	1.8 E-4
03D-SP144	20	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	1.0 E-6	NA	NA	NA	3.1 E-8	NA	1.9 E-7	NA	NA	1.6 E-8	1.7 E-7	1.3 E-4
03D-SP144	30	NA	NA	2.6 E-4	NA	NA	1.3 E-4	NA	NA	NA	7.6 E-7	NA	2.7 E-7	2.5 E-6	NA	NA	NA	NA	NA	NA	1.6 E-7	6.0 E-4
03D-SP145	10	NA	4.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	1.1 E-4
03D-SP145	20	NA	3.4 E-8	NA	NA	NA	NA	1.7 E-8	NA	NA	2.3 E-7	3.1 E-8	NA	NA	4.1 E-8	NA	1.9 E-7	NA	NA	NA	2.3 E-7	8.7 E-6
03D-SP146	10	1.0 E-5	4.2 E-5	NA	5.6 E-8	NA	NA	NA	NA	NA	7.2 E-7	1.6 E-7	NA	NA	3.0 E-7	7.3 E-7	3.7 E-7	NA	NA	NA	2.7 E-7	1.1 E-3
03D-SP146	20	1.9 E-5	2.9 E-5	NA	2.1 E-8	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	5.4 E-7	4.7 E-4
03D-SP146	27	2.3 E-5	6.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4
03D-SP147	10	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
03D-SP147	20	NA	5.1 E-5	NA	NA	NA	NA	1.1 E-8	NA	NA	5.0 E-7	3.6 E-8	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	3.6 E-7	8.2 E-5
03D-SP147	27	5.1 E-6	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	NA	NA	NA	NA	8.8 E-7	NA	NA	NA	3.3 E-6	1.7 E-5
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	1.1 E-7	NA	NA	NA	NA	2.7 E-8	NA	NA	3.9 E-7	2.3 E-7	NA	NA	1.9 E-7	3.1 E-7	NA	NA	NA	NA	2.4 E-7	4.3 E-6
03D-SP149	20	NA	3.5 E-8	NA	NA	NA	NA	1.1 E-7	2.1 E-7	1.8 E-8	1.5 E-6	5.1 E-8	NA	4.0 E-9	3.8 E-7	NA	1.4 E-6	7.0 E-7	NA	1.6 E-8	2.0 E-6	2.8 E-5
03D-SP150	30	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	1.4 E-8	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	5.0 E-8	1.3 E-6
03D-SP84	15	NA	6.4 E-7	1.7 E-5	NA	NA	1.2 E-5	5.5 E-8	NA	NA	5.2 E-7	1.3 E-7	NA	2.1 E-7	NA	NA	2.9 E-7	NA	NA	NA	8.0 E-7	4.7 E-5
03D-SP84	25	NA	1.9 E-7	1.2 E-6	NA	NA	3.2 E-7	NA	NA	NA	1.1 E-7	1.4 E-7	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	1.4 E-7	9.1 E-6
03D-SP85	25	NA	3.4 E-5	4.1 E-3	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	1.3 E-5	2.5 E-5	NA	NA	NA	2.6 E-5	2.8 E-5	NA	NA	1.4 E-2
03D-SP85	30	NA	1.7 E-7	1.2 E-7	NA	NA	NA	1.7 E-7	NA	1.1 E-8	1.5 E-6	4.9 E-8	NA	5.1 E-9	6.6 E-8	NA	4.7 E-7	2.7 E-7	NA	NA	8.9 E-7	2.1 E-5
03D-SP86	10	NA	1.8 E-7	NA	1.9 E-8	NA	NA	3.6 E-8	NA	NA	4.2 E-7	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	7.5 E-6
03D-SP86	20	NA	1.4 E-7	NA	NA	NA	NA	2.1 E-8	NA	NA	2.9 E-7	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	NA	2.2 E-7	3.0 E-6
03D-SP87	10	NA	NA	NA	NA	7.3 E-6	7.3 E-5	NA	1.1 E-6	NA	NA	8.9 E-8	NA	8.5 E-9	1.0 E-6	NA	6.5 E-6	1.7 E-6	NA	1.7 E-7	4.4 E-6	1.0 E-4
03D-SP88	10	NA	1.8 E-6	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	2.9 E-7	1.0 E-4

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
03D-SP88	20	NA	6.6 E-8	NA	NA	NA	NA	1.7 E-8	NA	NA	2.3 E-7	4.2 E-8	NA	3.0 E-9	NA	NA	4.1 E-7	1.9 E-7	NA	NA	3.3 E-7	5.1 E-5
03D-SP89	10	NA	4.2 E-6	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3
03D-SP90	10	NA	5.7 E-6	1.5 E-5	3.2 E-8	8.6 E-6	1.1 E-4	NA	1.5 E-6	NA	8.1 E-7	1.3 E-7	NA	2.8 E-7	2.4 E-7	NA	1.0 E-5	2.7 E-6	NA	7.9 E-8	4.9 E-6	2.8 E-4
03D-SP90	20	NA	1.9 E-6	2.6 E-6	1.1 E-8	5.0 E-6	1.7 E-5	NA	7.0 E-7	NA	1.7 E-6	2.5 E-8	NA	4.6 E-8	1.0 E-7	NA	3.2 E-6	1.0 E-6	NA	6.6 E-8	1.4 E-6	7.3 E-5
03D-SP91	10	NA	3.2 E-6	1.7 E-6	NA	5.0 E-6	NA	2.2 E-8	4.9 E-7	3.3 E-8	2.3 E-7	4.8 E-7	NA	5.8 E-9	NA	NA	1.8 E-6	6.4 E-7	NA	3.3 E-8	1.5 E-6	4.6 E-5
03D-SP91	20	NA	1.7 E-6	2.8 E-6	6.0 E-9	2.9 E-6	NA	NA	2.9 E-7	1.1 E-8	NA	9.7 E-8	NA	NA	NA	NA	6.5 E-7	2.5 E-7	NA	1.8 E-8	3.9 E-7	3.9 E-5
03D-SP92	10	NA	1.2 E-6	1.1 E-5	3.2 E-8	9.9 E-6	6.7 E-5	NA	1.1 E-6	NA	NA	2.2 E-7	NA	8.7 E-9	NA	NA	3.7 E-6	1.2 E-6	NA	7.2 E-8	1.6 E-6	1.3 E-4
03D-SP92	20	NA	3.4 E-6	9.1 E-6	2.0 E-8	2.6 E-6	8.3 E-5	NA	3.7 E-7	NA	2.0 E-7	1.4 E-7	NA	4.9 E-9	NA	NA	2.7 E-6	8.7 E-7	NA	3.0 E-8	1.8 E-6	2.2 E-4
03D-SP93	15	NA	NA	NA	NA	NA	8.9 E-5	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-4
03D-SP93	25	NA	NA	NA	NA	3.2 E-6	1.4 E-5	NA	4.0 E-7	NA	NA	NA	NA	2.0 E-8	1.9 E-7	NA	1.6 E-6	5.6 E-7	NA	NA	8.9 E-7	2.5 E-5
03D-SP94	15	NA	2.0 E-6	NA	1.0 E-8	5.7 E-6	NA	NA	2.8 E-7	NA	NA	1.1 E-7	NA	NA	NA	NA	5.9 E-7	2.8 E-7	NA	NA	1.5 E-7	7.7 E-4
03D-SP94	25	NA	2.0 E-7	NA	NA	5.3 E-6	NA	2.6 E-8	5.1 E-7	NA	NA	4.5 E-8	NA	9.4 E-9	2.7 E-8	NA	3.3 E-6	1.3 E-6	NA	NA	1.1 E-6	2.3 E-4
03D-SP95	10	NA	5.8 E-5	9.1 E-5	6.1 E-7	NA	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	2.4 E-2
03D-SP95	18	NA	3.9 E-5	6.7 E-5	3.3 E-7	NA	6.3 E-5	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-7	1.2 E-2
03D-SP96	10	NA	4.3 E-7	NA	NA	2.9 E-5	2.1 E-5	NA	5.8 E-6	3.3 E-8	2.4 E-7	5.7 E-7	1.5 E-7	1.5 E-7	4.4 E-7	NA	3.1 E-5	1.3 E-5	3.2 E-6	NA	6.0 E-5	4.3 E-4
03D-SP96	17	NA	5.3 E-7	NA	NA	7.4 E-6	9.4 E-6	4.9 E-8	7.1 E-7	NA	4.3 E-7	3.8 E-7	NA	6.0 E-8	2.5 E-7	NA	2.3 E-6	8.2 E-7	NA	5.0 E-8	9.4 E-6	2.4 E-4
03D-SP99	10	NA	9.4 E-6	NA	1.3 E-6	NA	6.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2
11D-SP26	10	NA	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	6.0 E-8	NA	5.9 E-9	NA	NA	4.2 E-7	NA	NA	NA	3.1 E-7	4.0 E-6
11D-SP26	20	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	2.4 E-7	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	6.8 E-8	1.6 E-6
11D-SP27	10	NA	2.3 E-7	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	5.7 E-8	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	1.8 E-7	2.2 E-5
11D-SP27	20	NA	4.0 E-8	NA	7.2 E-9	NA	NA	4.9 E-8	NA	4.5 E-9	5.6 E-7	1.1 E-7	NA	4.4 E-9	1.5 E-7	NA	5.0 E-7	1.9 E-7	NA	NA	6.2 E-7	1.4 E-5
11D-SP28	10	NA	3.1 E-7	NA	3.2 E-8	NA	NA	NA	NA	NA	2.6 E-7	1.5 E-7	NA	NA	8.9 E-8	NA	7.1 E-7	NA	NA	NA	7.6 E-7	1.7 E-5
11D-SP28	20	NA	2.1 E-6	NA	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	2.9 E-7	NA	NA	NA	7.2 E-8	2.0 E-5
11D-SP29	10	NA	1.7 E-7	NA	4.4 E-8	NA	NA	NA	NA	NA	5.7 E-7	2.2 E-7	NA	NA	8.2 E-8	NA	3.1 E-7	NA	NA	NA	1.2 E-6	6.0 E-6
11D-SP29	30	NA	9.5 E-7	NA	NA	NA	NA	1.2 E-8	NA	NA	4.1 E-7	1.7 E-7	NA	NA	7.3 E-8	NA	1.5 E-7	NA	NA	NA	6.3 E-7	2.1 E-5
11D-SP30	10	NA	1.3 E-7	NA	4.5 E-8	NA	6.4 E-7	NA	NA	NA	2.1 E-7	5.3 E-7	NA	1.3 E-8	6.7 E-8	NA	3.2 E-7	NA	NA	NA	1.0 E-6	1.4 E-5
11D-SP30	20	NA	1.4 E-7	NA	2.3 E-8	NA	3.7 E-7	NA	NA	NA	1.5 E-7	1.3 E-7	NA	NA	4.8 E-8	NA	1.6 E-7	NA	NA	NA	5.0 E-7	2.1 E-5
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	3.8 E-7	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	9.5 E-7	3.4 E-6
11D-SP31	20	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	4.1 E-7	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	5.6 E-7	7.3 E-6
11D-SP31	30	NA	8.5 E-8	NA	NA	NA	1.5 E-7	NA	NA	NA	1.4 E-7	9.9 E-8	NA	6.5 E-9	3.2 E-8	NA	1.1 E-7	NA	NA	NA	2.2 E-7	1.1 E-5
50D-SP01	10	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	2.7 E-7	7.7 E-8	NA	5.9 E-9	NA	NA	5.9 E-7	NA	NA	NA	4.2 E-7	2.5 E-5
50D-SP01	20	NA	NA	NA	NA	NA	5.7 E-6	8.0 E-8	2.3 E-7	NA	7.5 E-7	5.7 E-8	1.8 E-7	1.8 E-7	7.6 E-8	NA	1.0 E-6	5.0 E-7	1.5 E-6	1.6 E-8	1.0 E-6	2.8 E-5
51D-SP04	10	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	NA	9.4 E-8	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	2.1 E-7	1.9 E-5
51D-SP04	20	NA	NA	NA	NA	NA	3.7 E-6	3.4 E-8	3.0 E-7	NA	3.5 E-7	5.7 E-8	1.8 E-6	8.2 E-8	6.5 E-8	NA	8.0 E-7	4.7 E-7	1.2 E-5	NA	7.0 E-7	3.7 E-5
A20-B34-SP01	10	NA	1.4 E-6	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	7.1 E-7	NA	NA	NA	2.9 E-7	1.7 E-5
A20-B34-SP01	20	NA	1.1 E-6	NA	9.6 E-8	NA	1.9 E-7	3.8 E-8	NA	NA	3.8 E-7	2.5 E-7	5.2 E-8	7.7 E-9	NA	NA	6.5 E-7	2.5 E-7	5.2 E-7	NA	4.4 E-7	1.2 E-5
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	1.5 E-7	3.7 E-5
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	4.7 E-7	NA	NA	NA	7.6 E-8	NA	5.9 E-7	2.5 E-7	NA	NA	5.3 E-7	1.2 E-5
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	5.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	1.4 E-4
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	1.1 E-6	5.2 E-8	NA	2.3 E-9	3.4 E-8	NA	2.1 E-7	NA	NA	3.3 E-8	3.4 E-7	7.5 E-5
A20-B34-SP03	29	NA	6.3 E-8	NA	NA	NA	NA	6.0 E-8	NA	NA	7.3 E-7	3.5 E-8	NA	1.6 E-9	6.6 E-8	NA	2.0 E-7	NA	NA	NA	5.4 E-7	6.6 E-5
A20-RB37-SP01	10	NA	5.6 E-5	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-3
A20-RB37-SP01	20	NA	3.3 E-5	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3
A20-RB37-SP01	30	NA	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4
A20-RB37-SP02	10	NA	9.5 E-6	NA	6.1 E-8	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	1.1 E-3
A20-RB37-SP02	20	NA	1.5 E-7	NA	NA	NA	NA	3.2 E-8	NA	NA	4.7 E-7	2.7 E-7	NA	NA	6.9 E-8	NA	4.1 E-7	2.3 E-7	NA	NA	5.0 E-7	2.5 E-5
A20-RC29-SP01	10	NA	2.4 E-7	NA	1.1 E-8	NA	NA	NA	NA	NA	2.0 E-7	3.2 E-7	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	3.6 E-7	4.8 E-5
A20-RC29-SP01	20	NA	7.1 E-7	NA	9.6 E-9	NA	NA	2.2 E-8	NA	NA	2.4 E-7	8.0 E-7	NA	NA	6.2 E-8	NA	3.2 E-7	NA	NA	NA	1.4 E-7	3.2 E-5
A20-RX73-SP01	10	NA	7.0 E-7	NA	4.7 E-8	NA	NA	NA	NA	NA	1.7 E-7	1.7 E-7	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	1.1 E-6	1.0 E-4
A20-RX73-SP01	20	NA	1.3 E-6	NA	2.0 E-8	NA	NA	4.8 E-8	NA	NA	5.4 E-7	9.1 E-8	NA	7.7 E-8	2.3 E-7	NA	5.3 E-7	2.6 E-7	NA	NA	2.7 E-6	6.8 E-5
A20-ST01-1-SP01	10	NA	5.6 E-7	1.6 E-6	1.1 E-8	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	3.8 E-7	3.9 E-5
A20-ST01-1-SP01	20	NA	1.0 E-7	NA	NA	NA	NA	4.0 E-8	NA	NA	4.1 E-7	NA	NA	NA	6.9 E-8	NA	5.3 E-7	2.6 E-7	NA	NA	3.9 E-7	6.1 E-6
A20-ST01-2-SP01	10	NA	4.8 E-7	NA	1.7 E-8	5.6 E-6	NA	NA	1.1 E-6	NA	NA	1.6 E-7	NA	NA	NA	NA	1.7 E-6	6.5 E-7	9.9 E-7	NA	1.8 E-6	7.9 E-5
A20-ST01-2-SP01	20	NA	1.1 E-7	NA	NA	NA	NA	3.8 E-8	NA	5.2 E-9	4.1 E-7	8.5 E-8	NA	9.7 E-9	NA	NA	5.9 E-7	2.7 E-7	NA	NA	1.0 E-6	2.4 E-5
A20-ST01-3-SP01	10	NA	1.9 E-7	NA	NA	NA	NA	2.7 E-8	NA	NA	3.3 E-7	7.6 E-8	NA	NA	6.9 E-8	NA	1.6 E-6	6.7 E-7	NA	NA	7.1 E-7	1.6 E-5
A20-ST01-3-SP01	20	NA	1.6 E-7	NA	NA	NA	3.3 E-5	6.8 E-8	NA	NA	6.3 E-7	1.0 E-7	6.8 E-7	1.1 E-6	NA	NA	1.0 E-6	4.0 E-7	3.9 E-6	NA	1.2 E-6	9.6 E-5
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
A20-ST02-SP01	20	NA	1.8 E-6	3.9 E-7	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	2.4 E-6	1.5 E-6	NA	NA	NA	NA	3.2 E-6	NA	5.2 E-7	1.9 E-4
A20-ST02-SP01	30	NA	1.7 E-7	1.4 E-7	NA	NA	3.3 E-5	1.3 E-7	NA	NA	1.1 E-6	1.3 E-7	1.6 E-7	1.4 E-7	4.6 E-8	NA	3.9 E-7	2.4 E-7	NA	NA	5.8 E-7	6.6 E-5
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5
A20-ST02-SP02	20	NA	9.7 E-8	NA	NA	NA	1.8 E-5	NA	NA	NA	1.4 E-7	NA	1.4 E-6	NA	NA	NA	1.7 E-7	3.3 E-7	3.0 E-6	NA	1.8 E-7	3.0 E-5
A20-ST02-SP02	30	NA	4.4 E-8	NA	NA	1.3 E-6	2.2 E-6	1.4 E-7	1.4 E-7	NA	1.9 E-6	3.1 E-8	1.0 E-7	4.4 E-9	1.7 E-7	NA	3.7 E-7	2.2 E-7	3.1 E-7	2.8 E-8	6.5 E-7	3.1 E-5
A20-ST02-SP03	20	NA	3.2 E-7	NA	NA	NA	NA	3.5 E-8	NA	NA	3.2 E-7	NA	NA	NA	5.8 E-8	NA	3.8 E-7	2.0 E-7	NA	NA	8.9 E-7	1.0 E-5
A20-ST02-SP03	30	NA	5.1 E-7	NA	NA	NA	NA	2.8 E-8	NA	NA	4.0 E-7	NA	NA	NA	4.6 E-8	NA	1.6 E-7	NA	NA	NA	4.7 E-7	8.7 E-6
A20-ST02-SP04	30	NA	NA	NA	NA	3.3 E-6	NA	3.6 E-8	1.8 E-7	NA	6.5 E-7	4.6 E-8	NA	2.7 E-9	1.6 E-7	NA	3.7 E-7	1.8 E-7	NA	NA	3.3 E-7	2.0 E-4
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5
A20-ST05-SP01	20	1.9 E-5	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	6.1 E-3
A20-ST05-SP01	30	3.6 E-6	1.2 E-4	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	2.4 E-3
A20-ST05-SP02	10	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	3.1 E-7	2.2 E-5
A20-ST05-SP02	20	NA	1.3 E-7	NA	NA	NA	NA	3.5 E-8	NA	NA	3.9 E-7	NA	NA	NA	1.1 E-7	NA	6.8 E-7	3.0 E-7	NA	NA	2.9 E-7	2.5 E-5
A20-ST05-SP03	10	NA	1.0 E-6	1.0 E-6	NA	NA	8.0 E-7	NA	NA	NA	3.6 E-7	8.8 E-7	NA	1.8 E-8	7.6 E-8	NA	3.6 E-7	NA	NA	NA	2.2 E-6	1.3 E-4
A20-ST05-SP04	10	NA	3.4 E-7	NA	NA	NA	NA	7.3 E-8	NA	NA	9.0 E-7	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	7.6 E-6
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	7.2 E-7	5.8 E-8	NA	NA	1.5 E-7	NA	5.9 E-7	NA	NA	NA	7.3 E-7	7.1 E-6
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	5.1 E-8	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	1.8 E-7	1.4 E-4
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	1.8 E-7	1.3 E-7	NA	NA	NA	NA	5.0 E-7	1.8 E-7	NA	NA	3.0 E-7	7.0 E-5
A20-ST14-SP01	10	NA	4.1 E-6	NA	3.9 E-8	NA	NA	9.3 E-9	NA	NA	1.3 E-7	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.5 E-4
A20-ST14-SP01	20	NA	1.5 E-7	NA	5.9 E-9	NA	NA	1.2 E-8	NA	NA	2.0 E-7	6.8 E-8	NA	NA	3.2 E-8	NA	1.6 E-7	NA	NA	NA	2.2 E-7	1.9 E-5
A20-ST14-SP02	10	NA	7.2 E-8	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	1.2 E-4
A20-ST14-SP02	20	NA	8.6 E-8	NA	7.8 E-9	NA	NA	NA	NA	NA	1.4 E-7	1.7 E-7	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	3.1 E-7	9.1 E-5
A20-ST20-SP01	10	NA	1.0 E-6	NA	NA	NA	NA	3.7 E-8	NA	NA	6.0 E-7	NA	NA	NA	9.6 E-8	NA	5.6 E-7	NA	NA	NA	2.4 E-7	2.5 E-6
A20-ST20-SP01	20	NA	1.6 E-7	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	6.8 E-8	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	9.5 E-8	2.4 E-6
A20-ST22-SP01	10	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	1.7 E-7	8.1 E-8	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	1.7 E-7	1.6 E-6
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	4.2 E-7	NA	NA	NA	5.8 E-8	NA	2.2 E-7	NA	NA	NA	4.3 E-7	8.3 E-6

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	NA
03D-SP100	20	5.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA
03D-SP102	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA
03D-SP104	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA
03D-SP104	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA
03D-SP105	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA
03D-SP106	15	6.0 E-10	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	6.1 E-10	NA	1.4 E-10	NA	NA	NA	NA	NA	8.6 E-8	NA	NA
03D-SP106	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA
03D-SP106	30	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA
03D-SP107	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA
03D-SP107	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
03D-SP107	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA
03D-SP109	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA
03D-SP109	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	NA	NA
03D-SP109	30	NA	NA	NA	NA	3.7 E-10	NA	5.9 E-10	NA	NA	NA	NA	3.4 E-11	NA	NA	NA	NA	NA	1.4 E-8	9.9 E-11	NA
03D-SP110	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA
03D-SP110	20	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA
03D-SP111	10	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	2.2 E-11	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	5.4 E-11	NA	NA	NA	NA	NA	1.7 E-9	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	3.4 E-8	NA	5.3 E-11	NA	NA	NA	NA	NA	4.8 E-9	NA	NA
03D-SP113	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	NA	5.0 E-10	NA	NA	5.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	2.8 E-9	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP115	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	NA	7.0 E-10	NA	NA	4.0 E-8	NA	1.4 E-10	NA	NA	NA	NA	NA	2.7 E-9	NA	NA
03D-SP117	10	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	6.2 E-9	NA	1.2 E-10	NA	NA	NA	NA	NA	1.8 E-8	NA	NA
03D-SP118	10	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	7.8 E-11	NA	NA	NA	NA	NA	2.5 E-7	1.0 E-10	NA
03D-SP118	20	NA	NA	NA	NA	1.4 E-9	NA	5.7 E-9	NA	NA	NA	NA	5.8 E-11	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
03D-SP119	10	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	NA	1.8 E-7	NA	NA
03D-SP119	20	2.1 E-9	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	9.0 E-8	NA	NA
03D-SP119	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	3.2 E-9	NA	NA
03D-SP120	20	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6	NA	NA
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA
03D-SP122	10	6.0 E-10	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA
03D-SP122	20	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA
03D-SP122	30	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA
03D-SP123	20	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	3.3 E-11	NA	NA	NA	NA	NA	1.7 E-9	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	2.5 E-10	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	5.0 E-10	NA	NA
03D-SP125	10	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	5.9 E-10	NA	NA
03D-SP125	20	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	5.5 E-9	NA	7.4 E-11	NA	NA	NA	NA	NA	1.3 E-9	NA	NA
03D-SP126	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	6.4 E-11	NA
03D-SP126	20	1.3 E-11	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	2.7 E-10	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	1.5 E-9	2.9 E-11	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	NA
03D-SP128	20	1.6 E-10	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	7.0 E-9	NA	2.0 E-10	NA	NA	NA	NA	NA	8.9 E-10	NA	NA
03D-SP128	30	2.3 E-9	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP129	15	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	NA	NA	7.8 E-11	NA	NA	NA	NA	NA	6.6 E-10	NA	NA
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-10	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	2.1 E-11	NA
03D-SP131	10	NA	NA	NA	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	6.3 E-9	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	NA	NA	NA	2.2 E-10	NA	5.2 E-9	NA	NA	1.1 E-9	NA	9.6 E-11	NA	NA	NA	NA	NA	9.6 E-10	1.4 E-10	NA
03D-SP133	10	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	4.0 E-11	NA
03D-SP134	10	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	7.4 E-11	NA	NA	NA	NA	NA	2.0 E-10	1.0 E-10	NA
03D-SP134	20	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	1.8 E-10	NA	NA
03D-SP135	10	3.0 E-11	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	4.8 E-8	NA	1.3 E-10	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	8.4 E-9	NA	NA
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	9.3 E-11	NA	NA	NA	NA	NA	NA	1.2 E-10	NA
03D-SP137	10	NA	NA	NA	NA	NA	NA	7.1 E-10	NA	NA	6.7 E-8	NA	1.3 E-10	NA	NA	NA	NA	NA	1.3 E-8	NA	NA
03D-SP138	10	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	2.3 E-9	NA	5.6 E-11	NA	NA	NA	NA	NA	1.1 E-9	3.2 E-10	NA
03D-SP138	19	8.5 E-11	NA	NA	NA	NA	NA	9.4 E-10	NA	NA	4.1 E-9	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	1.4 E-10	NA
03D-SP138	30	2.2 E-11	NA	NA	NA	3.9 E-10	NA	2.1 E-9	NA	NA	7.3 E-10	NA	2.1 E-11	NA	NA	NA	NA	NA	9.0 E-8	1.7 E-10	NA
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-10	9.3 E-11	NA
03D-SP139	20	NA	NA	NA	NA	4.8 E-10	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	2.3 E-10	NA
03D-SP139	28	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	2.3 E-11	NA	NA	NA	NA	NA	5.5 E-9	1.2 E-10	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	NA	7.3 E-10	NA	NA	NA	NA	5.4 E-11	NA	NA	NA	NA	NA	2.0 E-10	2.7 E-11	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	1.4 E-10	NA
03D-SP141	20	NA	NA	NA	NA	3.0 E-10	NA	3.0 E-9	NA	NA	NA	NA	5.4 E-11	NA	NA	NA	NA	NA	4.6 E-10	1.6 E-10	NA
03D-SP142	10	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	7.3 E-11	NA
03D-SP142	20	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	2.1 E-9	NA	6.6 E-11	NA	NA	NA	NA	NA	4.6 E-9	NA	NA
03D-SP142	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	1.0 E-10	NA
03D-SP143	20	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	1.9 E-8	NA	2.3 E-11	NA	NA	NA	NA	NA	6.5 E-9	8.9 E-11	NA
03D-SP143	30	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	6.6 E-9	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	3.4 E-11	NA
03D-SP144	20	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	2.1 E-11	NA
03D-SP144	30	3.5 E-10	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	5.9 E-11	NA	NA	NA	NA	NA	9.0 E-9	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	5.4 E-11	NA
03D-SP145	20	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	4.2 E-11	NA
03D-SP146	10	3.6 E-11	NA	NA	NA	NA	NA	9.6 E-10	NA	NA	7.8 E-10	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	4.3 E-11	NA
03D-SP146	20	9.0 E-11	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	9.3 E-11	NA
03D-SP146	27	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA
03D-SP147	20	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	9.3 E-11	NA
03D-SP147	27	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA
03D-SP148	10	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	5.6 E-9	NA	5.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-11	NA
03D-SP149	20	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-11	NA	NA
03D-SP84	15	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	6.4 E-10	NA	NA	NA	NA	NA	NA	NA	9.2 E-10	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	7.1 E-11	NA
03D-SP85	25	5.2 E-9	NA	NA	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	8.1 E-10	NA	NA	NA	NA	NA	4.5 E-7	NA	NA
03D-SP85	30	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	3.9 E-11	NA	NA	NA	NA	NA	8.4 E-10	5.7 E-11	NA
03D-SP86	10	6.5 E-11	NA	NA	NA	NA	NA	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	1.0 E-10	NA
03D-SP86	20	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	5.5 E-11	NA
03D-SP87	10	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP88	20	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-9	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA
03D-SP90	10	5.0 E-11	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	2.6 E-8	NA	3.9 E-10	NA	NA	NA	NA	NA	4.8 E-9	NA	NA
03D-SP90	20	1.9 E-11	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	6.0 E-9	NA	1.2 E-10	NA	NA	NA	NA	NA	2.4 E-9	NA	NA
03D-SP91	10	NA	NA	NA	NA	NA	NA	8.3 E-10	NA	NA	2.3 E-9	NA	7.4 E-11	NA	NA	NA	NA	NA	9.7 E-10	2.5 E-10	NA
03D-SP91	20	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	7.5 E-9	NA	2.6 E-11	NA	NA	NA	NA	NA	1.7 E-9	4.2 E-11	NA
03D-SP92	10	3.9 E-11	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	2.4 E-9	NA	1.2 E-10	NA	NA	NA	NA	NA	2.5 E-9	NA	NA
03D-SP92	20	3.3 E-11	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	1.5 E-8	NA	1.0 E-10	NA	NA	NA	NA	NA	9.0 E-9	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	3.5 E-9	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	3.2 E-10	NA	5.6 E-11	NA	NA	NA	NA	NA	7.9 E-11	NA	NA
03D-SP94	15	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA
03D-SP94	25	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	1.0 E-9	NA	1.6 E-10	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
03D-SP95	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA
03D-SP95	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA
03D-SP96	10	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	NA	1.2 E-7	NA	1.3 E-9	NA	NA	NA	NA	NA	1.6 E-9	NA	NA
03D-SP96	17	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	9.4 E-8	NA	1.4 E-10	NA	NA	NA	NA	NA	7.2 E-10	NA	NA
03D-SP99	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
11D-SP27	20	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	1.2 E-10	2.3 E-11	NA
11D-SP28	10	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP28	20	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	1.4 E-11	NA
11D-SP29	10	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA
11D-SP29	30	1.7 E-11	NA	NA	NA	3.1 E-10	NA	9.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA
11D-SP30	10	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	8.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP30	20	5.8 E-11	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA
11D-SP31	20	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	1.0 E-9	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-11	NA
11D-SP31	30	4.5 E-11	NA	NA	NA	1.7 E-10	NA	2.8 E-10	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-11	NA
50D-SP01	10	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA
50D-SP01	20	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	4.5 E-10	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA
51D-SP04	20	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	2.9 E-10	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
A20-B34-SP01	20	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	9.0 E-10	NA	NA	3.8 E-11	NA	NA	NA	NA	NA	4.0 E-10	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-9	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	2.4 E-10	4.1 E-11	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-9	5.1 E-11	NA
A20-B34-SP03	29	NA	NA	NA	NA	2.5 E-10	NA	1.0 E-9	NA	2.2 E-9	2.2 E-10	NA	1.7 E-11	NA	NA	NA	NA	NA	6.2 E-9	1.1 E-10	NA
A20-RB37-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-7	NA	NA
A20-RB37-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA
A20-RB37-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.1 E-10	NA
A20-RB37-SP02	20	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	1.4 E-9	1.3 E-10	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA
A20-RX73-SP01	10	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA
A20-RX73-SP01	20	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	1.5 E-8	NA	3.2 E-11	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
A20-ST01-1-SP01	10	3.4 E-11	NA	NA	NA	NA	NA	8.7 E-10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	3.6 E-10	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	6.2 E-10	NA	NA	2.4 E-9	NA	8.5 E-11	NA	NA	NA	NA	NA	6.8 E-9	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	1.6 E-9	NA	3.9 E-11	NA	NA	NA	NA	NA	8.5 E-10	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	9.4 E-10	NA	NA	NA	NA	8.5 E-11	NA	NA	NA	NA	NA	1.1 E-9	1.3 E-10	NA
A20-ST01-3-SP01	20	NA	NA	6.2 E-10	NA	NA	NA	4.0 E-9	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA	NA	6.4 E-10	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-33
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
A20-ST02-SP01	20	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	30	NA	NA	NA	NA	NA	NA	7.0 E-9	NA	NA	NA	NA	5.9 E-11	NA	NA	NA	NA	NA	3.7 E-10	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	6.7 E-10	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	3.6 E-11	NA	NA	NA	NA	NA	2.8 E-10	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	2.1 E-10	3.7 E-11	NA
A20-ST02-SP03	30	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	6.2 E-11	NA
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	1.8 E-10	NA
A20-ST05-SP01	30	7.5 E-9	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	1.7 E-10	NA
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	1.1 E-10	NA
A20-ST05-SP02	20	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	1.5 E-9	8.9 E-11	NA
A20-ST05-SP03	10	3.7 E-10	NA	NA	NA	NA	NA	5.5 E-10	NA	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	8.0 E-11	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	7.6 E-9	NA	NA
A20-ST14-SP01	10	NA	NA	NA	NA	NA	NA	5.5 E-10	NA	NA	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	1.0 E-10	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	8.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	9.3 E-11	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	9.3 E-11	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	2.7 E-11	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-11	NA

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP100	10	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-6
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-4
03D-SP102	28	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-5
03D-SP103	10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP103	20	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP104	10	9.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP104	20	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP105	10	9.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP106	15	3.4 E-10	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP106	25	5.0 E-7	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP106	30	3.1 E-7	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP107	10	5.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP107	20	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP107	29	5.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP108	10	2.1 E-9	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP109	10	1.5 E-8	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP109	20	3.6 E-7	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-6
03D-SP109	30	9.4 E-10	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP110	10	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP110	20	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP111	10	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP111	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP112	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP113	10	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP113	20	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP114	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP114	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP115	10	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP116	10	4.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP117	10	9.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP118	10	8.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP118	20	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP119	10	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP119	20	1.5 E-7	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP119	29	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP120	10	6.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP120	20	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP121	15	4.4 E-8	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP122	10	9.2 E-10	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP122	20	5.6 E-9	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP122	30	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP123	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP124	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP124	20	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP125	10	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
03D-SP125	20	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP126	10	3.3 E-10	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP126	20	3.6 E-10	7.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
03D-SP127	10	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP127	20	3.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP128	10	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP128	20	2.0 E-7	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP128	30	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP129	15	9.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
03D-SP130	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
03D-SP131	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP131	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP132	10	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP132	30	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
03D-SP133	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
03D-SP134	10	6.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP134	20	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP135	10	1.1 E-9	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP135	20	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP137	10	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
03D-SP138	10	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP138	19	5.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP138	30	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
03D-SP139	20	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP139	28	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP140	10	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
03D-SP140	20	7.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP141	20	9.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP142	10	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP142	20	7.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
03D-SP142	30	8.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP143	10	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP143	20	6.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP143	30	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP144	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP144	30	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP145	10	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP145	20	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP146	10	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP146	20	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP146	27	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP147	10	9.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP147	20	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP147	27	5.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP149	10	7.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP149	20	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP150	30	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP84	15	4.2 E-10	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP84	25	1.2 E-10	4.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP85	25	2.2 E-8	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP85	30	1.1 E-10	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP86	10	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP86	20	9.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
03D-SP87	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP88	10	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
03D-SP88	20	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP89	10	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
03D-SP90	10	3.7 E-9	6.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP90	20	1.2 E-9	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP91	10	2.0 E-9	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP91	20	1.1 E-9	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP92	10	7.9 E-10	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP92	20	2.2 E-9	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP93	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP94	15	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP94	25	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP95	10	3.7 E-8	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP95	18	2.5 E-8	2.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP96	10	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP96	17	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP99	10	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
11D-SP26	10	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
11D-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
11D-SP27	10	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
11D-SP27	20	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
11D-SP28	10	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
11D-SP28	20	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
11D-SP29	10	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
11D-SP29	30	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
11D-SP30	10	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
11D-SP30	20	9.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-11
11D-SP31	20	3.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
11D-SP31	30	5.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
50D-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
50D-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
51D-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
51D-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
A20-B34-SP01	10	9.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
A20-B34-SP01	20	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-B34-SP03	29	4.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-RB37-SP01	10	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-RB37-SP01	20	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
A20-RB37-SP01	30	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-RB37-SP02	10	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-RB37-SP02	20	9.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-RC29-SP01	10	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
A20-RC29-SP01	20	4.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
A20-RX73-SP01	10	4.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
A20-RX73-SP01	20	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-ST01-1-SP01	10	3.6 E-10	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST01-1-SP01	20	6.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
A20-ST01-2-SP01	10	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST01-2-SP01	20	7.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
A20-ST01-3-SP01	10	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-ST01-3-SP01	20	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
A20-ST02-SP01	20	1.2 E-9	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST02-SP01	30	1.1 E-10	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-ST02-SP02	20	6.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-ST02-SP02	30	2.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-ST02-SP03	20	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
A20-ST02-SP03	30	3.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST05-SP01	20	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
A20-ST05-SP01	30	7.4 E-8	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST05-SP02	10	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
A20-ST05-SP02	20	8.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-ST05-SP03	10	6.5 E-10	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST05-SP04	10	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
A20-ST14-SP01	10	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-ST14-SP01	20	9.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
A20-ST14-SP02	10	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST14-SP02	20	5.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST20-SP01	10	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
A20-ST20-SP01	20	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.2-34 ***Unit Soil Hazard and Unit Cancer Risk Results - Construction Worker***
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Cadmium	1.0 E+0	3.2 E-3	3.9 E-4	9.8 E-5	3.7 E-3	NA	NA	2.1 E-8	2.1 E-8
Chromium VI	1.0 E+0	1.1 E-3	0.0 E+0	4.4 E-2	4.6 E-2	NA	NA	7.1 E-7	7.1 E-7
Iron	1.0 E+0	4.6 E-6	0.0 E+0	NA	4.6 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	1.1 E-2	0.0 E+0	1.1 E-3	1.2 E-2	NA	NA	NA	NA
Molybdenum	1.0 E+0	6.5 E-4	0.0 E+0	2.0 E-5	6.7 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-8	1.3 E-8	1.0 E-9	4.8 E-8
Benzo(b)fluoranthene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Benzo(k)fluoranthene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-7	2.2 E-7	5.5 E-9	7.7 E-7
Chrysene	1.0 E+0	NA	NA	NA	NA	5.5 E-9	2.2 E-9	5.5 E-11	7.7 E-9
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-7	1.3 E-7	5.7 E-9	4.7 E-7
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Naphthalene	1.0 E+0	1.6 E-4	6.3 E-5	5.3 E-3	5.5 E-3	NA	NA	7.8 E-9	7.8 E-9
PCB-1248	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
PCB-1254	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
PCB-1260	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA
Di-n-butyl phthalate	1.0 E+0	3.2 E-5	9.7 E-6	9.8 E-7	4.3 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
Phenanthrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Pyrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	1.0 E+0	5.4 E-5	0.0 E+0	2.3 E-4	2.9 E-4	1.2 E-8	0.0 E+0	4.0 E-8	5.3 E-8

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.2-35 Inhalation Unit Hazard and Unit Cancer Risk Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethane	1.0 E+0	9.8 E-1	1.6 E-5
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	2.5 E-4
1,3-Butadiene	1.0 E+0	3.4 E+2	1.7 E-3
1,4-Dioxane	1.0 E+0	2.3 E-1	7.5 E-5
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
Bromodichloromethane	1.0 E+0	9.8 E+0	3.6 E-4
Carbon Tetrachloride	1.0 E+0	1.7 E+1	4.2 E-4
Chloroform	1.0 E+0	1.5 E+1	2.3 E-4
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Ethylbenzene	1.0 E+0	6.8 E-1	2.4 E-5
Freon 113	1.0 E+0	2.3 E-2	NA
Freon 12	1.0 E+0	3.4 E+0	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Methylene Chloride	1.0 E+0	2.3 E-1	9.8 E-6
Tetrachloroethylene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
trans-1,2-Dichloroethene	1.0 E+0	1.2 E+1	NA
Trichloroethylene	1.0 E+0	1.2 E+0	2.0 E-5
Vinyl Chloride	1.0 E+0	6.8 E+0	7.5 E-4
1,1,1-Trichloroethane	1.0 E+0	1.4 E-1	NA
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cumene	1.0 E+0	1.7 E+0	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Freon 11	1.0 E+0	3.4 E+0	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Styrene	1.0 E+0	7.6 E-1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.9 E-4	NA	NA	NA	NA	NA	3.7 E-3	4.6 E-2	NA	NA	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	5.5 E-3	2.3 E-1	2.3 E-1	2.3 E-1	1.6 E-5	4.3 E-5	1.1 E-4	1.5 E-4	1.5 E-4
Unit Risk		5.3 E-8	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	7.7 E-8	2.1 E-8	7.1 E-7	7.7 E-9	4.7 E-7	7.7 E-8	NA	NA	NA	NA	7.8 E-9	3.3 E-7	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA
03D-AH01	0.01												13600	16.4	0.144	2.03					1.5				
03D-AH01	3		88.4	62		48	56			93	6.44	21	13200	14.6			2.2					170	140		160
03D-AH02	0.01												16900	24.9							2.1				
03D-AH02	3		110	67		60	63			110		22	12000	10.6	0.116	21.9						170	123		180
03D-SB01	1	1						1.29					36700	33.6	0.457						11				
03D-SB01	5												32500	12.7							4.24				
03D-SB01	10												42300	14	0.324						1.3				
03D-SB02	0.01												20400	20.6	1.25										
03D-SB02	1												25700	8.9	0.19				2.8		6.1				
03D-SB02	3												26600	14	0.26										
03D-SB02	6												19200	9.1	0.18										
03D-SB02	7																				2.8				
03D-SB02	10																				5.8				
03D-SB02	11												20100	6.3	0.15										
03D-SB03	1												23000	9.8							2.7				
03D-SB03	5												23600	8.1							5.7				
03D-SB03	10							3.1					21500	25	2.9						10.0				
03D-SB04	0.01												21400	5.8											
03D-SB04	1	2.0											21600	6.2					0.083						
03D-SB04	3												18600												
03D-SB04	5												21500	8.8											
03D-SB04	6																				0.8				
03D-SB04	10	1.0											21100	6.3							7.4				
03D-SB05	0.01												12800	8.0											
03D-SB05	1	0.40											15700						0.12		8.3				
03D-SB05	4												20100	10.3											
03D-SB05	5												19500	10					2.3		0.80				
03D-SB05	10												17000						0.084		1.9				
03D-SB06	1												23500	7.6					0.051		8.2				
03D-SB06	5												9310								8.9				
03D-SB06	10												206000	5.04					0.43		1.7				
03D-SB07	0.01												23800		0.18										
03D-SB07	1	2.0																							
03D-SB07	5												19500	6.1											
03D-SB07	7																				1.6				
03D-SB07	10																				6.3				
03D-SB08	0.01												23300	10.1	0.19										
03D-SB08	1												25800	8.6	0.30						5.6				
03D-SB08	3												18100	7.5											
03D-SB08	5												22500	9.3	0.50						7.2				
03D-SB08	10												14400		0.4						1.7				
03D-SB09	5								0.36					12	0.11	0.50								0.074	
03D-SB09	11								0.25					7.9	0.03	0.58									
03D-SB10	5								0.22					4.6	0.012	0.77									
03D-SB10	11								0.28					6.6	0.052	3.1									
03D-SB11	1			0.012					0.42	0.0065				3.1	0.079	0.40			0.037				0.0058		0.0079
03D-SB11	5								0.32					11	0.28	0.65									
03D-SB11	11								0.52					4.3	0.46	2.4									
03D-SB12	5			0.024				0.62	0.22	0.021				6.5	0.063	0.34							0.016		
03D-SB12	11			0.045				0.36	0.3	0.026				4.0	0.098	0.80							0.021		
03D-SB13	6							0.35	0.36					6.2	0.040	0.36									
03D-SB13	11.5							0.25	0.31					2.9	0.010	0.21								0.30	
03D-SB14	3.5							0.32	0.18					2.9	0.037	0.25								0.59	
03D-SB14	7.5							0.35	0.24					3.0	0.023	0.56								0.36	
03D-SB14	11								0.47					3.2	0.0070	0.40									
03D-SB15	3							0.44						5.6	0.043									0.66	
03D-SB15	6							0.32						2.8	0.37	1.6									
03D-SB15	11.5							0.35						3.9	0.019	0.18								0.23	
03D-SB16	5							0.78	0.46					8.9	0.065	0.56								1.3	
03D-SB16	11.5							0.41	0.27					3.5	0.028	0.43									
03D-SB17	1			0.13					0.59					5.8	0.28	1.5								2.7	
03D-SB17	5													4.9	0.069	0.45									
03D-SB17	11								0.19					5.8	0.037	0.40									
03D-SB18	11							0.36	0.45					5.4	0.06	0.29							0.015		
03D-SB19	7.5							0.32	0.20					3.9	0.026	1.5								0.18	

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.9 E-4	NA	NA	NA	NA	NA	3.7 E-3	4.6 E-2	NA	NA	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	5.5 E-3	2.3 E-1	2.3 E-1	2.3 E-1	1.6 E-5	4.3 E-5	1.1 E-4	1.5 E-4	1.5 E-4
Unit Risk		5.3 E-8	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	7.7 E-8	2.1 E-8	7.1 E-7	7.7 E-9	4.7 E-7	7.7 E-8	NA	NA	NA	NA	7.8 E-9	3.3 E-7	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA
03D-SB19	11.5							0.37	0.14					3.3	0.021	0.36									
03D-SB20	5							0.50	0.22					2.8	0.10	0.45				0.011				0.29	
03D-SB20	11								0.29					6.1	0.026	0.83			0.43						
03D-SB22	7.75							0.30	0.22					3.8	0.018	0.19		0.26						1.0	
03D-SB22	11							0.44	0.61					7.0										0.22	
03D-SB23	6							0.39	0.19					3.4	0.015	0.20								0.47	
03D-SB23	11							0.39	0.14					3.5	0.013	0.26								0.39	
03D-SB24	7.5							0.34	0.31					5.1	0.021	2.0								0.55	
03D-SB24	11.5													4.6	0.029	0.79									
03D-SB25	1								0.49					5.2	0.074	1.0									
03D-SB25	5								0.72					5.4	0.029	0.98								0.086	
03D-SB25	11								1.5					8.3	0.056	0.49									
03D-SB26	1		0.0058						0.14	0.0051				4.5	0.016	0.57							0.0069	0.34	
03D-SB26	5								0.23					5.2	0.017	0.42								1.7	
03D-SB26	11								0.72					6.8	0.037	0.60									
03D-SB27	1		0.023	0.0061	0.011				0.25	0.013				7.4	0.056	0.56						0.0079	0.024	1.0	0.021
03D-SB27	5								0.28					6.4	0.0097	0.50									
03D-SB27	11								0.59					4.6	0.072	0.41									
03D-SB30	5							0.33	0.60					4.6	0.11	0.28									
03D-SB30	11							0.39	1.1					6.4	0.072	0.50									
03D-SB31	1.5							0.48	0.35					4.2	0.076	0.49							0.0025	0.57	
03D-SB31	5.5							0.39	0.27					3.0	0.019	1.6								0.17	
03D-SB31	11.5							0.54	0.61					9.3	0.13	0.33									
03D-SB32	5								0.36					12	0.079	0.60								0.21	
03D-SB32	11								0.24					3.4	0.032	0.88									
03D-SB33	5								0.37					8.4		4.8			47						
03D-SB33	11								0.18					8.0	0.067	0.56			0.098						
03D-SB35	5							0.39	0.47					4.0	0.036	0.25									
03D-SB35	11							0.39	0.13					6.3	0.020	0.46									
03D-SB36	1		0.042						0.42	0.017				4.4	0.041	1.3				0.014			0.020	0.057	0.025
03D-SB36	5								0.63					8.9	0.051	1.4									
03D-SB36	11				0.011				0.58	0.022				3.7	0.021	0.55						0.0021	0.017	1.0	0.0078
03D-SB37	5							0.47	0.66					4.6	0.022	0.47			0.14						
03D-SB37	11							0.53	0.37					6.9	0.052	0.82									
03D-SB38	1							0.49	0.097					7.3	0.017	0.15								2.3	
03D-SB38	5							0.45	0.40					4.8	0.040	7.4								1.1	
03D-SB38	11							0.32						3.3	0.0091	0.43									
03D-SB39	3.5							0.47	0.20					2.9	0.026	19								0.33	
03D-SB39	5							0.29	0.18					3.8		0.18									
03D-SB39	11.5													2.8	0.0041	0.61									
03D-SB40	3.75							0.37	0.38					3.7	0.0093	0.39									
03D-SB40	7.5							0.31	0.30					4.3	0.028	0.52								0.19	
03D-SB40	11.75																								
03D-SB41	3							0.38	0.11					4.7	0.0081	0.32								0.35	
03D-SB41	6							0.32						4.2	0.023	0.26								0.18	
03D-SB41	11.75														0.0099										
03D-SB42	1													7.6	0.065	0.71			0.024				0.0026		
03D-SB42	5								0.40					5.2	0.032	0.46									
03D-SB42	11							0.41	0.22					14	0.078	0.93							0.0041		
03D-SB43	5							0.27	0.52					3.3	0.076	0.42			0.11						
03D-SB43	11							0.25	0.53					2.6	0.038	0.24			0.037						
03D-SB44	5							0.36	0.42					4.1	0.018	2.2									
03D-SB44	11							0.32	0.21					3.7	0.0044										
03D-SB45	5								0.35					5.1	0.02	0.90	0.28					0.017	0.85		0.048
03D-SB46	5								0.41					5.9	0.061	1.1	1.9						2.7		0.24
03D-SB46	11													7.4	0.025	0.81	0.090		11				0.076		
03D-SB47	7.5							0.48	0.28					8.0	0.0099	1.3								0.22	
03D-SB47	11.5							0.41	0.24					4.7	0.012	2.3								0.57	
03D-SB48	5							0.39	0.94					9.0	0.013	0.92									
03D-SB48	11		0.0045					0.44	0.12					6.3	0.036	6.5									
03D-SB49	5							0.35	0.17					1.9		0.54								0.17	
03D-SB49	11.5							0.38	0.2					5.0		0.32									
03D-SB50	1								1.0					11	0.14	0.72				0.065					
03D-SB50	5								0.43					8.1	0.016	0.74									
03D-SB50	11								0.23					5.2	0.0099	0.81									

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																						
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.9 E-4	NA	NA	NA	NA	NA	3.7 E-3	4.6 E-2	NA	NA	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	5.5 E-3	2.3 E-1	2.3 E-1	2.3 E-1	1.6 E-5	4.3 E-5	1.1 E-4	1.5 E-4	1.5 E-4
Unit Risk		5.3 E-8	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	7.7 E-8	2.1 E-8	7.1 E-7	7.7 E-9	4.7 E-7	7.7 E-8	NA	NA	NA	NA	7.8 E-9	3.3 E-7	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA
03D-SB51	5								0.71					12	0.18	1.5									
03D-SB51	11								0.63					3.6	0.012	0.46									
03D-SB52	1							0.28						23	0.11	1.3			0.048						
03D-SB52	5								0.19					4.1	0.011	0.79								0.079	
03D-SB52	11													8.0		0.41									
03D-SB53	5								0.5					4.1	0.012	0.59								1.1	
03D-SB53	11								0.37					10	0.0092	0.67									
03D-SB54	1													9.1	0.043	0.58				0.022					
03D-SB54	5								1.0					10	0.026	0.54									
03D-SB54	11								0.31					8.2	0.0095	0.32									
03D-SB55	1								0.61					9.4	0.045	0.48							0.0043		
03D-SB55	5								0.84					11	0.083	0.47								0.13	
03D-SB55	11								0.77					11	0.012	0.54									
03D-SB56	5							0.38	0.26					4.0		0.47									
03D-SB56	11		0.0081					0.37	0.59	0.0067				5.7		1.5							0.010		
03D-SB57	5							0.29	0.28					3.4	0.019	0.67									
03D-SB57	11							0.32	0.28	0.005				5.5		0.57			0.027			0.0025	0.0032		
03D-SB61	5							0.67	0.33					9.2	0.13	0.58									
03D-SB61	11							0.26	0.43					4.0	0.0057	0.45									
03D-SB62	5													11	0.06	0.65									
03D-SB62	11													5.7	0.021	0.70									
03D-SB63	1																		0.024						
03D-SB63	5																								
03D-SB63	10																		0.046						
03D-SB64	1																		0.05						
03D-SB64	5																		0.047						
03D-SB64	10																		0.019						
03D-SB65	1																								
03D-SB65	5																								
03D-SB65	12																		0.055						
03D-SB66	1																								
03D-SB66	5																								
03D-SB66	10																		0.051						
03D-SB67	1																		0.51						
03D-SB67	5																								
03D-SB67	10																		0.14						
03D-SB68	1																		1.7						
03D-SB68	5																		0.086						
03D-SB68	10																		0.32						
03D-SB69	1																		0.37						
03D-SB69	5																		0.021						
03D-SB69	10																								
03D-SNS02	0.01												19500		0.117										
03D-SNS02	3												21500	5.63											
03D-SNS03	0.01												16600												
03D-SNS03	3												17300												
03D-SNS04	0.01												19500	8.17											
03D-SNS04	3												16300												
03D-SNS05	0.01												19100	5.43											
03D-SNS05	3												18700	8.56											
03D-SNS06	0.01												22400	6.62											
03D-SNS34	0.25		0.042	0.038	0.088			3.5	4.0	0.083				110	0.11	2.0	0.0026		0.42	1.5		0.11	0.21		0.18
03D-SNS35	0.25							1.4	0.99					10	0.025	2.0	0.011								
11D-SB01	1								0.51					12	0.018	0.6									
11D-SB01	5								0.65					5.1		0.3									
11D-SB01	11								0.14					5.1	0.0067	1.2									
11D-SB02	1								0.83					11	0.09	0.79								2.1	
11D-SB02	5								0.078					7.2	0.035	0.52									
11D-SB02	11								0.14					6.1	0.018	7.5									
11D-SB03	1								0.35					4.5	0.06	0.65								0.20	
11D-SB03	5								0.30																
11D-SB03	11								0.29																
11D-SB04	1		0.014		0.018			0.43	0.34	0.021				5.6	0.38	1.3			0.014			0.0066	0.023		0.034
11D-SB04	5							0.56	0.43	0.0063				10	0.89	0.66							0.0038		
11D-SB04	11							0.40	0.38					4.4	0.22	0.67									

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.9 E-4	NA	NA	NA	NA	NA	3.7 E-3	4.6 E-2	NA	NA	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	5.5 E-3	2.3 E-1	2.3 E-1	2.3 E-1	1.6 E-5	4.3 E-5	1.1 E-4	1.5 E-4	1.5 E-4
Unit Risk		5.3 E-8	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	7.7 E-8	2.1 E-8	7.1 E-7	7.7 E-9	4.7 E-7	7.7 E-8	NA	NA	NA	NA	7.8 E-9	3.3 E-7	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA
11D-SB05	1		0.0086	0.0062				0.28	0.069	0.028				4.2	0.0094	0.88						0.021	0.048	7.3	0.044
11D-SB05	5							0.51	0.38					4.5	0.033	0.51								0.29	
11D-SB05	11							0.38	0.34					6.0	0.015	0.24									
11D-SB06	1																			1.6				0.44	
11D-SB06	5																							3.5	
11D-SB06	11																								
11D-SB07	1																							1.6	
11D-SB07	5																							0.36	
11D-SB08	1								0.81					8.5	0.022	0.66									
11D-SB08	5								0.57					8.1	0.0092	0.72									
11D-SB09	1								0.19					4.1	0.023	0.40									
11D-SB09	5							0.59	0.59					8.4	0.0074	0.31									
11D-SB09	11								0.26					10		0.56									
11D-SNS01	0.01												15100	10.3											
11D-SNS02	0.01							5.89					30100	379	0.354										
11D-SNS12	0.5							0.91	0.24					36	0.12	1.5		0.027	0.16	0.33		0.0043			
11D-SNS12	2.5		0.0046		0.014			1.0	0.86	0.0077				45	0.16	2.7			0.16	0.34		0.011	0.0084		0.014
11D-SNS13	0.5		0.0046		0.020			0.15	0.45	0.013				16	0.024				0.12	0.31		0.0096	0.0042		0.0092
11D-SNS13	2.5							0.045	0.17					7.2	0.013									3.4	
11D-SNS14	0.5		0.0070	0.0070	0.018			1.4	0.22	0.012				17	0.028	8.7			0.15			0.018	0.020		0.028
11D-SNS14	2.5													8.3	0.0056										
11D-SNS15	0.5		0.0088	0.010	0.03			2.7	0.98	0.015				150	0.21	6.1			10			0.021	0.0071		0.019
11D-SNS15	2.5							0.97	0.19					11	0.086	1.4			0.029						
11D-SNS16	0.5							2.0	0.34					17	0.21	2.5				1.1					
11D-SNS16	2.5							2.4	0.45					28	0.21	2.7				0.041					
11D-SNS17	0.5		0.026	0.041	0.064			1.1	0.47	0.033		0.017		5.8	0.077	2.7	0.0018	0.011		0.15		0.029	0.026	0.34	0.056
11D-SNS17	2.5							0.65	0.31					8.7	0.044					0.015					
11D-SNS18	0.5				0.013			0.22	0.15					9.0	0.0051	0.41				0.042					
11D-SNS18	2.5							0.077	0.17					4.4		0.42				0.045					
11D-SNS19	0.5		0.0062	0.0084	0.030			1.8	0.32	0.014				46	0.032	1.5						0.015	0.0053	0.29	0.012
11D-SNS19	2.5							0.12	0.12					11	0.0042	0.38				0.12					
11D-SNS20	0.5							0.33	0.41					47	0.024	0.38									
11D-SNS20	2.5																								
11D-SNS21	0.5							0.28	0.25					8.1	0.031										
11D-SNS21	2.5							0.32						8.8	0.042										
11D-SNS22	0.5		0.0085	0.0090	0.019			3.7	0.35	0.012				23	0.053	2.8				1.3		0.014	0.0085		0.013
11D-SNS22	2.5		0.015	0.015	0.030			0.77	0.26	0.018				7.2	0.052	1.7						0.026	0.013	0.24	0.020
11D-SNS23	3.5							0.10	0.11					5.8	0.036	0.93									
11D-SNS23	4.5							0.092	0.11					4.7	0.011									0.70	
11D-SNS24	0.5																								
11D-SNS24	2.5																								
11D-SNS25	0.5													5.3											
11D-SNS25	2.5													5.5											
11D-SNS26	0.5													9.2											
11D-SNS26	2.5													5.8											
11D-SNS27	0.5													9.6											
11D-SNS27	2.5													8.5											
11D-SNS28	0.5													9.1											
11D-SNS28	2.5													13											
50D-SB01	1																								
50D-SB02	1																				4.92				
50D-SB03	1																				8.1				
50D-SB03	5																				3.7				
50D-SB03	10																				13.4				
50D-SB04	5													4.0	0.063	0.45									
50D-SB04	11									0.0052				4.4	0.035	0.38	0.0034					0.0026	0.024	0.059	0.059
51D-SB01	2																				2.3				
51D-SB01	10																				1.2				
51D-SB02	1	2.0																			2.12				
51D-SB02	5																				1.72				
51D-SB02	10																				51				
51D-SB03	1																				3.1				
51D-SB03	10																				17				
51D-SB04	1	3.0																			2.7				
51D-SB04	1.5																				2.7				

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																						
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.9 E-4	NA	NA	NA	NA	NA	3.7 E-3	4.6 E-2	NA	NA	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	5.5 E-3	2.3 E-1	2.3 E-1	2.3 E-1	1.6 E-5	4.3 E-5	1.1 E-4	1.5 E-4	1.5 E-4
Unit Risk		5.3 E-8	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	7.7 E-8	2.1 E-8	7.1 E-7	7.7 E-9	4.7 E-7	7.7 E-8	NA	NA	NA	NA	7.8 E-9	3.3 E-7	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA
51D-SB04	5																				38.5				
51D-SB04	11																				8.3				
51D-SB05	5								0.16					5.5	0.026	0.69									
51D-SB05	9								0.21					4.8	0.024	2									
51D-SB06	5								0.13					6	0.15	0.69								0.23	
51D-SB06	9							2.2						7.1	0.046	0.48								0.37	
51D-SB07	5								0.17					3.5	0.0094	0.69									
51D-SB07	9								0.15					3.2	0.024	9.5									
51D-SB08	5								0.43					9.7	0.013	0.73								0.069	
51D-SB08	9								0.38					4.2	0.018	0.57									
51D-SB09	5								0.26					2.7	0.044	0.68								2.5	
51D-SB09	9								0.25					9.5	0.096	2.1								0.12	
51D-SB10	5		0.0055		0.016				0.48	0.0077				6.0	0.042	1.3						0.0095	0.052		0.0095
51D-SB10	9								0.54					6.5	0.055	0.51									
A20-B34-SB01	1							0.53	0.89					8.4	0.06	0.51									
A20-B34-SB01	5							0.34	0.85					7.5	0.017	0.42									
A20-B34-SB01	11								0.27					6.6	0.0059	0.44									
A20-B34-SB02	1		0.0046						0.35					8.0	0.027	0.45						0.0061	0.0046		
A20-B34-SB02	5								0.46					8.6	0.032	0.58									
A20-B34-SB02	11								0.26					9.3	0.0088	0.53									
A20-RB37-SB01	1			0.016				1.6	0.57			0.0073		210	0.14	100			3.1					0.38	
A20-RB37-SB01	5								0.60					9.7	0.017	0.41									
A20-RB37-SB01	11								0.40					6.2		0.45									
A20-RB37-SB02	1							0.59	0.55					15	0.033	9.6			2.0			0.0027		0.97	
A20-RB37-SB02	5							0.36	0.42					7.7	0.017	1.2								0.23	
A20-RB37-SB02	11							0.26	0.81					5.3	0.011	0.49									
A20-RB37-SB03	1								0.26	0.013				10	0.053	0.65			0.21				0.01		0.0093
A20-RB37-SB03	5								0.16					9.4	0.012	0.62									
A20-RB37-SB03	11													5.5		0.59									
A20-RB37-SB04	1							0.33	0.5	0.0083				6.3	0.032	0.58							0.0064		
A20-RB37-SB04	5							0.29	0.34					8.1	0.017	0.7									
A20-RB37-SB04	11							0.34	0.65					9.3	0.031	0.19									
A20-RC29-SB01	1							0.31	0.13					4.4	0.011				0.059						
A20-RC29-SB01	5							0.52	0.26					10	0.029										
A20-RC29-SB01	11							0.4	0.16					3.9	0.0069	1.8									
A20-RX73-SB01	1		0.0042						0.20					4.3	0.051	1.4							0.0053	0.088	
A20-RX73-SB01	5								0.40					2.9	0.026	0.53				0.016				0.057	
A20-RX73-SB01	11								0.36					4.3	0.012	0.73									
A20-RX73-SB02	1								0.64					6.5	0.078	0.36									
A20-RX73-SB02	5								0.68					3.5	0.30	1.3									
A20-RX73-SB02	11								0.25					4.1	0.15	5.8									
A20-RX73-SB03	1		0.010	0.0074	0.011			0.19	0.41	0.011				4.4	0.018	1.6						0.0042	0.020		0.011
A20-RX73-SB03	5								0.77					7	0.33	0.84									
A20-RX73-SB03	11								0.19					5.5	0.078	0.85									
A20-ST01-SB01	1								0.71					10	0.061	0.63									
A20-ST01-SB01	5								0.58					7.3	0.087	0.57									
A20-ST01-SB01	11								0.32					6.6	0.059	0.43			0.030						
A20-ST01-SB02	1		0.0049		0.021					0.022				7.2	0.061	0.56	0.0022					0.0037	0.022		0.011
A20-ST01-SB02	5								0.069					17	0.44	0.35									
A20-ST01-SB02	11							0.52						3.7	0.042	0.38									
A20-ST01-SB03	1								0.21	0.005				11	0.15	0.62			0.13			0.0043	0.0032		
A20-ST01-SB03	5								0.11					3.6	0.096	0.60								0.17	
A20-ST01-SB03	11							0.37						2.1	0.011	0.19									
A20-ST02-SB01	1								0.29					4.7	0.091	0.76									
A20-ST02-SB01	5								0.14	0.0052				4.1	0.025	0.75							0.0082		
A20-ST02-SB01	11								0.25					3.8	0.0037	0.85									
A20-ST05-SB01	1							0.37	0.22	0.011				5.7	0.025	0.46						0.0021	0.013		0.0067
A20-ST05-SB01	5							0.37	0.47					7.3	0.012	0.52									
A20-ST05-SB01	11								0.73					10	0.010	0.5									
A20-ST05-SB02	1							0.43	0.65	0.0081				7.3	0.019	0.32						0.0032	0.0041		
A20-ST05-SB02	5							0.29	0.48					6.7	0.039	0.41									
A20-ST05-SB02	11								0.62																
A20-ST06-SB01	1								0.45	0.0049				10	0.10	0.46									
A20-ST06-SB01	5								0.30	0.007				7.7	0.036	0.36									
A20-ST06-SB01	11													3.3		0.22									

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.9 E-4	NA	NA	NA	NA	NA	3.7 E-3	4.6 E-2	NA	NA	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	5.5 E-3	2.3 E-1	2.3 E-1	2.3 E-1	1.6 E-5	4.3 E-5	1.1 E-4	1.5 E-4	1.5 E-4
Unit Risk		5.3 E-8	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	7.7 E-8	2.1 E-8	7.1 E-7	7.7 E-9	4.7 E-7	7.7 E-8	NA	NA	NA	NA	7.8 E-9	3.3 E-7	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA
A20-ST14-SB01	1								0.28					2.9	0.020	2.2								0.13	
A20-ST14-SB01	5								0.46					3.8	0.060	0.63									
A20-ST14-SB01	11								0.076					3.9	0.21	0.53									
A20-ST20-SB01	1								0.680					3.3	0.16	0.47									
A20-ST20-SB01	5								0.69					16	0.95	0.53									
A20-ST20-SB01	11								0.14					9.6	1.4	0.68									
A20-ST22-SB01	1							0.43	0.14					4.9	0.071	0.44						0.0018	0.0025	0.57	
A20-ST22-SB01	5							0.53	0.091					9.1	0.051	1.9								1.8	
A20-ST22-SB01	11							0.19						2.2	0.0084	0.69									

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
03D-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	1.7 E-3	1.4 E-3	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	6.6 E-2
03D-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	7.3 E-3	1.6 E-2	NA	2.4 E-2	1.2 E-1
03D-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-2	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	7.8 E-2
03D-AH02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-2	NA	1.4 E-3	1.5 E-2	NA	NA	NA	NA	NA	7.3 E-3	1.4 E-2	NA	2.8 E-2	1.2 E-1
03D-SB01	1	2.9 E-4	NA	NA	NA	NA	NA	4.8 E-3	NA	NA	NA	NA	1.7 E-1	NA	5.4 E-3	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	1.8 E-1
03D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	NA	NA	NA	1.5 E-1
03D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	3.9 E-3	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	2.0 E-1
03D-SB02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-2	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1
03D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	2.3 E-3	NA	NA	NA	6.6 E-1	NA	9.6 E-5	NA	NA	NA	NA	7.8 E-1
03D-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1
03D-SB02	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-2	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-2
03D-SB02	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	4.4 E-5
03D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	NA	NA	NA	9.1 E-5
03D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-2
03D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	NA	1.1 E-1
03D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	NA	NA	NA	NA	1.1 E-1
03D-SB03	10	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	9.9 E-2	NA	3.5 E-2	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	1.5 E-1
03D-SB04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2
03D-SB04	1	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	1.2 E-1
03D-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-2
03D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2
03D-SB04	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	1.3 E-5
03D-SB04	10	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	9.8 E-2
03D-SB05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-2
03D-SB05	1	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-2	NA	NA	NA	NA	NA	2.9 E-2	NA	1.3 E-4	NA	NA	NA	NA	1.0 E-1
03D-SB05	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2
03D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	5.4 E-1	NA	1.3 E-5	NA	NA	NA	NA	6.3 E-1
03D-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-2	NA	NA	NA	NA	NA	2.0 E-2	NA	3.0 E-5	NA	NA	NA	NA	9.8 E-2
03D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	1.2 E-2	NA	1.3 E-4	NA	NA	NA	NA	1.2 E-1
03D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	4.3 E-2
03D-SB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-1	NA	NA	NA	NA	NA	1.0 E-1	NA	2.7 E-5	NA	NA	NA	NA	1.1 E+0
03D-SB07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1
03D-SB07	1	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4
03D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2
03D-SB07	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	2.5 E-5
03D-SB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	NA	NA	NA	9.9 E-5
03D-SB08	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1
03D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	3.6 E-3	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	1.2 E-1
03D-SB08	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-2
03D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	6.0 E-3	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	1.1 E-1
03D-SB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-2	NA	4.8 E-3	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	7.1 E-2
03D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	1.3 E-3	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	1.8 E-2
03D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	3.6 E-4	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SB10	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	1.4 E-4	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB10	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	6.2 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SB11	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	9.4 E-4	2.7 E-4	NA	NA	8.7 E-3	NA	NA	NA	6.6 E-7	NA	1.2 E-6	2.9 E-2
03D-SB11	5	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	3.3 E-3	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
03D-SB11	11	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	5.5 E-3	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2
03D-SB12	5	NA	NA	NA	NA	NA	NA	2.3 E-3	1.0 E-2	NA	NA	NA	NA	NA	7.5 E-4	2.3 E-4	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	1.3 E-2
03D-SB12	11	NA	NA	NA	NA	NA	NA	1.3 E-3	1.4 E-2	NA	NA	NA	NA	NA	1.2 E-3	5.3 E-4	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	1.7 E-2
03D-SB13	6	NA	NA	NA	NA	NA	NA	1.3 E-3	1.6 E-2	NA	NA	NA	NA	NA	4.8 E-4	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
03D-SB13	11.5	NA	NA	NA	NA	NA	NA	9.3 E-4	1.4 E-2	NA	NA	NA	NA	NA	1.2 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	1.5 E-2
03D-SB14	3.5	NA	NA	NA	NA	NA	NA	1.2 E-3	8.2 E-3	NA	NA	NA	NA	NA	4.4 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	NA	1.0 E-2
03D-SB14	7.5	NA	NA	NA	NA	NA	NA	1.3 E-3	1.1 E-2	NA	NA	NA	NA	NA	2.7 E-4	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	1.3 E-2
03D-SB14	11	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	8.3 E-5	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2
03D-SB15	3	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	2.2 E-3
03D-SB15	6	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-3
03D-SB15	11.5	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	2.3 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	1.7 E-3
03D-SB16	5	NA	NA	NA	NA	NA	NA	2.9 E-3	2.1 E-2	NA	NA	NA	NA	NA	7.7 E-4	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	2.5 E-2
03D-SB16	11.5	NA	NA	NA	NA	NA	NA	1.5 E-3	1.2 E-2	NA	NA	NA	NA	NA	3.3 E-4	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SB17	1	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	3.3 E-3	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	3.2 E-2
03D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SB17	11	NA	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	4.4 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-3
03D-SB18	11	NA	NA	NA	NA	NA	NA	1.3 E-3	2.0 E-2	NA	NA	NA	NA	NA	7.1 E-4	1.9 E-4	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	2.3 E-2
03D-SB19	7.5	NA	NA	NA	NA	NA	NA	1.2 E-3	9.1 E-3	NA	NA	NA	NA	NA	3.1 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	1.2 E-2

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
03D-SB19	11.5	NA	NA	NA	NA	NA	NA	1.4 E-3	6.4 E-3	NA	NA	NA	NA	NA	2.5 E-4	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-3
03D-SB20	5	NA	NA	NA	NA	NA	NA	1.9 E-3	1.0 E-2	NA	NA	NA	NA	NA	1.2 E-3	3.0 E-4	NA	NA	NA	2.6 E-3	NA	NA	NA	4.4 E-5	NA	1.6 E-2
03D-SB20	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	3.1 E-4	5.5 E-4	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	1.1 E-1
03D-SB22	7.75	NA	NA	NA	NA	NA	NA	1.1 E-3	1.0 E-2	NA	NA	NA	NA	NA	2.1 E-4	1.3 E-4	NA	6.1 E-2	NA	NA	NA	NA	NA	1.5 E-4	NA	7.3 E-2
03D-SB22	11	NA	NA	NA	NA	NA	NA	1.6 E-3	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	2.9 E-2
03D-SB23	6	NA	NA	NA	NA	NA	NA	1.4 E-3	8.7 E-3	NA	NA	NA	NA	NA	1.8 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	1.0 E-2
03D-SB23	11	NA	NA	NA	NA	NA	NA	1.4 E-3	6.4 E-3	NA	NA	NA	NA	NA	1.5 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	8.2 E-3
03D-SB24	7.5	NA	NA	NA	NA	NA	NA	1.3 E-3	1.4 E-2	NA	NA	NA	NA	NA	2.5 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	8.4 E-5	NA	1.7 E-2
03D-SB24	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-4
03D-SB25	1	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	8.8 E-4	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
03D-SB25	5	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	3.5 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	3.4 E-2
03D-SB25	11	NA	NA	NA	NA	NA	NA	NA	6.8 E-2	NA	NA	NA	NA	NA	6.7 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-2
03D-SB26	1	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	1.9 E-4	3.8 E-4	NA	NA	NA	NA	NA	NA	7.9 E-7	5.2 E-5	NA	7.0 E-3
03D-SB26	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	2.0 E-4	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	1.1 E-2
03D-SB26	11	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	4.4 E-4	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2
03D-SB27	1	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	6.7 E-4	3.7 E-4	NA	NA	NA	NA	NA	3.4 E-7	2.8 E-6	1.5 E-4	3.2 E-6	1.3 E-2
03D-SB27	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	1.2 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
03D-SB27	11	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	8.6 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
03D-SB30	5	NA	NA	NA	NA	NA	NA	1.2 E-3	2.7 E-2	NA	NA	NA	NA	NA	1.3 E-3	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
03D-SB30	11	NA	NA	NA	NA	NA	NA	1.4 E-3	5.0 E-2	NA	NA	NA	NA	NA	8.6 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-2
03D-SB31	1.5	NA	NA	NA	NA	NA	NA	1.8 E-3	1.6 E-2	NA	NA	NA	NA	NA	9.0 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	2.9 E-7	8.7 E-5	NA	1.9 E-2
03D-SB31	5.5	NA	NA	NA	NA	NA	NA	1.4 E-3	1.2 E-2	NA	NA	NA	NA	NA	2.3 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	1.5 E-2
03D-SB31	11.5	NA	NA	NA	NA	NA	NA	2.0 E-3	2.8 E-2	NA	NA	NA	NA	NA	1.5 E-3	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
03D-SB32	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	9.4 E-4	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	1.8 E-2
03D-SB32	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	3.8 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SB33	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	1.1 E+1	NA	NA	NA	NA	NA	NA	1.1 E+1
03D-SB33	11	NA	NA	NA	NA	NA	NA	NA	8.2 E-3	NA	NA	NA	NA	NA	8.0 E-4	3.7 E-4	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	3.2 E-2
03D-SB35	5	NA	NA	NA	NA	NA	NA	1.4 E-3	2.1 E-2	NA	NA	NA	NA	NA	4.3 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2
03D-SB35	11	NA	NA	NA	NA	NA	NA	1.4 E-3	5.9 E-3	NA	NA	NA	NA	NA	2.4 E-4	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-3
03D-SB36	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	4.9 E-4	8.6 E-4	NA	NA	NA	3.3 E-3	NA	NA	2.3 E-6	8.7 E-6	3.8 E-6	2.4 E-2
03D-SB36	5	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	6.1 E-4	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
03D-SB36	11	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	2.5 E-4	3.7 E-4	NA	NA	NA	NA	NA	9.0 E-8	1.9 E-6	1.5 E-4	1.2 E-6	2.7 E-2
03D-SB37	5	NA	NA	NA	NA	NA	NA	1.7 E-3	3.0 E-2	NA	NA	NA	NA	NA	2.6 E-4	3.1 E-4	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	6.5 E-2
03D-SB37	11	NA	NA	NA	NA	NA	NA	2.0 E-3	1.7 E-2	NA	NA	NA	NA	NA	6.2 E-4	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
03D-SB38	1	NA	NA	NA	NA	NA	NA	1.8 E-3	4.4 E-3	NA	NA	NA	NA	NA	2.0 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	6.9 E-3
03D-SB38	5	NA	NA	NA	NA	NA	NA	1.7 E-3	1.8 E-2	NA	NA	NA	NA	NA	4.8 E-4	4.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	2.5 E-2
03D-SB38	11	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
03D-SB39	3.5	NA	NA	NA	NA	NA	NA	1.7 E-3	9.1 E-3	NA	NA	NA	NA	NA	3.1 E-4	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	5.0 E-5	NA	2.4 E-2
03D-SB39	5	NA	NA	NA	NA	NA	NA	1.1 E-3	8.2 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-3
03D-SB39	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4
03D-SB40	3.75	NA	NA	NA	NA	NA	NA	1.4 E-3	1.7 E-2	NA	NA	NA	NA	NA	1.1 E-4	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
03D-SB40	7.5	NA	NA	NA	NA	NA	NA	1.2 E-3	1.4 E-2	NA	NA	NA	NA	NA	3.3 E-4	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	1.6 E-2
03D-SB40	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB41	3	NA	NA	NA	NA	NA	NA	1.4 E-3	5.0 E-3	NA	NA	NA	NA	NA	9.6 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	6.8 E-3
03D-SB41	6	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	1.7 E-3
03D-SB41	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4
03D-SB42	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	4.7 E-4	NA	NA	5.6 E-3	NA	NA	NA	3.0 E-7	NA	NA	6.9 E-3
03D-SB42	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	3.8 E-4	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
03D-SB42	11	NA	NA	NA	NA	NA	NA	1.5 E-3	1.0 E-2	NA	NA	NA	NA	NA	9.3 E-4	6.2 E-4	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	1.3 E-2
03D-SB43	5	NA	NA	NA	NA	NA	NA	1.0 E-3	2.4 E-2	NA	NA	NA	NA	NA	9.0 E-4	2.8 E-4	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	5.2 E-2
03D-SB43	11	NA	NA	NA	NA	NA	NA	9.3 E-4	2.4 E-2	NA	NA	NA	NA	NA	4.5 E-4	1.6 E-4	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	NA	3.4 E-2
03D-SB44	5	NA	NA	NA	NA	NA	NA	1.3 E-3	1.9 E-2	NA	NA	NA	NA	NA	2.1 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2
03D-SB44	11	NA	NA	NA	NA	NA	NA	1.2 E-3	9.6 E-3	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB45	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	2.4 E-4	6.0 E-4	1.5 E-3	NA	NA	NA	NA	7.3 E-7	9.7 E-5	NA	7.3 E-6	1.8 E-2
03D-SB46	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	7.3 E-4	7.3 E-4	1.0 E-2	NA	NA	NA	NA	NA	3.1 E-4	NA	3.7 E-5	3.1 E-2
03D-SB46	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	5.4 E-4	5.0 E-4	NA	2.6 E+0	NA	NA	NA	8.7 E-6	NA	NA	2.6 E+0
03D-SB47	7.5	NA	NA	NA	NA	NA	NA	1.8 E-3	1.3 E-2	NA	NA	NA	NA	NA	1.2 E-4	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	1.6 E-2
03D-SB47	11.5	NA	NA	NA	NA	NA	NA	1.5 E-3	1.1 E-2	NA	NA	NA	NA	NA	1.4 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	NA	1.4 E-2
03D-SB48	5	NA	NA	NA	NA	NA	NA	1.4 E-3	4.3 E-2	NA	NA	NA	NA	NA	1.5 E-4	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2
03D-SB48	11	NA	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-3	NA	NA	NA	NA	NA	4.3 E-4	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SB49	5	NA	NA	NA	NA	NA	NA	1.3 E-3	7.7 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	9.4 E-3
03D-SB49	11.5	NA	NA	NA	NA	NA	NA	1.4 E-3	9.1 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB50	1	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	1.7 E-3	4.8 E-4	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	6.3 E-2
03D-SB50	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	1.9 E-4	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
03D-SB50	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	1.2 E-4	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
03D-SB51	5	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	2.1 E-3	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
03D-SB51	11	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	1.4 E-4	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
03D-SB52	1	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	8.6 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SB52	5	NA	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	1.3 E-4	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	9.3 E-3
03D-SB52	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4
03D-SB53	5	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	1.4 E-4	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	2.3 E-2
03D-SB53	11	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	1.1 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
03D-SB54	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	3.9 E-4	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	6.0 E-3
03D-SB54	5	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	3.1 E-4	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2
03D-SB54	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	1.1 E-4	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SB55	1	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	5.4 E-4	3.2 E-4	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	2.9 E-2
03D-SB55	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	9.9 E-4	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	4.0 E-2
03D-SB55	11	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	1.4 E-4	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2
03D-SB56	5	NA	NA	NA	NA	NA	NA	1.4 E-3	1.2 E-2	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SB56	11	NA	NA	NA	NA	NA	NA	1.4 E-3	2.7 E-2	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	2.9 E-2
03D-SB57	5	NA	NA	NA	NA	NA	NA	1.1 E-3	1.3 E-2	NA	NA	NA	NA	NA	2.3 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SB57	11	NA	NA	NA	NA	NA	NA	1.2 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	6.3 E-3	NA	NA	1.1 E-7	3.7 E-7	NA	NA	2.1 E-2
03D-SB61	5	NA	NA	NA	NA	NA	NA	2.5 E-3	1.5 E-2	NA	NA	NA	NA	NA	1.5 E-3	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
03D-SB61	11	NA	NA	NA	NA	NA	NA	9.7 E-4	2.0 E-2	NA	NA	NA	NA	NA	6.8 E-5	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2
03D-SB62	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SB62	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4
03D-SB63	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	5.6 E-3
03D-SB63	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB63	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB64	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SB64	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB64	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3
03D-SB65	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	1.3 E-2
03D-SB66	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SB67	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	1.2 E-1
03D-SB67	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB67	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	3.3 E-2
03D-SB68	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	NA	NA	NA	NA	NA	NA	4.0 E-1
03D-SB68	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	2.0 E-2
03D-SB68	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-2	NA	NA	NA	NA	NA	NA	7.5 E-2
03D-SB69	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	8.7 E-2
03D-SB69	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-3	NA	NA	NA	NA	NA	NA	4.9 E-3
03D-SB69	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-2
03D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2
03D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-2
03D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-2
03D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2
03D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-2
03D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-2
03D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-2
03D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1
03D-SNS34	0.25	NA	NA	NA	NA	NA	NA	1.3 E-2	1.8 E-1	NA	NA	NA	NA	NA	1.3 E-3	1.3 E-3	1.4 E-5	NA	9.8 E-2	3.5 E-1	NA	4.7 E-6	2.4 E-5	NA	2.8 E-5	6.5 E-1
03D-SNS35	0.25	NA	NA	NA	NA	NA	NA	5.2 E-3	4.5 E-2	NA	NA	NA	NA	NA	3.0 E-4	1.3 E-3	6.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-2
11D-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	2.1 E-4	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
11D-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
11D-SB01	11	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	8.0 E-5	8.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-3
11D-SB02	1	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	1.1 E-3	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	4.0 E-2
11D-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	NA	NA	4.2 E-4	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-3
11D-SB02	11	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	2.1 E-4	5.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
11D-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	7.1 E-4	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	1.7 E-2
11D-SB03	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
11D-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
11D-SB04	1	NA	NA	NA	NA	NA	NA	1.6 E-3	1.5 E-2	NA	NA	NA	NA	NA	4.5 E-3	8.6 E-4	NA	NA	3.3 E-3	NA	NA	2.8 E-7	2.6 E-6	NA	5.2 E-6	2.6 E-2
11D-SB04	5	NA	NA	NA	NA	NA	NA	2.1 E-3	2.0 E-2	NA	NA	NA	NA	NA	1.1 E-2	4.4 E-4	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	3.3 E-2
11D-SB04	11	NA	NA	NA	NA	NA	NA	1.5 E-3	1.7 E-2	NA	NA	NA	NA	NA	2.6 E-3	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
11D-SB05	1	NA	NA	NA	NA	NA	NA	1.0 E-3	3.1 E-3	NA	NA	NA	NA	NA	1.1 E-4	5.9 E-4	NA	NA	NA	NA	NA	9.0 E-7	5.5 E-6	1.1 E-3	6.7 E-6	6.0 E-3
11D-SB05	5	NA	NA	NA	NA	NA	NA	1.9 E-3	1.7 E-2	NA	NA	NA	NA	NA	3.9 E-4	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	2.0 E-2
11D-SB05	11	NA	NA	NA	NA	NA	NA	1.4 E-3	1.5 E-2	NA	NA	NA	NA	NA	1.8 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
11D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	6.7 E-5	NA	3.7 E-1
11D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	5.4 E-4
11D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	2.4 E-4
11D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	5.5 E-5
11D-SB08	1	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	2.6 E-4	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2
11D-SB08	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	1.1 E-4	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
11D-SB09	1	NA	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	2.7 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-3
11D-SB09	5	NA	NA	NA	NA	NA	NA	2.2 E-3	2.7 E-2	NA	NA	NA	NA	NA	8.8 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
11D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
11D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-2
11D-SNS02	0.01	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	1.4 E-1	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1
11D-SNS12	0.5	NA	NA	NA	NA	NA	NA	3.4 E-3	1.1 E-2	NA	NA	NA	NA	NA	1.4 E-3	1.0 E-3	NA	6.3 E-3	3.7 E-2	7.7 E-2	NA	1.8 E-7	NA	NA	NA	1.4 E-1
11D-SNS12	2.5	NA	NA	NA	NA	NA	NA	3.7 E-3	3.9 E-2	NA	NA	NA	NA	NA	1.9 E-3	1.8 E-3	NA	NA	3.7 E-2	8.0 E-2	NA	4.7 E-7	9.6 E-7	NA	2.1 E-6	1.6 E-1
11D-SNS13	0.5	NA	NA	NA	NA	NA	NA	5.6 E-4	2.0 E-2	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	2.8 E-2	7.3 E-2	NA	4.1 E-7	4.8 E-7	NA	1.4 E-6	1.2 E-1
11D-SNS13	2.5	NA	NA	NA	NA	NA	NA	1.7 E-4	7.7 E-3	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	8.6 E-3
11D-SNS14	0.5	NA	NA	NA	NA	NA	NA	5.2 E-3	1.0 E-2	NA	NA	NA	NA	NA	3.3 E-4	5.8 E-3	NA	NA	3.5 E-2	NA	NA	7.7 E-7	2.3 E-6	NA	4.3 E-6	5.6 E-2
11D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5
11D-SNS15	0.5	NA	NA	NA	NA	NA	NA	1.0 E-2	4.5 E-2	NA	NA	NA	NA	NA	2.5 E-3	4.1 E-3	NA	NA	2.3 E+0	NA	NA	9.0 E-7	8.1 E-7	NA	2.9 E-6	2.4 E+0
11D-SNS15	2.5	NA	NA	NA	NA	NA	NA	3.6 E-3	8.7 E-3	NA	NA	NA	NA	NA	1.0 E-3	9.3 E-4	NA	NA	6.8 E-3	NA	NA	NA	NA	NA	NA	2.1 E-2
11D-SNS16	0.5	NA	NA	NA	NA	NA	NA	7.4 E-3	1.5 E-2	NA	NA	NA	NA	NA	2.5 E-3	1.7 E-3	NA	NA	NA	2.6 E-1	NA	NA	NA	NA	NA	2.8 E-1
11D-SNS16	2.5	NA	NA	NA	NA	NA	NA	8.9 E-3	2.0 E-2	NA	NA	NA	NA	NA	2.5 E-3	1.8 E-3	NA	NA	NA	9.6 E-3	NA	NA	NA	NA	NA	4.3 E-2
11D-SNS17	0.5	NA	NA	NA	NA	NA	NA	4.1 E-3	2.1 E-2	NA	NA	NA	NA	NA	9.2 E-4	1.8 E-3	9.9 E-6	2.6 E-3	NA	3.5 E-2	NA	1.2 E-6	3.0 E-6	5.2 E-5	8.6 E-6	6.6 E-2
11D-SNS17	2.5	NA	NA	NA	NA	NA	NA	2.4 E-3	1.4 E-2	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	2.1 E-2
11D-SNS18	0.5	NA	NA	NA	NA	NA	NA	8.2 E-4	6.8 E-3	NA	NA	NA	NA	NA	6.1 E-5	2.7 E-4	NA	NA	NA	9.8 E-3	NA	NA	NA	NA	NA	1.8 E-2
11D-SNS18	2.5	NA	NA	NA	NA	NA	NA	2.9 E-4	7.7 E-3	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	1.9 E-2
11D-SNS19	0.5	NA	NA	NA	NA	NA	NA	6.7 E-3	1.5 E-2	NA	NA	NA	NA	NA	3.8 E-4	1.0 E-3	NA	NA	NA	NA	NA	6.4 E-7	6.1 E-7	4.4 E-5	1.8 E-6	2.3 E-2
11D-SNS19	2.5	NA	NA	NA	NA	NA	NA	4.5 E-4	5.5 E-3	NA	NA	NA	NA	NA	5.0 E-5	2.5 E-4	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	3.4 E-2
11D-SNS20	0.5	NA	NA	NA	NA	NA	NA	1.2 E-3	1.9 E-2	NA	NA	NA	NA	NA	2.9 E-4	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	NA	NA	NA	NA	NA	NA	1.0 E-3	1.1 E-2	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
11D-SNS21	2.5	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	5.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
11D-SNS22	0.5	NA	NA	NA	NA	NA	NA	1.4 E-2	1.6 E-2	NA	NA	NA	NA	NA	6.3 E-4	1.9 E-3	NA	NA	NA	3.0 E-1	NA	6.0 E-7	9.7 E-7	NA	2.0 E-6	3.4 E-1
11D-SNS22	2.5	NA	NA	NA	NA	NA	NA	2.9 E-3	1.2 E-2	NA	NA	NA	NA	NA	6.2 E-4	1.1 E-3	NA	NA	NA	NA	NA	1.1 E-6	1.5 E-6	3.7 E-5	3.1 E-6	1.6 E-2
11D-SNS23	3.5	NA	NA	NA	NA	NA	NA	3.7 E-4	5.0 E-3	NA	NA	NA	NA	NA	4.3 E-4	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-3
11D-SNS23	4.5	NA	NA	NA	NA	NA	NA	3.4 E-4	5.0 E-3	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	5.6 E-3
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	7.7 E-5
50D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	1.3 E-4
50D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	NA	NA	5.8 E-5
50D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	2.1 E-4
50D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-4	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
50D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	2.5 E-4	1.9 E-5	NA	NA	NA	NA	1.1 E-7	2.8 E-6	9.0 E-6	9.0 E-6	7.1 E-4
51D-SB01	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	NA	3.6 E-5
51D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	1.9 E-5
51D-SB02	1	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	6.0 E-4
51D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	2.7 E-5
51D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-4	NA	NA	NA	NA	8.0 E-4
51D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	NA	4.9 E-5
51D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	2.7 E-4
51D-SB04	1	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	9.0 E-4
51D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	4.2 E-5

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																							
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
51D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	6.0 E-4
51D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	1.3 E-4
51D-SB05	5	NA	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	3.1 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-3
51D-SB05	9	NA	NA	NA	NA	NA	NA	NA	9.6 E-3	NA	NA	NA	NA	NA	2.9 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
51D-SB06	5	NA	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	NA	NA	NA	1.8 E-3	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	8.2 E-3
51D-SB06	9	NA	NA	NA	NA	NA	NA	8.2 E-3	NA	NA	NA	NA	NA	NA	5.5 E-4	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	9.1 E-3
51D-SB07	5	NA	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	NA	NA	NA	1.1 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-3
51D-SB07	9	NA	NA	NA	NA	NA	NA	NA	6.8 E-3	NA	NA	NA	NA	NA	2.9 E-4	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
51D-SB08	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	1.5 E-4	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	2.0 E-2
51D-SB08	9	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	2.1 E-4	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
51D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	5.2 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	1.3 E-2
51D-SB09	9	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	1.1 E-3	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	1.4 E-2
51D-SB10	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	5.0 E-4	8.6 E-4	NA	NA	NA	NA	NA	4.1 E-7	6.0 E-6	NA	1.5 E-6	2.3 E-2
51D-SB10	9	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	NA	NA	NA	NA	NA	6.5 E-4	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2
A20-B34-SB01	1	NA	NA	NA	NA	NA	NA	2.0 E-3	4.1 E-2	NA	NA	NA	NA	NA	7.1 E-4	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2
A20-B34-SB01	5	NA	NA	NA	NA	NA	NA	1.3 E-3	3.9 E-2	NA	NA	NA	NA	NA	2.0 E-4	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
A20-B34-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	7.0 E-5	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
A20-B34-SB02	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	3.2 E-4	3.0 E-4	NA	NA	NA	NA	NA	2.6 E-7	5.3 E-7	NA	NA	1.7 E-2
A20-B34-SB02	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	3.8 E-4	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2
A20-B34-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	1.0 E-4	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
A20-RB37-SB01	1	NA	NA	NA	NA	NA	NA	5.9 E-3	2.6 E-2	NA	NA	NA	NA	NA	1.7 E-3	6.7 E-2	NA	NA	7.3 E-1	NA	NA	NA	NA	5.8 E-5	NA	8.3 E-1
A20-RB37-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	2.0 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
A20-RB37-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
A20-RB37-SB02	1	NA	NA	NA	NA	NA	NA	2.2 E-3	2.5 E-2	NA	NA	NA	NA	NA	3.9 E-4	6.4 E-3	NA	NA	4.7 E-1	NA	NA	1.2 E-7	NA	1.5 E-4	NA	5.0 E-1
A20-RB37-SB02	5	NA	NA	NA	NA	NA	NA	1.3 E-3	1.9 E-2	NA	NA	NA	NA	NA	2.0 E-4	8.0 E-4	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	2.2 E-2
A20-RB37-SB02	11	NA	NA	NA	NA	NA	NA	9.7 E-4	3.7 E-2	NA	NA	NA	NA	NA	1.3 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2
A20-RB37-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	6.3 E-4	4.3 E-4	NA	NA	4.9 E-2	NA	NA	NA	1.1 E-6	NA	1.4 E-6	6.2 E-2
A20-RB37-SB03	5	NA	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	1.4 E-4	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-3
A20-RB37-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4
A20-RB37-SB04	1	NA	NA	NA	NA	NA	NA	1.2 E-3	2.3 E-2	NA	NA	NA	NA	NA	3.8 E-4	3.9 E-4	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	NA	2.5 E-2
A20-RB37-SB04	5	NA	NA	NA	NA	NA	NA	1.1 E-3	1.5 E-2	NA	NA	NA	NA	NA	2.0 E-4	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
A20-RB37-SB04	11	NA	NA	NA	NA	NA	NA	1.3 E-3	3.0 E-2	NA	NA	NA	NA	NA	3.7 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2
A20-RC29-SB01	1	NA	NA	NA	NA	NA	NA	1.2 E-3	5.9 E-3	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	2.1 E-2
A20-RC29-SB01	5	NA	NA	NA	NA	NA	NA	1.9 E-3	1.2 E-2	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
A20-RC29-SB01	11	NA	NA	NA	NA	NA	NA	1.5 E-3	7.3 E-3	NA	NA	NA	NA	NA	8.2 E-5	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2
A20-RX73-SB01	1	NA	NA	NA	NA	NA	NA	NA	9.1 E-3	NA	NA	NA	NA	NA	6.1 E-4	9.3 E-4	NA	NA	NA	NA	NA	NA	6.1 E-7	1.3 E-5	NA	1.1 E-2
A20-RX73-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	3.1 E-4	3.5 E-4	NA	NA	NA	3.7 E-3	NA	NA	NA	8.7 E-6	NA	2.3 E-2
A20-RX73-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	1.4 E-4	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
A20-RX73-SB02	1	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	9.3 E-4	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
A20-RX73-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	3.6 E-3	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
A20-RX73-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	1.8 E-3	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
A20-RX73-SB03	1	NA	NA	NA	NA	NA	NA	7.1 E-4	1.9 E-2	NA	NA	NA	NA	NA	2.1 E-4	1.1 E-3	NA	NA	NA	NA	NA	1.8 E-7	2.3 E-6	NA	1.7 E-6	2.1 E-2
A20-RX73-SB03	5	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	3.9 E-3	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
A20-RX73-SB03	11	NA	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	9.3 E-4	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2
A20-ST01-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	7.3 E-4	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
A20-ST01-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	1.0 E-3	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
A20-ST01-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	7.0 E-4	2.9 E-4	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	NA	2.3 E-2
A20-ST01-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	3.7 E-4	1.2 E-5	NA	NA	NA	NA	1.6 E-7	2.5 E-6	NA	1.7 E-6	1.1 E-3
A20-ST01-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	5.2 E-3	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-3
A20-ST01-SB02	11	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	5.0 E-4	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3
A20-ST01-SB03	1	NA	NA	NA	NA	NA	NA	NA	9.6 E-3	NA	NA	NA	NA	NA	1.8 E-3	4.1 E-4	NA	NA	3.0 E-2	NA	NA	1.8 E-7	3.7 E-7	NA	NA	4.2 E-2
A20-ST01-SB03	5	NA	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	NA	1.1 E-3	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	6.6 E-3
A20-ST01-SB03	11	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
A20-ST02-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	1.1 E-3	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
A20-ST02-SB01	5	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	3.0 E-4	5.0 E-4	NA	NA	NA	NA	NA	NA	9.4 E-7	NA	NA	7.2 E-3
A20-ST02-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	4.4 E-5	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
A20-ST05-SB01	1	NA	NA	NA	NA	NA	NA	1.4 E-3	1.0 E-2	NA	NA	NA	NA	NA	3.0 E-4	3.1 E-4	NA	NA	NA	NA	NA	9.0 E-8	1.5 E-6	NA	1.0 E-6	1.2 E-2
A20-ST05-SB01	5	NA	NA	NA	NA	NA	NA	1.4 E-3	2.1 E-2	NA	NA	NA	NA	NA	1.4 E-4	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2
A20-ST05-SB01	11	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	1.2 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2
A20-ST05-SB02	1	NA	NA	NA	NA	NA	NA	1.6 E-3	3.0 E-2	NA	NA	NA	NA	NA	2.3 E-4	2.1 E-4	NA	NA	NA	NA	NA	1.4 E-7	4.7 E-7	NA	NA	3.2 E-2
A20-ST05-SB02	5	NA	NA	NA	NA	NA	NA	1.1 E-3	2.2 E-2	NA	NA	NA	NA	NA	4.6 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
A20-ST05-SB02	11	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
A20-ST06-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	1.2 E-3	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2
A20-ST06-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	4.3 E-4	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
A20-ST06-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**	**HI**
Unit Hazard																										
Unit Risk																										
A20-ST14-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	2.4 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	1.4 E-2
A20-ST14-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	7.1 E-4	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2
A20-ST14-SB01	11	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	2.5 E-3	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
A20-ST20-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	1.9 E-3	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
A20-ST20-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	1.1 E-2	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2
A20-ST20-SB01	11	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	1.7 E-2	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2
A20-ST22-SB01	1	NA	NA	NA	NA	NA	NA	1.6 E-3	6.4 E-3	NA	NA	NA	NA	NA	8.5 E-4	2.9 E-4	NA	NA	NA	NA	NA	7.7 E-8	2.9 E-7	8.7 E-5	NA	9.2 E-3
A20-ST22-SB01	5	NA	NA	NA	NA	NA	NA	2.0 E-3	4.1 E-3	NA	NA	NA	NA	NA	6.1 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	8.3 E-3
A20-ST22-SB01	11	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	1.0 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3

		Incremental Lifetime Cancer Risk																									
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**	**ILCR**	**Blood Lead**
Unit Hazard																											
Unit Risk																											
03D-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
03D-AH01	3	NA	4.2 E-6	4.8 E-5	NA	3.7 E-6	4.3 E-6	NA	NA	7.2 E-7	3.1 E-6	1.6 E-6	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	7 E-5	3.5
03D-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6
03D-AH02	3	NA	5.3 E-6	5.2 E-5	NA	4.6 E-6	4.9 E-6	NA	NA	8.5 E-7	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-5	3.4
03D-SB01	1	5.3 E-8	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.7
03D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
03D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
03D-SB02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6
03D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-7	NA	NA	NA	NA	NA	NA	9 E-7	3.4
03D-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
03D-SB02	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB02	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB03	10	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.6
03D-SB04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB04	1	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB04	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB04	10	5.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.4
03D-SB05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB05	1	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	6 E-8	NA
03D-SB05	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	NA	NA	8 E-7	3.4
03D-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	3 E-8	NA
03D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	2 E-8	3.4
03D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB07	1	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	NA
03D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB07	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB08	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB08	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB09	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.5
03D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB10	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB10	11	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB11	1	NA	5.7 E-10	NA	NA	NA	NA	NA	3.0 E-7	5.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	3 E-7	3.3
03D-SB11	5	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB11	11	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB12	5	NA	1.1 E-9	NA	NA	NA	NA	1.3 E-8	1.6 E-7	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB12	11	NA	2.2 E-9	NA	NA	NA	NA	7.5 E-9	2.1 E-7	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB13	6	NA	NA	NA	NA	NA	NA	7.3 E-9	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB13	11.5	NA	NA	NA	NA	NA	NA	5.2 E-9	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB14	3.5	NA	NA	NA	NA	NA	NA	6.7 E-9	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
03D-SB14	7.5	NA	NA	NA	NA	NA	NA	7.3 E-9	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB14	11	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.3
03D-SB15	3	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
03D-SB15	6	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB15	11.5	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
03D-SB16	5	NA	NA	NA	NA	NA	NA	1.6 E-8	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB16	11.5	NA	NA	NA	NA	NA	NA	8.6 E-9	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB17	1	NA	6.2 E-9	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB17	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB18	11	NA	NA	NA	NA	NA	NA	7.5 E-9	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB19	7.5	NA	NA	NA	NA	NA	NA	6.7 E-9	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
03D-SB19	11.5	NA	NA	NA	NA	NA	NA	7.8 E-9	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
03D-SB20	5	NA	NA	NA	NA	NA	NA	1.0 E-8	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB20	11	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB22	7.75	NA	NA	NA	NA	NA	NA	6.3 E-9	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-8	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB22	11	NA	NA	NA	NA	NA	NA	9.2 E-9	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB23	6	NA	NA	NA	NA	NA	NA	8.2 E-9	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
03D-SB23	11	NA	NA	NA	NA	NA	NA	8.2 E-9	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB24	7.5	NA	NA	NA	NA	NA	NA	7.1 E-9	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB24	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB25	1	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB25	5	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
03D-SB25	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.4
03D-SB26	1	NA	2.8 E-10	NA	NA	NA	NA	NA	1.0 E-7	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB26	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB26	11	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
03D-SB27	1	NA	1.1 E-9	4.7 E-9	8.5 E-10	NA	NA	NA	1.8 E-7	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB27	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB27	11	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB30	5	NA	NA	NA	NA	NA	NA	6.9 E-9	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB30	11	NA	NA	NA	NA	NA	NA	8.2 E-9	7.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	3.4
03D-SB31	1.5	NA	NA	NA	NA	NA	NA	1.0 E-8	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB31	5.5	NA	NA	NA	NA	NA	NA	8.2 E-9	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB31	11.5	NA	NA	NA	NA	NA	NA	1.1 E-8	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB32	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.5
03D-SB32	11	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB33	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	2 E-5	3.4
03D-SB33	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB35	5	NA	NA	NA	NA	NA	NA	8.2 E-9	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB35	11	NA	NA	NA	NA	NA	NA	8.2 E-9	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB36	1	NA	2.0 E-9	NA	NA	NA	NA	NA	3.0 E-7	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB36	5	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB36	11	NA	NA	NA	8.5 E-10	NA	NA	NA	4.1 E-7	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB37	5	NA	NA	NA	NA	NA	NA	9.9 E-9	4.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	5 E-7	3.4
03D-SB37	11	NA	NA	NA	NA	NA	NA	1.1 E-8	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB38	1	NA	NA	NA	NA	NA	NA	1.0 E-8	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
03D-SB38	5	NA	NA	NA	NA	NA	NA	9.4 E-9	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB38	11	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB39	3.5	NA	NA	NA	NA	NA	NA	9.9 E-9	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB39	5	NA	NA	NA	NA	NA	NA	6.1 E-9	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB39	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB40	3.75	NA	NA	NA	NA	NA	NA	7.8 E-9	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB40	7.5	NA	NA	NA	NA	NA	NA	6.5 E-9	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB40	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB41	3	NA	NA	NA	NA	NA	NA	8.0 E-9	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8	3.4
03D-SB41	6	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
03D-SB41	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB42	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	NA	NA	NA	NA	NA	NA	8 E-9	3.4
03D-SB42	5	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB42	11	NA	NA	NA	NA	NA	NA	8.6 E-9	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.5
03D-SB43	5	NA	NA	NA	NA	NA	NA	5.7 E-9	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	4 E-7	3.3
03D-SB43	11	NA	NA	NA	NA	NA	NA	5.2 E-9	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	4 E-7	3.3
03D-SB44	5	NA	NA	NA	NA	NA	NA	7.5 E-9	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB44	11	NA	NA	NA	NA	NA	NA	6.7 E-9	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB45	5	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB46	5	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB46	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-10	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	4 E-6	3.4
03D-SB47	7.5	NA	NA	NA	NA	NA	NA	1.0 E-8	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB47	11.5	NA	NA	NA	NA	NA	NA	8.6 E-9	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB48	5	NA	NA	NA	NA	NA	NA	8.2 E-9	6.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	3.4
03D-SB48	11	NA	2.2 E-10	NA	NA	NA	NA	9.2 E-9	8.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8	3.4
03D-SB49	5	NA	NA	NA	NA	NA	NA	7.3 E-9	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
03D-SB49	11.5	NA	NA	NA	NA	NA	NA	8.0 E-9	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB50	1	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	7 E-7	3.4
03D-SB50	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB50	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
03D-SB51	5	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.5
03D-SB51	11	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB52	1	NA	NA	NA	NA	NA	NA	5.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	2 E-8	3.6
03D-SB52	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
03D-SB52	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB53	5	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB53	11	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB54	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	7 E-9	3.4
03D-SB54	5	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	3.4
03D-SB54	11	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB55	1	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB55	5	NA	NA	NA	NA	NA	NA	NA	6.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
03D-SB55	11	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
03D-SB56	5	NA	NA	NA	NA	NA	NA	8.0 E-9	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB56	11	NA	3.9 E-10	NA	NA	NA	NA	7.8 E-9	4.2 E-7	5.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
03D-SB57	5	NA	NA	NA	NA	NA	NA	6.1 E-9	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB57	11	NA	NA	NA	NA	NA	NA	6.7 E-9	2.0 E-7	3.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB61	5	NA	NA	NA	NA	NA	NA	1.4 E-8	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB61	11	NA	NA	NA	NA	NA	NA	5.5 E-9	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
03D-SB62	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB62	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB63	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	NA	NA	NA	NA	NA	NA	8 E-9	NA
03D-SB63	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB63	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	2 E-8	NA
03D-SB64	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	2 E-8	NA
03D-SB64	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	2 E-8	NA
03D-SB64	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	6 E-9	NA
03D-SB65	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	2 E-8	NA
03D-SB66	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	2 E-8	NA
03D-SB67	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
03D-SB67	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB67	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	5 E-8	NA
03D-SB68	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	NA	NA	6 E-7	NA
03D-SB68	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	3 E-8	NA
03D-SB68	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	1 E-7	NA
03D-SB69	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	1 E-7	NA
03D-SB69	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	NA	NA	NA	NA	7 E-9	NA
03D-SB69	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SNS34	0.25	NA	2.0 E-9	2.9 E-8	6.8 E-9	NA	NA	7.3 E-8	2.9 E-6	6.4 E-10	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	1.4 E-7	5.0 E-7	NA	NA	NA	NA	NA	4 E-6	4.7
03D-SNS35	0.25	NA	NA	NA	NA	NA	NA	2.9 E-8	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	3.4
11D-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.5
11D-SB01	5	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
11D-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
11D-SB02	1	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
11D-SB02	5	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.4
11D-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
11D-SB03	1	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
11D-SB03	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA
11D-SB03	11	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA
11D-SB04	1	NA	6.7 E-10	NA	1.4 E-9	NA	NA	9.0 E-9	2.4 E-7	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	NA	NA	NA	NA	NA	NA	3 E-7	3.4
11D-SB04	5	NA	NA	NA	NA	NA	NA	1.2 E-8	3.1 E-7	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
11D-SB04	11	NA	NA	NA	NA	NA	NA	8.4 E-9	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
11D-SB05	1	NA	4.1 E-10	4.8 E-9	NA	NA	NA	5.9 E-9	4.9 E-8	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.4
11D-SB05	5	NA	NA	NA	NA	NA	NA	1.1 E-8	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
11D-SB05	11	NA	NA	NA	NA	NA	NA	8.0 E-9	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
11D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	NA	NA	5 E-7	NA
11D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB08	1	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
11D-SB08	5	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
11D-SB09	1	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
11D-SB09	5	NA	NA	NA	NA	NA	NA	1.2 E-8	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
11D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
11D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS02	0.01	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	8.1
11D-SNS12	0.5	NA	NA	NA	NA	NA	NA	1.9 E-8	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	5.3 E-8	1.1 E-7	NA	NA	NA	NA	NA	4 E-7	3.8
11D-SNS12	2.5	NA	2.2 E-10	NA	1.1 E-9	NA	NA	2.1 E-8	6.1 E-7	6.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	1.1 E-7	NA	NA	NA	NA	NA	8 E-7	3.9
11D-SNS13	0.5	NA	2.2 E-10	NA	1.5 E-9	NA	NA	3.1 E-9	3.2 E-7	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	1.0 E-7	NA	NA	NA	NA	NA	5 E-7	3.5
11D-SNS13	2.5	NA	NA	NA	NA	NA	NA	9.4 E-10	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
11D-SNS14	0.5	NA	3.3 E-10	5.4 E-9	1.4 E-9	NA	NA	2.9 E-8	1.6 E-7	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	2 E-7	3.5
11D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS15	0.5	NA	4.2 E-10	7.7 E-9	2.3 E-9	NA	NA	5.7 E-8	7.0 E-7	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	4 E-6	5.2
11D-SNS15	2.5	NA	NA	NA	NA	NA	NA	2.0 E-8	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	NA	NA	NA	NA	2 E-7	3.4
11D-SNS16	0.5	NA	NA	NA	NA	NA	NA	4.2 E-8	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	6 E-7	3.5
11D-SNS16	2.5	NA	NA	NA	NA	NA	NA	5.0 E-8	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	4 E-7	3.7
11D-SNS17	0.5	NA	1.2 E-9	3.2 E-8	5.0 E-9	NA	NA	2.3 E-8	3.4 E-7	2.6 E-10	NA	1.3 E-9	NA	NA	NA	NA	1.4 E-11	3.6 E-9	NA	5.0 E-8	NA	NA	NA	NA	NA	5 E-7	3.4
11D-SNS17	2.5	NA	NA	NA	NA	NA	NA	1.4 E-8	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	2 E-7	3.4
11D-SNS18	0.5	NA	NA	NA	1.0 E-9	NA	NA	4.6 E-9	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	1 E-7	3.4
11D-SNS18	2.5	NA	NA	NA	NA	NA	NA	1.6 E-9	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	1 E-7	3.4
11D-SNS19	0.5	NA	3.0 E-10	6.5 E-9	2.3 E-9	NA	NA	3.8 E-8	2.3 E-7	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.9
11D-SNS19	2.5	NA	NA	NA	NA	NA	NA	2.5 E-9	8.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	1 E-7	3.4
11D-SNS20	0.5	NA	NA	NA	NA	NA	NA	6.9 E-9	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.9
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	NA	NA	NA	NA	NA	NA	5.9 E-9	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
11D-SNS21	2.5	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
11D-SNS22	0.5	NA	4.1 E-10	7.0 E-9	1.5 E-9	NA	NA	7.8 E-8	2.5 E-7	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	NA	8 E-7	3.6
11D-SNS22	2.5	NA	7.2 E-10	1.2 E-8	2.3 E-9	NA	NA	1.6 E-8	1.9 E-7	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
11D-SNS23	3.5	NA	NA	NA	NA	NA	NA	2.1 E-9	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
11D-SNS23	4.5	NA	NA	NA	NA	NA	NA	1.9 E-9	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
50D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11	3.4
51D-SB01	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB02	1	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	NA
51D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	1	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA
51D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
51D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB05	5	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
51D-SB05	9	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
51D-SB06	5	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8	3.4
51D-SB06	9	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.4
51D-SB07	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
51D-SB07	9	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
51D-SB08	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
51D-SB08	9	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
51D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
51D-SB09	9	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
51D-SB10	5	NA	2.6 E-10	NA	1.2 E-9	NA	NA	NA	3.4 E-7	6.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
51D-SB10	9	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
A20-B34-SB01	1	NA	NA	NA	NA	NA	NA	1.1 E-8	6.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
A20-B34-SB01	5	NA	NA	NA	NA	NA	NA	7.1 E-9	6.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
A20-B34-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-B34-SB02	1	NA	2.2 E-10	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-B34-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-B34-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-RB37-SB01	1	NA	NA	1.2 E-8	NA	NA	NA	3.4 E-8	4.1 E-7	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	1 E-6	6.0
A20-RB37-SB01	5	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
A20-RB37-SB01	11	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-RB37-SB02	1	NA	NA	NA	NA	NA	NA	1.2 E-8	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-7	NA	NA	NA	NA	NA	NA	1 E-6	3.5
A20-RB37-SB02	5	NA	NA	NA	NA	NA	NA	7.5 E-9	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-RB37-SB02	11	NA	NA	NA	NA	NA	NA	5.5 E-9	5.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
A20-RB37-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-RB37-SB03	5	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-RB37-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
A20-RB37-SB04	1	NA	NA	NA	NA	NA	NA	6.9 E-9	3.6 E-7	6.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
A20-RB37-SB04	5	NA	NA	NA	NA	NA	NA	6.1 E-9	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-RB37-SB04	11	NA	NA	NA	NA	NA	NA	7.1 E-9	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
A20-RC29-SB01	1	NA	NA	NA	NA	NA	NA	6.5 E-9	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-RC29-SB01	5	NA	NA	NA	NA	NA	NA	1.1 E-8	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-RC29-SB01	11	NA	NA	NA	NA	NA	NA	8.4 E-9	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-RX73-SB01	1	NA	2.0 E-10	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-RX73-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-9	NA	NA	NA	NA	NA	3 E-7	3.3
A20-RX73-SB01	11	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-RX73-SB02	1	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
A20-RX73-SB02	5	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
A20-RX73-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-RX73-SB03	1	NA	4.8 E-10	5.7 E-9	8.5 E-10	NA	NA	4.0 E-9	2.9 E-7	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-RX73-SB03	5	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
A20-RX73-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-ST01-SB01	1	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
A20-ST01-SB01	5	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
A20-ST01-SB01	11	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-ST01-SB02	1	NA	2.3 E-10	NA	1.6 E-9	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
A20-ST01-SB02	5	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.5
A20-ST01-SB02	11	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
A20-ST01-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	3.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-ST01-SB03	5	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
A20-ST01-SB03	11	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
A20-ST02-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-ST02-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-ST02-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-ST05-SB01	1	NA	NA	NA	NA	NA	NA	7.8 E-9	1.6 E-7	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-ST05-SB01	5	NA	NA	NA	NA	NA	NA	7.8 E-9	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-ST05-SB01	11	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
A20-ST05-SB02	1	NA	NA	NA	NA	NA	NA	9.0 E-9	4.6 E-7	6.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
A20-ST05-SB02	5	NA	NA	NA	NA	NA	NA	6.1 E-9	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-ST05-SB02	11	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	NA
A20-ST06-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	3.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-ST06-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	5.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
A20-ST06-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3

Table 5.2-36
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**	**ILCR**	**Blood Lead**
Unit Hazard																											
Unit Risk																											
A20-ST14-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
A20-ST14-SB01	5	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
A20-ST14-SB01	11	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.4
A20-ST20-SB01	1	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.3
A20-ST20-SB01	5	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.5
A20-ST20-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-ST22-SB01	1	NA	NA	NA	NA	NA	NA	9.0 E-9	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
A20-ST22-SB01	5	NA	NA	NA	NA	NA	NA	1.1 E-8	6.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
A20-ST22-SB01	11	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	3.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0
Unit Risk		1.6 E-5	NA	2.5 E-4	1.7 E-3	7.5 E-5	NA	2.8 E-4	3.6 E-4	4.2 E-4	2.3 E-4	NA	2.4 E-5	NA	NA	NA	NA	9.8 E-6	5.9 E-5	1.9 E-5
03D-SP100	10													47000					430000	
03D-SP100	20	21												300					41000	
03D-SP102	10													59000					30000000	
03D-SP102	28						8700							29000					5900000	
03D-SP103	10										500			95000					830000	
03D-SP103	20													22000					130000	
03D-SP104	10		990									360		170000					640000	
03D-SP104	20		2600									820		250000					1600000	
03D-SP105	10		560									2000		140000					580000	
03D-SP106	15	180					11	32			9.2	41	27	5900		100	15		7200	
03D-SP106	25		120000											64000000					480000	
03D-SP106	30	1500	15000				16000					11000		2800000			1700		270000	
03D-SP107	10		3600				5600							1200000					98000	
03D-SP107	20		640											470000					12000	
03D-SP107	29		4900											340000					340000	
03D-SP108	10											140		86000			30		8700	
03D-SP109	10		1200											630000					16000	
03D-SP109	20		54000				41000							17000000			6400		500000	
03D-SP109	30		94			35	21	17				16	13	15000		36	46		2400	35
03D-SP110	10		49								26	14		11000	10				11000	
03D-SP110	20		28					11			5.6	16		1600		13	51		2900	
03D-SP111	10		28					30						7200			30		56000	
03D-SP111	20							4.2						310			14		1300	5.3
03D-SP112	10													23					240	
03D-SP112	20							27					14	130		13	18		190	
03D-SP113	10							15			340		6.9	9.2		16	22		270	
03D-SP113	20						18000							4600000			5100		2500	
03D-SP114	10							4.8			57			1200			7.8			
03D-SP114	20						18	16			57		6.5	2300		18	36			
03D-SP115	10		51								890			42000					650	
03D-SP116	10							6.7			400		18	100		15	16		150	
03D-SP117	10		5.3					27			62		16	2200		33	80		1000	
03D-SP118	10		6.9				17	11					10	10000		14	29		14000	12
03D-SP118	20					88		110					15	24000		66	1100		3700	
03D-SP119	10	57	150				53					140	26	38000	53		20		10000	
03D-SP119	20	830	2200					46				9100	32	48000		29	400		10000	
03D-SP119	29		11000				210000					5700		13000000	30000		5100		310000	
03D-SP120	10							8.6					15	310		5.1	14		180	
03D-SP120	20		6.2					200					33	3200		220	360		160	
03D-SP121	15											2300		3800000					320000	
03D-SP121	25						40000							15000000					68000	
03D-SP122	10	120	570					11			18	260		1800		56	120		9800	
03D-SP122	20	8100	19000									2800		3400000	8800				8200	
03D-SP122	30	9800	28000									2200		3400000			1000			
03D-SP123	10							5.5			16			650		5.3	6.5		180	
03D-SP123	20						24	9.3					8.6			14	11		190	
03D-SP124	10							7.6					17	1300	7.2		16		14	
03D-SP124	20							8.1					30	4800	12	10	16		56	
03D-SP125	10						15	54				4.7	14		110	110	210		33	
03D-SP125	20		26				26	45			110	46	19	73	37	130	220		140	
03D-SP126	10						13												59	7.5
03D-SP126	20	5.2	6.6					7.5				26	6.9	350		14	19		30	
03D-SP127	10															5.2	5.7		190	
03D-SP127	20							4.9					7.7			9.2	10		170	6.8
03D-SP128	10																		25	
03D-SP128	20	64	1000					32			140	510	51	9800		85	340		99	
03D-SP128	30	1400	770	54							750	18000		1800		53	55		170	
03D-SP129	15						19	12				8.6	15			30	19		55	
03D-SP129	25											8600							710	

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	3.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0
Unit Risk		1.6 E-5	NA	2.5 E-4	1.7 E-3	7.5 E-5	NA	2.8 E-4	3.6 E-4	4.2 E-4	2.3 E-4	NA	2.4 E-5	NA	NA	NA	NA	9.8 E-6	5.9 E-5	1.9 E-5
03D-SP130	10															5.4			36	
03D-SP130	20							5.2								10	9.7		33	5.0
03D-SP131	10							7.2					17			24	9.6		350	
03D-SP131	20							5.4					6.5			7.1	9.8		160	
03D-SP132	10							8.6								5.3	7.8		170	
03D-SP132	20																			
03D-SP132	30		10			21	36	150			32	6.5	37	240		620	590		160	50
03D-SP133	10							5.4						91			9.2		18	
03D-SP133	20							5.2					12			6	26			9.4
03D-SP134	10						150	5.2					9.5			18	7.8		11	12
03D-SP134	20		8.0				48	400				24	960			1000	2900		20	
03D-SP135	10	6.0	7.2					19			480	14	17	280		21	100		8600	
03D-SP135	20											120	290	150		5100	27000		940	
03D-SP136	10						55				25		12			7.1	5.8			14
03D-SP137	10		6.0					6.8			670		17	560			26		740	
03D-SP138	10		28					19			23	27	7.2	12000	61	22	72		60	38
03D-SP138	19	32	160					17			79	290		58000	270		45		140	31
03D-SP138	30	13	39			37	41	61			22	190	8.3	11000	35	39	87		15000	60
03D-SP139	10																6.6		39	11
03D-SP139	20					30		16								50	130		80	54
03D-SP139	28		5.7				20	160					8.4	12		160	230		860	38
03D-SP140	10																		31	
03D-SP140	20							14					14			30	21		22	6.4
03D-SP141	10																7.4		48	17
03D-SP141	20					19	14	57					14	30		190	200		51	37
03D-SP142	10							11			50			56000	63	18	30		790	8.6
03D-SP142	20							49			42		17	39000		94	170		510	
03D-SP142	30		1300									1700		1100000					4100	
03D-SP143	10							5.2			340			710			11		1000	12
03D-SP143	20							16			380	4.9	6.0	640		14	27		720	21
03D-SP143	30							120						300000				160	1100	
03D-SP144	10							7.8									4.3		1100	4.0
03D-SP144	20							7.6								5.4	7.7		1600	4.9
03D-SP144	30	210	100					41				800	23			1700	9400		1500	
03D-SP145	10								14		500			1300		5.8	16		98	6.4
03D-SP145	20							16			55			110		12	20		12	9.9
03D-SP146	10	7.1	41				50	9.2			7.8	58		81000	180	5.2	8.6		6200	5.1
03D-SP146	20	36	87					26				350		65000	150	26	56		4800	22
03D-SP146	27	270	860									1600		530000	680				2300	
03D-SP147	10										390	76		10000					1100	
03D-SP147	20		5.7				35	16			28	48		630		12	31		110	22
03D-SP147	27	300	450								440	3700		29000			170		760	
03D-SP148	10							13			56		6.9			9.5	16			
03D-SP148	20																			
03D-SP149	10							10						1100		5.9	6.8			4.8
03D-SP149	20						26	93					27	65		93	80			
03D-SP150	30							5.0						160			6.0		12	
03D-SP84	15		4.8					23			9.7	6.2		730		14	170		77	
03D-SP84	25							13			12			950		6.0	27		71	21
03D-SP85	25	2600	810					2300				73000	260	12000		9500	64000		63000	
03D-SP85	30						18	66				7.2	15	43		35	63		140	20
03D-SP86	10	13						4.8						26			12		30	12
03D-SP86	20							5.3									12		17	13
03D-SP87	10							29					30	19		19	33			
03D-SP88	10							8.1			22			110		11	30		580	
03D-SP88	20							19						10		31	54		590	
03D-SP89	10													890					33000	
03D-SP90	10	10	27					23			260	58	50	4900		73	530		270	
03D-SP90	20	7.5	8.8					16			120	25	31	1900		27	170		270	

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	3.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0
Unit Risk		1.6 E-5	NA	2.5 E-4	1.7 E-3	7.5 E-5	NA	2.8 E-4	3.6 E-4	4.2 E-4	2.3 E-4	NA	2.4 E-5	NA	NA	NA	NA	9.8 E-6	5.9 E-5	1.9 E-5
03D-SP91	10						21	7.9			23		9.5	48	NA	18	8.0		54	30
03D-SP91	20							5.1			150	16	6.7	170		9.4	5.9		190	10
03D-SP92	10	7.8						14			24	32	16	680		6.9	18		140	
03D-SP92	20	13	6.9					25			310	72	26	1000		20	45		1000	
03D-SP93	15										210			2400			420		290	
03D-SP93	25							16			8.0		18	160		22	78		11	
03D-SP94	15		5					5.3			57	27		1500			5.7		7100	
03D-SP94	25						18	27			26	11	51	240		46	61		3300	
03D-SP95	10		210									1200		25000					150000	
03D-SP95	18		220									1400		18000					130000	
03D-SP96	10						37	36			1200		170	44		130	73		89	
03D-SP96	17						65	28			1600		30	56		67	100		68	
03D-SP99	10		140											41000					280000	
11D-SP26	10							8.6						3200		8.4	12			
11D-SP26	20							6.6						850		6.3	30			6.6
11D-SP27	10																		130	
11D-SP27	20						18	27					6.9			47	79		13	5.4
11D-SP28	10						14	17								15	18			
11D-SP28	20	7.6	61								120	11		90					33	3.4
11D-SP29	10							6.3						290		26	63			14
11D-SP29	30	10	120			29	15	26				17		3400	9.3	210	1000			44
11D-SP30	10							7.8			8.3			970	7.2	140	310			
11D-SP30	20	23	20					8.2			46	30		710	8.0	210	910			
11D-SP31	10													55			64			11
11D-SP31	20							5.0		15	23	7.2		120		6.4	140			18
11D-SP31	30	27	6.2			16		8.0			37	64		78		180	450			28
50D-SP01	10							7.4						35		6.7	9.9		140	
50D-SP01	20						14	29					32			67	340		50	
51D-SP04	10							5.8									5.9		110	
51D-SP04	20						18	32					310			140	210		32	
A20-B34-SP01	10							6.9		20							8.0		63	
A20-B34-SP01	20		8.4					20		13			9.7			33	83		45	
A20-B34-SP02	10																		230	
A20-B34-SP02	20						16	11					7.5			20	20		27	9.6
A20-B34-SP03	10							8.2											870	
A20-B34-SP03	20							44								36	56		860	12
A20-B34-SP03	29					23	14	28		46	6.5	9.5	6.3			53	81		1000	38
A20-RB37-SP01	10		300									280		370000					55000	
A20-RB37-SP01	20		500									190		430000					65000	
A20-RB37-SP01	30													490000			410		3100	
A20-RB37-SP02	10		38											24000			11		7000	13
A20-RB37-SP02	20						21	12					6.8	18		20	34		160	30
A20-RC29-SP01	10							15						15		10	21		270	
A20-RC29-SP01	20							16						22		12	26		350	
A20-RX73-SP01	10		9.1					5.8			450					30	5.6		100	
A20-RX73-SP01	20		64				34	25			300		8.2	9.5		1100	46		170	
A20-ST01-1-SP01	10	6.8						8.3			11			1300		6.7	10		200	
A20-ST01-1-SP01	20							7.9					7.6			15	15		40	
A20-ST01-2-SP01	10							5.9			24		11	4600		7.7	11		380	
A20-ST01-2-SP01	20						12	41			32		10	1500		68	130		95	
A20-ST01-3-SP01	10							9.0					11			8.3	6.7		64	15
A20-ST01-3-SP01	20			11			16	77					84			430	2100		71	
A20-ST02-SP01	10																			
A20-ST02-SP01	20							160				33	630			520	1000			
A20-ST02-SP01	30		5.6				14	200				27	23			720	660		62	
A20-ST02-SP02	10													22					76	
A20-ST02-SP02	20							12					7.8			8.0	14		75	
A20-ST02-SP02	30						60	57					14	9.9		90	240		47	
A20-ST02-SP03	20						16	3.8					6.4				8.4		23	8.7

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	3.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0
Unit Risk		1.6 E-5	NA	2.5 E-4	1.7 E-3	7.5 E-5	NA	2.8 E-4	3.6 E-4	4.2 E-4	2.3 E-4	NA	2.4 E-5	NA	NA	NA	NA	9.8 E-6	5.9 E-5	1.9 E-5
A20-ST02-SP03	30						15	24								12	27		24	22
A20-ST02-SP04	30						810	41					5.6			39	67			
A20-ST05-SP01	10						20													
A20-ST05-SP01	20	2900	2900								1700	27000		3900			41		470	42
A20-ST05-SP01	30	4500	3100	100							1600	37000		23000		32	44		190	59
A20-ST05-SP02	10							6								5.9	9.2		120	13
A20-ST05-SP02	20						23	5.4					7.5	9.9		11	19		170	21
A20-ST05-SP03	10	74	110				14	5.3			33	260		4600		13	150		320	
A20-ST05-SP04	10							9.7						88		15	33		15	9.4
A20-ST05-SP05	10							18								11	25			7.1
A20-ST06-SP01	10							3.7						1500		49	25		900	
A20-ST06-SP01	20							11					5.6	2500		11	16		850	
A20-ST14-SP01	10		21					5.3			58			18000			7.1		840	
A20-ST14-SP01	20							12			32			11000		9.3	26		150	24
A20-ST14-SP02	10							7.7						720		11	20		760	11
A20-ST14-SP02	20							20						770		30	53		1100	22
A20-ST20-SP01	10																			
A20-ST20-SP01	20							4.3						320			6.9		15	6.3
A20-ST22-SP01	10							3.5									5.1			
A20-ST22-SP01	20						17	6.4								4.9	14			5.0

Table 5.2-37
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Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+1	1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		NA	2.0 E-5	7.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP100	10		580								510										
03D-SP100	20																				
03D-SP102	10																				
03D-SP102	28		12000		800																
03D-SP103	10		1700		140																
03D-SP103	20		330		2200																
03D-SP104	10		14000		7600																
03D-SP104	20		57000		1600																
03D-SP105	10		14000		17	26	12	52	27		160	15	5.9	17			65	36			120
03D-SP106	15		78	240										23000							
03D-SP106	25		190000	120000	6400		2700					2000		2900							1300
03D-SP106	30		140000	8400	3300							3100		610							
03D-SP107	10		86000		430																
03D-SP107	20		12000		5100																710
03D-SP107	29		250000		78								51	33							
03D-SP108	10		320	51																	
03D-SP109	10		2300	550								31000									
03D-SP109	20		110000	25000	14			290		20	800	6.4		5.4	37		29	9.9			52
03D-SP109	30		430	40	120																
03D-SP110	10		910		24		7.5	43			200	12		5.7	13		7.8				17
03D-SP110	20		460		120		160														23
03D-SP111	10		410				1100	22			140										13
03D-SP111	20						350										12				10
03D-SP112	10						970	38	6.2		220	8.7		5.6			30	11			76
03D-SP112	20						910		5.9		58	9.0		7.6			20	10			29
03D-SP113	10		18				4000					1800		2000							1500
03D-SP113	20			940				26			110				9.7		8.2				9.8
03D-SP114	10							110		6.8	460	5.4			45		14	6.0			97
03D-SP114	20											18									
03D-SP115	10		250			33	580		32			9.3		11	20		81	32			58
03D-SP116	10		70		19	8.8	2300		11	5.8	120	42		26	15		54	15		15	110
03D-SP117	10		140		38		1600				160	16		20	35		33	11		27	55
03D-SP118	10		130				5200			12	340	38		580	64		35	12		31	180
03D-SP118	20		93		33	28	990		29			22					100	31			92
03D-SP119	10	160	6400			35	1000		34			25		370			120	48			130
03D-SP119	20	15000	46000	89								29000		6700			7800				7300
03D-SP119	29		170000		8.9	22	670		24		89	26		14	18		66	21		9.2	48
03D-SP120	10		100		10	18	1600		15		91	22			25		92	24		32	460
03D-SP120	20		53		3100																
03D-SP121	15		10000	2500								22000		9400							
03D-SP121	25						100							340			12				16
03D-SP122	10		140	240								1100		1900							
03D-SP122	20		1700	1600	4700																
03D-SP122	30		6400									20				18	11				17
03D-SP123	10					6.1		78	7.7		250				36		26	11			110
03D-SP123	20					43	760		38			18			16		80	32	6.4		53
03D-SP124	10					34	1400		37			69		9.9	12		130	51	7.6		94
03D-SP124	20		36				3700			13	500	200				170	34	9.9		19	130
03D-SP125	10		270				4900					170		41		51	44	17		61	160
03D-SP125	20	21	15000												13		5.7				12
03D-SP126	10		50	7.5				49			260	6.4			16		17	5.9			38
03D-SP126	20		110	60		6.2			6.3			11					15	6.6			16
03D-SP127	10		18			6.8		46	7.8		200			4.6	14		24	10			29
03D-SP127	20		12								56										9.9
03D-SP128	10		13									42					86	39			55
03D-SP128	20	580	60000	25		84		350	100			160			130		58				98
03D-SP128	30	3500	210000			12		100	9.8	5.6	270				35		34	16			66
03D-SP129	15		220					220													
03D-SP129	25	900						29			200				14		5.8				20

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Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+1	1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		NA	2.0 E-5	7.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP130	10							94			610				26		7.0			6.6	17
03D-SP130	20					23	16		23			55					45	17	6.7		1200
03D-SP131	10					8.3		41	7.9		230				12		22	10			28
03D-SP131	20				46						84	6.6					9.7				18
03D-SP132	10		250																		
03D-SP132	20							390			1500	360	29	140	69		29	14			170
03D-SP132	30		140								92	4.8					12				14
03D-SP133	10							26			140	3.7			17		35	16			34
03D-SP133	20					7.5			7.2	6.5	61	5.4	5.5	8.2	32		18	5.6			26
03D-SP134	10		10			11	2600	37			170	98	430	4300	9.3		26	11	110		40
03D-SP134	20			40	45	9.7	1500		11		57	20	6.3	78	10		52	17		12	76
03D-SP135	10		170	71			9900						540	21000			110		110		120
03D-SP135	20			21000		18			11		30		14	7.4	32		20		10		22
03D-SP136	10				18	20	1300		22		66	16		16			72	30			61
03D-SP137	10		490		26	10	68	23	8.4	8.7	96	75		39	22	22	24	8.4		5.6	49
03D-SP138	10		3400		30		49					100		18	100	97	30				64
03D-SP138	19		16000					160			2600	36			100	20	12				99
03D-SP138	30	29	9700														9.4				59
03D-SP139	10							34		5.7	120	8.3		6.2	14		8.6				33
03D-SP139	20		180					120		7.6	840	23		17	35		12	5.4			110
03D-SP139	28		660														9.6				11
03D-SP140	10		25					86			570				13		29	11			85
03D-SP140	20		22					19			140				9.9		5.6				21
03D-SP141	10						24	240			800	120	13	29	23		21	7.3	14		260
03D-SP141	20		28		10							13				9.9	9.6				57
03D-SP142	10		30					110			460	17		14	53		21				200
03D-SP142	20		22													790					
03D-SP142	30		37000		18							5.7					6.1				19
03D-SP143	10		250		17						95	9.0					13				40
03D-SP143	20		200								1400										210
03D-SP143	30		1300									17								11	8.4
03D-SP144	10							22			670				8.9		6.6			5.4	15
03D-SP144	20						5800				760		66	7300							21
03D-SP144	30			13000								14									12
03D-SP145	10		46					27			150	5.4			12		6.6				21
03D-SP145	20		6.7		47						240	14			44	22	6.2				12
03D-SP146	10	110	4100		35						860				51						49
03D-SP146	20	420	5800																		
03D-SP146	27	690	18000																		
03D-SP147	10		140000					18			330	6.4					6.3				32
03D-SP147	20		10000																		
03D-SP147	27	150	230000									7.9					15				150
03D-SP148	10																				
03D-SP148	20							22			130	20			27	9.3					11
03D-SP149	10		11					170	6.4	19	980	9.0		7.9	110		49	21		5.3	180
03D-SP149	20		6.9								90	3.8			45						6.7
03D-SP150	30		7.2				260	67			260	17		310			7.3				54
03D-SP84	15		95	420			12				93	30		30							16
03D-SP84	25		46	48			18000						2600	60000				960	530		
03D-SP85	25		8300	170000				420		18	1500	13		15	29		24	12			120
03D-SP85	30		50	6.1	16			29			140	14									10
03D-SP86	10		18					34			190				13						20
03D-SP86	20		28			11	1100		16			7.8		8.3	150		110	25		28	200
03D-SP87	10				36							17					6.3				13
03D-SP88	10		180					28			150	7.3		5.9			14	5.8			30
03D-SP88	20		13		22																
03D-SP89	10		410		27	13	1700		22		270	11		270	35		170	41		13	220
03D-SP90	10		560	250	18	15	510		21		1100	4.4		91	29		110	31		22	130
03D-SP90	20		370	87		7.6		18	7.4	17	77	42		5.7			31	9.6		5.4	67

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+1	1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		NA	2.0 E-5	7.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP91	10		310	28	10	8.7			8.6	12		17					22	7.4		5.8	35
03D-SP91	20		340	94	27	15	1000		16			19		8.5			62	18		12	72
03D-SP92	10		120	190	33	7.7	2500		11		130	25		9.5			90	26		10	160
03D-SP92	20		660	300			2000							160							
03D-SP93	15					12	540		15					50	71		70	21			100
03D-SP93	25				13	13			6.4			14					15	6.2			10
03D-SP94	15		300			20		52	19			9.9		23	10		140	47			120
03D-SP94	25		49		510		1200														60
03D-SP95	10		5700	1500	500		1700					66									53
03D-SP95	18		6900	2000		43	310		87	17	78	50	12	150	64		530	190	24		2700
03D-SP96	10		42			19	240	67	18		240	57		100	62		67	21		14	720
03D-SP96	17		89		1100		960														
03D-SP99	10		920								68	5.3		5.8			7.1				14
11D-SP26	10		6.6					27			160				15						6.1
11D-SP26	20				15							5.0					9.7				8.1
11D-SP27	10		23		12			79		4.7	370	20		8.6	43		17	5.8			56
11D-SP27	20		7.8		27						86	13			13		12				34
11D-SP28	10		30		100										9.4		10				6.5
11D-SP28	20		420		37						190	19			12		5.3				54
11D-SP29	10		17					29			410	46			32		7.4				85
11D-SP29	30		280		38		9.6				69	47		13	9.7		5.4				45
11D-SP30	10		13		39		11				100	23			14		5.3				45
11D-SP30	20		28								82	33			15						43
11D-SP31	10										82	72			9.8						50
11D-SP31	20		11				6.8				140	26		19	14		5.5				30
11D-SP31	30		25					24			90	6.8		5.8			10				19
50D-SP01	10						170	130	6.9		500	10	29	350	22		34	15	23	5.3	94
50D-SP01	20				8.3							8.3					7.0				9.6
51D-SP04	10						110	55	9.1		230	10	290	160	19		27	14	190		63
51D-SP04	20				120									5.0			12				13
A20-B34-SP01	10		140		160		5.8	62			250	44	8.4	15			22	7.6	7.9		40
A20-B34-SP01	20		220														7.6				6.8
A20-B34-SP02	10							69			310				22		20	7.5			48
A20-B34-SP02	20										380	4.6									11
A20-B34-SP03	10							29			710	9.1		4.6	10		7.2			11	31
A20-B34-SP03	20							140			700	9.0		4.6	28		9.9				71
A20-B34-SP03	29		18		270							150									
A20-RB37-SP01	10		5500		500																
A20-RB37-SP01	20		6500																		
A20-RB37-SP01	30		1500		51							10									9.3
A20-RB37-SP02	10		930					52			310	47			20		14	7.0			45
A20-RB37-SP02	20		30		9						66	28					7.4				16
A20-RC29-SP01	10		24		16			36			160	140			18		11				13
A20-RC29-SP01	20		140		39						57	15					6.6				48
A20-RX73-SP01	10		69		33			78			360	16		150	66		18	7.8			240
A20-RX73-SP01	20		250		9.5							7.4					9.1				17
A20-ST01-1-SP01	10		55	26				65			270				20		18	7.9			35
A20-ST01-1-SP01	20		20		14	8.4			17			14					29	9.8	7.5		79
A20-ST01-2-SP01	10		47					62		5.4	270	15		19			20	8.1			93
A20-ST01-2-SP01	20		22					22			110	6.7			10		28	10			32
A20-ST01-3-SP01	10		19				990	110			420	18	110	2100			34	12	59		110
A20-ST01-3-SP01	20		32																		
A20-ST02-SP01	10						4400						390	3000					49		47
A20-ST02-SP01	20		360	13			1500	310			1100	34	38	400	20		20	11			78
A20-ST02-SP01	30		51	7.1							220										
A20-ST02-SP02	10						530				93		230				5.7	9.8	46		16
A20-ST02-SP02	20		19			5.7	100	340	6.3		1900	8.1	24	13	75		19	10	7.0	14	88
A20-ST02-SP02	30		13					57			210				17		13	6.1			80
A20-ST02-SP03	20		63					67			400				20		7.9				63

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																			
Sample Name	**Depth**	**trans-1,2-Dichloroethene**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+1	1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		NA	2.0 E-5	7.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP03	30		150			15		87	8.2		650	12		7.9	68		19	8.3			44
A20-ST02-SP04	30																				
A20-ST05-SP01	10										500										45
A20-ST05-SP01	20	420	700000									24									25
A20-ST05-SP01	30	120	34000	160													12				14
A20-ST05-SP02	10		16					56			260				31		23	8.9			26
A20-ST05-SP02	20		25				12				120	77		18	11		6.1				100
A20-ST05-SP03	10		99	17				59			300	17									21
A20-ST05-SP04	10		33					32			240	5.1			22		10				33
A20-ST05-SP05	10										82	4.5					9.2				8.3
A20-ST06-SP01	10							28			120	23					17	5.5			27
A20-ST06-SP01	20				33			7.5			42	52									5.8
A20-ST14-SP01	10		400		9.9			19			130	12			9.4		5.5				20
A20-ST14-SP01	20		29		9.8							24									14
A20-ST14-SP02	10		7.1		13						90	30					10				28
A20-ST14-SP02	20		17					30			200				14		9.5				11
A20-ST20-SP01	10		99		8.0							12					7.6				8.6
A20-ST20-SP01	20		31		9.3						57	7.1				9.2					7.8
A20-ST22-SP01	10							69			280				17		7.5				39
A20-ST22-SP01	20																				

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard																					
Unit Risk																					
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	4.8 E-2	NA	NA
03D-SP100	20	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	2.3 E-3	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	NA	3.4 E+0	NA	NA
03D-SP102	28	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	2.4 E-1	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	1.3 E-5	NA	NA	NA	NA	9.3 E-2	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	7.3 E-3	NA	NA
03D-SP104	10	NA	7.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	2.4 E-5	NA	NA	NA	NA	7.2 E-2	NA	NA
03D-SP104	20	NA	9.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	1.8 E-5	NA	NA	NA	NA	9.0 E-2	NA	NA
03D-SP105	10	NA	3.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	2.0 E-5	NA	NA	NA	NA	6.5 E-2	NA	NA
03D-SP106	15	7.0 E-7	NA	NA	NA	NA	3.8 E-6	3.4 E-6	NA	NA	7.7 E-7	3.1 E-6	7.4 E-8	5.6 E-7	NA	3.6 E-7	1.6 E-7	NA	5.4 E-4	NA	NA
03D-SP106	25	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	NA	2.2 E-2	NA	NA
03D-SP106	30	2.9 E-6	3.5 E-4	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	4.2 E-4	NA	1.3 E-4	NA	NA	8.9 E-6	NA	1.0 E-2	NA	NA
03D-SP107	10	NA	2.5 E-4	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	1.1 E-2	NA	NA
03D-SP107	20	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	6.8 E-4	NA	NA
03D-SP107	29	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.3 E-2	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	1.2 E-5	NA	NA	4.7 E-7	NA	9.8 E-4	NA	NA
03D-SP109	10	NA	8.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-5	NA	NA	NA	NA	1.8 E-3	NA	NA
03D-SP109	20	NA	1.9 E-3	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	5.0 E-5	NA	2.8 E-2	NA	NA
03D-SP109	30	NA	2.2 E-6	NA	NA	2.1 E-8	3.6 E-6	9.1 E-7	NA	NA	NA	6.1 E-7	1.8 E-8	7.1 E-7	NA	6.4 E-8	2.4 E-7	NA	9.0 E-5	2.2 E-7	NA
03D-SP110	10	NA	3.4 E-6	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	1.6 E-6	NA	1.6 E-6	2.2 E-7	NA	NA	NA	1.2 E-3	NA	NA
03D-SP110	20	NA	9.8 E-7	NA	NA	NA	NA	8.8 E-7	NA	NA	3.5 E-7	9.2 E-7	NA	1.1 E-7	NA	3.5 E-8	4.0 E-7	NA	1.6 E-4	NA	NA
03D-SP111	10	NA	2.0 E-6	NA	NA	NA	NA	4.8 E-6	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	4.7 E-7	NA	6.3 E-3	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	1.1 E-7	NA	7.3 E-5	5.1 E-8	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	2.7 E-5	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	2.9 E-8	9.2 E-9	NA	3.5 E-8	1.4 E-7	NA	1.1 E-5	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	4.3 E-5	NA	2.8 E-8	1.3 E-9	NA	8.6 E-8	3.4 E-7	NA	3.0 E-5	NA	NA
03D-SP113	20	NA	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	4.0 E-5	NA	1.4 E-4	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	7.1 E-6	NA	NA	1.7 E-7	NA	NA	1.2 E-7	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	4.7 E-6	1.3 E-6	NA	NA	3.6 E-6	NA	1.3 E-8	1.6 E-7	NA	4.8 E-8	2.8 E-7	NA	NA	NA	NA
03D-SP115	10	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	6.0 E-6	NA	NA	NA	NA	7.3 E-5	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	5.0 E-5	NA	7.4 E-8	1.4 E-8	NA	8.0 E-8	2.5 E-7	NA	1.7 E-5	NA	NA
03D-SP117	10	NA	3.7 E-7	NA	NA	NA	NA	4.3 E-6	NA	NA	7.8 E-6	NA	6.6 E-8	3.1 E-7	NA	1.8 E-7	1.3 E-6	NA	1.1 E-4	NA	NA
03D-SP118	10	NA	4.9 E-7	NA	NA	NA	8.8 E-6	1.8 E-6	NA	NA	NA	NA	4.1 E-8	1.4 E-6	NA	7.5 E-8	4.5 E-7	NA	1.6 E-3	2.3 E-7	NA
03D-SP118	20	NA	NA	NA	NA	7.9 E-8	NA	8.8 E-6	NA	NA	NA	NA	3.1 E-8	1.7 E-6	NA	1.8 E-7	8.6 E-6	NA	2.1 E-4	NA	NA
03D-SP119	10	3.3 E-7	1.1 E-5	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	1.6 E-5	1.1 E-7	5.4 E-6	1.2 E-6	NA	3.1 E-7	NA	1.1 E-3	NA	1.0 E-5
03D-SP119	20	2.4 E-6	7.7 E-5	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	5.2 E-4	6.6 E-8	3.4 E-6	NA	7.8 E-8	3.1 E-6	NA	5.6 E-4	NA	4.9 E-4
03D-SP119	29	NA	2.7 E-4	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	2.3 E-4	NA	6.4 E-4	2.3 E-4	NA	2.7 E-5	NA	1.2 E-2	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	6.2 E-8	4.4 E-8	NA	2.7 E-8	2.2 E-7	NA	2.0 E-5	NA	NA
03D-SP120	20	NA	2.2 E-7	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	6.8 E-8	2.3 E-7	NA	5.9 E-7	2.8 E-6	NA	9.0 E-6	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	3.6 E-4	NA	NA	NA	NA	2.4 E-2	NA	NA
03D-SP121	25	NA	NA	NA	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	3.1 E-3	NA	NA
03D-SP122	10	7.0 E-7	4.0 E-5	NA	NA	NA	NA	1.8 E-6	NA	NA	2.3 E-6	3.0 E-5	NA	2.6 E-7	NA	3.0 E-7	1.9 E-6	NA	1.1 E-3	NA	NA
03D-SP122	20	2.3 E-5	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	2.4 E-4	9.6 E-5	NA	NA	NA	4.6 E-4	NA	NA
03D-SP122	30	1.9 E-5	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-5	NA	1.6 E-4	NA	NA	5.2 E-6	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	2.0 E-6	NA	NA	9.2 E-8	NA	2.8 E-8	1.0 E-7	NA	2.0 E-5	NA	NA
03D-SP123	20	NA	NA	NA	NA	NA	6.2 E-6	7.4 E-7	NA	NA	NA	NA	1.8 E-8	NA	NA	3.7 E-8	8.6 E-8	NA	1.1 E-5	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	7.0 E-8	1.8 E-7	1.6 E-7	NA	2.5 E-7	NA	1.6 E-6	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	NA	6.5 E-7	NA	NA	NA	NA	6.2 E-8	3.4 E-7	1.3 E-7	2.7 E-8	1.3 E-7	NA	3.2 E-6	NA	NA
03D-SP125	10	NA	NA	NA	NA	NA	7.8 E-6	8.6 E-6	NA	NA	NA	5.4 E-7	5.7 E-8	NA	2.4 E-6	5.9 E-7	3.3 E-6	NA	3.7 E-6	NA	NA
03D-SP125	20	NA	9.1 E-7	NA	NA	NA	6.7 E-6	3.6 E-6	NA	NA	6.9 E-6	2.6 E-6	3.9 E-8	5.2 E-9	4.0 E-7	3.5 E-7	1.7 E-6	NA	7.9 E-6	NA	6.8 E-7
03D-SP126	10	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	1.4 E-7	NA
03D-SP126	20	1.5 E-8	2.3 E-7	NA	NA	NA	NA	6.0 E-7	NA	NA	NA	1.5 E-6	1.4 E-8	2.5 E-8	NA	3.7 E-8	1.5 E-7	NA	1.7 E-6	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	8.9 E-8	NA	2.1 E-5	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	1.6 E-8	NA	NA	2.5 E-8	7.8 E-8	NA	9.6 E-6	6.5 E-8	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA
03D-SP128	20	1.9 E-7	3.5 E-5	NA	NA	NA	NA	2.6 E-6	NA	NA	8.8 E-6	2.9 E-5	1.0 E-7	6.9 E-7	NA	2.3 E-7	2.7 E-6	NA	5.6 E-6	NA	1.9 E-5
03D-SP128	30	2.7 E-6	1.8 E-5	2.1 E-5	NA	NA	NA	NA	NA	NA	3.1 E-5	6.9 E-4	NA	8.5 E-8	NA	9.4 E-8	2.9 E-7	NA	6.4 E-6	NA	7.6 E-5
03D-SP129	15	NA	NA	NA	NA	NA	6.5 E-6	1.3 E-6	NA	NA	NA	6.6 E-7	4.1 E-8	NA	NA	1.1 E-7	2.0 E-7	NA	4.1 E-6	NA	NA
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	2.3 E-5

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard																					
Unit Risk																					
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	4.1 E-6	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	7.6 E-8	NA	1.9 E-6	4.8 E-8	NA
03D-SP131	10	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	7.0 E-8	NA	NA	1.3 E-7	1.5 E-7	NA	3.9 E-5	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	1.3 E-8	NA	NA	1.9 E-8	7.7 E-8	NA	9.0 E-6	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	1.2 E-7	NA	1.9 E-5	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	2.3 E-7	NA	NA	1.3 E-8	6.2 E-6	8.0 E-6	NA	NA	1.3 E-6	2.5 E-7	5.1 E-8	1.1 E-8	NA	1.1 E-6	3.1 E-6	NA	6.0 E-6	3.2 E-7	NA
03D-SP133	10	NA	NA	NA	NA	NA	NA	8.6 E-7	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	1.4 E-7	NA	2.0 E-6	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	2.5 E-8	NA	NA	1.6 E-8	2.0 E-7	NA	NA	9.0 E-8	NA
03D-SP134	10	NA	NA	NA	NA	NA	7.8 E-5	8.3 E-7	NA	NA	NA	NA	3.9 E-8	NA	NA	9.6 E-8	1.2 E-7	NA	1.2 E-6	2.3 E-7	NA
03D-SP134	20	NA	2.8 E-7	NA	NA	NA	1.2 E-5	3.2 E-5	NA	NA	NA	1.4 E-6	2.0 E-6	NA	NA	2.7 E-6	2.3 E-5	NA	1.1 E-6	NA	NA
03D-SP135	10	3.5 E-8	5.1 E-7	NA	NA	NA	NA	3.0 E-6	NA	NA	6.0 E-5	1.6 E-6	7.0 E-8	4.0 E-8	NA	1.1 E-7	1.6 E-6	NA	9.7 E-4	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	5.9 E-7	1.1 E-8	NA	1.4 E-5	2.1 E-4	NA	5.3 E-5	NA	NA
03D-SP136	10	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	3.1 E-6	NA	4.9 E-8	NA	NA	3.8 E-8	9.1 E-8	NA	NA	2.7 E-7	NA
03D-SP137	10	NA	4.2 E-7	NA	NA	NA	NA	1.1 E-6	NA	NA	8.4 E-5	NA	7.0 E-8	7.9 E-8	NA	NA	4.1 E-7	NA	8.3 E-5	NA	NA
03D-SP138	10	NA	2.0 E-6	NA	NA	NA	NA	3.0 E-6	NA	NA	2.9 E-6	3.1 E-6	3.0 E-8	1.7 E-6	1.3 E-6	1.2 E-7	1.1 E-6	NA	6.8 E-6	7.3 E-7	NA
03D-SP138	19	9.8 E-8	5.9 E-6	NA	NA	NA	NA	1.4 E-6	NA	NA	5.2 E-6	1.8 E-5	NA	4.3 E-6	3.1 E-6	NA	3.7 E-7	NA	8.3 E-6	3.1 E-7	NA
03D-SP138	30	2.5 E-8	9.1 E-7	NA	NA	2.2 E-8	7.1 E-6	3.3 E-6	NA	NA	9.2 E-7	7.3 E-6	1.1 E-8	5.2 E-7	2.6 E-7	6.9 E-8	4.5 E-7	NA	5.6 E-4	3.8 E-7	6.3 E-7
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	4.4 E-6	2.1 E-7	NA
03D-SP139	20	NA	NA	NA	NA	2.7 E-8	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.0 E-6	NA	4.5 E-6	5.2 E-7	NA
03D-SP139	28	NA	1.4 E-7	NA	NA	NA	3.7 E-6	9.1 E-6	NA	NA	NA	NA	1.2 E-8	6.1 E-10	NA	3.1 E-7	1.3 E-6	NA	3.5 E-5	2.6 E-7	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	2.9 E-8	NA	NA	8.0 E-8	1.6 E-7	NA	1.2 E-6	6.1 E-8	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	5.4 E-6	3.2 E-7	NA
03D-SP141	20	NA	NA	NA	NA	1.7 E-8	3.6 E-6	4.6 E-6	NA	NA	NA	NA	2.9 E-8	2.1 E-9	NA	5.1 E-7	1.6 E-6	NA	2.9 E-6	3.5 E-7	NA
03D-SP142	10	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	6.3 E-6	NA	NA	7.9 E-6	1.4 E-6	9.6 E-8	4.7 E-7	NA	8.9 E-5	1.6 E-7	NA
03D-SP142	20	NA	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	2.6 E-6	NA	3.5 E-8	2.8 E-6	NA	2.5 E-7	1.3 E-6	NA	2.9 E-5	NA	NA
03D-SP142	30	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	5.2 E-5	NA	NA	NA	NA	1.5 E-4	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	4.3 E-5	NA	NA	1.0 E-7	NA	NA	1.7 E-7	NA	1.1 E-4	2.3 E-7	NA
03D-SP143	20	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	2.4 E-5	2.8 E-7	1.2 E-8	4.5 E-8	NA	3.7 E-8	2.1 E-7	NA	4.1 E-5	2.0 E-7	NA
03D-SP143	30	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	9.8 E-8	4.1 E-5	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	1.2 E-4	7.6 E-8	NA
03D-SP144	20	NA	NA	NA	NA	NA	NA	6.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	6.0 E-8	NA	9.0 E-5	4.7 E-8	NA
03D-SP144	30	4.1 E-7	2.3 E-6	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	3.1 E-5	3.1 E-8	NA	NA	3.0 E-6	4.9 E-5	NA	5.6 E-5	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	6.3 E-5	NA	NA	1.8 E-7	NA	3.1 E-8	2.5 E-7	NA	1.1 E-5	1.2 E-7	NA
03D-SP145	20	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	3.4 E-6	NA	NA	7.8 E-9	NA	3.2 E-8	1.6 E-7	NA	6.8 E-7	9.4 E-8	NA
03D-SP146	10	4.1 E-8	2.9 E-6	NA	NA	NA	2.6 E-5	1.5 E-6	NA	NA	9.8 E-7	6.7 E-6	NA	1.1 E-5	3.9 E-6	2.8 E-8	1.3 E-7	NA	7.0 E-4	9.7 E-8	7.1 E-6
03D-SP146	20	1.0 E-7	3.1 E-6	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	2.0 E-5	NA	4.6 E-6	1.6 E-6	6.9 E-8	4.4 E-7	NA	2.7 E-4	2.1 E-7	1.4 E-5
03D-SP146	27	5.8 E-7	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	NA	2.8 E-5	5.5 E-6	NA	NA	NA	9.6 E-5	NA	1.7 E-5
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	8.7 E-6	NA	1.4 E-6	NA	NA	NA	NA	1.2 E-4	NA	NA
03D-SP147	20	NA	2.0 E-7	NA	NA	NA	9.0 E-6	1.3 E-6	NA	NA	1.8 E-6	2.8 E-6	NA	4.5 E-8	NA	3.2 E-8	2.4 E-7	NA	6.2 E-6	2.1 E-7	NA
03D-SP147	27	6.4 E-7	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	1.6 E-4	NA	1.5 E-6	NA	NA	9.8 E-7	NA	3.2 E-5	NA	3.6 E-6
03D-SP148	10	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	7.0 E-6	NA	2.8 E-8	NA	NA	5.1 E-8	2.5 E-7	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	1.6 E-7	NA	3.2 E-8	1.1 E-7	NA	NA	9.2 E-8	NA
03D-SP149	20	NA	NA	NA	NA	NA	6.7 E-6	7.4 E-6	NA	NA	NA	NA	5.5 E-8	4.6 E-9	NA	2.5 E-7	6.3 E-7	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	3.1 E-8	NA	4.5 E-7	NA	NA
03D-SP84	15	NA	2.3 E-7	NA	NA	NA	NA	2.5 E-6	NA	NA	8.1 E-7	4.8 E-7	NA	6.9 E-8	NA	5.0 E-8	1.8 E-6	NA	5.8 E-6	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	6.0 E-7	NA	NA	5.4 E-8	NA	1.3 E-8	1.7 E-7	NA	3.2 E-6	1.6 E-7	NA
03D-SP85	25	6.0 E-6	2.3 E-5	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	3.4 E-3	4.3 E-7	6.8 E-7	NA	2.0 E-5	4.0 E-4	NA	2.8 E-3	NA	NA
03D-SP85	30	NA	NA	NA	NA	NA	3.1 E-6	3.5 E-6	NA	NA	NA	2.8 E-7	2.1 E-8	2.0 E-9	NA	6.2 E-8	3.3 E-7	NA	5.3 E-6	1.3 E-7	NA
03D-SP86	10	7.5 E-8	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	1.9 E-7	NA	3.4 E-6	2.3 E-7	NA
03D-SP86	20	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-8	NA	9.6 E-7	1.2 E-7	NA
03D-SP87	10	NA	NA	NA	NA	NA	NA	4.6 E-6	NA	NA	NA	NA	1.2 E-7	2.7 E-9	NA	1.0 E-7	5.2 E-7	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	2.8 E-6	NA	NA	1.6 E-8	NA	5.9 E-8	4.7 E-7	NA	6.5 E-5	NA	NA
03D-SP88	20	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	7.1 E-10	NA	8.3 E-8	4.2 E-7	NA	3.3 E-5	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	3.7 E-3	NA	NA
03D-SP90	10	5.8 E-8	1.9 E-6	NA	NA	NA	NA	3.7 E-6	NA	NA	3.3 E-5	6.7 E-6	2.1 E-7	6.9 E-7	NA	3.9 E-7	8.3 E-6	NA	3.0 E-5	NA	NA
03D-SP90	20	2.2 E-8	3.1 E-7	NA	NA	NA	NA	1.3 E-6	NA	NA	7.5 E-6	1.4 E-6	6.4 E-8	1.3 E-7	NA	7.2 E-8	1.3 E-6	NA	1.5 E-5	NA	NA

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard																					
Unit Risk																					
03D-SP91	10	NA	NA	NA	NA	NA	1.1 E-5	1.3 E-6	NA	NA	2.9 E-6	NA	3.9 E-8	6.8 E-9	NA	9.6 E-8	1.3 E-7	NA	6.1 E-6	5.7 E-7	NA
03D-SP91	20	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	9.4 E-6	9.2 E-7	1.4 E-8	1.2 E-8	NA	2.5 E-8	4.6 E-8	NA	1.1 E-5	9.5 E-8	NA
03D-SP92	10	4.5 E-8	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	3.0 E-6	3.7 E-6	6.6 E-8	9.6 E-8	NA	3.7 E-8	2.8 E-7	NA	1.6 E-5	NA	NA
03D-SP92	20	3.8 E-8	2.4 E-7	NA	NA	NA	NA	2.0 E-6	NA	NA	1.9 E-5	4.1 E-6	5.3 E-8	7.1 E-8	NA	5.3 E-8	3.5 E-7	NA	5.6 E-5	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	2.3 E-7	NA	NA	4.4 E-6	NA	2.2 E-5	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	4.0 E-7	NA	3.0 E-8	9.1 E-9	NA	4.7 E-8	4.9 E-7	NA	5.0 E-7	NA	NA
03D-SP94	15	NA	2.3 E-7	NA	NA	NA	NA	5.7 E-7	NA	NA	4.8 E-6	2.1 E-6	NA	1.4 E-7	NA	NA	5.9 E-8	NA	5.3 E-4	NA	NA
03D-SP94	25	NA	NA	NA	NA	NA	3.7 E-6	1.7 E-6	NA	NA	1.3 E-6	5.1 E-7	8.4 E-8	1.4 E-8	NA	9.8 E-8	3.8 E-7	NA	1.5 E-4	NA	NA
03D-SP95	10	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	3.5 E-6	NA	NA	NA	NA	1.7 E-2	NA	NA
03D-SP95	18	NA	8.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-5	NA	1.4 E-6	NA	NA	NA	NA	8.1 E-3	NA	NA
03D-SP96	10	NA	NA	NA	NA	NA	1.9 E-5	5.8 E-6	NA	NA	1.5 E-4	NA	7.0 E-7	6.2 E-9	NA	6.9 E-7	1.1 E-6	NA	1.0 E-5	NA	NA
03D-SP96	17	NA	NA	NA	NA	NA	2.0 E-5	2.6 E-6	NA	NA	1.2 E-4	NA	7.2 E-8	4.7 E-9	NA	2.1 E-7	9.2 E-7	NA	4.5 E-6	NA	NA
03D-SP99	10	NA	9.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	NA	NA	NA	3.2 E-2	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	4.5 E-7	NA	4.5 E-8	1.9 E-7	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	NA	NA	6.0 E-8	NA	1.7 E-8	2.3 E-7	NA	NA	6.3 E-8	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA
11D-SP27	20	NA	NA	NA	NA	NA	4.7 E-6	2.2 E-6	NA	NA	NA	NA	1.4 E-8	NA	NA	1.3 E-7	6.2 E-7	NA	7.3 E-7	5.2 E-8	NA
11D-SP28	10	NA	NA	NA	NA	NA	7.2 E-6	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	2.8 E-7	NA	NA	NA	NA
11D-SP28	20	2.2 E-8	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	6.3 E-7	NA	6.4 E-9	NA	NA	NA	NA	1.9 E-6	3.2 E-8	NA
11D-SP29	10	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	4.1 E-8	NA	1.4 E-7	9.8 E-7	NA	NA	2.7 E-7	NA
11D-SP29	30	1.9 E-8	2.8 E-6	NA	NA	1.7 E-8	2.6 E-6	1.4 E-6	NA	NA	NA	6.5 E-7	NA	1.6 E-7	6.8 E-8	3.7 E-7	5.2 E-6	NA	NA	2.8 E-7	NA
11D-SP30	10	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	1.0 E-6	NA	NA	1.4 E-7	1.6 E-7	7.5 E-7	4.8 E-6	NA	NA	NA	NA
11D-SP30	20	6.7 E-8	7.0 E-7	NA	NA	NA	NA	6.6 E-7	NA	NA	2.9 E-6	1.7 E-6	NA	5.0 E-8	8.8 E-8	5.6 E-7	7.1 E-6	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	1.0 E-6	NA	NA	2.1 E-7	NA
11D-SP31	20	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	8.0 E-7	1.4 E-6	4.1 E-7	NA	8.5 E-9	NA	1.7 E-8	1.1 E-6	NA	NA	1.7 E-7	NA
11D-SP31	30	5.2 E-8	1.5 E-7	NA	NA	9.6 E-9	NA	4.3 E-7	NA	NA	1.5 E-6	2.5 E-6	NA	3.7 E-9	NA	3.2 E-7	2.3 E-6	NA	NA	1.8 E-7	NA
50D-SP01	10	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	5.0 E-9	NA	3.6 E-8	1.5 E-7	NA	1.6 E-5	NA	NA
50D-SP01	20	NA	NA	NA	NA	NA	3.6 E-6	2.3 E-6	NA	NA	NA	NA	6.6 E-8	NA	NA	1.8 E-7	2.7 E-6	NA	2.8 E-6	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	NA	9.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	1.2 E-5	NA	NA
51D-SP04	20	NA	NA	NA	NA	NA	4.7 E-6	2.6 E-6	NA	NA	NA	NA	6.4 E-7	NA	NA	3.7 E-7	1.6 E-6	NA	1.8 E-6	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	7.1 E-6	NA	NA
A20-B34-SP01	20	NA	3.0 E-7	NA	NA	NA	NA	1.6 E-6	NA	6.9 E-7	NA	NA	2.0 E-8	NA	NA	8.8 E-8	6.5 E-7	NA	2.5 E-6	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	4.1 E-6	8.8 E-7	NA	NA	NA	NA	1.5 E-8	NA	NA	5.3 E-8	1.6 E-7	NA	1.5 E-6	9.2 E-8	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	4.4 E-7	NA	4.8 E-5	1.1 E-7	NA
A20-B34-SP03	29	NA	NA	NA	NA	1.4 E-8	2.5 E-6	1.5 E-6	NA	1.7 E-6	2.8 E-7	3.8 E-7	8.9 E-9	NA	NA	9.8 E-8	4.4 E-7	NA	3.9 E-5	2.5 E-7	NA
A20-RB37-SP01	10	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	5.2 E-5	NA	NA	NA	NA	6.2 E-3	NA	NA
A20-RB37-SP01	20	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	3.0 E-5	NA	NA	NA	NA	3.7 E-3	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	2.1 E-6	NA	1.2 E-4	NA	NA
A20-RB37-SP02	10	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	1.7 E-7	NA	7.9 E-4	2.5 E-7	NA
A20-RB37-SP02	20	NA	NA	NA	NA	NA	5.4 E-6	9.6 E-7	NA	NA	NA	NA	1.4 E-8	1.3 E-9	NA	5.3 E-8	2.7 E-7	NA	9.0 E-6	2.9 E-7	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	2.1 E-9	NA	5.3 E-8	3.3 E-7	NA	3.0 E-5	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	1.6 E-9	NA	3.2 E-8	2.0 E-7	NA	2.0 E-5	NA	NA
A20-RX73-SP01	10	NA	6.4 E-7	NA	NA	NA	NA	9.3 E-7	NA	NA	5.6 E-5	NA	NA	NA	NA	1.6 E-7	8.8 E-8	NA	1.1 E-5	NA	NA
A20-RX73-SP01	20	NA	2.3 E-6	NA	NA	NA	8.8 E-6	2.0 E-6	NA	NA	1.9 E-5	NA	1.7 E-8	6.7 E-10	NA	2.9 E-6	3.6 E-7	NA	9.6 E-6	NA	NA
A20-ST01-1-SP01	10	3.9 E-8	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	1.4 E-6	NA	NA	1.8 E-7	NA	3.6 E-8	1.6 E-7	NA	2.3 E-5	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	6.3 E-7	NA	NA	NA	NA	1.6 E-8	NA	NA	4.0 E-8	1.2 E-7	NA	2.3 E-6	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	9.4 E-7	NA	NA	3.0 E-6	NA	4.5 E-8	6.5 E-7	NA	4.1 E-8	1.7 E-7	NA	4.3 E-5	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	3.1 E-6	3.3 E-6	NA	NA	2.0 E-6	NA	2.1 E-8	1.1 E-7	NA	1.8 E-7	1.0 E-6	NA	5.3 E-6	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	4.5 E-8	NA	NA	4.4 E-8	1.0 E-7	NA	7.2 E-6	2.9 E-7	NA
A20-ST01-3-SP01	20	NA	NA	6.4 E-6	NA	NA	4.1 E-6	6.2 E-6	NA	NA	NA	NA	1.7 E-7	NA	NA	1.1 E-6	1.6 E-5	NA	4.0 E-6	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	1.9 E-6	1.3 E-6	NA	NA	1.4 E-6	7.8 E-6	NA	NA	NA	NA
A20-ST02-SP01	30	NA	1.3 E-7	NA	NA	NA	2.4 E-6	1.1 E-5	NA	NA	NA	1.0 E-6	3.1 E-8	NA	NA	1.3 E-6	3.4 E-6	NA	2.3 E-6	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	NA	NA	8.6 E-6	NA	NA
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	NA	1.6 E-8	NA	NA	2.1 E-8	1.1 E-7	NA	4.2 E-6	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	NA	1.0 E-5	3.0 E-6	NA	NA	NA	NA	1.9 E-8	4.7 E-10	NA	1.6 E-7	1.3 E-6	NA	1.8 E-6	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	NA	4.1 E-6	3.0 E-7	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	6.6 E-8	NA	1.3 E-6	8.3 E-8	NA

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																					
Unit Risk																					
A20-ST02-SP03	30	NA	NA	NA	NA	NA	2.6 E-6	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	1.4 E-7	NA	9.0 E-7	1.4 E-7	NA
A20-ST02-SP04	30	NA	NA	NA	NA	NA	1.4 E-4	2.2 E-6	NA	NA	NA	NA	7.7 E-9	NA	NA	6.9 E-8	3.5 E-7	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	8.4 E-6	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.6 E-3	NA	2.8 E-7	NA	NA	3.2 E-7	NA	2.6 E-5	4.0 E-7	1.4 E-5
A20-ST05-SP01	30	8.7 E-6	7.3 E-5	3.9 E-5	NA	NA	NA	NA	NA	NA	6.7 E-5	1.4 E-3	NA	1.1 E-6	NA	5.7 E-8	2.3 E-7	NA	7.1 E-6	3.8 E-7	2.6 E-6
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	1.4 E-7	NA	1.4 E-5	2.5 E-7	NA
A20-ST05-SP02	20	NA	NA	NA	NA	NA	5.9 E-6	4.3 E-7	NA	NA	NA	NA	1.5 E-8	7.0 E-10	NA	2.9 E-8	1.5 E-7	NA	9.6 E-6	2.0 E-7	NA
A20-ST05-SP03	10	4.3 E-7	7.7 E-6	NA	NA	NA	7.2 E-6	8.5 E-7	NA	NA	4.1 E-6	3.0 E-5	NA	6.5 E-7	NA	6.9 E-8	2.3 E-6	NA	3.6 E-5	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	1.2 E-8	NA	8.0 E-8	5.2 E-7	NA	1.7 E-6	1.8 E-7	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	3.9 E-7	NA	NA	1.4 E-7	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	2.1 E-7	NA	2.6 E-7	3.9 E-7	NA	1.0 E-4	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	NA	NA	1.1 E-8	1.8 E-7	NA	2.9 E-8	1.3 E-7	NA	4.8 E-5	NA	NA
A20-ST14-SP01	10	NA	1.5 E-6	NA	NA	NA	NA	8.5 E-7	NA	NA	7.3 E-6	NA	NA	2.6 E-6	NA	NA	1.1 E-7	NA	9.5 E-5	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	2.0 E-6	NA	NA	7.8 E-7	NA	2.5 E-8	2.0 E-7	NA	8.4 E-6	2.3 E-7	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	1.0 E-7	NA	5.9 E-8	3.1 E-7	NA	8.6 E-5	2.1 E-7	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	5.5 E-8	NA	8.0 E-8	4.1 E-7	NA	6.2 E-5	2.1 E-7	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	5.4 E-8	NA	8.4 E-7	6.0 E-8	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	4.4 E-6	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	1.1 E-7	NA	NA	4.8 E-8	NA

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Trichloroethylene	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	HI
Unit Hazard																					
Unit Risk																					
03D-SP100	10	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-2
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-3
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E+0
03D-SP102	28	3.1 E-5	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1
03D-SP103	10	1.2 E-5	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2
03D-SP103	20	1.2 E-6	NA	9.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-3
03D-SP104	10	1.0 E-4	NA	6.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-2
03D-SP104	20	2.1 E-4	NA	6.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2
03D-SP105	10	1.0 E-4	NA	1.5 E-8	1.2 E-5	5.7 E-7	4.6 E-8	1.3 E-6	NA	3.4 E-7	1.2 E-7	5.2 E-8	1.2 E-8	NA	NA	2.7 E-6	1.7 E-6	NA	NA	1.9 E-6	6.6 E-2
03D-SP106	15	3.8 E-7	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	5.7 E-4
03D-SP106	25	5.5 E-4	2.1 E-3	2.2 E-6	NA	5.1 E-5	NA	NA	NA	NA	6.5 E-6	NA	8.5 E-7	NA	NA	NA	NA	NA	NA	8.2 E-6	3.1 E-2
03D-SP106	30	3.4 E-4	1.2 E-4	9.4 E-7	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SP107	10	6.2 E-4	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SP107	20	4.4 E-5	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-6	7.8 E-4
03D-SP107	29	6.3 E-4	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SP108	10	2.3 E-6	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
03D-SP109	10	1.7 E-5	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-3
03D-SP109	20	4.0 E-4	5.4 E-4	6.0 E-9	NA	NA	1.3 E-7	NA	1.4 E-8	8.6 E-7	2.6 E-8	NA	2.0 E-9	9.1 E-8	NA	6.1 E-7	2.4 E-7	NA	NA	4.1 E-7	4.3 E-2
03D-SP109	30	1.0 E-6	5.8 E-7	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4
03D-SP110	10	6.6 E-6	NA	2.0 E-8	NA	3.6 E-7	3.8 E-8	NA	NA	4.3 E-7	9.8 E-8	NA	4.2 E-9	6.4 E-8	NA	3.3 E-7	NA	NA	NA	2.7 E-7	1.3 E-3
03D-SP110	20	1.7 E-6	NA	5.1 E-8	NA	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	1.7 E-4
03D-SP111	10	3.0 E-6	NA	NA	NA	5.2 E-5	1.9 E-8	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	6.4 E-3
03D-SP111	20	NA	NA	NA	NA	8.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	7.9 E-8	8.2 E-5
03D-SP112	10	NA	NA	NA	NA	4.6 E-5	3.4 E-8	3.0 E-7	NA	4.7 E-7	7.1 E-8	NA	4.1 E-9	NA	NA	1.3 E-6	5.2 E-7	NA	NA	1.2 E-6	7.7 E-5
03D-SP112	20	NA	NA	NA	NA	2.2 E-5	NA	1.4 E-7	NA	6.2 E-8	3.7 E-8	NA	2.8 E-9	NA	NA	4.2 E-7	2.4 E-7	NA	NA	2.3 E-7	3.6 E-5
03D-SP113	10	1.3 E-7	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	1.5 E-5	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	2.4 E-5	3.1 E-4
03D-SP113	20	NA	2.0 E-5	NA	NA	NA	1.1 E-8	NA	NA	1.2 E-7	NA	NA	NA	2.4 E-8	NA	1.7 E-7	NA	NA	NA	7.8 E-8	5.2 E-3
03D-SP114	10	NA	NA	NA	NA	NA	9.7 E-8	NA	9.3 E-9	9.9 E-7	4.4 E-8	NA	NA	2.2 E-7	NA	5.9 E-7	2.9 E-7	NA	NA	1.5 E-6	1.2 E-5
03D-SP114	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5
03D-SP115	10	1.8 E-6	NA	NA	1.6 E-5	2.8 E-5	NA	1.5 E-6	NA	NA	7.6 E-8	NA	8.0 E-9	9.8 E-8	NA	3.4 E-6	1.5 E-6	NA	NA	9.2 E-7	2.5 E-4
03D-SP116	10	5.1 E-7	NA	1.6 E-8	4.2 E-6	1.1 E-4	NA	5.2 E-7	7.9 E-9	2.6 E-7	3.4 E-7	NA	1.9 E-8	7.4 E-8	NA	2.3 E-6	7.1 E-7	NA	6.5 E-8	1.7 E-6	1.9 E-4
03D-SP117	10	1.0 E-6	NA	3.2 E-8	NA	7.6 E-5	NA	NA	NA	3.4 E-7	1.3 E-7	NA	1.5 E-8	1.7 E-7	NA	1.4 E-6	5.2 E-7	NA	1.2 E-7	8.7 E-7	2.1 E-4
03D-SP118	10	9.4 E-7	NA	NA	NA	2.5 E-4	NA	NA	1.6 E-8	7.3 E-7	3.1 E-7	NA	4.2 E-7	3.1 E-7	NA	1.5 E-6	5.7 E-7	NA	1.3 E-7	2.9 E-6	1.8 E-3
03D-SP118	20	3.4 E-7	NA	1.4 E-8	6.6 E-6	2.4 E-5	NA	6.9 E-7	NA	NA	8.9 E-8	NA	NA	NA	NA	2.1 E-6	7.4 E-7	NA	NA	7.3 E-7	2.6 E-4
03D-SP119	10	4.6 E-5	NA	NA	1.7 E-5	4.8 E-5	NA	1.6 E-6	NA	NA	2.0 E-7	NA	2.7 E-7	NA	NA	5.0 E-6	2.3 E-6	NA	NA	2.1 E-6	1.3 E-3
03D-SP119	20	1.7 E-4	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	2.4 E-6	NA	NA	1.6 E-4	NA	NA	NA	5.8 E-5	2.2 E-3
03D-SP119	29	4.3 E-4	NA	2.6 E-9	3.6 E-6	1.1 E-5	NA	3.9 E-7	NA	6.6 E-8	7.3 E-8	NA	3.5 E-9	3.0 E-8	NA	9.6 E-7	3.4 E-7	NA	1.4 E-8	2.6 E-7	5.1 E-2
03D-SP120	10	7.3 E-7	NA	8.5 E-9	8.5 E-6	7.6 E-5	NA	7.1 E-7	NA	2.0 E-7	1.8 E-7	NA	NA	1.2 E-7	NA	3.9 E-6	1.1 E-6	NA	1.4 E-7	7.3 E-6	1.2 E-4
03D-SP120	20	1.9 E-7	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5
03D-SP121	15	4.8 E-5	7.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
03D-SP121	25	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	9.9 E-8	NA	NA	2.0 E-7	NA	NA	NA	1.0 E-7	1.2 E-2
03D-SP122	10	1.0 E-6	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	8.9 E-6	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SP122	20	6.2 E-6	3.5 E-5	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
03D-SP122	30	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	1.4 E-7	1.5 E-7	NA	NA	NA	9.0 E-8	9.4 E-4
03D-SP123	10	NA	NA	NA	2.9 E-6	NA	6.9 E-8	3.7 E-7	NA	5.4 E-7	NA	NA	NA	1.8 E-7	NA	1.1 E-6	5.2 E-7	NA	NA	1.7 E-6	3.1 E-5
03D-SP123	20	NA	NA	NA	1.0 E-5	1.8 E-5	NA	9.0 E-7	NA	NA	7.3 E-8	NA	NA	3.9 E-8	NA	1.7 E-6	7.6 E-7	3.0 E-7	NA	4.2 E-7	5.0 E-5
03D-SP124	10	NA	NA	NA	1.6 E-5	6.7 E-5	NA	1.8 E-6	NA	NA	5.6 E-7	NA	7.2 E-9	5.9 E-8	NA	5.5 E-6	2.4 E-6	7.1 E-7	NA	1.5 E-6	9.9 E-5
03D-SP124	20	1.3 E-7	NA	NA	NA	8.8 E-5	NA	NA	8.9 E-9	5.4 E-7	8.1 E-7	NA	NA	NA	2.0 E-6	7.2 E-7	2.4 E-7	NA	4.1 E-8	1.0 E-6	9.8 E-5
03D-SP125	10	2.0 E-6	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	1.4 E-6	NA	3.0 E-8	NA	1.2 E-6	1.9 E-6	8.1 E-7	NA	2.6 E-7	2.5 E-6	2.7 E-4
03D-SP125	20	5.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	1.2 E-7	NA	NA	NA	9.5 E-8	8.7 E-5
03D-SP126	10	3.6 E-7	3.2 E-7	NA	NA	NA	4.3 E-8	NA	NA	5.6 E-7	5.2 E-8	NA	NA	7.8 E-8	NA	7.2 E-7	2.8 E-7	NA	NA	6.0 E-7	1.7 E-5
03D-SP126	20	4.0 E-7	1.3 E-6	NA	1.5 E-6	NA	NA	1.5 E-7	NA	NA	4.5 E-8	NA	NA	NA	NA	3.2 E-7	1.6 E-7	NA	NA	1.3 E-7	8.2 E-6
03D-SP127	10	1.3 E-7	NA	NA	3.2 E-6	NA	4.1 E-8	3.7 E-7	NA	4.3 E-7	NA	NA	3.4 E-9	6.9 E-8	NA	1.0 E-6	4.8 E-7	NA	NA	4.6 E-7	2.8 E-5
03D-SP127	20	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-8	1.0 E-5
03D-SP128	10	9.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	3.6 E-6	1.9 E-6	NA	NA	8.7 E-7	9.6 E-6
03D-SP128	20	2.2 E-4	5.4 E-7	NA	2.0 E-5	NA	1.5 E-7	2.4 E-6	NA	NA	6.5 E-7	NA	NA	3.2 E-7	NA	1.2 E-6	NA	NA	NA	7.8 E-7	3.5 E-4
03D-SP128	30	5.1 E-4	NA	NA	1.9 E-6	NA	2.9 E-8	1.6 E-7	2.6 E-9	1.9 E-7	NA	NA	NA	5.7 E-8	NA	4.8 E-7	2.5 E-7	NA	NA	3.5 E-7	1.4 E-3
03D-SP129	15	1.1 E-6	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5
03D-SP129	25	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	1.7 E-7	NA	NA	NA	2.7 E-8	NA	9.8 E-8	NA	NA	NA	1.3 E-7	4.5 E-4

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Trichloroethylene	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	HI
Unit Hazard																					
Unit Risk																					
03D-SP130	10	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	1.3 E-6	NA	NA	NA	1.3 E-7	NA	2.9 E-7	NA	NA	2.8 E-8	2.7 E-7	6.2 E-6
03D-SP130	20	NA	NA	NA	5.4 E-6	3.8 E-7	NA	5.5 E-7	NA	NA	2.2 E-7	NA	NA	NA	NA	9.5 E-7	4.0 E-7	3.1 E-7	NA	9.5 E-6	2.0 E-5
03D-SP131	10	NA	NA	NA	3.9 E-6	NA	3.6 E-8	3.8 E-7	NA	5.0 E-7	NA	NA	NA	5.9 E-8	NA	9.3 E-7	4.8 E-7	NA	NA	4.4 E-7	4.8 E-5
03D-SP131	20	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	9.0 E-8	2.7 E-8	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	1.4 E-7	1.0 E-5
03D-SP132	10	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5
03D-SP132	20	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	1.6 E-6	1.5 E-6	1.3 E-7	5.1 E-8	1.7 E-7	NA	6.1 E-7	3.3 E-7	NA	NA	1.3 E-6	5.9 E-6
03D-SP132	30	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	1.3 E-8	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	7.4 E-8	2.7 E-5
03D-SP133	10	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	3.0 E-7	3.0 E-8	NA	NA	8.3 E-8	NA	1.5 E-6	7.6 E-7	NA	NA	5.4 E-7	6.3 E-6
03D-SP133	20	NA	NA	NA	1.8 E-6	NA	NA	1.7 E-7	4.4 E-9	6.6 E-8	2.2 E-8	2.4 E-8	3.0 E-9	7.8 E-8	NA	3.8 E-7	1.3 E-7	NA	NA	2.1 E-7	3.6 E-6
03D-SP134	10	7.3 E-8	NA	NA	5.2 E-6	1.2 E-4	3.3 E-8	NA	NA	3.7 E-7	8.0 E-7	3.8 E-6	3.1 E-6	4.6 E-8	NA	1.1 E-6	5.2 E-7	1.0 E-5	NA	6.3 E-7	2.3 E-4
03D-SP134	20	NA	8.6 E-7	1.9 E-8	2.3 E-6	3.6 E-5	NA	2.6 E-7	NA	6.1 E-8	8.1 E-8	2.8 E-8	2.8 E-8	2.5 E-8	NA	1.1 E-6	4.0 E-7	NA	2.6 E-8	6.0 E-7	1.2 E-4
03D-SP135	10	1.2 E-6	3.1 E-6	NA	NA	4.7 E-4	NA	NA	NA	NA	NA	4.8 E-6	1.5 E-5	NA	NA	4.6 E-6	NA	1.0 E-5	NA	1.9 E-6	1.5 E-3
03D-SP135	20	NA	4.5 E-4	NA	4.3 E-6	NA	NA	2.6 E-7	NA	3.2 E-8	NA	6.2 E-8	2.7 E-9	7.8 E-8	NA	4.2 E-7	NA	4.7 E-7	NA	1.7 E-7	7.4 E-4
03D-SP136	10	NA	NA	1.5 E-8	9.5 E-6	6.2 E-5	NA	1.0 E-6	NA	1.4 E-7	1.3 E-7	NA	1.2 E-8	NA	NA	3.0 E-6	1.4 E-6	NA	NA	9.7 E-7	1.1 E-4
03D-SP137	10	3.6 E-6	NA	2.2 E-8	4.7 E-6	3.2 E-6	2.0 E-8	4.0 E-7	1.2 E-8	2.1 E-7	6.1 E-7	NA	2.8 E-8	1.1 E-7	5.2 E-7	1.0 E-6	4.0 E-7	NA	2.4 E-8	7.8 E-7	1.8 E-4
03D-SP138	10	2.5 E-5	NA	2.6 E-8	NA	2.3 E-6	NA	NA	NA	NA	8.1 E-7	NA	1.3 E-8	4.9 E-7	2.3 E-6	1.3 E-6	NA	NA	NA	1.0 E-6	5.6 E-5
03D-SP138	19	6.1 E-5	NA	NA	NA	NA	7.4 E-8	NA	NA	2.9 E-6	1.5 E-7	NA	NA	2.6 E-7	2.5 E-7	2.7 E-7	NA	NA	NA	8.3 E-7	1.1 E-4
03D-SP138	30	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	3.1 E-7	6.1 E-4
03D-SP139	10	NA	NA	NA	NA	NA	3.0 E-8	NA	7.8 E-9	2.6 E-7	6.7 E-8	NA	4.5 E-9	6.9 E-8	NA	3.6 E-7	NA	NA	NA	5.2 E-7	6.0 E-6
03D-SP139	20	6.5 E-7	NA	NA	NA	NA	5.3 E-8	NA	5.2 E-9	9.0 E-7	9.3 E-8	NA	6.2 E-9	8.6 E-8	NA	2.5 E-7	1.3 E-7	NA	NA	8.7 E-7	1.1 E-5
03D-SP139	28	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	6.2 E-8	5.1 E-5
03D-SP140	10	1.8 E-7	NA	NA	NA	NA	7.6 E-8	NA	NA	1.2 E-6	NA	NA	NA	6.4 E-8	NA	1.2 E-6	5.2 E-7	NA	NA	1.3 E-6	8.1 E-6
03D-SP140	20	8.0 E-8	NA	NA	NA	NA	8.4 E-9	NA	NA	1.5 E-7	NA	NA	NA	2.4 E-8	NA	1.2 E-7	NA	NA	NA	1.7 E-7	3.2 E-6
03D-SP141	10	NA	NA	NA	NA	1.1 E-6	2.1 E-7	NA	NA	1.7 E-6	9.8 E-7	1.2 E-7	2.1 E-8	1.1 E-7	NA	8.8 E-7	3.5 E-7	1.3 E-6	NA	4.1 E-6	1.7 E-5
03D-SP141	20	1.0 E-7	NA	4.3 E-9	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	1.2 E-7	2.0 E-7	NA	NA	NA	4.5 E-7	1.4 E-5
03D-SP142	10	2.2 E-7	NA	NA	NA	NA	9.7 E-8	NA	NA	9.9 E-7	1.4 E-7	NA	1.0 E-8	2.6 E-7	NA	8.8 E-7	NA	NA	NA	3.2 E-6	1.1 E-4
03D-SP142	20	8.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	NA	NA	NA	4.9 E-5
03D-SP142	30	9.0 E-5	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	8.6 E-8	NA	NA	NA	1.0 E-7	3.9 E-4
03D-SP143	10	1.8 E-6	NA	1.5 E-8	NA	NA	NA	NA	NA	2.0 E-7	7.3 E-8	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	6.3 E-7	1.6 E-4
03D-SP143	20	7.3 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	7.0 E-5
03D-SP143	30	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	4.4 E-8	6.5 E-5
03D-SP144	10	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	1.4 E-6	NA	NA	NA	4.4 E-8	NA	2.8 E-7	NA	NA	2.3 E-8	2.4 E-7	1.3 E-4
03D-SP144	20	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	8.2 E-7	NA	2.9 E-7	2.7 E-6	NA	NA	NA	NA	NA	NA	1.7 E-7	2.3 E-4
03D-SP144	30	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	3.3 E-4
03D-SP145	10	3.3 E-7	NA	NA	NA	NA	2.4 E-8	NA	NA	3.2 E-7	4.4 E-8	NA	NA	5.9 E-8	NA	2.8 E-7	NA	NA	NA	3.3 E-7	7.6 E-5
03D-SP145	20	2.4 E-8	NA	2.0 E-8	NA	NA	NA	NA	NA	2.6 E-7	5.7 E-8	NA	NA	1.1 E-7	2.6 E-7	1.3 E-7	NA	NA	NA	9.5 E-8	6.6 E-6
03D-SP146	10	3.0 E-5	NA	3.0 E-8	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	7.8 E-7	7.9 E-4
03D-SP146	20	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4
03D-SP146	27	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4
03D-SP147	10	1.0 E-3	NA	NA	NA	NA	1.6 E-8	NA	NA	7.1 E-7	5.2 E-8	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	5.1 E-7	1.2 E-3
03D-SP147	20	3.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5
03D-SP147	27	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	8.8 E-7	8.5 E-4
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6
03D-SP148	20	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	1.4 E-7	8.1 E-8	NA	NA	6.6 E-8	1.1 E-7	NA	NA	NA	NA	8.7 E-8	5.0 E-7
03D-SP149	10	8.0 E-8	NA	NA	NA	NA	1.5 E-7	3.0 E-7	2.6 E-8	2.1 E-6	7.3 E-8	NA	5.8 E-9	5.4 E-7	NA	2.1 E-6	1.0 E-6	NA	2.3 E-8	2.9 E-6	1.1 E-5
03D-SP149	20	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	1.5 E-8	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	5.3 E-8	1.5 E-5
03D-SP150	30	1.7 E-8	NA	NA	NA	4.1 E-6	2.0 E-8	NA	NA	1.9 E-7	4.6 E-8	NA	7.5 E-8	NA	NA	1.0 E-7	NA	NA	NA	2.9 E-7	5.6 E-6
03D-SP84	15	4.6 E-7	1.2 E-5	NA	NA	3.8 E-7	NA	NA	NA	1.3 E-7	1.6 E-7	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	1.7 E-7	2.5 E-5
03D-SP84	25	1.3 E-7	8.3 E-7	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	9.2 E-6	1.8 E-5	NA	NA	NA	1.8 E-5	2.0 E-5	NA	NA	4.1 E-4
03D-SP85	25	2.4 E-5	2.9 E-3	NA	NA	NA	1.5 E-7	NA	9.8 E-9	1.3 E-6	4.2 E-8	NA	4.4 E-9	5.7 E-8	NA	4.0 E-7	2.3 E-7	NA	NA	7.6 E-7	9.8 E-3
03D-SP85	30	1.2 E-7	8.8 E-8	4.6 E-9	NA	NA	8.5 E-9	NA	NA	1.0 E-7	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	1.3 E-5
03D-SP86	10	1.3 E-7	NA	NA	NA	NA	3.0 E-8	NA	NA	4.1 E-7	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	3.2 E-7	5.6 E-6
03D-SP86	20	1.0 E-7	NA	NA	2.6 E-6	2.6 E-5	NA	3.8 E-7	NA	NA	3.2 E-8	NA	3.0 E-9	3.7 E-7	NA	2.3 E-6	5.9 E-7	NA	6.0 E-8	1.6 E-6	3.6 E-5
03D-SP87	10	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	2.1 E-7	6.0 E-6
03D-SP88	10	1.3 E-6	NA	NA	NA	NA	2.5 E-8	NA	NA	3.2 E-7	5.9 E-8	NA	4.3 E-9	NA	NA	5.9 E-7	2.8 E-7	NA	NA	4.8 E-7	7.3 E-5
03D-SP88	20	4.7 E-8	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5
03D-SP89	10	3.0 E-6	NA	2.3 E-8	6.2 E-6	8.1 E-5	NA	1.0 E-6	NA	5.8 E-7	8.9 E-8	NA	2.0 E-7	1.7 E-7	NA	7.2 E-6	2.0 E-6	NA	5.6 E-8	3.5 E-6	3.8 E-3
03D-SP90	10	4.1 E-6	1.1 E-5	1.5 E-8	7.1 E-6	2.4 E-5	NA	1.0 E-6	NA	2.4 E-6	3.6 E-8	NA	6.6 E-8	1.4 E-7	NA	4.6 E-6	1.5 E-6	NA	9.5 E-8	2.1 E-6	1.4 E-4
03D-SP90	20	1.3 E-6	1.9 E-6	NA	1.8 E-6	NA	8.0 E-9	1.8 E-7	1.2 E-8	8.3 E-8	1.7 E-7	NA	2.1 E-9	NA	NA	6.5 E-7	2.3 E-7	NA	1.2 E-8	5.3 E-7	3.4 E-5

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Trichloroethylene	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	HI
Unit Hazard																					
Unit Risk																					
03D-SP91	10	2.3 E-6	1.2 E-6	8.5 E-9	4.1 E-6	NA	NA	4.1 E-7	1.6 E-8	NA	1.4 E-7	NA	NA	NA	NA	9.3 E-7	3.5 E-7	NA	2.5 E-8	5.6 E-7	3.2 E-5
03D-SP91	20	1.2 E-6	2.0 E-6	1.2 E-8	3.6 E-6	2.4 E-5	NA	3.8 E-7	NA	NA	7.7 E-8	NA	3.1 E-9	NA	NA	1.3 E-6	4.3 E-7	NA	2.6 E-8	5.7 E-7	5.5 E-5
03D-SP92	10	8.7 E-7	8.2 E-6	2.8 E-8	3.6 E-6	1.2 E-4	NA	5.2 E-7	NA	2.8 E-7	2.0 E-7	NA	6.9 E-9	NA	NA	3.8 E-6	1.2 E-6	NA	4.3 E-8	2.5 E-6	1.7 E-4
03D-SP92	20	2.4 E-6	6.5 E-6	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
03D-SP93	15	NA	NA	NA	3.8 E-6	1.7 E-5	NA	4.8 E-7	NA	NA	NA	NA	2.4 E-8	2.3 E-7	NA	2.0 E-6	6.7 E-7	NA	NA	1.1 E-6	6.9 E-5
03D-SP93	25	NA	NA	4.4 E-9	2.5 E-6	NA	NA	1.2 E-7	NA	NA	4.6 E-8	NA	NA	NA	NA	2.5 E-7	1.2 E-7	NA	NA	6.3 E-8	5.6 E-6
03D-SP94	15	1.5 E-6	NA	NA	6.3 E-6	NA	3.1 E-8	6.0 E-7	NA	NA	5.4 E-8	NA	1.1 E-8	3.3 E-8	NA	3.9 E-6	1.5 E-6	NA	NA	1.3 E-6	5.6 E-4
03D-SP94	25	1.4 E-7	NA	1.7 E-7	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	1.8 E-4
03D-SP95	10	4.1 E-5	6.5 E-5	4.3 E-7	NA	8.1 E-5	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-7	1.7 E-2
03D-SP95	18	2.8 E-5	4.8 E-5	NA	1.1 E-5	8.2 E-6	NA	2.3 E-6	1.3 E-8	9.3 E-8	2.3 E-7	5.9 E-8	6.1 E-8	1.7 E-7	NA	1.2 E-5	5.0 E-6	1.3 E-6	NA	2.4 E-5	8.4 E-3
03D-SP96	10	3.1 E-7	NA	NA	9.0 E-6	1.1 E-5	5.9 E-8	8.6 E-7	NA	5.2 E-7	4.6 E-7	NA	7.3 E-8	3.0 E-7	NA	2.8 E-6	1.0 E-6	NA	6.0 E-8	1.1 E-5	2.3 E-4
03D-SP96	17	3.8 E-7	NA	5.5 E-7	NA	2.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4
03D-SP99	10	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	4.3 E-8	NA	4.2 E-9	NA	NA	3.0 E-7	NA	NA	NA	2.2 E-7	3.2 E-2
11D-SP26	10	4.8 E-8	NA	NA	NA	NA	2.4 E-8	NA	NA	3.4 E-7	NA	NA	NA	7.4 E-8	NA	NA	NA	NA	NA	9.7 E-8	2.6 E-6
11D-SP26	20	NA	NA	6.4 E-9	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	6.4 E-8	1.2 E-6
11D-SP27	10	1.7 E-7	NA	1.0 E-8	NA	NA	7.0 E-8	NA	6.4 E-9	8.0 E-7	1.6 E-7	NA	6.3 E-9	2.1 E-7	NA	7.2 E-7	2.8 E-7	NA	NA	8.9 E-7	1.8 E-5
11D-SP27	20	2.8 E-8	NA	1.2 E-8	NA	NA	NA	NA	NA	9.3 E-8	5.3 E-8	NA	NA	3.2 E-8	NA	2.5 E-7	NA	NA	NA	2.7 E-7	9.1 E-6
11D-SP28	10	2.2 E-7	NA	8.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	4.2 E-7	NA	NA	NA	1.0 E-7	1.1 E-5
11D-SP28	20	1.5 E-6	NA	1.6 E-8	NA	NA	NA	NA	NA	2.0 E-7	7.7 E-8	NA	NA	2.9 E-8	NA	1.1 E-7	NA	NA	NA	4.3 E-7	1.5 E-5
11D-SP29	10	1.2 E-7	NA	NA	NA	NA	2.6 E-8	NA	NA	8.8 E-7	3.7 E-7	NA	NA	1.6 E-7	NA	3.1 E-7	NA	NA	NA	1.3 E-6	5.7 E-6
11D-SP29	30	6.8 E-7	NA	1.1 E-8	NA	1.5 E-7	NA	NA	NA	5.0 E-8	1.3 E-7	NA	3.2 E-9	1.6 E-8	NA	7.6 E-8	NA	NA	NA	2.4 E-7	1.5 E-5
11D-SP30	10	9.4 E-8	NA	3.3 E-8	NA	5.2 E-7	NA	NA	NA	2.2 E-7	1.9 E-7	NA	NA	6.9 E-8	NA	2.2 E-7	NA	NA	NA	7.1 E-7	1.0 E-5
11D-SP30	20	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	1.3 E-7	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	3.4 E-7	1.5 E-5
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	5.9 E-7	NA	NA	4.8 E-8	NA	NA	NA	NA	NA	7.9 E-7	2.8 E-6
11D-SP31	20	4.0 E-8	NA	NA	NA	1.6 E-7	NA	NA	NA	1.5 E-7	1.1 E-7	NA	6.9 E-9	3.4 E-8	NA	1.2 E-7	NA	NA	NA	2.4 E-7	5.2 E-6
11D-SP31	30	6.1 E-8	NA	NA	NA	NA	7.1 E-9	NA	NA	6.5 E-8	1.8 E-8	NA	1.4 E-9	NA	NA	1.4 E-7	NA	NA	NA	1.0 E-7	7.9 E-6
50D-SP01	10	NA	NA	NA	NA	8.1 E-6	1.1 E-7	3.3 E-7	NA	1.1 E-6	8.1 E-8	2.6 E-7	2.6 E-7	1.1 E-7	NA	1.4 E-6	7.1 E-7	2.2 E-6	2.3 E-8	1.5 E-6	3.3 E-5
50D-SP01	20	NA	NA	3.5 E-9	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	7.6 E-8	1.2 E-5
51D-SP04	10	NA	NA	NA	NA	5.2 E-6	4.9 E-8	4.3 E-7	NA	5.0 E-7	8.1 E-8	2.6 E-6	1.2 E-7	9.3 E-8	NA	1.1 E-6	6.7 E-7	1.8 E-5	NA	1.0 E-6	4.3 E-5
51D-SP04	20	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	2.5 E-7	NA	NA	NA	1.0 E-7	1.2 E-5
A20-B34-SP01	10	1.0 E-6	NA	1.4 E-7	NA	2.8 E-7	5.5 E-8	NA	NA	5.4 E-7	3.6 E-7	7.5 E-8	1.1 E-8	NA	NA	9.3 E-7	3.6 E-7	7.4 E-7	NA	6.3 E-7	1.6 E-5
A20-B34-SP01	20	8.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	5.4 E-8	6.9 E-6
A20-B34-SP02	10	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	6.7 E-7	NA	NA	NA	1.1 E-7	NA	8.4 E-7	3.6 E-7	NA	NA	7.6 E-7	2.9 E-5
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	7.4 E-6
A20-B34-SP03	10	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	1.5 E-6	7.4 E-8	NA	3.4 E-9	4.9 E-8	NA	3.0 E-7	NA	NA	4.7 E-8	4.9 E-7	1.0 E-4
A20-B34-SP03	20	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	7.5 E-7	3.7 E-8	NA	1.7 E-9	6.9 E-8	NA	2.1 E-7	NA	NA	NA	5.6 E-7	5.4 E-5
A20-B34-SP03	29	4.5 E-8	NA	7.9 E-8	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5
A20-RB37-SP01	10	4.0 E-5	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
A20-RB37-SP01	20	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-3
A20-RB37-SP01	30	3.6 E-6	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	1.5 E-4
A20-RB37-SP02	10	6.8 E-6	NA	NA	NA	NA	4.6 E-8	NA	NA	6.7 E-7	3.8 E-7	NA	NA	9.8 E-8	NA	5.9 E-7	3.3 E-7	NA	NA	7.1 E-7	8.0 E-4
A20-RB37-SP02	20	1.1 E-7	NA	3.8 E-9	NA	NA	NA	NA	NA	7.1 E-8	1.1 E-7	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	1.3 E-7	1.7 E-5
A20-RC29-SP01	10	1.7 E-7	NA	1.4 E-8	NA	NA	3.2 E-8	NA	NA	3.4 E-7	1.1 E-6	NA	NA	8.8 E-8	NA	4.6 E-7	NA	NA	NA	2.1 E-7	3.6 E-5
A20-RC29-SP01	20	5.1 E-7	NA	1.7 E-8	NA	NA	NA	NA	NA	6.1 E-8	6.1 E-8	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	3.8 E-7	2.2 E-5
A20-RX73-SP01	10	5.0 E-7	NA	2.8 E-8	NA	NA	6.9 E-8	NA	NA	7.8 E-7	1.3 E-7	NA	1.1 E-7	3.2 E-7	NA	7.6 E-7	3.7 E-7	NA	NA	3.8 E-6	7.6 E-5
A20-RX73-SP01	20	9.1 E-7	NA	4.1 E-9	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.3 E-7	4.6 E-5
A20-ST01-1-SP01	10	4.0 E-7	1.1 E-6	NA	NA	NA	5.7 E-8	NA	NA	5.8 E-7	NA	NA	NA	9.8 E-8	NA	7.6 E-7	3.8 E-7	NA	NA	5.6 E-7	3.0 E-5
A20-ST01-1-SP01	20	7.3 E-8	NA	6.0 E-9	2.0 E-6	NA	NA	4.0 E-7	NA	NA	5.7 E-8	NA	NA	NA	NA	6.1 E-7	2.3 E-7	3.5 E-7	NA	6.3 E-7	7.4 E-6
A20-ST01-2-SP01	10	3.4 E-7	NA	NA	NA	NA	5.5 E-8	NA	7.4 E-9	5.8 E-7	1.2 E-7	NA	1.4 E-8	NA	NA	8.4 E-7	3.9 E-7	NA	NA	1.5 E-6	5.1 E-5
A20-ST01-2-SP01	20	8.0 E-8	NA	NA	NA	NA	9.7 E-9	NA	NA	1.2 E-7	2.7 E-8	NA	NA	2.5 E-8	NA	5.9 E-7	2.4 E-7	NA	NA	2.5 E-7	1.6 E-5
A20-ST01-3-SP01	10	1.4 E-7	NA	NA	NA	4.7 E-5	9.7 E-8	NA	NA	9.0 E-7	1.5 E-7	9.8 E-7	1.5 E-6	NA	NA	1.4 E-6	5.7 E-7	5.5 E-6	NA	1.7 E-6	6.9 E-5
A20-ST01-3-SP01	20	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5
A20-ST02-SP01	10	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	3.5 E-6	2.2 E-6	NA	NA	NA	NA	4.6 E-6	NA	7.5 E-7	2.2 E-4
A20-ST02-SP01	20	1.3 E-6	2.8 E-7	NA	NA	3.6 E-5	1.4 E-7	NA	NA	1.2 E-6	1.4 E-7	1.7 E-7	1.5 E-7	4.9 E-8	NA	4.2 E-7	2.6 E-7	NA	NA	6.2 E-7	6.6 E-5
A20-ST02-SP01	30	1.2 E-7	1.0 E-7	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5
A20-ST02-SP02	10	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	2.0 E-7	NA	2.0 E-6	NA	NA	NA	2.4 E-7	4.7 E-7	4.3 E-6	NA	2.5 E-7	4.1 E-5
A20-ST02-SP02	20	6.9 E-8	NA	NA	1.3 E-6	2.4 E-6	1.5 E-7	1.5 E-7	NA	2.0 E-6	3.3 E-8	1.1 E-7	4.7 E-9	1.8 E-7	NA	4.0 E-7	2.4 E-7	3.3 E-7	3.0 E-8	7.0 E-7	1.3 E-5
A20-ST02-SP02	30	3.1 E-8	NA	NA	NA	NA	1.7 E-8	NA	NA	1.5 E-7	NA	NA	NA	2.8 E-8	NA	1.8 E-7	9.7 E-8	NA	NA	4.2 E-7	1.7 E-5
A20-ST02-SP03	20	2.3 E-7	NA	NA	NA	NA	3.0 E-8	NA	NA	4.3 E-7	NA	NA	NA	4.9 E-8	NA	1.7 E-7	NA	NA	NA	5.0 E-7	7.3 E-6

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
A20-ST02-SP03	30	3.6 E-7	NA	NA	2.4 E-6	NA	2.6 E-8	1.3 E-7	NA	4.7 E-7	3.3 E-8	NA	1.9 E-9	1.1 E-7	NA	2.7 E-7	1.3 E-7	NA	NA	2.3 E-7	9.2 E-6
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	1.2 E-5
A20-ST05-SP01	20	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	4.4 E-3
A20-ST05-SP01	30	8.2 E-5	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	7.4 E-8	1.7 E-3
A20-ST05-SP02	10	1.2 E-7	NA	NA	NA	NA	5.0 E-8	NA	NA	5.6 E-7	NA	NA	NA	1.5 E-7	NA	9.7 E-7	4.2 E-7	NA	NA	4.1 E-7	1.8 E-5
A20-ST05-SP02	20	9.1 E-8	NA	NA	NA	2.9 E-7	NA	NA	NA	1.3 E-7	3.1 E-7	NA	6.6 E-9	2.7 E-8	NA	1.3 E-7	NA	NA	NA	7.9 E-7	1.8 E-5
A20-ST05-SP03	10	7.2 E-7	7.3 E-7	NA	NA	NA	5.2 E-8	NA	NA	6.5 E-7	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	9.2 E-5
A20-ST05-SP04	10	2.4 E-7	NA	NA	NA	NA	2.8 E-8	NA	NA	5.2 E-7	4.1 E-8	NA	NA	1.1 E-7	NA	4.2 E-7	NA	NA	NA	5.2 E-7	5.9 E-6
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	3.7 E-8	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	1.3 E-7	4.2 E-6
A20-ST06-SP01	10	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	2.6 E-7	1.9 E-7	NA	NA	NA	NA	7.2 E-7	2.6 E-7	NA	NA	4.3 E-7	1.0 E-4
A20-ST06-SP01	20	NA	NA	1.4 E-8	NA	NA	3.3 E-9	NA	NA	4.5 E-8	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	4.9 E-5
A20-ST14-SP01	10	2.9 E-6	NA	8.4 E-9	NA	NA	1.7 E-8	NA	NA	2.8 E-7	9.8 E-8	NA	NA	4.6 E-8	NA	2.3 E-7	NA	NA	NA	3.2 E-7	1.1 E-4
A20-ST14-SP01	20	1.1 E-7	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	1.3 E-5
A20-ST14-SP02	10	5.2 E-8	NA	1.1 E-8	NA	NA	NA	NA	NA	1.9 E-7	2.4 E-7	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	4.4 E-7	8.9 E-5
A20-ST14-SP02	20	6.2 E-8	NA	NA	NA	NA	1.3 E-8	NA	NA	2.2 E-7	NA	NA	NA	3.4 E-8	NA	2.0 E-7	NA	NA	NA	8.7 E-8	6.5 E-5
A20-ST20-SP01	10	7.2 E-7	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	1.4 E-7	1.3 E-6
A20-ST20-SP01	20	1.1 E-7	NA	4.0 E-9	NA	NA	NA	NA	NA	6.1 E-8	2.9 E-8	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	6.2 E-8	1.7 E-6
A20-ST22-SP01	10	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	6.0 E-7	NA	NA	NA	8.3 E-8	NA	3.2 E-7	NA	NA	NA	6.2 E-7	2.3 E-6
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-6

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene	Trichloroethylene
Unit Hazard																						
Unit Risk																						
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	7.2 E-11
03D-SP100	20	9.9 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA
03D-SP102	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	5.3 E-10
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	2.1 E-10
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	2.0 E-11
03D-SP104	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	1.7 E-9
03D-SP104	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	3.5 E-9
03D-SP105	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	1.7 E-9
03D-SP106	15	1.1 E-11	NA	NA	NA	NA	NA	4.2 E-11	NA	NA	1.1 E-11	NA	2.6 E-12	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	6.4 E-12
03D-SP106	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	9.4 E-9
03D-SP106	30	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	5.8 E-9
03D-SP107	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	1.1 E-8
03D-SP107	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	7.4 E-10
03D-SP107	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	1.1 E-8
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	4.0 E-11
03D-SP109	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-9	NA	NA	2.8 E-10
03D-SP109	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	NA	6.8 E-9
03D-SP109	30	NA	NA	NA	NA	7.0 E-12	NA	1.1 E-11	NA	NA	NA	NA	6.3 E-13	NA	NA	NA	NA	NA	2.7 E-10	1.9 E-12	NA	1.8 E-11
03D-SP110	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	1.1 E-10
03D-SP110	20	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	5.2 E-12	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	2.8 E-11
03D-SP111	10	NA	NA	NA	NA	NA	NA	5.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	5.1 E-11
03D-SP111	20	NA	NA	NA	NA	NA	NA	4.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	4.2 E-13	NA	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-11	NA	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	6.4 E-10	NA	1.0 E-12	NA	NA	NA	NA	NA	9.1 E-11	NA	NA	2.2 E-12
03D-SP113	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	NA	9.4 E-12	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	5.3 E-11	NA	4.7 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP115	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	3.1 E-11
03D-SP116	10	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	7.5 E-10	NA	2.6 E-12	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	8.6 E-12
03D-SP117	10	NA	NA	NA	NA	NA	NA	5.3 E-11	NA	NA	1.2 E-10	NA	2.3 E-12	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	1.7 E-11
03D-SP118	10	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	1.5 E-12	NA	NA	NA	NA	NA	4.7 E-9	1.9 E-12	NA	1.6 E-11
03D-SP118	20	NA	NA	NA	NA	2.6 E-11	NA	1.1 E-10	NA	NA	NA	NA	1.1 E-12	NA	NA	NA	NA	NA	6.2 E-10	NA	NA	5.7 E-12
03D-SP119	10	5.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-12	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	7.9 E-10
03D-SP119	20	3.9 E-11	NA	NA	NA	NA	NA	4.5 E-11	NA	NA	NA	NA	2.3 E-12	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	2.8 E-9
03D-SP119	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	7.2 E-9
03D-SP120	10	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	2.2 E-12	NA	NA	NA	NA	NA	6.1 E-11	NA	NA	1.2 E-11
03D-SP120	20	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	2.4 E-12	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	3.3 E-12
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-8	NA	NA	8.2 E-10
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA
03D-SP122	10	1.1 E-11	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	3.4 E-11	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	1.7 E-11
03D-SP122	20	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	1.0 E-10
03D-SP122	30	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10
03D-SP123	10	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	6.1 E-11	NA	NA	NA
03D-SP123	20	NA	NA	NA	NA	NA	NA	9.1 E-12	NA	NA	NA	NA	6.3 E-13	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	2.5 E-12	NA	NA	NA	NA	NA	4.7 E-12	NA	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	NA	8.0 E-12	NA	NA	NA	NA	2.2 E-12	NA	NA	NA	NA	NA	9.5 E-12	NA	NA	2.2 E-12
03D-SP125	10	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	2.0 E-12	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	3.3 E-11
03D-SP125	20	NA	NA	NA	NA	NA	NA	4.4 E-11	NA	NA	1.0 E-10	NA	1.4 E-12	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	9.3 E-10
03D-SP126	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	1.2 E-12	NA	6.2 E-12
03D-SP126	20	2.5 E-13	NA	NA	NA	NA	NA	7.4 E-12	NA	NA	NA	NA	5.0 E-13	NA	NA	NA	NA	NA	5.1 E-12	NA	NA	6.8 E-12
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-11	NA	NA	2.2 E-12
03D-SP127	20	NA	NA	NA	NA	NA	NA	4.8 E-12	NA	NA	NA	NA	5.6 E-13	NA	NA	NA	NA	NA	2.9 E-11	5.4 E-13	NA	7.4 E-13
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-12	NA	NA	1.6 E-12
03D-SP128	20	3.0 E-12	NA	NA	NA	NA	NA	3.1 E-11	NA	NA	1.3 E-10	NA	3.7 E-12	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	3.7 E-9
03D-SP128	30	4.4 E-11	NA	3.8 E-11	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	8.6 E-9
03D-SP129	15	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	1.5 E-12	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	1.8 E-11
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-11	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**	**Trichloroethylene**
Unit Hazard																						
Unit Risk																						
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	NA	5.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-12	4.0 E-13	NA	NA
03D-SP131	10	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	2.5 E-12	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	NA	5.3 E-12	NA	NA	NA	NA	4.7 E-13	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-11	NA	NA	3.1 E-11
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	NA	NA	NA	4.2 E-12	NA	9.8 E-11	NA	NA	2.0 E-11	NA	1.8 E-12	NA	NA	NA	NA	NA	1.8 E-11	2.7 E-12	NA	5.8 E-12
03D-SP133	10	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-12	NA	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	NA	5.1 E-12	NA	NA	NA	NA	8.7 E-13	NA	NA	NA	NA	NA	NA	7.5 E-13	NA	NA
03D-SP134	10	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	NA	NA	1.4 E-12	NA	NA	NA	NA	NA	3.7 E-12	1.9 E-12	NA	1.2 E-12
03D-SP134	20	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	7.0 E-11	NA	NA	NA	NA	NA	3.4 E-12	NA	NA	NA
03D-SP135	10	5.7 E-13	NA	NA	NA	NA	NA	3.7 E-11	NA	NA	9.0 E-10	NA	2.5 E-12	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	2.1 E-11
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	1.7 E-12	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	NA
03D-SP137	10	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	1.3 E-9	NA	2.5 E-12	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	6.0 E-11
03D-SP138	10	NA	NA	NA	NA	NA	NA	3.7 E-11	NA	NA	4.3 E-11	NA	1.0 E-12	NA	NA	NA	NA	NA	2.0 E-11	6.1 E-12	NA	4.2 E-10
03D-SP138	19	1.6 E-12	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	7.8 E-11	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	2.6 E-12	NA	1.0 E-9
03D-SP138	30	4.1 E-13	NA	NA	NA	7.4 E-12	NA	4.0 E-11	NA	NA	1.4 E-11	NA	4.0 E-13	NA	NA	NA	NA	NA	1.7 E-9	3.2 E-12	NA	4.0 E-10
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	1.8 E-12	NA	NA
03D-SP139	20	NA	NA	NA	NA	9.0 E-12	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	4.3 E-12	NA	1.1 E-11
03D-SP139	28	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	4.4 E-13	NA	NA	NA	NA	NA	1.0 E-10	2.2 E-12	NA	2.9 E-11
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	3.1 E-12
03D-SP140	20	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	NA	NA	3.7 E-12	5.1 E-13	NA	1.4 E-12
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	2.7 E-12	NA	NA
03D-SP141	20	NA	NA	NA	NA	5.7 E-12	NA	5.6 E-11	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	NA	NA	8.6 E-12	2.9 E-12	NA	1.7 E-12
03D-SP142	10	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	1.4 E-12	NA	3.7 E-12
03D-SP142	20	NA	NA	NA	NA	NA	NA	4.8 E-11	NA	NA	3.9 E-11	NA	1.2 E-12	NA	NA	NA	NA	NA	8.6 E-11	NA	NA	1.4 E-12
03D-SP142	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	1.5 E-9
03D-SP143	10	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	6.4 E-10	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	1.9 E-12	NA	3.1 E-11
03D-SP143	20	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	3.6 E-10	NA	4.4 E-13	NA	NA	NA	NA	NA	1.2 E-10	1.7 E-12	NA	1.2 E-11
03D-SP143	30	NA	NA	NA	NA	NA	NA	7.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-12	1.2 E-10	NA	NA	5.4 E-11
03D-SP144	10	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	6.4 E-13	NA	NA
03D-SP144	20	NA	NA	NA	NA	NA	NA	7.5 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	3.9 E-13	NA	NA
03D-SP144	30	6.6 E-12	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	1.1 E-12	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	1.0 E-12	NA	5.7 E-12
03D-SP145	20	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	5.1 E-11	NA	NA	NA	NA	NA	NA	NA	2.0 E-12	7.9 E-13	NA	4.1 E-13
03D-SP146	10	6.7 E-13	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	8.1 E-13	NA	5.1 E-10
03D-SP146	20	1.7 E-12	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-10	1.8 E-12	NA	3.6 E-10
03D-SP146	27	9.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	8.2 E-10
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	1.7 E-8
03D-SP147	20	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	1.8 E-12	NA	6.2 E-10
03D-SP147	27	1.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	9.5 E-11	NA	NA	1.1 E-8
03D-SP148	10	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	1.0 E-10	NA	1.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-13	NA	1.4 E-12
03D-SP149	20	NA	NA	NA	NA	NA	NA	9.1 E-11	NA	NA	NA	NA	2.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-13
03D-SP150	30	NA	NA	NA	NA	NA	NA	3.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-12	NA	NA	3.0 E-13
03D-SP84	15	NA	NA	NA	NA	NA	NA	3.0 E-11	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	7.8 E-12
03D-SP84	25	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	9.0 E-12	NA	NA	NA	NA	NA	NA	NA	9.6 E-12	1.3 E-12	NA	2.3 E-12
03D-SP85	25	9.8 E-11	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	8.5 E-9	NA	NA	4.1 E-10
03D-SP85	30	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA	NA	NA	7.3 E-13	NA	NA	NA	NA	NA	1.6 E-11	1.1 E-12	NA	2.1 E-12
03D-SP86	10	1.2 E-12	NA	NA	NA	NA	NA	9.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	1.9 E-12	NA	2.2 E-12
03D-SP86	20	NA	NA	NA	NA	NA	NA	5.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-12	1.0 E-12	NA	1.7 E-12
03D-SP87	10	NA	NA	NA	NA	NA	NA	5.7 E-11	NA	NA	NA	NA	4.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	4.1 E-11	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	2.2 E-11
03D-SP88	20	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	8.0 E-13
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	5.1 E-11
03D-SP90	10	9.4 E-13	NA	NA	NA	NA	NA	4.5 E-11	NA	NA	4.9 E-10	NA	7.3 E-12	NA	NA	NA	NA	NA	9.1 E-11	NA	NA	6.9 E-11
03D-SP90	20	3.5 E-13	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	1.1 E-10	NA	2.3 E-12	NA	NA	NA	NA	NA	4.6 E-11	NA	NA	2.3 E-11

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3-Butadiene	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene	Trichloroethylene
Unit Hazard																						
Unit Risk																						
03D-SP91	10	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	4.3 E-11	NA	1.4 E-12	NA	NA	NA	NA	NA	1.8 E-11	4.8 E-12	NA	3.8 E-11
03D-SP91	20	NA	NA	NA	NA	NA	NA	5.0 E-12	NA	NA	1.4 E-10	NA	4.9 E-13	NA	NA	NA	NA	NA	3.2 E-11	8.0 E-13	NA	2.1 E-11
03D-SP92	10	7.4 E-13	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	4.5 E-11	NA	2.3 E-12	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	1.5 E-11
03D-SP92	20	6.1 E-13	NA	NA	NA	NA	NA	2.5 E-11	NA	NA	2.9 E-10	NA	1.9 E-12	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	4.1 E-11
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	6.5 E-11	NA	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	6.0 E-12	NA	1.0 E-12	NA	NA	NA	NA	NA	1.5 E-12	NA	NA	NA
03D-SP94	15	NA	NA	NA	NA	NA	NA	6.9 E-12	NA	NA	7.1 E-11	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	2.5 E-11
03D-SP94	25	NA	NA	NA	NA	NA	NA	2.1 E-11	NA	NA	1.9 E-11	NA	3.0 E-12	NA	NA	NA	NA	NA	4.5 E-10	NA	NA	2.4 E-12
03D-SP95	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	7.0 E-10
03D-SP95	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	4.7 E-10
03D-SP96	10	NA	NA	NA	NA	NA	NA	7.1 E-11	NA	NA	2.2 E-9	NA	2.5 E-11	NA	NA	NA	NA	NA	3.0 E-11	NA	NA	5.2 E-12
03D-SP96	17	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	1.8 E-9	NA	2.6 E-12	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	6.5 E-12
03D-SP99	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	1.1 E-10
11D-SP26	10	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-13
11D-SP26	20	NA	NA	NA	NA	NA	NA	6.5 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-13	NA	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-11	NA	NA	2.8 E-12
11D-SP27	20	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	5.0 E-13	NA	NA	NA	NA	NA	2.2 E-12	4.3 E-13	NA	4.8 E-13
11D-SP28	10	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-12
11D-SP28	20	3.6 E-13	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	5.6 E-12	2.7 E-13	NA	2.6 E-11
11D-SP29	10	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	2.1 E-12
11D-SP29	30	3.1 E-13	NA	NA	NA	5.8 E-12	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-12	NA	1.2 E-11
11D-SP30	10	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-12
11D-SP30	20	1.1 E-12	NA	NA	NA	NA	NA	8.1 E-12	NA	NA	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-12
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-12	NA	NA
11D-SP31	20	NA	NA	NA	NA	NA	NA	4.9 E-12	NA	2.0 E-11	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-12	NA	6.8 E-13
11D-SP31	30	8.5 E-13	NA	NA	NA	3.2 E-12	NA	5.2 E-12	NA	NA	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-12	NA	1.0 E-12
50D-SP01	10	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	NA
50D-SP01	20	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	NA	NA	2.3 E-12	NA	NA	NA	NA	NA	8.4 E-12	NA	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-11	NA	NA	NA
51D-SP04	20	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	NA	NA	NA	2.3 E-11	NA	NA	NA	NA	NA	5.4 E-12	NA	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	5.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-11	NA	NA	1.7 E-11
A20-B34-SP01	20	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	1.7 E-11	NA	NA	7.1 E-13	NA	NA	NA	NA	NA	7.6 E-12	NA	NA	1.4 E-11
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-11	NA	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	5.5 E-13	NA	NA	NA	NA	NA	4.6 E-12	7.7 E-13	NA	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	9.6 E-13	NA	NA
A20-B34-SP03	29	NA	NA	NA	NA	4.7 E-12	NA	1.9 E-11	NA	4.1 E-11	4.2 E-12	NA	3.2 E-13	NA	NA	NA	NA	NA	1.2 E-10	2.1 E-12	NA	7.7 E-13
A20-RB37-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	6.8 E-10
A20-RB37-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	4.0 E-10
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	6.2 E-11
A20-RB37-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	2.1 E-12	NA	1.1 E-10
A20-RB37-SP02	20	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	5.0 E-13	NA	NA	NA	NA	NA	2.7 E-11	2.4 E-12	NA	1.9 E-12
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-11	NA	NA	3.0 E-12
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-11	NA	NA	8.6 E-12
A20-RX73-SP01	10	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	3.4 E-11	NA	NA	8.5 E-12
A20-RX73-SP01	20	NA	NA	NA	NA	NA	NA	2.5 E-11	NA	NA	2.8 E-10	NA	6.0 E-13	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	1.5 E-11
A20-ST01-1-SP01	10	6.4 E-13	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	NA	6.8 E-12
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	7.8 E-12	NA	NA	NA	NA	5.5 E-13	NA	NA	NA	NA	NA	6.8 E-12	NA	NA	1.2 E-12
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	4.5 E-11	NA	1.6 E-12	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	5.8 E-12
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	NA	4.0 E-11	NA	NA	3.0 E-11	NA	7.3 E-13	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	1.4 E-12
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	1.6 E-12	NA	NA	NA	NA	NA	2.2 E-11	2.4 E-12	NA	2.3 E-12
A20-ST01-3-SP01	20	NA	NA	1.2 E-11	NA	NA	NA	7.6 E-11	NA	NA	NA	NA	6.1 E-12	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	2.0 E-12
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	4.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11
A20-ST02-SP01	30	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	1.1 E-12	NA	NA	NA	NA	NA	7.0 E-12	NA	NA	2.1 E-12
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	5.7 E-13	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	1.2 E-12
A20-ST02-SP02	30	NA	NA	NA	NA	NA	NA	3.7 E-11	NA	NA	NA	NA	6.8 E-13	NA	NA	NA	NA	NA	5.3 E-12	NA	NA	5.4 E-13
A20-ST02-SP03	20	NA	NA	NA	NA	NA	NA	3.7 E-12	NA	NA	NA	NA	4.7 E-13	NA	NA	NA	NA	NA	3.9 E-12	6.9 E-13	NA	3.9 E-12

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**	**Trichloroethylene**
Unit Hazard																						
Unit Risk																						
A20-ST02-SP03	30	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-12	1.2 E-12	NA	6.2 E-12
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	2.7 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	7.9 E-11	3.3 E-12	NA	4.3 E-8
A20-ST05-SP01	30	1.4 E-10	NA	7.0 E-11	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	2.1 E-11	3.1 E-12	NA	1.4 E-9
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-11	2.1 E-12	NA	2.0 E-12
A20-ST05-SP02	20	NA	NA	NA	NA	NA	NA	5.3 E-12	NA	NA	NA	NA	5.5 E-13	NA	NA	NA	NA	NA	2.9 E-11	1.7 E-12	NA	1.5 E-12
A20-ST05-SP03	10	7.0 E-12	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	6.2 E-11	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	1.2 E-11
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-12	1.5 E-12	NA	4.1 E-12
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-12	NA	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	7.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	4.1 E-13	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA
A20-ST14-SP01	10	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	4.9 E-11
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	1.9 E-12	NA	1.8 E-12
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	1.8 E-12	NA	8.8 E-13
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	1.8 E-12	NA	1.0 E-12
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	4.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-12	5.0 E-13	NA	1.9 E-12
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	6.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	6.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-13	NA	NA

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	ILCR
Unit Hazard																				
Unit Risk																				
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP102	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP104	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP104	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP105	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP106	15	7.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP106	25	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP106	30	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP107	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP107	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP107	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP108	10	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP109	10	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
03D-SP109	20	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP109	30	6.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
03D-SP110	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP110	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP111	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP111	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-11
03D-SP112	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
03D-SP113	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
03D-SP113	20	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP114	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP114	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11
03D-SP115	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP116	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
03D-SP117	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP118	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP118	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
03D-SP119	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP119	20	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP119	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP120	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-11
03D-SP120	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP121	15	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
03D-SP122	10	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP122	20	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP122	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP123	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
03D-SP124	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP124	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP125	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP125	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP126	10	3.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
03D-SP126	20	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11
03D-SP127	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
03D-SP128	20	6.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP128	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
03D-SP129	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	ILCR
Unit Hazard																				
Unit Risk																				
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
03D-SP130	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
03D-SP131	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP131	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
03D-SP132	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP132	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP133	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-12
03D-SP134	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP134	20	9.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
03D-SP135	10	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP135	20	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
03D-SP137	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP138	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP138	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP138	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
03D-SP139	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
03D-SP139	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
03D-SP140	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP141	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-11
03D-SP142	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
03D-SP142	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP142	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP143	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP143	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP143	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
03D-SP144	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP144	30	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP145	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11
03D-SP146	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP146	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP146	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP147	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
03D-SP147	27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP149	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP149	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-11
03D-SP150	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-12
03D-SP84	15	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP84	25	9.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP85	25	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP85	30	9.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11
03D-SP86	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP86	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
03D-SP87	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
03D-SP88	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP88	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP90	10	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP90	20	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	ILCR
Unit Hazard																				
Unit Risk																				
03D-SP91	10	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP91	20	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
03D-SP92	10	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP92	20	7.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP93	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
03D-SP94	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP94	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP95	10	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP95	18	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP96	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP96	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP99	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
11D-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
11D-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-12
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
11D-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
11D-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
11D-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
11D-SP29	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
11D-SP29	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
11D-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
11D-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-12
11D-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
11D-SP31	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
50D-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
50D-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
51D-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
51D-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
A20-B34-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-11
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-B34-SP03	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-RB37-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-RB37-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
A20-RB37-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-RB37-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-11
A20-RX73-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
A20-RX73-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
A20-ST01-1-SP01	10	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-11
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
A20-ST01-3-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST02-SP01	20	3.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
A20-ST02-SP01	30	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
A20-ST02-SP02	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
A20-ST02-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11

Table 5.2-37
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																				
Unit Risk																				
A20-ST02-SP03	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST05-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
A20-ST05-SP01	30	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
A20-ST05-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
A20-ST05-SP03	10	8.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-ST14-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-12
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-12
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-12

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.2-38 ***Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker***
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Cadmium	1.0 E+0	9.8 E-4	2.6 E-4	1.4 E-7	1.2 E-3	NA	NA	7.7 E-10	7.7 E-10
Chromium VI	1.0 E+0	3.3 E-4	0.0 E+0	6.5 E-5	3.9 E-4	NA	NA	2.6 E-8	2.6 E-8
Iron	1.0 E+0	1.4 E-6	0.0 E+0	NA	1.4 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	3.3 E-3	0.0 E+0	1.7 E-6	3.3 E-3	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.0 E-4	0.0 E+0	2.9 E-8	2.0 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	2.6 E-7	2.2 E-7	3.8 E-11	4.7 E-7
Benzo(b)fluoranthene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Benzo(k)fluoranthene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	4.2 E-6	3.6 E-6	2.0 E-10	7.8 E-6
Chrysene	1.0 E+0	NA	NA	NA	NA	4.2 E-8	3.6 E-8	2.0 E-12	7.8 E-8
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	2.6 E-6	2.2 E-6	2.1 E-10	4.7 E-6
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Naphthalene	1.0 E+0	4.9 E-5	4.2 E-5	5.3 E-3	5.4 E-3	NA	NA	1.9 E-7	1.9 E-7
PCB-1248	1.0 E+0	4.9 E-2	4.5 E-2	7.2 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
PCB-1254	1.0 E+0	4.9 E-2	4.5 E-2	7.2 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
PCB-1260	1.0 E+0	4.9 E-2	4.5 E-2	7.2 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	2.5 E-9	5.4 E-6	NA	NA	NA	NA
Di-n-butyl phthalate	1.0 E+0	9.8 E-6	6.5 E-6	1.4 E-9	1.6 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	3.6 E-9	4.5 E-5	NA	NA	NA	NA
Phenanthrene	1.0 E+0	3.3 E-5	2.8 E-5	4.8 E-9	6.1 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	3.3 E-5	2.8 E-5	4.8 E-9	6.1 E-5	NA	NA	NA	NA
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	1.0 E+0	1.6 E-5	0.0 E+0	2.3 E-4	2.5 E-4	9.4 E-8	0.0 E+0	1.0 E-6	1.1 E-6

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.2-39 Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethane	1.0 E+0	9.8 E-1	4.0 E-4
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,3-Butadiene	1.0 E+0	3.4 E+2	4.2 E-2
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Bromodichloromethane	1.0 E+0	9.8 E+0	9.1 E-3
Carbon Tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Ethylbenzene	1.0 E+0	6.8 E-1	6.1 E-4
Freon 113	1.0 E+0	2.3 E-2	NA
Freon 12	1.0 E+0	3.4 E+0	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Methylene Chloride	1.0 E+0	2.3 E-1	2.4 E-4
Tetrachloroethylene	1.0 E+0	2.0 E+1	1.5 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	4.8 E-4
trans-1,2-Dichloroethene	1.0 E+0	1.2 E+1	NA
Trichloroethylene	1.0 E+0	1.2 E+0	4.9 E-4
Vinyl Chloride	1.0 E+0	6.8 E+0	1.9 E-2
1,1,1-Trichloroethane	1.0 E+0	1.4 E-1	NA
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cumene	1.0 E+0	1.7 E+0	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Freon 11	1.0 E+0	3.4 E+0	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Styrene	1.0 E+0	7.6 E-1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.5 E-4	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-4	NA	NA	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.4 E-3	9.4 E-2	9.4 E-2	9.4 E-2	5.4 E-6	1.6 E-5	4.5 E-5	6.1 E-5	6.1 E-5
Unit Risk		1.1 E-6	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	7.8 E-7	7.7 E-10	2.6 E-8	7.8 E-8	4.7 E-6	7.8 E-7	NA	NA	NA	NA	1.9 E-7	3.4 E-6	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA
03D-AH01	0.01												13600	16	0.14	2.03					1.5				
03D-AH01	3		88.4	62		48	56			93	6.44	21	13200	15			2.2					170	140		160
03D-AH02	0.01												16900	25							2.1				
03D-AH02	3		110	67		60	63			110		22	12000	11	0.12	21.9						170	123		180
03D-SB01	1	1.0						1.29					36700	34	0.46						11				
03D-SB01	5												32500	13							4.2				
03D-SB01	10												42300	14	0.32						1.3				
03D-SB02	0.01												20400	21	1.3										
03D-SB02	1												25700	8.9	0.19				2.8		6.1				
03D-SB02	3												26600	14	0.26										
03D-SB02	6												19200	9.1	0.18										
03D-SB02	7																				2.8				
03D-SB02	10																				5.8				
03D-SB02	11												20100	6.3	0.15										
03D-SB03	1												23000	9.8							2.7				
03D-SB03	5												23600	8.1							5.7				
03D-SB03	10							3.12					21500	25	2.9						10.0				
03D-SB04	0.01												21400	5.8											
03D-SB04	1	2.0											21600	6.2					0.083						
03D-SB04	3												18600												
03D-SB04	5												21500	8.8											
03D-SB04	6																				0.80				
03D-SB04	10	1.0											21100	6.3							7.4				
03D-SB05	0.01												12800	8.0											
03D-SB05	1	0.4											15700						0.122		8.3				
03D-SB05	4												20100	10.3											
03D-SB05	5												19500	10					2.32		0.803				
03D-SB05	10												17000						0.084		1.9				
03D-SB06	1												23500	7.6					0.051		8.2				
03D-SB06	5												9310								8.9				
03D-SB06	10												206000	5.0					0.43		1.7				
03D-SB07	0.01												23800		0.18										
03D-SB07	1	2.0																							
03D-SB07	5												19500	6.1											
03D-SB07	7																				1.6				
03D-SB07	10																				6.3				
03D-SB08	0.01												23300	10.1	0.19										
03D-SB08	1												25800	8.6	0.30						5.6				
03D-SB08	3												18100	7.5											
03D-SB08	5												22500	9.3	0.50						7.2				
03D-SB08	10												14400		0.4						1.7				
03D-SB09	5								0.36					12	0.11	0.50								0.074	
03D-SB09	11								0.25					7.9	0.03	0.58									
03D-SB10	5								0.22					4.6	0.012	0.77									
03D-SB10	11								0.28					6.6	0.052	3.1									
03D-SB11	1			0.012					0.42	0.0065				3.1	0.079	0.40			0.037				0.0058		0.0079
03D-SB11	5								0.32					11	0.28	0.65									
03D-SB11	11								0.52					4.3	0.46	2.4									
03D-SB12	5			0.024				0.62	0.22	0.021				6.5	0.063	0.34							0.016		
03D-SB12	11			0.045				0.36	0.30	0.026				4.0	0.098	0.80							0.021		
03D-SB13	6							0.35	0.36					6.2	0.040	0.36									
03D-SB13	11.5							0.25	0.31					2.9	0.010	0.21								0.30	
03D-SB14	3.5							0.32	0.18					2.9	0.037	0.25								0.59	
03D-SB14	7.5							0.35	0.24					3.0	0.023	0.56								0.36	
03D-SB14	11								0.47					3.2	0.007	0.4									
03D-SB15	3							0.44						5.6	0.043									0.66	
03D-SB15	6							0.32						2.8	0.37	1.6									
03D-SB15	11.5							0.35						3.9	0.019	0.18								0.23	
03D-SB16	5							0.78	0.46					8.9	0.065	0.56								1.3	
03D-SB16	11.5							0.41	0.27					3.5	0.028	0.43									
03D-SB17	1			0.13					0.59					5.8	0.28	1.5								2.7	
03D-SB17	5													4.9	0.069	0.45									
03D-SB17	11								0.19					5.8	0.037	0.40									
03D-SB18	11							0.36	0.45					5.4	0.06	0.29							0.015		

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.5 E-4	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-4	NA	NA	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.4 E-3	9.4 E-2	9.4 E-2	9.4 E-2	5.4 E-6	1.6 E-5	4.5 E-5	6.1 E-5	6.1 E-5
Unit Risk		1.1 E-6	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	7.8 E-7	7.7 E-10	2.6 E-8	7.8 E-8	4.7 E-6	7.8 E-7	NA	NA	NA	NA	1.9 E-7	3.4 E-6	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA
03D-SB19	7.5							0.32	0.20					3.9	0.026	1.5								0.18	
03D-SB19	11.5							0.37	0.14					3.3	0.021	0.36									
03D-SB20	5							0.50	0.22					2.8	0.10	0.45				0.011				0.29	
03D-SB20	11								0.29					6.1	0.026	0.83			0.43						
03D-SB22	7.75							0.30	0.22					3.8	0.018	0.19		0.26						1.0	
03D-SB22	11							0.44	0.61					7.0										0.22	
03D-SB23	6							0.39	0.19					3.4	0.015	0.20								0.47	
03D-SB23	11							0.39	0.14					3.5	0.013	0.26								0.39	
03D-SB24	7.5							0.34	0.31					5.1	0.021	2.0								0.55	
03D-SB24	11.5													4.6	0.029	0.79									
03D-SB25	1								0.49					5.2	0.074	1.0									
03D-SB25	5								0.72					5.4	0.029	0.98								0.086	
03D-SB25	11								1.5					8.3	0.056	0.49									
03D-SB26	1		0.0058						0.14	0.0051				4.5	0.016	0.57							0.0069	0.34	
03D-SB26	5								0.23					5.2	0.017	0.42								1.7	
03D-SB26	11								0.72					6.8	0.037	0.6									
03D-SB27	1		0.023	0.0061	0.011				0.25	0.013				7.4	0.056	0.56						0.0079	0.024	1.0	0.021
03D-SB27	5								0.28					6.4	0.0097	0.5									
03D-SB27	11								0.59					4.6	0.072	0.41									
03D-SB30	5							0.33	0.60					4.6	0.11	0.28									
03D-SB30	11							0.39	1.1					6.4	0.072	0.5									
03D-SB31	1.5							0.48	0.35					4.2	0.076	0.49							0.0025	0.57	
03D-SB31	5.5							0.39	0.27					3	0.019	1.6								0.17	
03D-SB31	11.5							0.54	0.61					9.3	0.13	0.33									
03D-SB32	5								0.36					12	0.079	0.6								0.21	
03D-SB32	11								0.24					3.4	0.032	0.88									
03D-SB33	5								0.37					8.4		4.8			47						
03D-SB33	11								0.18					8.0	0.067	0.56			0.098						
03D-SB35	5							0.39	0.47					4.0	0.036	0.25									
03D-SB35	11							0.39	0.13					6.3	0.02	0.46									
03D-SB36	1		0.042						0.42	0.017				4.4	0.041	1.3				0.014			0.02	0.057	0.025
03D-SB36	5								0.63					8.9	0.051	1.4									
03D-SB36	11				0.011				0.58	0.022				3.7	0.021	0.55						0.0021	0.017	1.0	0.0078
03D-SB37	5							0.47	0.66					4.6	0.022	0.47			0.14						
03D-SB37	11							0.53	0.37					6.9	0.052	0.82									
03D-SB38	1							0.49	0.097					7.3	0.017	0.15								2.3	
03D-SB38	5							0.45	0.40					4.8	0.040	7.4								1.1	
03D-SB38	11							0.32						3.3	0.0091	0.43									
03D-SB39	3.5							0.47	0.20					2.9	0.026	19								0.33	
03D-SB39	5							0.29	0.18					3.8		0.18									
03D-SB39	11.5													2.8	0.0041	0.61									
03D-SB40	3.75							0.37	0.38					3.7	0.0093	0.39									
03D-SB40	7.5							0.31	0.30					4.3	0.028	0.52								0.19	
03D-SB40	11.75																								
03D-SB41	3							0.38	0.11					4.7	0.0081	0.32								0.35	
03D-SB41	6							0.32						4.2	0.023	0.26								0.18	
03D-SB41	11.75														0.0099										
03D-SB42	1													7.6	0.065	0.71			0.024				0.0026		
03D-SB42	5								0.4					5.2	0.032	0.46									
03D-SB42	11							0.41	0.22					14	0.078	0.93							0.0041		
03D-SB43	5							0.27	0.52					3.3	0.076	0.42			0.11						
03D-SB43	11							0.25	0.53					2.6	0.038	0.24			0.037						
03D-SB44	5							0.36	0.42					4.1	0.018	2.2									
03D-SB44	11							0.32	0.21					3.7	0.0044										
03D-SB45	5								0.35					5.1	0.020	0.90	0.28					0.017	0.85		0.048
03D-SB46	5								0.41					5.9	0.061	1.1	1.9						2.7		0.24
03D-SB46	11													7.4	0.025	0.81	0.09		11				0.076		
03D-SB47	7.5							0.48	0.28					8.0	0.0099	1.3								0.22	
03D-SB47	11.5							0.41	0.24					4.7	0.012	2.3								0.57	
03D-SB48	5							0.39	0.94					9	0.013	0.92									
03D-SB48	11		0.0045					0.44	0.12					6.3	0.036	6.5									
03D-SB49	5							0.35	0.17					1.9		0.54								0.17	
03D-SB49	11.5							0.38	0.2					5.0		0.32									
03D-SB50	1								1.0					11	0.14	0.72				0.065					

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.5 E-4	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-4	NA	NA	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.4 E-3	9.4 E-2	9.4 E-2	9.4 E-2	5.4 E-6	1.6 E-5	4.5 E-5	6.1 E-5	6.1 E-5
Unit Risk		1.1 E-6	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	7.8 E-7	7.7 E-10	2.6 E-8	7.8 E-8	4.7 E-6	7.8 E-7	NA	NA	NA	NA	1.9 E-7	3.4 E-6	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA
03D-SB50	5								0.43					8.1	0.016	0.74									
03D-SB50	11								0.23					5.2	0.0099	0.81									
03D-SB51	5								0.71					12	0.18	1.5									
03D-SB51	11								0.63					3.6	0.012	0.46									
03D-SB52	1							0.28						23	0.11	1.3			0.048						
03D-SB52	5								0.19					4.1	0.011	0.79								0.079	
03D-SB52	11													8.0		0.41									
03D-SB53	5								0.50					4.1	0.012	0.59								1.1	
03D-SB53	11								0.37					10	0.0092	0.67									
03D-SB54	1													9.1	0.043	0.58				0.022					
03D-SB54	5								1.0					10	0.026	0.54									
03D-SB54	11								0.31					8.2	0.0095	0.32									
03D-SB55	1								0.61					9.4	0.045	0.48							0.0043		
03D-SB55	5								0.84					11	0.083	0.47								0.13	
03D-SB55	11								0.77					11	0.012	0.54									
03D-SB56	5							0.38	0.26					4.0		0.47									
03D-SB56	11		0.0081					0.37	0.59	0.0067				5.7		1.5							0.010		
03D-SB57	5							0.29	0.28					3.4	0.019	0.67									
03D-SB57	11							0.32	0.28	0.005				5.5		0.57			0.027			0.0025	0.0032		
03D-SB61	5							0.67	0.33					9.2	0.13	0.58									
03D-SB61	11							0.26	0.43					4.0	0.0057	0.45									
03D-SB62	5													11	0.06	0.65									
03D-SB62	11													5.7	0.021	0.70									
03D-SB63	1																		0.024						
03D-SB63	5																								
03D-SB63	10																		0.046						
03D-SB64	1																		0.05						
03D-SB64	5																		0.047						
03D-SB64	10																		0.019						
03D-SB65	1																								
03D-SB65	5																								
03D-SB65	12																		0.055						
03D-SB66	1																								
03D-SB66	5																								
03D-SB66	10																		0.051						
03D-SB67	1																		0.51						
03D-SB67	5																								
03D-SB67	10																		0.14						
03D-SB68	1																		1.7						
03D-SB68	5																		0.086						
03D-SB68	10																		0.32						
03D-SB69	1																		0.37						
03D-SB69	5																		0.021						
03D-SB69	10																								
03D-SNS02	0.01												19500		0.117										
03D-SNS02	3												21500	5.6											
03D-SNS03	0.01												16600												
03D-SNS03	3												17300												
03D-SNS04	0.01												19500	8.2											
03D-SNS04	3												16300												
03D-SNS05	0.01												19100	5.4											
03D-SNS05	3												18700	8.6											
03D-SNS06	0.01												22400	6.6											
03D-SNS34	0.25		0.042	0.038	0.088			3.5	4.0	0.083				110	0.11	2.0	0.0026		0.42	1.5		0.11	0.21		0.18
03D-SNS35	0.25							1.4	0.99					10	0.025	2.0	0.011								
11D-SB01	1								0.51					12	0.018	0.60									
11D-SB01	5								0.65					5.1		0.30									
11D-SB01	11								0.14					5.1	0.0067	1.2									
11D-SB02	1								0.83					11	0.09	0.79								2.1	
11D-SB02	5								0.078					7.2	0.035	0.52									
11D-SB02	11								0.14					6.1	0.018	7.5									
11D-SB03	1								0.35					4.5	0.06	0.65								0.2	
11D-SB03	5								0.30																
11D-SB03	11								0.29																

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.5 E-4	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-4	NA	NA	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.4 E-3	9.4 E-2	9.4 E-2	9.4 E-2	5.4 E-6	1.6 E-5	4.5 E-5	6.1 E-5	6.1 E-5
Unit Risk		1.1 E-6	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	7.8 E-7	7.7 E-10	2.6 E-8	7.8 E-8	4.7 E-6	7.8 E-7	NA	NA	NA	NA	1.9 E-7	3.4 E-6	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA
11D-SB04	1		0.014		0.018			0.43	0.34	0.021				5.6	0.38	1.3			0.014			0.0066	0.023		0.034
11D-SB04	5							0.56	0.43	0.0063				10	0.89	0.66							0.0038		
11D-SB04	11							0.40	0.38					4.4	0.22	0.67									
11D-SB05	1		0.0086	0.0062				0.28	0.069	0.028				4.2	0.0094	0.88						0.021	0.048	7.3	0.044
11D-SB05	5							0.51	0.38					4.5	0.033	0.51								0.29	
11D-SB05	11							0.38	0.34					6.0	0.015	0.24									
11D-SB06	1																			1.6				0.44	
11D-SB06	5																							3.5	
11D-SB06	11																								
11D-SB07	1																							1.6	
11D-SB07	5																							0.36	
11D-SB08	1								0.81					8.5	0.022	0.66									
11D-SB08	5								0.57					8.1	0.0092	0.72									
11D-SB09	1								0.19					4.1	0.023	0.40									
11D-SB09	5							0.59	0.59					8.4	0.0074	0.31									
11D-SB09	11								0.26					10		0.56									
11D-SNS01	0.01												15100	10.3											
11D-SNS02	0.01							5.89					30100	379	0.35										
11D-SNS12	0.5							0.91	0.24					36	0.12	1.5		0.027	0.16	0.33		0.0043			
11D-SNS12	2.5		0.0046		0.014			1.0	0.86	0.0077				45	0.16	2.7			0.16	0.34		0.011	0.0084		0.014
11D-SNS13	0.5		0.0046		0.020			0.15	0.45	0.013				16	0.024				0.12	0.31		0.0096	0.0042		0.0092
11D-SNS13	2.5							0.045	0.17					7.2	0.013									3.4	
11D-SNS14	0.5		0.0070	0.0070	0.018			1.4	0.22	0.012				17	0.028	8.7			0.15			0.018	0.020		0.028
11D-SNS14	2.5													8.3	0.0056										
11D-SNS15	0.5		0.0088	0.010	0.03			2.7	0.98	0.015				150	0.21	6.1			10			0.021	0.0071		0.019
11D-SNS15	2.5							0.97	0.19					11	0.086	1.4			0.029						
11D-SNS16	0.5							2.0	0.34					17	0.21	2.5				1.1					
11D-SNS16	2.5							2.4	0.45					28	0.21	2.7				0.041					
11D-SNS17	0.5		0.026	0.041	0.064			1.1	0.47	0.033		0.017		5.8	0.077	2.7	0.0018	0.011		0.15		0.029	0.026	0.34	0.056
11D-SNS17	2.5							0.65	0.31					8.7	0.044					0.015					
11D-SNS18	0.5				0.013			0.22	0.15					9.0	0.0051	0.41				0.042					
11D-SNS18	2.5							0.077	0.17					4.4		0.42				0.045					
11D-SNS19	0.5		0.0062	0.0084	0.03			1.8	0.32	0.014				46	0.032	1.5						0.015	0.0053	0.29	0.012
11D-SNS19	2.5							0.12	0.12					11	0.0042	0.38				0.12					
11D-SNS20	0.5							0.33	0.41					47	0.024	0.38									
11D-SNS20	2.5																								
11D-SNS21	0.5							0.28	0.25					8.1	0.031										
11D-SNS21	2.5							0.32						8.8	0.042										
11D-SNS22	0.5		0.0085	0.0090	0.019			3.7	0.35	0.012				23	0.053	2.8				1.3		0.014	0.0085		0.013
11D-SNS22	2.5		0.015	0.015	0.030			0.77	0.26	0.018				7.2	0.052	1.7						0.026	0.013	0.24	0.020
11D-SNS23	3.5							0.10	0.11					5.8	0.036	0.93									
11D-SNS23	4.5							0.092	0.11					4.7	0.011									0.7	
11D-SNS24	0.5																								
11D-SNS24	2.5																								
11D-SNS25	0.5													5.3											
11D-SNS25	2.5													5.5											
11D-SNS26	0.5													9.2											
11D-SNS26	2.5													5.8											
11D-SNS27	0.5													9.6											
11D-SNS27	2.5													8.5											
11D-SNS28	0.5													9.1											
11D-SNS28	2.5													13											
50D-SB01	1																								
50D-SB02	1																				4.9				
50D-SB03	1																				8.1				
50D-SB03	5																				3.7				
50D-SB03	10																				13				
50D-SB04	5													4.0	0.063	0.45									
50D-SB04	11									0.0052				4.4	0.035	0.38	0.0034					0.0026	0.024	0.059	0.059
51D-SB01	2																				2.3				
51D-SB01	10																				1.2				
51D-SB02	1	2.0																			2.1				
51D-SB02	5																				1.7				
51D-SB02	10																				51				

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.5 E-4	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-4	NA	NA	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.4 E-3	9.4 E-2	9.4 E-2	9.4 E-2	5.4 E-6	1.6 E-5	4.5 E-5	6.1 E-5	6.1 E-5
Unit Risk		1.1 E-6	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	7.8 E-7	7.7 E-10	2.6 E-8	7.8 E-8	4.7 E-6	7.8 E-7	NA	NA	NA	NA	1.9 E-7	3.4 E-6	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA
51D-SB03	1																				3.1				
51D-SB03	10																				17				
51D-SB04	1	3.0																			2.7				
51D-SB04	1.5																				2.7				
51D-SB04	5																				39				
51D-SB04	11																				8.3				
51D-SB05	5								0.16					5.5	0.026	0.69									
51D-SB05	9								0.21					4.8	0.024	2.0									
51D-SB06	5								0.13					6.0	0.15	0.69								0.23	
51D-SB06	9							2.2						7.1	0.046	0.48								0.37	
51D-SB07	5								0.17					3.5	0.0094	0.69									
51D-SB07	9								0.15					3.2	0.024	9.5									
51D-SB08	5								0.43					9.7	0.013	0.73								0.069	
51D-SB08	9								0.38					4.2	0.018	0.57									
51D-SB09	5								0.26					2.7	0.044	0.68								2.5	
51D-SB09	9								0.25					9.5	0.096	2.1								0.12	
51D-SB10	5		0.0055		0.016				0.48	0.0077				6.0	0.042	1.3						0.0095	0.052		0.0095
51D-SB10	9								0.54					6.5	0.055	0.51									
A20-B34-SB01	1							0.53	0.89					8.4	0.06	0.51									
A20-B34-SB01	5							0.34	0.85					7.5	0.017	0.42									
A20-B34-SB01	11								0.27					6.6	0.0059	0.44									
A20-B34-SB02	1		0.0046						0.35					8.0	0.027	0.45						0.0061	0.0046		
A20-B34-SB02	5								0.46					8.6	0.032	0.58									
A20-B34-SB02	11								0.26					9.3	0.0088	0.53									
A20-RB37-SB0	1			0.016				1.6	0.57			0.0073		210	0.14	100			3.1					0.38	
A20-RB37-SB0	5								0.60					9.7	0.017	0.41									
A20-RB37-SB0	11								0.40					6.2		0.45									
A20-RB37-SB0	1							0.59	0.55					15	0.033	9.6			2.0			0.0027		0.97	
A20-RB37-SB0	5							0.36	0.42					7.7	0.017	1.2								0.23	
A20-RB37-SB0	11							0.26	0.81					5.3	0.011	0.49									
A20-RB37-SB0	1								0.26	0.013				10	0.053	0.65			0.21				0.010		0.0093
A20-RB37-SB0	5								0.16					9.4	0.012	0.62									
A20-RB37-SB0	11													5.5		0.59									
A20-RB37-SB0	1							0.33	0.50	0.0083				6.3	0.032	0.58							0.0064		
A20-RB37-SB0	5							0.29	0.34					8.1	0.017	0.70									
A20-RB37-SB0	11							0.34	0.65					9.3	0.031	0.19									
A20-RC29-SB0	1							0.31	0.13					4.4	0.011				0.059						
A20-RC29-SB0	5							0.52	0.26					10	0.029										
A20-RC29-SB0	11							0.40	0.16					3.9	0.0069	1.8									
A20-RX73-SB0	1		0.0042						0.20					4.3	0.051	1.4							0.0053	0.088	
A20-RX73-SB0	5								0.40					2.9	0.026	0.53				0.016				0.057	
A20-RX73-SB0	11								0.36					4.3	0.012	0.73									
A20-RX73-SB0	1								0.64					6.5	0.078	0.36									
A20-RX73-SB0	5								0.68					3.5	0.30	1.3									
A20-RX73-SB0	11								0.25					4.1	0.15	5.8									
A20-RX73-SB0	1		0.010	0.0074	0.011			0.19	0.41	0.011				4.4	0.018	1.6						0.0042	0.020		0.011
A20-RX73-SB0	5								0.77					7.0	0.33	0.84									
A20-RX73-SB0	11								0.19					5.5	0.078	0.85									
A20-ST01-SB0	1								0.71					10	0.061	0.63									
A20-ST01-SB0	5								0.58					7.3	0.087	0.57									
A20-ST01-SB0	11								0.32					6.6	0.059	0.43			0.03						
A20-ST01-SB0	1		0.0049		0.021					0.022				7.2	0.061	0.56	0.0022					0.0037	0.022		0.011
A20-ST01-SB0	5								0.069					17	0.44	0.35									
A20-ST01-SB0	11							0.52						3.7	0.042	0.38									
A20-ST01-SB0	1								0.21	0.0050				11	0.15	0.62			0.13			0.0043	0.0032		
A20-ST01-SB0	5								0.11					3.6	0.096	0.60								0.17	
A20-ST01-SB0	11							0.37						2.1	0.011	0.19									
A20-ST02-SB0	1								0.29					4.7	0.091	0.76									
A20-ST02-SB0	5								0.14	0.0052				4.1	0.025	0.75							0.0082		
A20-ST02-SB0	11								0.25					3.8	0.0037	0.85									
A20-ST05-SB0	1							0.37	0.22	0.011				5.7	0.025	0.46						0.0021	0.013		0.0067
A20-ST05-SB0	5							0.37	0.47					7.3	0.012	0.52									
A20-ST05-SB0	11								0.73					10	0.010	0.5									
A20-ST05-SB0	1							0.43	0.65	0.0081				7.3	0.019	0.32						0.0032	0.0041		

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																							
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**
Unit Hazard		2.5 E-4	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-4	NA	NA	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.4 E-3	9.4 E-2	9.4 E-2	9.4 E-2	5.4 E-6	1.6 E-5	4.5 E-5	6.1 E-5	6.1 E-5
Unit Risk		1.1 E-6	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	7.8 E-7	7.7 E-10	2.6 E-8	7.8 E-8	4.7 E-6	7.8 E-7	NA	NA	NA	NA	1.9 E-7	3.4 E-6	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA
A20-ST05-SB0	5							0.29	0.48					6.7	0.039	0.41									
A20-ST05-SB0	11								0.62																
A20-ST06-SB0	1								0.45	0.0049				10	0.10	0.46									
A20-ST06-SB0	5								0.30	0.0070				7.7	0.036	0.36									
A20-ST06-SB0	11													3.3		0.22									
A20-ST14-SB0	1								0.28					2.9	0.02	2.2								0.13	
A20-ST14-SB0	5								0.46					3.8	0.06	0.63									
A20-ST14-SB0	11								0.076					3.9	0.21	0.53									
A20-ST20-SB0	1								0.68					3.3	0.16	0.47									
A20-ST20-SB0	5								0.69					16	0.95	0.53									
A20-ST20-SB0	11								0.14					9.6	1.4	0.68									
A20-ST22-SB0	1							0.43	0.14					4.9	0.071	0.44						0.0018	0.0025	0.57	
A20-ST22-SB0	5							0.53	0.091					9.1	0.051	1.9								1.8	
A20-ST22-SB0	11							0.19						2.2	0.0084	0.69									

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
03D-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	4.7 E-4	4.0 E-4	NA	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	2.0 E-2
03D-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	2.8 E-3	6.4 E-3	NA	9.7 E-3	4.9 E-2
03D-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	2.4 E-2
03D-AH02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	3.8 E-4	4.3 E-3	NA	NA	NA	NA	NA	2.8 E-3	5.6 E-3	NA	1.1 E-2	4.1 E-2
03D-SB01	1	2.5 E-4	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	5.1 E-2	NA	1.5 E-3	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	NA	NA	5.5 E-2
03D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	4.5 E-2
03D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-2	NA	1.1 E-3	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	NA	NA	6.0 E-2
03D-SB02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
03D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	6.3 E-4	NA	NA	NA	2.6 E-1	NA	3.3 E-5	NA	NA	NA	NA	3.0 E-1
03D-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2
03D-SB02	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
03D-SB02	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	1.5 E-5
03D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	3.1 E-5
03D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
03D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	3.2 E-2
03D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	3.3 E-2
03D-SB03	10	NA	NA	NA	NA	NA	NA	3.9 E-3	NA	NA	NA	NA	3.0 E-2	NA	9.6 E-3	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	NA	4.4 E-2
03D-SB04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
03D-SB04	1	5.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	7.8 E-3	NA	NA	NA	NA	NA	NA	3.9 E-2
03D-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2
03D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
03D-SB04	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-6	NA	NA	NA	NA	4.3 E-6
03D-SB04	10	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	NA	NA	3.0 E-2
03D-SB05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
03D-SB05	1	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	1.1 E-2	NA	4.5 E-5	NA	NA	NA	NA	3.4 E-2
03D-SB05	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
03D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	2.2 E-1	NA	4.3 E-6	NA	NA	NA	NA	2.5 E-1
03D-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	7.9 E-3	NA	1.0 E-5	NA	NA	NA	NA	3.2 E-2
03D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	4.8 E-3	NA	4.4 E-5	NA	NA	NA	NA	3.8 E-2
03D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	1.3 E-2
03D-SB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-1	NA	NA	NA	NA	NA	4.0 E-2	NA	9.2 E-6	NA	NA	NA	NA	3.3 E-1
03D-SB07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2
03D-SB07	1	5.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-4
03D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
03D-SB07	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-6	NA	NA	NA	NA	8.7 E-6
03D-SB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	3.4 E-5
03D-SB08	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
03D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	9.8 E-4	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	3.7 E-2
03D-SB08	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
03D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	1.6 E-3	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	3.3 E-2
03D-SB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	1.3 E-3	NA	NA	NA	NA	NA	9.2 E-6	NA	NA	NA	NA	2.1 E-2
03D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	3.6 E-4	9.8 E-5	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	NA	6.0 E-4
03D-SB09	11	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA	NA	NA	9.8 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
03D-SB10	5	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	NA	NA	NA	NA	NA	3.9 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4
03D-SB10	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	1.7 E-4	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4
03D-SB11	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	2.6 E-4	7.8 E-5	NA	NA	3.5 E-3	NA	NA	NA	2.6 E-7	NA	4.8 E-7	4.0 E-3
03D-SB11	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	9.1 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SB11	11	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	1.5 E-3	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
03D-SB12	5	NA	NA	NA	NA	NA	NA	7.7 E-4	8.6 E-5	NA	NA	NA	NA	NA	2.1 E-4	6.7 E-5	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	NA	1.1 E-3
03D-SB12	11	NA	NA	NA	NA	NA	NA	4.5 E-4	1.2 E-4	NA	NA	NA	NA	NA	3.2 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	9.5 E-7	NA	NA	1.0 E-3
03D-SB13	6	NA	NA	NA	NA	NA	NA	4.3 E-4	1.4 E-4	NA	NA	NA	NA	NA	1.3 E-4	7.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4
03D-SB13	11.5	NA	NA	NA	NA	NA	NA	3.1 E-4	1.2 E-4	NA	NA	NA	NA	NA	3.3 E-5	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	5.2 E-4
03D-SB14	3.5	NA	NA	NA	NA	NA	NA	4.0 E-4	7.0 E-5	NA	NA	NA	NA	NA	1.2 E-4	4.9 E-5	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	6.7 E-4
03D-SB14	7.5	NA	NA	NA	NA	NA	NA	4.3 E-4	9.4 E-5	NA	NA	NA	NA	NA	7.5 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	7.3 E-4
03D-SB14	11	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	2.3 E-5	7.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4
03D-SB15	3	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	7.2 E-4
03D-SB15	6	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	1.2 E-3	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
03D-SB15	11.5	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	NA	6.2 E-5	3.5 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	5.4 E-4
03D-SB16	5	NA	NA	NA	NA	NA	NA	9.6 E-4	1.8 E-4	NA	NA	NA	NA	NA	2.1 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	7.9 E-5	NA	1.5 E-3
03D-SB16	11.5	NA	NA	NA	NA	NA	NA	5.1 E-4	1.1 E-4	NA	NA	NA	NA	NA	9.1 E-5	8.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-4
03D-SB17	1	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	9.1 E-4	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	1.6 E-3
03D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
03D-SB17	11	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	1.2 E-4	7.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4
03D-SB18	11	NA	NA	NA	NA	NA	NA	4.5 E-4	1.8 E-4	NA	NA	NA	NA	NA	2.0 E-4	5.7 E-5	NA	NA	NA	NA	NA	NA	6.8 E-7	NA	NA	8.7 E-4

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
03D-SB19	7.5	NA	NA	NA	NA	NA	NA	4.0 E-4	7.8 E-5	NA	NA	NA	NA	NA	8.5 E-5	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	8.6 E-4
03D-SB19	11.5	NA	NA	NA	NA	NA	NA	4.6 E-4	5.5 E-5	NA	NA	NA	NA	NA	6.9 E-5	7.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-4
03D-SB20	5	NA	NA	NA	NA	NA	NA	6.2 E-4	8.6 E-5	NA	NA	NA	NA	NA	3.3 E-4	8.8 E-5	NA	NA	NA	1.0 E-3	NA	NA	NA	1.8 E-5	NA	2.2 E-3
03D-SB20	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	8.5 E-5	1.6 E-4	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	4.1 E-2
03D-SB22	7.75	NA	NA	NA	NA	NA	NA	3.7 E-4	8.6 E-5	NA	NA	NA	NA	NA	5.9 E-5	3.7 E-5	NA	2.4 E-2	NA	NA	NA	NA	NA	6.1 E-5	NA	2.5 E-2
03D-SB22	11	NA	NA	NA	NA	NA	NA	5.4 E-4	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	8.0 E-4
03D-SB23	6	NA	NA	NA	NA	NA	NA	4.8 E-4	7.4 E-5	NA	NA	NA	NA	NA	4.9 E-5	3.9 E-5	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	6.7 E-4
03D-SB23	11	NA	NA	NA	NA	NA	NA	4.8 E-4	5.5 E-5	NA	NA	NA	NA	NA	4.2 E-5	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	6.5 E-4
03D-SB24	7.5	NA	NA	NA	NA	NA	NA	4.2 E-4	1.2 E-4	NA	NA	NA	NA	NA	6.9 E-5	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	1.0 E-3
03D-SB24	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4
03D-SB25	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	2.4 E-4	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-4
03D-SB25	5	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	9.5 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	5.7 E-4
03D-SB25	11	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	1.8 E-4	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-4
03D-SB26	1	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	NA	NA	5.2 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	3.1 E-7	2.1 E-5	NA	2.4 E-4
03D-SB26	5	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	NA	NA	NA	NA	NA	5.5 E-5	8.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	3.3 E-4
03D-SB26	11	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	1.2 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4
03D-SB27	1	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA	NA	NA	1.8 E-4	1.1 E-4	NA	NA	NA	NA	NA	1.3 E-7	1.1 E-6	6.1 E-5	1.3 E-6	4.5 E-4
03D-SB27	5	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	3.2 E-5	9.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4
03D-SB27	11	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	2.3 E-4	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4
03D-SB30	5	NA	NA	NA	NA	NA	NA	4.1 E-4	2.3 E-4	NA	NA	NA	NA	NA	3.6 E-4	5.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SB30	11	NA	NA	NA	NA	NA	NA	4.8 E-4	4.3 E-4	NA	NA	NA	NA	NA	2.3 E-4	9.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SB31	1.5	NA	NA	NA	NA	NA	NA	5.9 E-4	1.4 E-4	NA	NA	NA	NA	NA	2.5 E-4	9.6 E-5	NA	NA	NA	NA	NA	NA	1.1 E-7	3.5 E-5	NA	1.1 E-3
03D-SB31	5.5	NA	NA	NA	NA	NA	NA	4.8 E-4	1.1 E-4	NA	NA	NA	NA	NA	6.2 E-5	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	9.7 E-4
03D-SB31	11.5	NA	NA	NA	NA	NA	NA	6.7 E-4	2.4 E-4	NA	NA	NA	NA	NA	4.2 E-4	6.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
03D-SB32	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	2.6 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	5.3 E-4
03D-SB32	11	NA	NA	NA	NA	NA	NA	NA	9.4 E-5	NA	NA	NA	NA	NA	1.0 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4
03D-SB33	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	4.4 E+0	NA	NA	NA	NA	NA	NA	4.4 E+0
03D-SB33	11	NA	NA	NA	NA	NA	NA	NA	7.0 E-5	NA	NA	NA	NA	NA	2.2 E-4	1.1 E-4	NA	NA	9.2 E-3	NA	NA	NA	NA	NA	NA	9.6 E-3
03D-SB35	5	NA	NA	NA	NA	NA	NA	4.8 E-4	1.8 E-4	NA	NA	NA	NA	NA	1.2 E-4	4.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-4
03D-SB35	11	NA	NA	NA	NA	NA	NA	4.8 E-4	5.1 E-5	NA	NA	NA	NA	NA	6.5 E-5	9.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4
03D-SB36	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	1.3 E-4	2.5 E-4	NA	NA	NA	1.3 E-3	NA	NA	9.1 E-7	3.5 E-6	1.5 E-6	1.9 E-3
03D-SB36	5	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	1.7 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4
03D-SB36	11	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	6.9 E-5	1.1 E-4	NA	NA	NA	NA	NA	3.4 E-8	7.7 E-7	6.1 E-5	4.7 E-7	4.7 E-4
03D-SB37	5	NA	NA	NA	NA	NA	NA	5.8 E-4	2.6 E-4	NA	NA	NA	NA	NA	7.2 E-5	9.2 E-5	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SB37	11	NA	NA	NA	NA	NA	NA	6.6 E-4	1.4 E-4	NA	NA	NA	NA	NA	1.7 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SB38	1	NA	NA	NA	NA	NA	NA	6.1 E-4	3.8 E-5	NA	NA	NA	NA	NA	5.5 E-5	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	8.7 E-4
03D-SB38	5	NA	NA	NA	NA	NA	NA	5.6 E-4	1.6 E-4	NA	NA	NA	NA	NA	1.3 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	2.4 E-3
03D-SB38	11	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	3.0 E-5	8.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4
03D-SB39	3.5	NA	NA	NA	NA	NA	NA	5.8 E-4	7.8 E-5	NA	NA	NA	NA	NA	8.5 E-5	3.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	4.5 E-3
03D-SB39	5	NA	NA	NA	NA	NA	NA	3.6 E-4	7.0 E-5	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4
03D-SB39	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4
03D-SB40	3.75	NA	NA	NA	NA	NA	NA	4.6 E-4	1.5 E-4	NA	NA	NA	NA	NA	3.0 E-5	7.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4
03D-SB40	7.5	NA	NA	NA	NA	NA	NA	3.8 E-4	1.2 E-4	NA	NA	NA	NA	NA	9.1 E-5	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	7.1 E-4
03D-SB40	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB41	3	NA	NA	NA	NA	NA	NA	4.7 E-4	4.3 E-5	NA	NA	NA	NA	NA	2.6 E-5	6.3 E-5	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	6.2 E-4
03D-SB41	6	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	7.5 E-5	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	5.3 E-4
03D-SB41	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5
03D-SB42	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	1.4 E-4	NA	NA	2.3 E-3	NA	NA	NA	1.2 E-7	NA	NA	2.6 E-3
03D-SB42	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	1.0 E-4	9.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4
03D-SB42	11	NA	NA	NA	NA	NA	NA	5.1 E-4	8.6 E-5	NA	NA	NA	NA	NA	2.5 E-4	1.8 E-4	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	1.0 E-3
03D-SB43	5	NA	NA	NA	NA	NA	NA	3.3 E-4	2.0 E-4	NA	NA	NA	NA	NA	2.5 E-4	8.2 E-5	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2
03D-SB43	11	NA	NA	NA	NA	NA	NA	3.1 E-4	2.1 E-4	NA	NA	NA	NA	NA	1.2 E-4	4.7 E-5	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	4.2 E-3
03D-SB44	5	NA	NA	NA	NA	NA	NA	4.5 E-4	1.6 E-4	NA	NA	NA	NA	NA	5.9 E-5	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SB44	11	NA	NA	NA	NA	NA	NA	4.0 E-4	8.2 E-5	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4
03D-SB45	5	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	6.5 E-5	1.8 E-4	1.5 E-3	NA	NA	NA	NA	2.8 E-7	3.9 E-5	NA	2.9 E-6	1.9 E-3
03D-SB46	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	2.0 E-4	2.2 E-4	1.0 E-2	NA	NA	NA	NA	NA	1.2 E-4	NA	1.5 E-5	1.1 E-2
03D-SB46	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	1.6 E-4	4.8 E-4	NA	1.0 E+0	NA	NA	NA	3.5 E-6	NA	NA	1.0 E+0
03D-SB47	7.5	NA	NA	NA	NA	NA	NA	5.9 E-4	1.1 E-4	NA	NA	NA	NA	NA	3.2 E-5	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	1.0 E-3
03D-SB47	11.5	NA	NA	NA	NA	NA	NA	5.1 E-4	9.4 E-5	NA	NA	NA	NA	NA	3.9 E-5	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	1.1 E-3
03D-SB48	5	NA	NA	NA	NA	NA	NA	4.8 E-4	3.7 E-4	NA	NA	NA	NA	NA	4.2 E-5	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
03D-SB48	11	NA	NA	NA	NA	NA	NA	5.4 E-4	4.7 E-5	NA	NA	NA	NA	NA	1.2 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
03D-SB49	5	NA	NA	NA	NA	NA	NA	4.3 E-4	6.7 E-5	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	6.2 E-4
03D-SB49	11.5	NA	NA	NA	NA	NA	NA	4.7 E-4	7.8 E-5	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4
03D-SB50	1	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	4.6 E-4	1.4 E-4	NA	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	7.1 E-3

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
03D-SB50	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	5.2 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4
03D-SB50	11	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	NA	NA	NA	NA	NA	3.2 E-5	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4
03D-SB51	5	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	5.9 E-4	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SB51	11	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	3.9 E-5	9.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
03D-SB52	1	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	3.6 E-4	2.5 E-4	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	5.5 E-3
03D-SB52	5	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	3.6 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	2.7 E-4
03D-SB52	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-5
03D-SB53	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	3.9 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	4.2 E-4
03D-SB53	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	3.0 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
03D-SB54	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	1.1 E-4	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	2.3 E-3
03D-SB54	5	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	8.5 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4
03D-SB54	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	3.1 E-5	6.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4
03D-SB55	1	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	1.5 E-4	9.4 E-5	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	4.8 E-4
03D-SB55	5	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	2.7 E-4	9.2 E-5	NA	NA	NA	NA	NA	NA	NA	7.9 E-6	NA	7.0 E-4
03D-SB55	11	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	3.9 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4
03D-SB56	5	NA	NA	NA	NA	NA	NA	4.7 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4
03D-SB56	11	NA	NA	NA	NA	NA	NA	4.6 E-4	2.3 E-4	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	9.8 E-4
03D-SB57	5	NA	NA	NA	NA	NA	NA	3.6 E-4	1.1 E-4	NA	NA	NA	NA	NA	6.2 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4
03D-SB57	11	NA	NA	NA	NA	NA	NA	4.0 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.5 E-3	NA	NA	4.1 E-8	1.5 E-7	NA	NA	3.2 E-3
03D-SB61	5	NA	NA	NA	NA	NA	NA	8.3 E-4	1.3 E-4	NA	NA	NA	NA	NA	4.2 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
03D-SB61	11	NA	NA	NA	NA	NA	NA	3.2 E-4	1.7 E-4	NA	NA	NA	NA	NA	1.9 E-5	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4
03D-SB62	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4
03D-SB62	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4
03D-SB63	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	2.3 E-3
03D-SB63	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB63	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	4.3 E-3
03D-SB64	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	4.7 E-3
03D-SB64	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3
03D-SB64	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	1.8 E-3
03D-SB65	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	5.2 E-3
03D-SB66	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	4.8 E-3
03D-SB67	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	NA	NA	NA	4.8 E-2
03D-SB67	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB67	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	1.3 E-2
03D-SB68	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	NA	NA	NA	NA	NA	NA	1.6 E-1
03D-SB68	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	8.1 E-3
03D-SB68	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	3.0 E-2
03D-SB69	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	3.5 E-2
03D-SB69	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	2.0 E-3
03D-SB69	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
03D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
03D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2
03D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
03D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
03D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2
03D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
03D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2
03D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2
03D-SNS34	0.25	NA	NA	NA	NA	NA	NA	4.3 E-3	1.6 E-3	NA	NA	NA	NA	NA	3.6 E-4	3.9 E-4	1.4 E-5	NA	4.0 E-2	1.4 E-1	NA	1.8 E-6	9.5 E-6	NA	1.1 E-5	1.9 E-1
03D-SNS35	0.25	NA	NA	NA	NA	NA	NA	1.7 E-3	3.9 E-4	NA	NA	NA	NA	NA	8.2 E-5	3.9 E-4	5.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3
11D-SB01	1	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	5.9 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
11D-SB01	5	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	5.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
11D-SB01	11	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	NA	NA	2.2 E-5	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
11D-SB02	1	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	2.9 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	9.0 E-4
11D-SB02	5	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	NA	1.1 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4
11D-SB02	11	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	NA	NA	5.9 E-5	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
11D-SB03	1	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	2.0 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	4.7 E-4
11D-SB03	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4
11D-SB03	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
11D-SB04	1	NA	NA	NA	NA	NA	NA	5.3 E-4	1.3 E-4	NA	NA	NA	NA	NA	1.2 E-3	2.5 E-4	NA	NA	1.3 E-3	NA	NA	1.1 E-7	1.0 E-6	NA	2.1 E-6	3.5 E-3
11D-SB04	5	NA	NA	NA	NA	NA	NA	6.9 E-4	1.7 E-4	NA	NA	NA	NA	NA	2.9 E-3	1.3 E-4	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	3.9 E-3
11D-SB04	11	NA	NA	NA	NA	NA	NA	4.9 E-4	1.5 E-4	NA	NA	NA	NA	NA	7.2 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
11D-SB05	1	NA	NA	NA	NA	NA	NA	3.5 E-4	2.7 E-5	NA	NA	NA	NA	NA	3.1 E-5	1.7 E-4	NA	NA	NA	NA	NA	3.4 E-7	2.2 E-6	4.4 E-4	2.7 E-6	1.0 E-3
11D-SB05	5	NA	NA	NA	NA	NA	NA	6.3 E-4	1.5 E-4	NA	NA	NA	NA	NA	1.1 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	1.0 E-3
11D-SB05	11	NA	NA	NA	NA	NA	NA	4.7 E-4	1.3 E-4	NA	NA	NA	NA	NA	4.9 E-5	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4
11D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	2.7 E-5	NA	1.5 E-1
11D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	2.1 E-4
11D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-5	NA	9.7 E-5
11D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	2.2 E-5
11D-SB08	1	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	7.2 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4
11D-SB08	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	3.0 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4
11D-SB09	1	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	7.5 E-5	7.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4
11D-SB09	5	NA	NA	NA	NA	NA	NA	7.3 E-4	2.3 E-4	NA	NA	NA	NA	NA	2.4 E-5	6.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
11D-SB09	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4
11D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2
11D-SNS02	0.01	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	4.2 E-2	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-2
11D-SNS12	0.5	NA	NA	NA	NA	NA	NA	1.1 E-3	9.4 E-5	NA	NA	NA	NA	NA	3.9 E-4	2.9 E-4	NA	2.5 E-3	1.5 E-2	3.1 E-2	NA	7.0 E-8	NA	NA	NA	5.1 E-2
11D-SNS12	2.5	NA	NA	NA	NA	NA	NA	1.2 E-3	3.4 E-4	NA	NA	NA	NA	NA	5.2 E-4	5.3 E-4	NA	NA	1.5 E-2	3.2 E-2	NA	1.8 E-7	3.8 E-7	NA	8.5 E-7	5.0 E-2
11D-SNS13	0.5	NA	NA	NA	NA	NA	NA	1.9 E-4	1.8 E-4	NA	NA	NA	NA	NA	7.8 E-5	NA	NA	NA	1.1 E-2	2.9 E-2	NA	1.6 E-7	1.9 E-7	NA	5.6 E-7	4.1 E-2
11D-SNS13	2.5	NA	NA	NA	NA	NA	NA	5.6 E-5	6.7 E-5	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	3.7 E-4
11D-SNS14	0.5	NA	NA	NA	NA	NA	NA	1.7 E-3	8.6 E-5	NA	NA	NA	NA	NA	9.1 E-5	1.7 E-3	NA	NA	1.4 E-2	NA	NA	2.9 E-7	9.1 E-7	NA	1.7 E-6	1.8 E-2
11D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5
11D-SNS15	0.5	NA	NA	NA	NA	NA	NA	3.3 E-3	3.8 E-4	NA	NA	NA	NA	NA	6.9 E-4	1.2 E-3	NA	NA	9.4 E-1	NA	NA	3.4 E-7	3.2 E-7	NA	1.2 E-6	9.5 E-1
11D-SNS15	2.5	NA	NA	NA	NA	NA	NA	1.2 E-3	7.4 E-5	NA	NA	NA	NA	NA	2.8 E-4	2.7 E-4	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	4.6 E-3
11D-SNS16	0.5	NA	NA	NA	NA	NA	NA	2.5 E-3	1.3 E-4	NA	NA	NA	NA	NA	6.9 E-4	4.9 E-4	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	1.1 E-1
11D-SNS16	2.5	NA	NA	NA	NA	NA	NA	3.0 E-3	1.8 E-4	NA	NA	NA	NA	NA	6.9 E-4	5.3 E-4	NA	NA	NA	3.9 E-3	NA	NA	NA	NA	NA	8.2 E-3
11D-SNS17	0.5	NA	NA	NA	NA	NA	NA	1.4 E-3	1.8 E-4	NA	NA	NA	NA	NA	2.5 E-4	5.3 E-4	9.7 E-6	1.0 E-3	NA	1.4 E-2	NA	4.7 E-7	1.2 E-6	2.1 E-5	3.4 E-6	1.8 E-2
11D-SNS17	2.5	NA	NA	NA	NA	NA	NA	8.0 E-4	1.2 E-4	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	2.5 E-3
11D-SNS18	0.5	NA	NA	NA	NA	NA	NA	2.7 E-4	5.9 E-5	NA	NA	NA	NA	NA	1.7 E-5	8.0 E-5	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	4.4 E-3
11D-SNS18	2.5	NA	NA	NA	NA	NA	NA	9.5 E-5	6.7 E-5	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	4.5 E-3
11D-SNS19	0.5	NA	NA	NA	NA	NA	NA	2.2 E-3	1.3 E-4	NA	NA	NA	NA	NA	1.0 E-4	2.9 E-4	NA	NA	NA	NA	NA	2.4 E-7	2.4 E-7	1.8 E-5	7.3 E-7	2.8 E-3
11D-SNS19	2.5	NA	NA	NA	NA	NA	NA	1.5 E-4	4.7 E-5	NA	NA	NA	NA	NA	1.4 E-5	7.4 E-5	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	1.2 E-2
11D-SNS20	0.5	NA	NA	NA	NA	NA	NA	4.1 E-4	1.6 E-4	NA	NA	NA	NA	NA	7.8 E-5	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	NA	NA	NA	NA	NA	NA	3.5 E-4	9.8 E-5	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4
11D-SNS21	2.5	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4
11D-SNS22	0.5	NA	NA	NA	NA	NA	NA	4.6 E-3	1.4 E-4	NA	NA	NA	NA	NA	1.7 E-4	5.5 E-4	NA	NA	NA	1.2 E-1	NA	2.3 E-7	3.9 E-7	NA	7.9 E-7	1.3 E-1
11D-SNS22	2.5	NA	NA	NA	NA	NA	NA	9.5 E-4	1.0 E-4	NA	NA	NA	NA	NA	1.7 E-4	3.3 E-4	NA	NA	NA	NA	NA	4.2 E-7	5.9 E-7	1.5 E-5	1.2 E-6	1.6 E-3
11D-SNS23	3.5	NA	NA	NA	NA	NA	NA	1.2 E-4	4.3 E-5	NA	NA	NA	NA	NA	1.2 E-4	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4
11D-SNS23	4.5	NA	NA	NA	NA	NA	NA	1.1 E-4	4.3 E-5	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	2.4 E-4
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	2.7 E-5
50D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	4.4 E-5
50D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	2.0 E-5
50D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	NA	NA	NA	7.3 E-5
50D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4
50D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	7.4 E-5	1.8 E-5	NA	NA	NA	NA	4.2 E-8	1.1 E-6	3.6 E-6	3.6 E-6	2.2 E-4
51D-SB01	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	1.2 E-5
51D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	6.5 E-6
51D-SB02	1	5.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	5.1 E-4
51D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	9.3 E-6
51D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	2.8 E-4

		Non-Cancer Hazard Index																								
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	HI
Unit Hazard																										
Unit Risk																										
51D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.7 E-5
51D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	NA	NA	NA	9.2 E-5
51D-SB04	1	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	7.6 E-4
51D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	1.5 E-5
51D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	2.1 E-4
51D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	4.5 E-5
51D-SB05	5	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	NA	NA	NA	8.5 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4
51D-SB05	9	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	NA	7.8 E-5	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4
51D-SB06	5	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	NA	NA	4.9 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	6.9 E-4
51D-SB06	9	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	1.5 E-4	9.4 E-5	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	3.0 E-3
51D-SB07	5	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	NA	NA	NA	NA	3.1 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4
51D-SB07	9	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	NA	NA	NA	NA	NA	7.8 E-5	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
51D-SB08	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	4.2 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.2 E-6	NA	3.6 E-4
51D-SB08	9	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	5.9 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4
51D-SB09	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	1.4 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	5.3 E-4
51D-SB09	9	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA	NA	NA	3.1 E-4	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	8.3 E-4
51D-SB10	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	1.4 E-4	2.5 E-4	NA	NA	NA	NA	NA	1.5 E-7	2.4 E-6	NA	5.8 E-7	5.8 E-4
51D-SB10	9	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	1.8 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4
A20-B34-SB01	1	NA	NA	NA	NA	NA	NA	6.6 E-4	3.5 E-4	NA	NA	NA	NA	NA	2.0 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
A20-B34-SB01	5	NA	NA	NA	NA	NA	NA	4.2 E-4	3.3 E-4	NA	NA	NA	NA	NA	5.5 E-5	8.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4
A20-B34-SB01	11	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	1.9 E-5	8.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4
A20-B34-SB02	1	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	8.8 E-5	8.8 E-5	NA	NA	NA	NA	NA	9.9 E-8	2.1 E-7	NA	NA	3.1 E-4
A20-B34-SB02	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	1.0 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4
A20-B34-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	2.9 E-5	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4
A20-RB37-SB0	1	NA	NA	NA	NA	NA	NA	2.0 E-3	2.2 E-4	NA	NA	NA	NA	NA	4.6 E-4	2.0 E-2	NA	NA	2.9 E-1	NA	NA	NA	NA	2.3 E-5	NA	3.1 E-1
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	5.5 E-5	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4
A20-RB37-SB0	1	NA	NA	NA	NA	NA	NA	7.3 E-4	2.2 E-4	NA	NA	NA	NA	NA	1.1 E-4	1.9 E-3	NA	NA	1.9 E-1	NA	NA	4.4 E-8	NA	5.9 E-5	NA	1.9 E-1
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	4.5 E-4	1.6 E-4	NA	NA	NA	NA	NA	5.5 E-5	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	9.1 E-4
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	3.2 E-4	3.2 E-4	NA	NA	NA	NA	NA	3.6 E-5	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4
A20-RB37-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	1.7 E-4	1.3 E-4	NA	NA	2.0 E-2	NA	NA	NA	4.5 E-7	NA	5.6 E-7	2.0 E-2
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	NA	NA	NA	3.9 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4
A20-RB37-SB0	1	NA	NA	NA	NA	NA	NA	4.1 E-4	2.0 E-4	NA	NA	NA	NA	NA	1.0 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	8.2 E-4
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	3.6 E-4	1.3 E-4	NA	NA	NA	NA	NA	5.5 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-4
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	4.2 E-4	2.5 E-4	NA	NA	NA	NA	NA	1.0 E-4	3.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4
A20-RC29-SB0	1	NA	NA	NA	NA	NA	NA	3.8 E-4	5.1 E-5	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	6.0 E-3
A20-RC29-SB0	5	NA	NA	NA	NA	NA	NA	6.4 E-4	1.0 E-4	NA	NA	NA	NA	NA	9.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4
A20-RC29-SB0	11	NA	NA	NA	NA	NA	NA	4.9 E-4	6.3 E-5	NA	NA	NA	NA	NA	2.3 E-5	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4
A20-RX73-SB0	1	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	NA	NA	NA	NA	NA	1.7 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	2.4 E-7	5.3 E-6	NA	5.2 E-4
A20-RX73-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	8.5 E-5	1.0 E-4	NA	NA	NA	1.5 E-3	NA	NA	NA	3.5 E-6	NA	1.9 E-3
A20-RX73-SB0	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	3.9 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4
A20-RX73-SB0	1	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	2.5 E-4	7.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4
A20-RX73-SB0	5	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	9.8 E-4	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
A20-RX73-SB0	11	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA	NA	NA	4.9 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
A20-RX73-SB0	1	NA	NA	NA	NA	NA	NA	2.4 E-4	1.6 E-4	NA	NA	NA	NA	NA	5.9 E-5	3.1 E-4	NA	NA	NA	NA	NA	6.8 E-8	9.1 E-7	NA	6.7 E-7	7.7 E-4
A20-RX73-SB0	5	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	1.1 E-3	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
A20-RX73-SB0	11	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	2.5 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-4
A20-ST01-SB0	1	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	2.0 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4
A20-ST01-SB0	5	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	2.8 E-4	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4
A20-ST01-SB0	11	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	1.9 E-4	8.4 E-5	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	3.2 E-3
A20-ST01-SB0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	1.1 E-4	1.2 E-5	NA	NA	NA	NA	6.0 E-8	1.0 E-6	NA	6.7 E-7	3.2 E-4
A20-ST01-SB0	5	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	1.4 E-3	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
A20-ST01-SB0	11	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	NA	NA	NA	NA	NA	1.4 E-4	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-4
A20-ST01-SB0	1	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	NA	4.9 E-4	1.2 E-4	NA	NA	1.2 E-2	NA	NA	7.0 E-8	1.5 E-7	NA	NA	1.3 E-2
A20-ST01-SB0	5	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	NA	NA	3.1 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	4.8 E-4
A20-ST01-SB0	11	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	3.6 E-5	3.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4
A20-ST02-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	3.0 E-4	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4
A20-ST02-SB0	5	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	NA	NA	8.2 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	2.8 E-4
A20-ST02-SB0	11	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA	NA	NA	1.2 E-5	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4
A20-ST05-SB0	1	NA	NA	NA	NA	NA	NA	4.6 E-4	8.6 E-5	NA	NA	NA	NA	NA	8.2 E-5	9.0 E-5	NA	NA	NA	NA	NA	3.4 E-8	5.9 E-7	NA	4.1 E-7	7.2 E-4
A20-ST05-SB0	5	NA	NA	NA	NA	NA	NA	4.6 E-4	1.8 E-4	NA	NA	NA	NA	NA	3.9 E-5	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-4
A20-ST05-SB0	11	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	3.3 E-5	9.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4
A20-ST05-SB0	1	NA	NA	NA	NA	NA	NA	5.3 E-4	2.5 E-4	NA	NA	NA	NA	NA	6.2 E-5	6.3 E-5	NA	NA	NA	NA	NA	5.2 E-8	1.9 E-7	NA	NA	9.1 E-4

		Non-Cancer Hazard Index																								
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chromium VI**	**Chrysene**	**Dibenz(a,h) anthracene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Naphthalene**	**PCB-1248**	**PCB-1254**	**PCB-1260**	**Phenol**	**Di-n-butyl phthalate**	**Fluoranthene**	**Phenanthrene**	**Pyrene**	**HI**
Unit Hazard																										
Unit Risk																										
A20-ST05-SB02	5	NA	NA	NA	NA	NA	NA	3.6 E-4	1.9 E-4	NA	NA	NA	NA	NA	1.3 E-4	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-4
A20-ST05-SB02	11	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4
A20-ST06-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	3.3 E-4	9.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4
A20-ST06-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	1.2 E-4	7.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
A20-ST06-SB0	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5
A20-ST14-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	6.5 E-5	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.9 E-6	NA	6.1 E-4
A20-ST14-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	2.0 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-4
A20-ST14-SB0	11	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	6.9 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4
A20-ST20-SB0	1	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	5.2 E-4	9.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4
A20-ST20-SB0	5	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3
A20-ST20-SB0	11	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	NA	NA	4.6 E-3	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3
A20-ST22-SB0	1	NA	NA	NA	NA	NA	NA	5.3 E-4	5.5 E-5	NA	NA	NA	NA	NA	2.3 E-4	8.6 E-5	NA	NA	NA	NA	NA	2.9 E-8	1.1 E-7	3.5 E-5	NA	9.4 E-4
A20-ST22-SB0	5	NA	NA	NA	NA	NA	NA	6.6 E-4	3.6 E-5	NA	NA	NA	NA	NA	1.7 E-4	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	1.3 E-3
A20-ST22-SB0	11	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	2.7 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
03D-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-AH01	3	NA	4.2 E-5	4.8 E-4	NA	3.7 E-5	4.4 E-5	NA	NA	7.2 E-6	3.1 E-5	1.6 E-5	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	7 E-4	3.4
03D-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-AH02	3	NA	5.2 E-5	5.2 E-4	NA	4.7 E-5	4.9 E-5	NA	NA	8.6 E-6	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-4	3.3
03D-SB01	1	1.1 E-6	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.4
03D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	NA	NA	NA	NA	9 E-6	3.3
03D-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
03D-SB02	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB02	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB03	10	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
03D-SB04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB04	1	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	NA	NA	NA	NA	2 E-6	3.3
03D-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB04	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB04	10	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.3
03D-SB05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB05	1	4.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	9 E-7	NA
03D-SB05	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	NA	NA	NA	8 E-6	3.3
03D-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	NA	NA	NA	NA	3 E-7	NA
03D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	2 E-7	3.3
03D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	1 E-6	3.3
03D-SB07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB07	1	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	NA
03D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB07	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB08	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB08	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB09	5	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
03D-SB09	11	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB10	5	NA	NA	NA	NA	NA	NA	NA	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB10	11	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB11	1	NA	5.7 E-9	NA	NA	NA	NA	NA	1.1 E-8	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	1 E-7	3.3
03D-SB11	5	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
03D-SB11	11	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB12	5	NA	1.1 E-8	NA	NA	NA	NA	4.8 E-10	5.8 E-9	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB12	11	NA	2.1 E-8	NA	NA	NA	NA	2.8 E-10	7.9 E-9	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
03D-SB13	6	NA	NA	NA	NA	NA	NA	2.7 E-10	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB13	11.5	NA	NA	NA	NA	NA	NA	1.9 E-10	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
03D-SB14	3.5	NA	NA	NA	NA	NA	NA	2.5 E-10	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
03D-SB14	7.5	NA	NA	NA	NA	NA	NA	2.7 E-10	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB14	11	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB15	3	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
03D-SB15	6	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
03D-SB15	11.5	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
03D-SB16	5	NA	NA	NA	NA	NA	NA	6.0 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB16	11.5	NA	NA	NA	NA	NA	NA	3.2 E-10	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB17	1	NA	6.2 E-8	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.3
03D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB17	11	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
03D-SB18	11	NA	NA	NA	NA	NA	NA	2.8 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
03D-SB19	7.5	NA	NA	NA	NA	NA	NA	2.5 E-10	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
03D-SB19	11.5	NA	NA	NA	NA	NA	NA	2.9 E-10	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
03D-SB20	5	NA	NA	NA	NA	NA	NA	3.9 E-10	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	4 E-8	3.3
03D-SB20	11	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	1 E-6	3.3
03D-SB22	7.75	NA	NA	NA	NA	NA	NA	2.3 E-10	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-7	NA	NA	NA	NA	NA	NA	NA	9 E-7	3.3
03D-SB22	11	NA	NA	NA	NA	NA	NA	3.4 E-10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB23	6	NA	NA	NA	NA	NA	NA	3.0 E-10	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
03D-SB23	11	NA	NA	NA	NA	NA	NA	3.0 E-10	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
03D-SB24	7.5	NA	NA	NA	NA	NA	NA	2.6 E-10	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
03D-SB24	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB25	1	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB25	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB25	11	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	3.3
03D-SB26	1	NA	2.7 E-9	NA	NA	NA	NA	NA	3.7 E-9	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB26	5	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB26	11	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB27	1	NA	1.1 E-8	4.8 E-8	8.6 E-9	NA	NA	NA	6.6 E-9	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.3
03D-SB27	5	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB27	11	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB30	5	NA	NA	NA	NA	NA	NA	2.5 E-10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB30	11	NA	NA	NA	NA	NA	NA	3.0 E-10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
03D-SB31	1.5	NA	NA	NA	NA	NA	NA	3.7 E-10	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB31	5.5	NA	NA	NA	NA	NA	NA	3.0 E-10	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB31	11.5	NA	NA	NA	NA	NA	NA	4.2 E-10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB32	5	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
03D-SB32	11	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB33	5	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	2 E-4	3.3
03D-SB33	11	NA	NA	NA	NA	NA	NA	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	3 E-7	3.3
03D-SB35	5	NA	NA	NA	NA	NA	NA	3.0 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB35	11	NA	NA	NA	NA	NA	NA	3.0 E-10	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
03D-SB36	1	NA	2.0 E-8	NA	NA	NA	NA	NA	1.1 E-8	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	8 E-8	3.3
03D-SB36	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB36	11	NA	NA	NA	8.6 E-9	NA	NA	NA	1.5 E-8	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
03D-SB37	5	NA	NA	NA	NA	NA	NA	3.6 E-10	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	NA	NA	5 E-7	3.3
03D-SB37	11	NA	NA	NA	NA	NA	NA	4.1 E-10	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB38	1	NA	NA	NA	NA	NA	NA	3.8 E-10	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
03D-SB38	5	NA	NA	NA	NA	NA	NA	3.5 E-10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB38	11	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
03D-SB39	3.5	NA	NA	NA	NA	NA	NA	3.6 E-10	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB39	5	NA	NA	NA	NA	NA	NA	2.2 E-10	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
03D-SB39	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB40	3.75	NA	NA	NA	NA	NA	NA	2.9 E-10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB40	7.5	NA	NA	NA	NA	NA	NA	2.4 E-10	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
03D-SB40	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB41	3	NA	NA	NA	NA	NA	NA	2.9 E-10	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
03D-SB41	6	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
03D-SB41	11.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB42	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-8	NA	NA	NA	NA	NA	NA	8 E-8	3.3
03D-SB42	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB42	11	NA	NA	NA	NA	NA	NA	3.2 E-10	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.4
03D-SB43	5	NA	NA	NA	NA	NA	NA	2.1 E-10	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	4 E-7	3.3
03D-SB43	11	NA	NA	NA	NA	NA	NA	1.9 E-10	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	1 E-7	3.3
03D-SB44	5	NA	NA	NA	NA	NA	NA	2.8 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB44	11	NA	NA	NA	NA	NA	NA	2.5 E-10	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB45	5	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.3
03D-SB46	5	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.3
03D-SB46	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	3.7 E-5	NA	NA	NA	NA	NA	NA	4 E-5	3.3
03D-SB47	7.5	NA	NA	NA	NA	NA	NA	3.7 E-10	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
03D-SB47	11.5	NA	NA	NA	NA	NA	NA	3.2 E-10	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB48	5	NA	NA	NA	NA	NA	NA	3.0 E-10	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB48	11	NA	2.1 E-9	NA	NA	NA	NA	3.4 E-10	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB49	5	NA	NA	NA	NA	NA	NA	2.7 E-10	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
03D-SB49	11.5	NA	NA	NA	NA	NA	NA	2.9 E-10	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB50	1	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	2 E-7	3.3

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
03D-SB50	5	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB50	11	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
03D-SB51	5	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
03D-SB51	11	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB52	1	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	2 E-7	3.4
03D-SB52	5	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
03D-SB52	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB53	5	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB53	11	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB54	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA	NA	NA	NA	7 E-8	3.3
03D-SB54	5	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
03D-SB54	11	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
03D-SB55	1	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB55	5	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB55	11	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB56	5	NA	NA	NA	NA	NA	NA	2.9 E-10	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
03D-SB56	11	NA	3.8 E-9	NA	NA	NA	NA	2.9 E-10	1.5 E-8	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
03D-SB57	5	NA	NA	NA	NA	NA	NA	2.2 E-10	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
03D-SB57	11	NA	NA	NA	NA	NA	NA	2.5 E-10	7.3 E-9	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	NA	NA	NA	NA	NA	NA	1 E-7	3.3
03D-SB61	5	NA	NA	NA	NA	NA	NA	5.2 E-10	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
03D-SB61	11	NA	NA	NA	NA	NA	NA	2.0 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
03D-SB62	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB62	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SB63	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-8	NA	NA	NA	NA	NA	NA	8 E-8	NA
03D-SB63	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB63	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
03D-SB64	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
03D-SB64	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
03D-SB64	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	NA	6 E-8	NA
03D-SB65	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB65	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
03D-SB66	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB66	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
03D-SB67	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	2 E-6	NA
03D-SB67	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SB67	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	NA	NA	5 E-7	NA
03D-SB68	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA	6 E-6	NA
03D-SB68	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	3 E-7	NA
03D-SB68	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	1 E-6	NA
03D-SB69	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	1 E-6	NA
03D-SB69	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	7 E-8	NA
03D-SB69	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
03D-SNS34	0.25	NA	2.0 E-8	3.0 E-7	6.9 E-8	NA	NA	2.7 E-9	1.0 E-7	6.5 E-9	NA	NA	NA	NA	NA	NA	5.1 E-10	NA	1.4 E-6	5.0 E-6	NA	NA	NA	NA	NA	7 E-6	3.7
03D-SNS35	0.25	NA	NA	NA	NA	NA	NA	1.1 E-9	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
11D-SB01	1	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
11D-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
11D-SB01	11	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
11D-SB02	1	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
11D-SB02	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
11D-SB02	11	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
11D-SB03	1	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
11D-SB03	5	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	NA
11D-SB03	11	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	NA

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
11D-SB04	1	NA	6.6 E-9	NA	1.4 E-8	NA	NA	3.3 E-10	8.9 E-9	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	8 E-8	3.3
11D-SB04	5	NA	NA	NA	NA	NA	NA	4.3 E-10	1.1 E-8	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
11D-SB04	11	NA	NA	NA	NA	NA	NA	3.1 E-10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
11D-SB05	1	NA	4.1 E-9	4.8 E-8	NA	NA	NA	2.2 E-10	1.8 E-9	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.3
11D-SB05	5	NA	NA	NA	NA	NA	NA	3.9 E-10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
11D-SB05	11	NA	NA	NA	NA	NA	NA	2.9 E-10	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
11D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	NA	NA	NA	5 E-6	NA
11D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SB08	1	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
11D-SB08	5	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
11D-SB09	1	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
11D-SB09	5	NA	NA	NA	NA	NA	NA	4.5 E-10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
11D-SB09	11	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
11D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS02	0.01	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	4.8
11D-SNS12	0.5	NA	NA	NA	NA	NA	NA	7.0 E-10	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	5.4 E-7	1.1 E-6	NA	NA	NA	NA	NA	2 E-6	3.4
11D-SNS12	2.5	NA	2.2 E-9	NA	1.1 E-8	NA	NA	7.7 E-10	2.3 E-8	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	1.1 E-6	NA	NA	NA	NA	NA	2 E-6	3.5
11D-SNS13	0.5	NA	2.2 E-9	NA	1.6 E-8	NA	NA	1.2 E-10	1.2 E-8	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	1.0 E-6	NA	NA	NA	NA	NA	1 E-6	3.4
11D-SNS13	2.5	NA	NA	NA	NA	NA	NA	3.5 E-11	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
11D-SNS14	0.5	NA	3.3 E-9	5.5 E-8	1.4 E-8	NA	NA	1.1 E-9	5.8 E-9	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	NA	NA	NA	NA	NA	NA	6 E-7	3.4
11D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS15	0.5	NA	4.2 E-9	7.8 E-8	2.3 E-8	NA	NA	2.1 E-9	2.6 E-8	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	3 E-5	3.9
11D-SNS15	2.5	NA	NA	NA	NA	NA	NA	7.5 E-10	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA	NA	NA	NA	NA	NA	1 E-7	3.3
11D-SNS16	0.5	NA	NA	NA	NA	NA	NA	1.5 E-9	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	NA	4 E-6	3.4
11D-SNS16	2.5	NA	NA	NA	NA	NA	NA	1.9 E-9	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	2 E-7	3.4
11D-SNS17	0.5	NA	1.2 E-8	3.2 E-7	5.0 E-8	NA	NA	8.5 E-10	1.2 E-8	2.6 E-9	NA	1.3 E-8	NA	NA	NA	NA	3.5 E-10	3.7 E-8	NA	5.0 E-7	NA	NA	NA	NA	NA	1 E-6	3.3
11D-SNS17	2.5	NA	NA	NA	NA	NA	NA	5.0 E-10	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	NA	6 E-8	3.3
11D-SNS18	0.5	NA	NA	NA	1.0 E-8	NA	NA	1.7 E-10	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	2 E-7	3.3
11D-SNS18	2.5	NA	NA	NA	NA	NA	NA	5.9 E-11	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	2 E-7	3.3
11D-SNS19	0.5	NA	2.9 E-9	6.5 E-8	2.3 E-8	NA	NA	1.4 E-9	8.4 E-9	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.5
11D-SNS19	2.5	NA	NA	NA	NA	NA	NA	9.3 E-11	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	NA	NA	NA	4 E-7	3.3
11D-SNS20	0.5	NA	NA	NA	NA	NA	NA	2.5 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.5
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	NA	NA	NA	NA	NA	NA	2.2 E-10	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
11D-SNS21	2.5	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
11D-SNS22	0.5	NA	4.0 E-9	7.0 E-8	1.5 E-8	NA	NA	2.9 E-9	9.2 E-9	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	NA	4 E-6	3.4
11D-SNS22	2.5	NA	7.1 E-9	1.2 E-7	2.3 E-8	NA	NA	5.9 E-10	6.8 E-9	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
11D-SNS23	3.5	NA	NA	NA	NA	NA	NA	7.7 E-11	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
11D-SNS23	4.5	NA	NA	NA	NA	NA	NA	7.1 E-11	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
50D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.3
51D-SB01	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB02	1	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	NA
51D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
51D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	1	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	NA
51D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
51D-SB05	5	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
51D-SB05	9	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
51D-SB06	5	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
51D-SB06	9	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
51D-SB07	5	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
51D-SB07	9	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
51D-SB08	5	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
51D-SB08	9	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
51D-SB09	5	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
51D-SB09	9	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
51D-SB10	5	NA	2.6 E-9	NA	1.2 E-8	NA	NA	NA	1.3 E-8	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
51D-SB10	9	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-B34-SB01	1	NA	NA	NA	NA	NA	NA	4.1 E-10	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-B34-SB01	5	NA	NA	NA	NA	NA	NA	2.6 E-10	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-B34-SB01	11	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-B34-SB02	1	NA	2.2 E-9	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-B34-SB02	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-B34-SB02	11	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-RB37-SB0	1	NA	NA	1.2 E-7	NA	NA	NA	1.2 E-9	1.5 E-8	NA	NA	5.7 E-9	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	1 E-5	4.1
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-RB37-SB0	1	NA	NA	NA	NA	NA	NA	4.5 E-10	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	7 E-6	3.4
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	2.8 E-10	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	2.0 E-10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-RB37-SB0	1	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	NA	NA	NA	7 E-7	3.3
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
A20-RB37-SB0	1	NA	NA	NA	NA	NA	NA	2.5 E-10	1.3 E-8	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-RB37-SB0	5	NA	NA	NA	NA	NA	NA	2.2 E-10	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
A20-RB37-SB0	11	NA	NA	NA	NA	NA	NA	2.6 E-10	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-RC29-SB0	1	NA	NA	NA	NA	NA	NA	2.4 E-10	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	2 E-7	3.3
A20-RC29-SB0	5	NA	NA	NA	NA	NA	NA	4.0 E-10	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-RC29-SB0	11	NA	NA	NA	NA	NA	NA	3.1 E-10	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
A20-RX73-SB0	1	NA	2.0 E-9	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-RX73-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	6 E-8	3.3
A20-RX73-SB0	11	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
A20-RX73-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-RX73-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-RX73-SB0	11	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-RX73-SB0	1	NA	4.7 E-9	5.8 E-8	8.6 E-9	NA	NA	1.5 E-10	1.1 E-8	8.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.3
A20-RX73-SB0	5	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-RX73-SB0	11	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
A20-ST01-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-ST01-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-ST01-SB0	11	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	1 E-7	3.3
A20-ST01-SB0	1	NA	2.3 E-9	NA	1.6 E-8	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-ST01-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
A20-ST01-SB0	11	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
A20-ST01-SB0	1	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	4 E-7	3.3
A20-ST01-SB0	5	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
A20-ST01-SB0	11	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
A20-ST02-SB0	1	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
A20-ST02-SB0	5	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	4.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
A20-ST02-SB0	11	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-ST05-SB0	1	NA	NA	NA	NA	NA	NA	2.9 E-10	5.8 E-9	8.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-ST05-SB0	5	NA	NA	NA	NA	NA	NA	2.9 E-10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-ST05-SB0	11	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-ST05-SB0	1	NA	NA	NA	NA	NA	NA	3.3 E-10	1.7 E-8	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3

Table 5.2-40
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Cadmium	Chromium VI	Chrysene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	Naphthalene	PCB-1248	PCB-1254	PCB-1260	Phenol	Di-n-butyl phthalate	Fluoranthene	Phenanthrene	Pyrene	ILCR	Blood Lead
Unit Hazard																											
Unit Risk																											
A20-ST05-SB02	5	NA	NA	NA	NA	NA	NA	2.2 E-10	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-ST05-SB02	11	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	NA
A20-ST06-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-ST06-SB0	5	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	5.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
A20-ST06-SB0	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
A20-ST14-SB0	1	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
A20-ST14-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
A20-ST14-SB0	11	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
A20-ST20-SB0	1	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
A20-ST20-SB0	5	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
A20-ST20-SB0	11	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
A20-ST22-SB0	1	NA	NA	NA	NA	NA	NA	3.3 E-10	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
A20-ST22-SB0	5	NA	NA	NA	NA	NA	NA	4.1 E-10	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
A20-ST22-SB0	11	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	3.3

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
03D-SP100	10												47000					430000		
03D-SP100	20	21											300					41000		
03D-SP102	10												59000					30000000		
03D-SP102	28					8700							29000					5900000		
03D-SP103	10									500			95000					830000		
03D-SP103	20												22000					130000		
03D-SP104	10		990								360		170000					640000		
03D-SP104	20		2600								820		250000					1600000		
03D-SP105	10		560								2000		140000					580000		
03D-SP106	15	180				11	32			9.2	41	27	5900		100	15		7200		
03D-SP106	25		120000										64000000					480000		
03D-SP106	30	1500	15000			16000					11000		2800000			1700		270000		
03D-SP107	10		3600			5600							1200000					98000		
03D-SP107	20		640										470000					12000		
03D-SP107	29		4900										340000					340000		
03D-SP108	10										140		86000			30		8700		
03D-SP109	10		1200										630000					16000		
03D-SP109	20		54000			41000							17000000			6400		500000		
03D-SP109	30		94		35	21	17				16	13	15000		36	46		2400	35	
03D-SP110	10		49							26	14		11000	10				11000		
03D-SP110	20		28				11			5.6	16		1600		13	51		2900		
03D-SP111	10		28				30						7200			30		56000		
03D-SP111	20						4.2						310			14		1300	5.3	
03D-SP112	10												23					240		
03D-SP112	20						27					14	130		13	18		190		
03D-SP113	10						15			340		6.9	9.2		16	22		270		
03D-SP113	20					18000							4600000			5100		2500		
03D-SP114	10						4.8			57			1200			7.8				
03D-SP114	20					18	16			57		6.5	2300		18	36				
03D-SP115	10		51							890			42000					650		
03D-SP116	10						6.7			400		18	100		15	16		150		
03D-SP117	10		5.3				27			62		16	2200		33	80		1000		
03D-SP118	10		6.9			17	11					10	10000		14	29		14000	12	
03D-SP118	20				88		110					15	24000		66	1100		3700		
03D-SP119	10	57	150			53					140	26	38000	53		20		10000		160
03D-SP119	20	830	2200				46				9100	32	48000		29	400		10000		15000
03D-SP119	29		11000			210000					5700		13000000	30000		5100		310000		
03D-SP120	10						8.6					15	310		5.1	14		180		
03D-SP120	20		6.2				200					33	3200		220	360		160		
03D-SP121	15										2300		3800000					320000		
03D-SP121	25					40000							15000000					68000		
03D-SP122	10	120	570				11			18	260		1800		56	120		9800		
03D-SP122	20	8100	19000								2800		3400000	8800				8200		
03D-SP122	30	9800	28000								2200		3400000			1000				
03D-SP123	10						5.5			16			650		5.3	6.5		180		
03D-SP123	20					24	9.3					8.6			14	11		190		
03D-SP124	10						7.6					17	1300	7.2		16		14		
03D-SP124	20						8.1					30	4800	12	10	16		56		
03D-SP125	10					15	54				4.7	14		110	110	210		33		
03D-SP125	20		26			26	45			110	46	19	73	37	130	220		140		21
03D-SP126	10					13												59	7.5	
03D-SP126	20	5.2	6.6				7.5				26	6.9	350		14	19		30		
03D-SP127	10														5.2	5.7		190		
03D-SP127	20						4.9					7.7			9.2	10		170	6.8	
03D-SP128	10																	25		
03D-SP128	20	64	1000				32			140	510	51	9800		85	340		99		580
03D-SP128	30	1400	770	54						750	18000		1800		53	55		170		3500
03D-SP129	15					19	12				8.6	15			30	19		55		

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
03D-SP129	25										8600							710		900
03D-SP130	10														5.4			36		
03D-SP130	20						5.2								10	9.7		33	5.0	
03D-SP131	10						7.2					17			24	9.6		350		
03D-SP131	20						5.4					6.5			7.1	9.8		160		
03D-SP132	10						8.6								5.3	7.8		170		
03D-SP132	20																			
03D-SP132	30		10		21	36	150			32	6.5	37	240		620	590		160	50	
03D-SP133	10						5.4						91			9.2		18		
03D-SP133	20						5.2					12			6.0	26			9.4	
03D-SP134	10					150	5.2					9.5			18	7.8		11	12	
03D-SP134	20		8.0			48	400				24	960			1000	2900		20		
03D-SP135	10	6.0	7.2				19			480	14	17	280		21	100		8600		
03D-SP135	20										120	290	150		5100	27000		940		
03D-SP136	10					55				25		12			7.1	5.8			14	
03D-SP137	10		6.0				6.8			670		17	560			26		740		
03D-SP138	10		28				19			23	27	7.2	12000	61	22	72		60	38	
03D-SP138	19	32	160				17			79	290		58000	270		45		140	31	
03D-SP138	30	13	39		37	41	61			22	190	8.3	11000	35	39	87		15000	60	29
03D-SP139	10															6.6		39	11	
03D-SP139	20				30		16								50	130		80	54	
03D-SP139	28		5.7			20	160					8.4	12		160	230		860	38	
03D-SP140	10																	31		
03D-SP140	20						14					14			30	21		22	6.4	
03D-SP141	10															7.4		48	17	
03D-SP141	20				19	14	57					14	30		190	200		51	37	
03D-SP142	10						11			50			56000	63	18	30		790	8.6	
03D-SP142	20						49			42		17	39000		94	170		510		
03D-SP142	30		1300								1700		1100000					4100		
03D-SP143	10						5.2			340			710			11		1000	12	
03D-SP143	20						16			380	4.9	6.0	640		14	27		720	21	
03D-SP143	30						120						300000				160	1100		
03D-SP144	10						7.8									4.3		1100	4.0	
03D-SP144	20						7.6								5.4	7.7		1600	4.9	
03D-SP144	30	210	100				41				800	23			1700	9400		1500		
03D-SP145	10							14		500			1300		5.8	16		98	6.4	
03D-SP145	20						16			55			110		12	20		12	9.9	
03D-SP146	10	7.1	41			50	9.2			7.8	58		81000	180	5.2	8.6		6200	5.1	110
03D-SP146	20	36	87				26				350		65000	150	26	56		4800	22	420
03D-SP146	27	270	860								1600		530000	680				2300		690
03D-SP147	10									390	76		10000					1100		
03D-SP147	20		5.7			35	16			28	48		630		12	31		110	22	
03D-SP147	27	300	450							440	3700		29000			170		760		150
03D-SP148	10						13			56		6.9			9.5	16				
03D-SP148	20																			
03D-SP149	10						10						1100		5.9	6.8			4.8	
03D-SP149	20					26	93					27	65		93	80				
03D-SP150	30						5.0						160			6		12		
03D-SP84	15		4.8				23			9.7	6.2		730		14	170		77		
03D-SP84	25						13			12			950		6.0	27		71	21	
03D-SP85	25	2600	810				2300				73000	260	12000		9500	64000		63000		
03D-SP85	30					18	66				7.2	15	43		35	63		140	20	
03D-SP86	10	13					4.8						26			12		30	12	
03D-SP86	20						5.3									12		17	13	
03D-SP87	10						29					30	19		19	33				
03D-SP88	10						8.1			22			110		11	30		580		
03D-SP88	20						19						10		31	54		590		
03D-SP89	10												890					33000		

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
03D-SP90	10	10	27				23			260	58	50	4900		73	530		270		
03D-SP90	20	7.5	8.8				16			120	25	31	1900		27	170		270		
03D-SP91	10					21	7.9			23		9.5	48		18	8.0		54	30	
03D-SP91	20						5.1			150	16	6.7	170		9.4	5.9		190	10	
03D-SP92	10	7.8					14			24	32	16	680		6.9	18		140		
03D-SP92	20	13	6.9				25			310	72	26	1000		20	45		1000		
03D-SP93	15									210			2400			420		290		
03D-SP93	25						16			8.0		18	160		22	78		11		
03D-SP94	15		5.0				5.3			57	27		1500			5.7		7100		
03D-SP94	25					18	27			26	11	51	240		46	61		3300		
03D-SP95	10		210								1200		25000					150000		
03D-SP95	18		220								1400		18000					130000		
03D-SP96	10					37	36			1200		170	44		130	73		89		
03D-SP96	17					65	28			1600		30	56		67	100		68		
03D-SP99	10		140										41000					280000		
11D-SP26	10						8.6						3200		8.4	12				
11D-SP26	20						6.6						850		6.3	30			6.6	
11D-SP27	10																	130		
11D-SP27	20					18	27					6.9			47	79		13	5.4	
11D-SP28	10					14	17								15	18				
11D-SP28	20	7.6	61							120	11		90					33	3.4	
11D-SP29	10						6.3						290		26	63			14	
11D-SP29	30	10	120		29	15	26				17		3400	9.3	210	1000			44	
11D-SP30	10						7.8			8.3			970	7.2	140	310				
11D-SP30	20	23	20				8.2			46	30		710	8.0	210	910				
11D-SP31	10												55			64			11	
11D-SP31	20						5.0		15	23	7.2		120		6.4	140			18	
11D-SP31	30	27	6.2		16		8.0			37	64		78		180	450			28	
50D-SP01	10						7.4						35		6.7	9.9		140		
50D-SP01	20					14	29					32			67	340		50		
51D-SP04	10						5.8									5.9		110		
51D-SP04	20					18	32					310			140	210		32		
A20-B34-SP01	10						6.9		20							8.0		63		
A20-B34-SP01	20		8.4				20		13			9.7			33	83		45		
A20-B34-SP02	10																	230		
A20-B34-SP02	20					16	11					7.5			20	20		27	9.6	
A20-B34-SP03	10						8.2											870		
A20-B34-SP03	20						44								36	56		860	12	
A20-B34-SP03	29				23	14	28		46	6.5	9.5	6.3			53	81		1000	38	
A20-RB37-SP01	10		300								280		370000					55000		
A20-RB37-SP01	20		500								190		430000					65000		
A20-RB37-SP01	30												490000			410		3100		
A20-RB37-SP02	10		38										24000			11		7000	13	
A20-RB37-SP02	20					21	12					6.8	18		20	34		160	30	
A20-RC29-SP01	10						15						15		10	21		270		
A20-RC29-SP01	20						16						22		12	26		350		
A20-RX73-SP01	10		9.1				5.8			450					30	5.6		100		
A20-RX73-SP01	20		64			34	25			300		8.2	9.5		1100	46		170		
A20-ST01-1-SP01	10	6.8					8.3			11			1300		6.7	10		200		
A20-ST01-1-SP01	20						7.9					7.6			15	15		40		
A20-ST01-2-SP01	10						5.9			24		11	4600		7.7	11		380		
A20-ST01-2-SP01	20					12	41			32		10	1500		68	130		95		
A20-ST01-3-SP01	10						9.0					11			8.3	6.7		64	15	
A20-ST01-3-SP01	20			11		16	77					84			430	2100		71		
A20-ST02-SP01	10																			
A20-ST02-SP01	20						160				33	630			520	1000				
A20-ST02-SP01	30		5.6			14	200				27	23			720	660		62		
A20-ST02-SP02	10												22					76		

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
A20-ST02-SP02	20						12					7.8			8.0	14		75		
A20-ST02-SP02	30					60	57					14	9.9		90	240		47		
A20-ST02-SP03	20					16	3.8					6.4				8.4		23	8.7	
A20-ST02-SP03	30					15	24								12	27		24	22	
A20-ST02-SP04	30					810	41					5.6			39	67				
A20-ST05-SP01	10					20														
A20-ST05-SP01	20	2900	2900							1700	27000		3900			41		470	42	420
A20-ST05-SP01	30	4500	3100	100						1600	37000		23000		32	44		190	59	120
A20-ST05-SP02	10						6.0								5.9	9.2		120	13	
A20-ST05-SP02	20					23	5.4					7.5	9.9		11	19		170	21	
A20-ST05-SP03	10	74	110			14	5.3			33	260		4600		13	150		320		
A20-ST05-SP04	10						9.7						88		15	33		15	9.4	
A20-ST05-SP05	10						18								11	25			7.1	
A20-ST06-SP01	10						3.7						1500		49	25		900		
A20-ST06-SP01	20						11					5.6	2500		11	16		850		
A20-ST14-SP01	10		21				5.3			58			18000			7.1		840		
A20-ST14-SP01	20						12			32			11000		9.3	26		150	24	
A20-ST14-SP02	10						7.7						720		11	20		760	11	
A20-ST14-SP02	20						20						770		30	53		1100	22	
A20-ST20-SP01	10																			
A20-ST20-SP01	20						4.3						320			6.9		15	6.3	
A20-ST22-SP01	10						3.5									5.1				
A20-ST22-SP01	20					17	6.4								4.9	14			5.0	

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP100	10	580		640																
03D-SP100	20									510										
03D-SP102	10																			
03D-SP102	28	12000																		
03D-SP103	10	1700		800																
03D-SP103	20	330		140																
03D-SP104	10	14000		2200																
03D-SP104	20	57000		7600																
03D-SP105	10	14000		1600																
03D-SP106	15	78	240	17	26	12	52	27		160	15	5.9	17			65	36			120
03D-SP106	25	190000	120000										23000							
03D-SP106	30	140000	8400	6400		2700					2000		2900							1300
03D-SP107	10	86000		3300							3100		610							
03D-SP107	20	12000		430																
03D-SP107	29	250000		5100																710
03D-SP108	10	320	51	78								51	33							
03D-SP109	10	2300	550																	
03D-SP109	20	110000	25000								31000									
03D-SP109	30	430	40	14			290		20	800	6.4		5.4	37		29	9.9			52
03D-SP110	10	910		120																
03D-SP110	20	460		24		7.5	43			200	12		5.7	13		7.8				17
03D-SP111	10	410		120		160														23
03D-SP111	20					1100	22			140										13
03D-SP112	10					350										12				10
03D-SP112	20					970	38	6.2		220	8.7		5.6			30	11			76
03D-SP113	10	18				910		5.9		58	9		7.6			20	10			29
03D-SP113	20		940			4000					1800		2000							1500
03D-SP114	10						26			110				9.7		8.2				9.8
03D-SP114	20						110		6.8	460	5.4			45		14	6.0			97
03D-SP115	10	250									18									
03D-SP116	10	70			33	580		32			9.3		11	20		81	32			58
03D-SP117	10	140		19	8.8	2300		11	5.8	120	42		26	15		54	15		15	110
03D-SP118	10	130		38		1600				160	16		20	35		33	11		27	55
03D-SP118	20	93				5200			12	340	38		580	64		35	12		31	180
03D-SP119	10	6400		33	28	990		29			22					100	31			92
03D-SP119	20	46000	89		35	1000		34			25		370			120	48			130
03D-SP119	29	170000									29000		6700			7800				7300
03D-SP120	10	100		8.9	22	670		24		89	26		14	18		66	21		9.2	48
03D-SP120	20	53		10	18	1600		15		91	22			25		92	24		32	460
03D-SP121	15	10000	2500	3100																
03D-SP121	25										22000		9400							
03D-SP122	10	140	240			100							340			12				16
03D-SP122	20	1700	1600								1100		1900							
03D-SP122	30	6400		4700																
03D-SP123	10										20				18	11				17
03D-SP123	20				6.1		78	7.7		250				36		26	11			110
03D-SP124	10				43	760		38			18			16		80	32	6.4		53
03D-SP124	20	36			34	1400		37			69		9.9	12		130	51	7.6		94
03D-SP125	10	270				3700			13	500	200				170	34	9.9		19	130
03D-SP125	20	15000				4900					170		41		51	44	17		61	160
03D-SP126	10	50	7.5											13		5.7				12
03D-SP126	20	110	60				49			260	6.4			16		17	5.9			38
03D-SP127	10	18			6.2			6.3			11					15	6.6			16
03D-SP127	20	12			6.8		46	7.8		200			4.6	14		24	10			29
03D-SP128	10	13								56										9.9
03D-SP128	20	60000	25								42					86	39			55
03D-SP128	30	210000			84		350	100			160			130		58				98
03D-SP129	15	220			12		100	9.8	5.6	270				35		34	16			66

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP129	25						220													
03D-SP130	10						29			200				14		5.8				20
03D-SP130	20						94			610				26		7.0			6.6	17
03D-SP131	10				23	16		23			55					45	17	6.7		1200
03D-SP131	20				8.3		41	7.9		230				12		22	10			28
03D-SP132	10	250		46						84	6.6					9.7				18
03D-SP132	20																			
03D-SP132	30	140					390			1500	360	29	140	69		29	14			170
03D-SP133	10									92	4.8					12				14
03D-SP133	20						26			140	3.7			17		35	16			34
03D-SP134	10	10			7.5			7.2	6.5	61	5.4	5.5	8.2	32		18	5.6			26
03D-SP134	20		40		11	2600	37			170	98	430	4300	9.3		26	11	110		40
03D-SP135	10	170	71	45	9.7	1500		11		57	20	6.3	78	10		52	17		12	76
03D-SP135	20		21000			9900						540	21000			110		110		120
03D-SP136	10				18			11		30		14	7.4	32		20		10		22
03D-SP137	10	490		18	20	1300		22		66	16		16			72	30			61
03D-SP138	10	3400		26	10	68	23	8.4	8.7	96	75		39	22	22	24	8.4		5.6	49
03D-SP138	19	16000		30		49					100		18	100	97	30				64
03D-SP138	30	9700					160			2600	36			100	20	12				99
03D-SP139	10															9.4				59
03D-SP139	20	180					34		5.7	120	8.3		6.2	14		8.6				33
03D-SP139	28	660					120		7.6	840	23		17	35		12	5.4			110
03D-SP140	10	25														9.6				11
03D-SP140	20	22					86			570				13		29	11			85
03D-SP141	10						19			140				9.9		5.6				21
03D-SP141	20	28				24	240			800	120	13	29	23		21	7.3	14		260
03D-SP142	10	30		10							13				9.9	9.6				57
03D-SP142	20	22					110			460	17		14	53		21				200
03D-SP142	30	37000													790					
03D-SP143	10	250		18							5.7					6.1				19
03D-SP143	20	200		17						95	9.0					13				40
03D-SP143	30	1300								1400										210
03D-SP144	10										17								11	8.4
03D-SP144	20						22			670				8.9		6.6			5.4	15
03D-SP144	30		13000			5800				760		66	7300							21
03D-SP145	10	46									14									12
03D-SP145	20	6.7					27			150	5.4			12		6.6				21
03D-SP146	10	4100		47						240	14			44	22	6.2				12
03D-SP146	20	5800		35						860				51						49
03D-SP146	27	18000																		
03D-SP147	10	140000																		
03D-SP147	20	10000					18			330	6.4					6.3				32
03D-SP147	27	230000																		
03D-SP148	10										7.9					15				150
03D-SP148	20																			
03D-SP149	10	11					22			130	20			27	9.3					11
03D-SP149	20	6.9					170	6.4	19	980	9.0		7.9	110		49	21		5.3	180
03D-SP150	30	7.2								90	3.8			45						6.7
03D-SP84	15	95	420			260	67			260	17		310			7.3				54
03D-SP84	25	46	48			12				93	30		30							16
03D-SP85	25	8300	170000			18000						2600	60000				960	530		
03D-SP85	30	50	6.1				420		18	1500	13		15	29		24	12			120
03D-SP86	10	18		16			29			140	14									10
03D-SP86	20	28					34			190				13						20
03D-SP87	10				11	1100		16			7.8		8.3	150		110	25		28	200
03D-SP88	10	180		36							17					6.3				13
03D-SP88	20	13					28			150	7.3		5.9			14	5.8			30
03D-SP89	10	410		22																

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP90	10	560	250	27	13	1700		22		270	11		270	35		170	41		13	220
03D-SP90	20	370	87	18	15	510		21		1100	4.4		91	29		110	31		22	130
03D-SP91	10	310	28		7.6		18	7.4	17	77	42		5.7			31	9.6		5.4	67
03D-SP91	20	340	94	10	8.7			8.6	12		17					22	7.4		5.8	35
03D-SP92	10	120	190	27	15	1000		16			19		8.5			62	18		12	72
03D-SP92	20	660	300	33	7.7	2500		11		130	25		9.5			90	26		10	160
03D-SP93	15					2000							160							
03D-SP93	25				12	540		15					50	71		70	21			100
03D-SP94	15	300		13	13			6.4			14					15	6.2			10
03D-SP94	25	49			20		52	19			9.9		23	10		140	47			120
03D-SP95	10	5700	1500	510		1200														60
03D-SP95	18	6900	2000	500		1700					66									53
03D-SP96	10	42			43	310		87	17	78	50	12	150	64		530	190	24		2700
03D-SP96	17	89			19	240	67	18		240	57		100	62		67	21		14	720
03D-SP99	10	920		1100		960														
11D-SP26	10	6.6								68	5.3		5.8			7.1				14
11D-SP26	20						27			160				15						6.1
11D-SP27	10	23		15							5.0					9.7				8.1
11D-SP27	20	7.8		12			79		4.7	370	20		8.6	43		17	5.8			56
11D-SP28	10	30		27						86	13			13		12				34
11D-SP28	20	420		100										9.4		10				6.5
11D-SP29	10	17		37						190	19			12		5.3				54
11D-SP29	30	280					29			410	46			32		7.4				85
11D-SP30	10	13		38		9.6				69	47		13	9.7		5.4				45
11D-SP30	20	28		39		11				100	23			14		5.3				45
11D-SP31	10									82	33			15						43
11D-SP31	20	11								82	72			9.8						50
11D-SP31	30	25				6.8				140	26		19	14		5.5				30
50D-SP01	10						24			90	6.8		5.8			10				19
50D-SP01	20					170	130	6.9		500	10	29	350	22		34	15	23	5.3	94
51D-SP04	10			8.3							8.3					7.0				9.6
51D-SP04	20					110	55	9.1		230	10	290	160	19		27	14	190		63
A20-B34-SP01	10	140		120									5.0			12				13
A20-B34-SP01	20	220		160		5.8	62			250	44	8.4	15			22	7.6	7.9		40
A20-B34-SP02	10															7.6				6.8
A20-B34-SP02	20						69			310				22		20	7.5			48
A20-B34-SP03	10									380	4.6									11
A20-B34-SP03	20						29			710	9.1		4.6	10		7.2			11	31
A20-B34-SP03	29	18					140			700	9.0		4.6	28		9.9				71
A20-RB37-SP01	10	5500		270							150									
A20-RB37-SP01	20	6500		500																
A20-RB37-SP01	30	1500																		
A20-RB37-SP02	10	930		51							10									9.3
A20-RB37-SP02	20	30					52			310	47			20		14	7.0			45
A20-RC29-SP01	10	24		9.0						66	28					7.4				16
A20-RC29-SP01	20	140		16			36			160	140			18		11				13
A20-RX73-SP01	10	69		39						57	15					6.6				48
A20-RX73-SP01	20	250		33			78			360	16		150	66		18	7.8			240
A20-ST01-1-SP01	10	55	26	9.5							7.4					9.1				17
A20-ST01-1-SP01	20	20					65			270				20		18	7.9			35
A20-ST01-2-SP01	10	47		14	8.4			17			14					29	9.8	7.5		79
A20-ST01-2-SP01	20	22					62		5.4	270	15		19			20	8.1			93
A20-ST01-3-SP01	10	19					22			110	6.7			10		28	10			32
A20-ST01-3-SP01	20	32				990	110			420	18	110	2100			34	12	59		110
A20-ST02-SP01	10																			
A20-ST02-SP01	20	360	13			4400						390	3000					49		47
A20-ST02-SP01	30	51	7.1			1500	310			1100	34	38	400	20		20	11			78
A20-ST02-SP02	10									220										

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP02	20	19				530				93		230				5.7	9.8	46		16
A20-ST02-SP02	30	13			5.7	100	340	6.3		1900	8.1	24	13	75		19	10	7.0	14	88
A20-ST02-SP03	20	63					57			210				17		13	6.1			80
A20-ST02-SP03	30	150					67			400				20		7.9				63
A20-ST02-SP04	30				15		87	8.2		650	12		7.9	68		19	8.3			44
A20-ST05-SP01	10																			
A20-ST05-SP01	20	700000								500										45
A20-ST05-SP01	30	34000	160								24									25
A20-ST05-SP02	10	16														12				14
A20-ST05-SP02	20	25					56			260				31		23	8.9			26
A20-ST05-SP03	10	99	17			12				120	77		18	11		6.1				100
A20-ST05-SP04	10	33					59			300	17									21
A20-ST05-SP05	10						32			240	5.1			22		10				33
A20-ST06-SP01	10									82	4.5					9.2				8.3
A20-ST06-SP01	20						28			120	23					17	5.5			27
A20-ST14-SP01	10	400		33			7.5			42	52									5.8
A20-ST14-SP01	20	29		9.9			19			130	12			9.4		5.5				20
A20-ST14-SP02	10	7.1		9.8							24									14
A20-ST14-SP02	20	17		13						90	30					10				28
A20-ST20-SP01	10	99					30			200				14		9.5				11
A20-ST20-SP01	20	31		8.0							12					7.6				8.6
A20-ST22-SP01	10			9.3						57	7.1				9.2					7.8
A20-ST22-SP01	20						69			280				17		7.5				39

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard																				
Unit Risk																				
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	1.9 E+0	NA	NA
03D-SP100	20	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-7	NA	NA	NA	NA	9.5 E-2	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	1.3 E+2	NA	NA
03D-SP102	28	NA	NA	NA	NA	6.9 E-2	NA	NA	NA	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	1.0 E+1	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	5.1 E-4	NA	NA	NA	NA	3.6 E+0	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	NA	NA	NA	3.0 E-1	NA	NA
03D-SP104	10	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	9.1 E-4	NA	NA	NA	NA	2.8 E+0	NA	NA
03D-SP104	20	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	7.6 E-4	NA	NA	NA	NA	3.7 E+0	NA	NA
03D-SP105	10	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	8.8 E-3	NA	7.5 E-4	NA	NA	NA	NA	2.5 E+0	NA	NA
03D-SP106	15	2.8 E-5	NA	NA	NA	1.5 E-4	1.3 E-4	NA	NA	2.9 E-5	1.3 E-4	2.9 E-6	2.2 E-5	NA	3.4 E-5	5.1 E-6	NA	2.2 E-2	NA	NA
03D-SP106	25	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	9.0 E-1	NA	NA
03D-SP106	30	1.2 E-4	1.5 E-2	NA	NA	1.2 E-1	NA	NA	NA	NA	1.8 E-2	NA	5.5 E-3	NA	NA	3.3 E-4	NA	4.3 E-1	NA	NA
03D-SP107	10	NA	9.3 E-3	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA	4.2 E-1	NA	NA
03D-SP107	20	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	2.8 E-2	NA	NA
03D-SP107	29	NA	4.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	5.6 E-1	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	NA	4.6 E-4	NA	NA	1.4 E-5	NA	3.8 E-2	NA	NA
03D-SP109	10	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA	6.9 E-2	NA	NA
03D-SP109	20	NA	8.0 E-2	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	NA	1.8 E-3	NA	1.2 E+0	NA	NA
03D-SP109	30	NA	9.1 E-5	NA	9.1 E-7	1.6 E-4	3.8 E-5	NA	NA	NA	2.6 E-5	7.5 E-7	3.0 E-5	NA	7.1 E-6	9.0 E-6	NA	3.8 E-3	9.2 E-6	NA
03D-SP110	10	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	1.2 E-4	6.1 E-5	NA	5.9 E-5	7.1 E-6	NA	NA	NA	4.7 E-2	NA	NA
03D-SP110	20	NA	4.1 E-5	NA	NA	NA	3.5 E-5	NA	NA	1.4 E-5	4.0 E-5	NA	4.8 E-6	NA	3.7 E-6	1.4 E-5	NA	6.7 E-3	NA	NA
03D-SP111	10	NA	7.2 E-5	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	1.4 E-5	NA	2.4 E-1	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	9.4 E-7	NA	NA	3.8 E-6	NA	3.0 E-3	2.1 E-6	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	1.0 E-3	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	8.7 E-5	NA	NA	NA	NA	1.2 E-6	3.9 E-7	NA	3.7 E-6	4.9 E-6	NA	4.4 E-4	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	1.5 E-3	NA	1.1 E-6	4.9 E-8	NA	7.3 E-6	1.0 E-5	NA	1.2 E-3	NA	NA
03D-SP113	20	NA	NA	NA	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	1.4 E-3	NA	5.8 E-3	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	2.5 E-4	NA	NA	6.4 E-6	NA	NA	3.5 E-6	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	2.0 E-4	5.2 E-5	NA	NA	1.4 E-4	NA	5.5 E-7	7.0 E-6	NA	5.1 E-6	9.9 E-6	NA	NA	NA	NA
03D-SP115	10	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	3.9 E-3	NA	NA	2.2 E-4	NA	NA	NA	NA	2.8 E-3	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	1.8 E-3	NA	2.8 E-6	5.4 E-7	NA	6.8 E-6	7.3 E-6	NA	6.5 E-4	NA	NA
03D-SP117	10	NA	1.4 E-5	NA	NA	NA	1.6 E-4	NA	NA	2.8 E-4	NA	2.5 E-6	1.2 E-5	NA	1.5 E-5	3.6 E-5	NA	4.3 E-3	NA	NA
03D-SP118	10	NA	1.8 E-5	NA	NA	3.4 E-4	6.5 E-5	NA	NA	NA	NA	1.6 E-6	5.4 E-5	NA	6.4 E-6	1.3 E-5	NA	6.0 E-2	8.1 E-6	NA
03D-SP118	20	NA	NA	NA	3.5 E-6	NA	3.5 E-4	NA	NA	NA	NA	1.3 E-6	7.3 E-5	NA	1.9 E-5	3.0 E-4	NA	8.6 E-3	NA	NA
03D-SP119	10	1.3 E-5	3.9 E-4	NA	NA	1.0 E-3	NA	NA	NA	NA	6.1 E-4	4.1 E-6	2.0 E-4	3.7 E-5	NA	9.1 E-6	NA	4.3 E-2	NA	4.0 E-4
03D-SP119	20	9.9 E-5	3.3 E-3	NA	NA	NA	1.5 E-4	NA	NA	NA	2.3 E-2	2.7 E-6	1.5 E-4	NA	8.3 E-6	1.1 E-4	NA	2.3 E-2	NA	2.1 E-2
03D-SP119	29	NA	1.1 E-2	NA	NA	1.6 E+0	NA	NA	NA	NA	9.5 E-3	NA	2.7 E-2	8.0 E-3	NA	1.0 E-3	NA	5.1 E-1	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	NA	2.3 E-6	1.7 E-6	NA	2.3 E-6	6.4 E-6	NA	7.8 E-4	NA	NA
03D-SP120	20	NA	9.2 E-6	NA	NA	NA	6.4 E-4	NA	NA	NA	NA	2.8 E-6	9.7 E-6	NA	6.3 E-5	9.9 E-5	NA	3.7 E-4	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3	NA	1.4 E-2	NA	NA	NA	NA	9.6 E-1	NA	NA
03D-SP121	25	NA	NA	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	1.3 E-1	NA	NA
03D-SP122	10	2.7 E-5	1.5 E-3	NA	NA	NA	6.5 E-5	NA	NA	8.0 E-5	1.1 E-3	NA	9.6 E-6	NA	2.5 E-5	5.4 E-5	NA	4.2 E-2	NA	NA
03D-SP122	20	9.6 E-4	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	6.9 E-3	NA	1.0 E-2	3.5 E-3	NA	NA	NA	1.9 E-2	NA	NA
03D-SP122	30	8.0 E-4	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	6.7 E-3	NA	NA	2.0 E-4	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	7.1 E-5	NA	NA	3.5 E-6	NA	2.4 E-6	3.0 E-6	NA	7.8 E-4	NA	NA
03D-SP123	20	NA	NA	NA	NA	2.7 E-4	3.0 E-5	NA	NA	NA	NA	7.2 E-7	NA	NA	4.0 E-6	3.0 E-6	NA	4.4 E-4	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	2.7 E-6	7.0 E-6	5.1 E-6	NA	7.3 E-6	NA	6.0 E-5	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	NA	NA	2.5 E-6	1.5 E-5	4.7 E-6	2.9 E-6	4.4 E-6	NA	1.3 E-4	NA	NA
03D-SP125	10	NA	NA	NA	NA	3.0 E-4	3.2 E-4	NA	NA	NA	2.1 E-5	2.2 E-6	NA	7.8 E-5	5.0 E-5	9.5 E-5	NA	1.4 E-4	NA	NA
03D-SP125	20	NA	3.8 E-5	NA	NA	2.9 E-4	1.4 E-4	NA	NA	2.7 E-4	1.1 E-4	1.6 E-6	2.2 E-7	1.5 E-5	3.7 E-5	6.0 E-5	NA	3.2 E-4	NA	2.9 E-5
03D-SP126	10	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	5.1 E-6	NA
03D-SP126	20	6.2 E-7	9.8 E-6	NA	NA	NA	2.4 E-5	NA	NA	NA	6.4 E-5	5.8 E-7	1.1 E-6	NA	4.0 E-6	5.2 E-6	NA	6.9 E-5	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	2.6 E-6	NA	8.2 E-4	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	6.5 E-7	NA	NA	2.6 E-6	2.7 E-6	NA	3.9 E-4	2.7 E-6	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA
03D-SP128	20	7.6 E-6	1.5 E-3	NA	NA	NA	1.0 E-4	NA	NA	3.5 E-4	1.3 E-3	4.3 E-6	3.0 E-5	NA	2.4 E-5	9.3 E-5	NA	2.3 E-4	NA	8.1 E-4
03D-SP128	30	1.1 E-4	7.5 E-4	8.6 E-4	NA	NA	NA	NA	NA	1.3 E-3	2.9 E-2	NA	3.6 E-6	NA	1.0 E-5	1.1 E-5	NA	2.7 E-4	NA	3.2 E-3
03D-SP129	15	NA	NA	NA	NA	2.7 E-4	5.0 E-5	NA	NA	NA	2.6 E-5	1.6 E-6	NA	NA	1.0 E-5	6.5 E-6	NA	1.7 E-4	NA	NA

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard																				
Unit Risk																				
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	9.8 E-4
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	1.6 E-4	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	2.7 E-6	NA	7.6 E-5	2.0 E-6	NA
03D-SP131	10	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	2.7 E-6	NA	NA	1.1 E-5	4.4 E-6	NA	1.5 E-3	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	5.5 E-7	NA	NA	2.0 E-6	2.7 E-6	NA	3.7 E-4	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	3.5 E-6	NA	7.3 E-4	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	9.7 E-6	NA	5.5 E-7	2.7 E-4	3.3 E-4	NA	NA	5.5 E-5	1.0 E-5	2.1 E-6	4.8 E-7	NA	1.2 E-4	1.2 E-4	NA	2.5 E-4	1.3 E-5	NA
03D-SP133	10	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	4.2 E-6	NA	7.8 E-5	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.0 E-6	NA	NA	1.7 E-6	7.1 E-6	NA	NA	3.7 E-6	NA
03D-SP134	10	NA	NA	NA	NA	3.0 E-3	3.1 E-5	NA	NA	NA	NA	1.5 E-6	NA	NA	8.2 E-6	3.5 E-6	NA	4.7 E-5	8.1 E-6	NA
03D-SP134	20	NA	1.2 E-5	NA	NA	5.4 E-4	1.3 E-3	NA	NA	NA	5.9 E-5	8.1 E-5	NA	NA	2.9 E-4	8.0 E-4	NA	4.6 E-5	NA	NA
03D-SP135	10	1.3 E-6	1.9 E-5	NA	NA	NA	1.1 E-4	NA	NA	2.1 E-3	6.1 E-5	2.7 E-6	1.5 E-6	NA	9.5 E-6	4.5 E-5	NA	3.7 E-2	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	2.4 E-5	4.5 E-7	NA	1.5 E-3	7.4 E-3	NA	2.2 E-3	NA	NA
03D-SP136	10	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	1.1 E-4	NA	1.9 E-6	NA	NA	3.2 E-6	2.6 E-6	NA	NA	9.5 E-6	NA
03D-SP137	10	NA	1.5 E-5	NA	NA	NA	4.0 E-5	NA	NA	3.0 E-3	NA	2.7 E-6	3.0 E-6	NA	NA	1.2 E-5	NA	3.2 E-3	NA	NA
03D-SP138	10	NA	7.2 E-5	NA	NA	NA	1.1 E-4	NA	NA	1.0 E-4	1.2 E-4	1.1 E-6	6.4 E-5	4.3 E-5	1.0 E-5	3.3 E-5	NA	2.6 E-4	2.6 E-5	NA
03D-SP138	19	4.0 E-6	2.4 E-4	NA	NA	NA	5.7 E-5	NA	NA	2.0 E-4	7.2 E-4	NA	1.8 E-4	1.1 E-4	NA	1.3 E-5	NA	3.4 E-4	1.2 E-5	NA
03D-SP138	30	1.1 E-6	3.8 E-5	NA	9.6 E-7	3.0 E-4	1.4 E-4	NA	NA	3.8 E-5	3.1 E-4	4.8 E-7	2.2 E-5	9.0 E-6	7.7 E-6	1.7 E-5	NA	2.4 E-2	1.6 E-5	2.7 E-5
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-6	NA	1.7 E-4	7.5 E-6	NA
03D-SP139	20	NA	NA	NA	1.2 E-6	NA	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	3.6 E-5	NA	1.9 E-4	2.1 E-5	NA
03D-SP139	28	NA	5.9 E-6	NA	NA	1.6 E-4	3.8 E-4	NA	NA	NA	NA	5.2 E-7	2.5 E-8	NA	3.3 E-5	4.8 E-5	NA	1.5 E-3	1.1 E-5	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	1.2 E-6	NA	NA	8.6 E-6	5.8 E-6	NA	5.1 E-5	2.5 E-6	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	2.1 E-4	1.2 E-5	NA
03D-SP141	20	NA	NA	NA	7.5 E-7	1.6 E-4	1.8 E-4	NA	NA	NA	NA	1.2 E-6	9.1 E-8	NA	5.4 E-5	5.5 E-5	NA	1.2 E-4	1.5 E-5	NA
03D-SP142	10	NA	NA	NA	NA	NA	6.5 E-5	NA	NA	2.2 E-4	NA	NA	3.0 E-4	4.5 E-5	8.2 E-6	1.4 E-5	NA	3.4 E-3	5.8 E-6	NA
03D-SP142	20	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	1.0 E-4	NA	1.4 E-6	1.2 E-4	NA	2.7 E-5	4.7 E-5	NA	1.2 E-3	NA	NA
03D-SP142	30	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	2.2 E-3	NA	NA	NA	NA	6.5 E-3	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	1.5 E-3	NA	NA	3.8 E-6	NA	NA	5.0 E-6	NA	4.3 E-3	8.1 E-6	NA
03D-SP143	20	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	9.4 E-4	1.2 E-5	5.0 E-7	1.9 E-6	NA	4.0 E-6	7.4 E-6	NA	1.7 E-3	8.3 E-6	NA
03D-SP143	30	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	4.0 E-6	1.7 E-3	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	4.7 E-3	2.7 E-6	NA
03D-SP144	20	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	2.1 E-6	NA	3.7 E-3	1.9 E-6	NA
03D-SP144	30	1.7 E-5	9.7 E-5	NA	NA	NA	9.1 E-5	NA	NA	NA	1.3 E-3	1.3 E-6	NA	NA	3.3 E-4	1.8 E-3	NA	2.4 E-3	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	2.2 E-3	NA	NA	7.0 E-6	NA	2.6 E-6	7.3 E-6	NA	4.2 E-4	4.3 E-6	NA
03D-SP145	20	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	1.4 E-4	NA	NA	3.3 E-7	NA	3.4 E-6	5.5 E-6	NA	2.8 E-5	3.9 E-6	NA
03D-SP146	10	1.6 E-6	1.1 E-4	NA	NA	9.9 E-4	5.4 E-5	NA	NA	3.5 E-5	2.5 E-4	NA	4.3 E-4	1.3 E-4	2.4 E-6	3.9 E-6	NA	2.7 E-2	3.5 E-6	2.7 E-4
03D-SP146	20	4.3 E-6	1.3 E-4	NA	NA	NA	8.4 E-5	NA	NA	NA	8.7 E-4	NA	2.0 E-4	5.9 E-5	7.4 E-6	1.5 E-5	NA	1.1 E-2	8.7 E-6	5.9 E-4
03D-SP146	27	2.4 E-5	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	1.2 E-3	1.9 E-4	NA	NA	NA	4.0 E-3	NA	7.0 E-4
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.3 E-4	NA	5.4 E-5	NA	NA	NA	NA	4.7 E-3	NA	NA
03D-SP147	20	NA	8.4 E-6	NA	NA	4.0 E-4	5.2 E-5	NA	NA	6.9 E-5	1.2 E-4	NA	1.9 E-6	NA	3.4 E-6	8.5 E-6	NA	2.5 E-4	8.7 E-6	NA
03D-SP147	27	2.7 E-5	4.8 E-4	NA	NA	NA	NA	NA	NA	8.3 E-4	6.6 E-3	NA	6.3 E-5	NA	NA	3.7 E-5	NA	1.3 E-3	NA	1.5 E-4
03D-SP148	10	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	2.5 E-4	NA	1.1 E-6	NA	NA	4.3 E-6	7.3 E-6	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	5.9 E-5	NA	NA	NA	NA	NA	5.9 E-6	NA	2.7 E-6	3.1 E-6	NA	NA	3.3 E-6	NA
03D-SP149	20	NA	NA	NA	NA	2.9 E-4	3.0 E-4	NA	NA	NA	NA	2.3 E-6	2.0 E-7	NA	2.7 E-5	2.2 E-5	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	1.2 E-6	NA	1.9 E-5	NA	NA
03D-SP84	15	NA	8.8 E-6	NA	NA	NA	9.6 E-5	NA	NA	3.1 E-5	1.9 E-5	NA	2.7 E-6	NA	4.8 E-6	5.8 E-5	NA	2.3 E-4	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	2.4 E-5	NA	NA	2.2 E-6	NA	1.4 E-6	6.2 E-6	NA	1.3 E-4	6.5 E-6	NA
03D-SP85	25	2.5 E-4	9.3 E-4	NA	NA	NA	6.0 E-3	NA	NA	NA	1.4 E-1	1.8 E-5	2.8 E-5	NA	2.2 E-3	1.5 E-2	NA	1.2 E-1	NA	NA
03D-SP85	30	NA	NA	NA	NA	1.3 E-4	1.5 E-4	NA	NA	NA	1.2 E-5	8.6 E-7	8.5 E-8	NA	6.9 E-6	1.2 E-5	NA	2.2 E-4	5.2 E-6	NA
03D-SP86	10	2.9 E-6	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	5.4 E-6	NA	1.3 E-4	8.1 E-6	NA
03D-SP86	20	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	3.9 E-5	5.1 E-6	NA
03D-SP87	10	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	4.7 E-6	1.0 E-7	NA	8.6 E-6	1.5 E-5	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	9.8 E-5	NA	NA	5.9 E-7	NA	5.0 E-6	1.4 E-5	NA	2.5 E-3	NA	NA
03D-SP88	20	NA	NA	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	NA	3.0 E-8	NA	8.9 E-6	1.5 E-5	NA	1.4 E-3	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	NA	NA	1.4 E-1	NA	NA

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard																				
Unit Risk																				
03D-SP90	10	2.2 E-6	7.0 E-5	NA	NA	NA	1.4 E-4	NA	NA	1.2 E-3	2.5 E-4	7.8 E-6	2.6 E-5	NA	3.3 E-5	2.4 E-4	NA	1.2 E-3	NA	NA
03D-SP90	20	8.9 E-7	1.3 E-5	NA	NA	NA	5.2 E-5	NA	NA	3.0 E-4	6.2 E-5	2.6 E-6	5.8 E-6	NA	7.7 E-6	4.7 E-5	NA	6.2 E-4	NA	NA
03D-SP91	10	NA	NA	NA	NA	4.1 E-4	4.7 E-5	NA	NA	1.0 E-4	NA	1.5 E-6	2.6 E-7	NA	8.2 E-6	3.6 E-6	NA	2.3 E-4	2.0 E-5	NA
03D-SP91	20	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	3.7 E-4	4.0 E-5	5.6 E-7	5.2 E-7	NA	2.7 E-6	1.6 E-6	NA	4.4 E-4	4.0 E-6	NA
03D-SP92	10	1.7 E-6	NA	NA	NA	NA	8.3 E-5	NA	NA	1.1 E-4	1.4 E-4	2.5 E-6	3.6 E-6	NA	3.1 E-6	8.2 E-6	NA	6.0 E-4	NA	NA
03D-SP92	20	1.5 E-6	1.0 E-5	NA	NA	NA	8.1 E-5	NA	NA	7.6 E-4	1.8 E-4	2.2 E-6	3.0 E-6	NA	5.7 E-6	1.2 E-5	NA	2.3 E-3	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	9.0 E-6	NA	NA	1.4 E-4	NA	8.7 E-4	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	1.6 E-5	NA	1.2 E-6	3.8 E-7	NA	5.0 E-6	1.8 E-5	NA	2.1 E-5	NA	NA
03D-SP94	15	NA	9.1 E-6	NA	NA	NA	2.2 E-5	NA	NA	1.8 E-4	8.3 E-5	NA	5.6 E-6	NA	NA	2.0 E-6	NA	2.1 E-2	NA	NA
03D-SP94	25	NA	NA	NA	NA	1.6 E-4	7.1 E-5	NA	NA	5.2 E-5	2.1 E-5	3.5 E-6	5.6 E-7	NA	1.1 E-5	1.4 E-5	NA	6.2 E-3	NA	NA
03D-SP95	10	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	5.3 E-3	NA	1.3 E-4	NA	NA	NA	NA	6.5 E-1	NA	NA
03D-SP95	18	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	5.7 E-5	NA	NA	NA	NA	3.3 E-1	NA	NA
03D-SP96	10	NA	NA	NA	NA	7.3 E-4	2.1 E-4	NA	NA	5.3 E-3	NA	2.7 E-5	2.4 E-7	NA	5.9 E-5	3.3 E-5	NA	3.8 E-4	NA	NA
03D-SP96	17	NA	NA	NA	NA	8.1 E-4	1.0 E-4	NA	NA	4.6 E-3	NA	2.9 E-6	1.9 E-7	NA	2.1 E-5	3.1 E-5	NA	1.8 E-4	NA	NA
03D-SP99	10	NA	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	1.2 E+0	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	NA	NA	1.7 E-5	NA	3.8 E-6	5.4 E-6	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	2.6 E-6	NA	1.8 E-6	8.2 E-6	NA	NA	2.6 E-6	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA
11D-SP27	20	NA	NA	NA	NA	2.0 E-4	8.7 E-5	NA	NA	NA	NA	5.8 E-7	NA	NA	1.3 E-5	2.2 E-5	NA	3.0 E-5	2.1 E-6	NA
11D-SP28	10	NA	NA	NA	NA	2.8 E-4	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	8.2 E-6	NA	NA	NA	NA
11D-SP28	20	9.0 E-7	9.0 E-5	NA	NA	NA	NA	NA	NA	3.0 E-4	2.7 E-5	NA	2.7 E-7	NA	NA	NA	NA	7.6 E-5	1.3 E-6	NA
11D-SP29	10	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA	NA	1.6 E-6	NA	1.2 E-5	2.9 E-5	NA	NA	9.5 E-6	NA
11D-SP29	30	8.1 E-7	1.2 E-4	NA	7.5 E-7	1.1 E-4	5.8 E-5	NA	NA	NA	2.7 E-5	NA	6.7 E-6	2.4 E-6	4.1 E-5	2.0 E-4	NA	NA	1.2 E-5	NA
11D-SP30	10	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	3.7 E-5	NA	NA	5.2 E-6	5.1 E-6	6.4 E-5	1.4 E-4	NA	NA	NA	NA
11D-SP30	20	2.7 E-6	3.0 E-5	NA	NA	NA	2.6 E-5	NA	NA	1.1 E-4	7.4 E-5	NA	2.2 E-6	3.2 E-6	6.0 E-5	2.5 E-4	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	2.9 E-5	NA	NA	7.5 E-6	NA
11D-SP31	20	NA	NA	NA	NA	NA	1.6 E-5	NA	3.3 E-5	5.7 E-5	1.8 E-5	NA	3.6 E-7	NA	1.8 E-6	3.8 E-5	NA	NA	7.1 E-6	NA
11D-SP31	30	2.2 E-6	6.0 E-6	NA	4.2 E-7	NA	1.8 E-5	NA	NA	6.3 E-5	1.0 E-4	NA	1.5 E-7	NA	3.5 E-5	8.8 E-5	NA	NA	7.3 E-6	NA
50D-SP01	10	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	NA	1.9 E-7	NA	3.0 E-6	4.5 E-6	NA	6.0 E-4	NA	NA
50D-SP01	20	NA	NA	NA	NA	1.6 E-4	9.3 E-5	NA	NA	NA	NA	2.7 E-6	NA	NA	1.9 E-5	9.3 E-5	NA	1.2 E-4	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	4.7 E-4	NA	NA
51D-SP04	20	NA	NA	NA	NA	2.0 E-4	1.0 E-4	NA	NA	NA	NA	2.6 E-5	NA	NA	4.0 E-5	5.8 E-5	NA	7.4 E-5	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	4.1 E-5	NA	8.1 E-5	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	2.7 E-4	NA	NA
A20-B34-SP01	20	NA	1.2 E-5	NA	NA	NA	6.4 E-5	NA	2.8 E-5	NA	NA	8.2 E-7	NA	NA	9.4 E-6	2.3 E-5	NA	1.0 E-4	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	1.8 E-4	3.5 E-5	NA	NA	NA	NA	6.3 E-7	NA	NA	5.7 E-6	5.5 E-6	NA	6.2 E-5	3.8 E-6	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	1.5 E-5	NA	2.0 E-3	4.7 E-6	NA
A20-B34-SP03	29	NA	NA	NA	6.2 E-7	1.1 E-4	6.4 E-5	NA	7.1 E-5	1.1 E-5	1.6 E-5	3.7 E-7	NA	NA	1.1 E-5	1.6 E-5	NA	1.6 E-3	1.0 E-5	NA
A20-RB37-SP01	10	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	2.0 E-3	NA	NA	NA	NA	2.4 E-1	NA	NA
A20-RB37-SP01	20	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	1.3 E-3	NA	NA	NA	NA	1.5 E-1	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-4	NA	NA	8.1 E-5	NA	4.9 E-3	NA	NA
A20-RB37-SP02	10	NA	9.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	5.0 E-6	NA	3.0 E-2	8.8 E-6	NA
A20-RB37-SP02	20	NA	NA	NA	NA	2.4 E-4	3.9 E-5	NA	NA	NA	NA	5.7 E-7	5.5 E-8	NA	5.7 E-6	9.3 E-6	NA	3.7 E-4	1.2 E-5	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	NA	8.0 E-8	NA	4.5 E-6	9.5 E-6	NA	1.2 E-3	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	6.7 E-8	NA	3.4 E-6	7.1 E-6	NA	8.1 E-4	NA	NA
A20-RX73-SP01	10	NA	2.3 E-5	NA	NA	NA	3.4 E-5	NA	NA	2.0 E-3	NA	NA	NA	NA	1.4 E-5	2.5 E-6	NA	4.3 E-4	NA	NA
A20-RX73-SP01	20	NA	9.5 E-5	NA	NA	3.8 E-4	8.1 E-5	NA	NA	7.4 E-4	NA	6.9 E-7	2.9 E-8	NA	3.1 E-4	1.3 E-5	NA	3.9 E-4	NA	NA
A20-ST01-1-SP01	10	1.5 E-6	NA	NA	NA	NA	4.9 E-5	NA	NA	4.9 E-5	NA	NA	7.0 E-6	NA	3.0 E-6	4.5 E-6	NA	8.6 E-4	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	6.4 E-7	NA	NA	4.3 E-6	4.1 E-6	NA	9.3 E-5	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	1.1 E-4	NA	1.7 E-6	2.5 E-5	NA	3.5 E-6	5.0 E-6	NA	1.6 E-3	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	1.4 E-4	1.3 E-4	NA	NA	7.9 E-5	NA	8.4 E-7	4.5 E-6	NA	1.9 E-5	3.6 E-5	NA	2.2 E-4	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	NA	NA	1.7 E-6	NA	NA	3.8 E-6	3.0 E-6	NA	2.8 E-4	1.0 E-5	NA
A20-ST01-3-SP01	20	NA	NA	2.5 E-4	NA	1.8 E-4	2.5 E-4	NA	NA	NA	NA	7.1 E-6	NA	NA	1.2 E-4	5.8 E-4	NA	1.6 E-4	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	8.2 E-5	5.3 E-5	NA	NA	1.5 E-4	2.7 E-4	NA	NA	NA	NA
A20-ST02-SP01	30	NA	5.4 E-6	NA	NA	1.0 E-4	4.4 E-4	NA	NA	NA	4.4 E-5	1.3 E-6	NA	NA	1.4 E-4	1.3 E-4	NA	9.8 E-5	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	3.3 E-4	NA	NA

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Depth	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dioxane	2-Propanol	Benzene	Bromodichloromethane	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Ethylbenzene	Freon 113	Freon 12	Heptane	Hexane	Methylene Chloride	Tetrachloroethylene	Tetrahydrofuran	trans-1,2-Dichloroethene
Unit Hazard																				
Unit Risk																				
A20-ST02-SP02	20	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	6.6 E-7	NA	NA	2.3 E-6	3.8 E-6	NA	1.7 E-4	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	4.5 E-4	1.3 E-4	NA	NA	NA	NA	8.0 E-7	2.0 E-8	NA	1.8 E-5	4.7 E-5	NA	7.4 E-5	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	1.8 E-4	1.2 E-5	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	2.3 E-6	NA	5.3 E-5	3.4 E-6	NA
A20-ST02-SP03	30	NA	NA	NA	NA	1.1 E-4	5.3 E-5	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	5.3 E-6	NA	3.8 E-5	5.8 E-6	NA
A20-ST02-SP04	30	NA	NA	NA	NA	6.0 E-3	9.1 E-5	NA	NA	NA	NA	3.2 E-7	NA	NA	7.7 E-6	1.3 E-5	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	3.4 E-4	4.3 E-3	NA	NA	NA	NA	NA	NA	4.2 E-3	6.7 E-2	NA	1.2 E-5	NA	NA	1.1 E-5	NA	1.1 E-3	1.7 E-5	5.9 E-4
A20-ST05-SP01	30	3.7 E-4	3.0 E-3	1.6 E-3	NA	NA	NA	NA	NA	2.7 E-3	6.0 E-2	NA	4.6 E-5	NA	6.3 E-6	8.7 E-6	NA	3.0 E-4	1.5 E-5	1.1 E-4
A20-ST05-SP02	10	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	4.2 E-6	NA	5.2 E-4	8.8 E-6	NA
A20-ST05-SP02	20	NA	NA	NA	NA	2.6 E-4	1.7 E-5	NA	NA	NA	NA	6.3 E-7	3.0 E-8	NA	3.1 E-6	5.2 E-6	NA	3.9 E-4	8.3 E-6	NA
A20-ST05-SP03	10	1.6 E-5	2.8 E-4	NA	NA	2.8 E-4	3.1 E-5	NA	NA	1.5 E-4	1.1 E-3	NA	2.5 E-5	NA	5.9 E-6	6.8 E-5	NA	1.4 E-3	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	NA	NA	NA	4.7 E-7	NA	6.8 E-6	1.5 E-5	NA	6.5 E-5	6.4 E-6	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	1.1 E-5	NA	NA	4.8 E-6	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	8.0 E-6	NA	2.2 E-5	1.1 E-5	NA	3.9 E-3	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	4.7 E-7	7.6 E-6	NA	3.1 E-6	4.4 E-6	NA	2.0 E-3	NA	NA
A20-ST14-SP01	10	NA	5.4 E-5	NA	NA	NA	3.1 E-5	NA	NA	2.6 E-4	NA	NA	9.6 E-5	NA	NA	3.2 E-6	NA	3.6 E-3	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	7.9 E-5	NA	NA	3.3 E-5	NA	2.7 E-6	7.1 E-6	NA	3.5 E-4	9.5 E-6	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	NA	3.9 E-6	NA	5.0 E-6	9.1 E-6	NA	3.3 E-3	7.5 E-6	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	NA	2.3 E-6	NA	8.6 E-6	1.5 E-5	NA	2.5 E-3	8.7 E-6	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	9.7 E-7	NA	NA	1.9 E-6	NA	3.5 E-5	2.5 E-6	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	1.9 E-4	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	3.8 E-6	NA	NA	2.0 E-6	NA

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
03D-SP100	10	1.6 E-4	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E+0
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-2
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E+2
03D-SP102	28	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+1
03D-SP103	10	4.6 E-4	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E+0
03D-SP103	20	5.1 E-5	NA	2.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1
03D-SP104	10	3.8 E-3	NA	7.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E+0
03D-SP104	20	8.8 E-3	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E+0
03D-SP105	10	3.8 E-3	NA	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E+0
03D-SP106	15	1.5 E-5	3.5 E-4	3.8 E-7	3.4 E-4	1.5 E-5	1.2 E-6	3.4 E-5	NA	8.5 E-6	3.1 E-6	1.4 E-6	3.3 E-7	NA	NA	7.3 E-5	4.5 E-5	NA	NA	5.0 E-5	2.3 E-2
03D-SP106	25	2.3 E-2	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E+0
03D-SP106	30	1.4 E-2	6.6 E-3	7.6 E-5	NA	1.8 E-3	NA	NA	NA	NA	2.2 E-4	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	2.9 E-4	6.1 E-1
03D-SP107	10	2.4 E-2	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	8.9 E-4	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	5.7 E-1
03D-SP107	20	1.9 E-3	NA	7.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
03D-SP107	29	2.6 E-2	NA	6.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	5.9 E-1
03D-SP108	10	8.8 E-5	1.0 E-4	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	9.0 E-7	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
03D-SP109	10	6.3 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-2
03D-SP109	20	1.7 E-2	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E+0
03D-SP109	30	4.4 E-5	3.2 E-5	1.7 E-7	NA	NA	3.6 E-6	NA	3.8 E-7	2.3 E-5	7.1 E-7	NA	5.5 E-8	2.6 E-6	NA	1.7 E-5	6.5 E-6	NA	NA	1.1 E-5	4.3 E-3
03D-SP110	10	2.5 E-4	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-2
03D-SP110	20	7.1 E-5	NA	4.4 E-7	NA	7.5 E-6	8.2 E-7	NA	NA	8.7 E-6	2.0 E-6	NA	8.9 E-8	1.3 E-6	NA	7.0 E-6	NA	NA	NA	5.7 E-6	7.0 E-3
03D-SP111	10	1.1 E-4	NA	3.9 E-6	NA	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	2.4 E-1
03D-SP111	20	NA	NA	NA	NA	1.1 E-3	4.2 E-7	NA	NA	6.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	4.1 E-3
03D-SP112	10	NA	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	5.9 E-6	1.7 E-3
03D-SP112	20	NA	NA	NA	NA	9.7 E-4	7.2 E-7	6.2 E-6	NA	9.6 E-6	1.5 E-6	NA	8.7 E-8	NA	NA	2.7 E-5	1.1 E-5	NA	NA	2.5 E-5	1.6 E-3
03D-SP113	10	4.9 E-6	NA	NA	NA	1.6 E-3	NA	1.0 E-5	NA	4.3 E-6	2.6 E-6	NA	2.1 E-7	NA	NA	3.2 E-5	1.8 E-5	NA	NA	1.7 E-5	4.5 E-3
03D-SP113	20	NA	1.1 E-3	NA	NA	4.0 E-3	NA	NA	NA	NA	3.0 E-4	NA	3.1 E-5	NA	NA	NA	NA	NA	NA	5.0 E-4	2.3 E-1
03D-SP114	10	NA	NA	NA	NA	NA	8.7 E-7	NA	NA	8.1 E-6	NA	NA	NA	1.6 E-6	NA	1.3 E-5	NA	NA	NA	5.7 E-6	3.2 E-4
03D-SP114	20	NA	NA	NA	NA	NA	2.1 E-6	NA	2.0 E-7	2.0 E-5	9.1 E-7	NA	NA	4.6 E-6	NA	1.3 E-5	6.0 E-6	NA	NA	3.2 E-5	5.0 E-4
03D-SP115	10	6.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-3
03D-SP116	10	1.9 E-5	NA	NA	6.2 E-4	1.0 E-3	NA	5.6 E-5	NA	NA	2.7 E-6	NA	3.0 E-7	3.3 E-6	NA	1.3 E-4	5.6 E-5	NA	NA	3.4 E-5	4.4 E-3
03D-SP117	10	3.8 E-5	NA	6.1 E-7	1.6 E-4	4.0 E-3	NA	1.9 E-5	3.0 E-7	8.8 E-6	1.2 E-5	NA	7.1 E-7	2.5 E-6	NA	8.6 E-5	2.6 E-5	NA	2.5 E-6	6.4 E-5	9.3 E-3
03D-SP118	10	3.6 E-5	NA	1.2 E-6	NA	2.8 E-3	NA	NA	NA	1.2 E-5	4.6 E-6	NA	5.5 E-7	5.8 E-6	NA	5.3 E-5	1.9 E-5	NA	4.5 E-6	3.2 E-5	6.4 E-2
03D-SP118	20	1.4 E-5	NA	NA	NA	5.2 E-3	NA	NA	3.5 E-7	1.5 E-5	6.4 E-6	NA	9.0 E-6	6.5 E-6	NA	3.2 E-5	1.2 E-5	NA	2.9 E-6	6.0 E-5	1.5 E-2
03D-SP119	10	1.8 E-3	NA	1.1 E-6	5.2 E-4	1.7 E-3	NA	5.1 E-5	NA	NA	6.3 E-6	NA	NA	NA	NA	1.6 E-4	5.4 E-5	NA	NA	5.4 E-5	5.0 E-2
03D-SP119	20	7.1 E-3	1.1 E-4	NA	3.6 E-4	1.0 E-3	NA	3.4 E-5	NA	NA	4.2 E-6	NA	5.8 E-6	NA	NA	1.1 E-4	4.8 E-5	NA	NA	4.4 E-5	7.9 E-2
03D-SP119	29	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	7.0 E-5	NA	NA	4.7 E-3	NA	NA	NA	1.7 E-3	2.2 E+0
03D-SP120	10	2.7 E-5	NA	2.9 E-7	4.1 E-4	1.2 E-3	NA	4.2 E-5	NA	6.5 E-6	7.5 E-6	NA	3.8 E-7	3.0 E-6	NA	1.1 E-4	3.7 E-5	NA	1.5 E-6	2.8 E-5	2.7 E-3
03D-SP120	20	8.2 E-6	NA	1.8 E-7	1.9 E-4	1.6 E-3	NA	1.5 E-5	NA	4.0 E-6	3.7 E-6	NA	NA	2.5 E-6	NA	8.3 E-5	2.4 E-5	NA	3.0 E-6	1.5 E-4	3.3 E-3
03D-SP121	15	1.9 E-3	3.7 E-3	7.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-1
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	5.2 E-1
03D-SP122	10	3.8 E-5	4.9 E-4	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	1.9 E-5	NA	NA	NA	9.4 E-6	4.6 E-2
03D-SP122	20	2.6 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	7.1 E-2
03D-SP122	30	6.5 E-4	NA	5.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	NA	NA	1.6 E-5	1.8 E-5	NA	NA	NA	1.0 E-5	9.4 E-4
03D-SP123	20	NA	NA	NA	6.3 E-5	NA	1.5 E-6	7.7 E-6	NA	1.1 E-5	NA	NA	NA	3.7 E-6	NA	2.3 E-5	1.1 E-5	NA	NA	3.7 E-5	9.1 E-4
03D-SP124	10	NA	NA	NA	8.0 E-4	1.3 E-3	NA	6.7 E-5	NA	NA	5.2 E-6	NA	NA	2.6 E-6	NA	1.3 E-4	5.6 E-5	2.4 E-5	NA	3.1 E-5	2.6 E-3
03D-SP124	20	5.6 E-6	NA	NA	3.5 E-4	1.4 E-3	NA	3.7 E-5	NA	NA	1.2 E-5	NA	1.5 E-7	1.2 E-6	NA	1.2 E-4	5.1 E-5	1.6 E-5	NA	3.1 E-5	2.2 E-3
03D-SP125	10	7.4 E-5	NA	NA	NA	6.5 E-3	NA	NA	6.8 E-7	3.7 E-5	5.8 E-5	NA	NA	NA	1.5 E-4	5.4 E-5	1.7 E-5	NA	3.1 E-6	7.6 E-5	8.0 E-3
03D-SP125	20	2.3 E-3	NA	NA	NA	4.9 E-3	NA	NA	NA	NA	2.9 E-5	NA	6.4 E-7	NA	2.6 E-5	4.0 E-5	1.7 E-5	NA	5.7 E-6	5.4 E-5	8.8 E-3
03D-SP126	10	1.4 E-5	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	9.1 E-6	NA	NA	NA	7.0 E-6	5.6 E-4
03D-SP126	20	1.7 E-5	7.2 E-5	NA	NA	NA	9.3 E-7	NA	NA	1.1 E-5	1.1 E-6	NA	NA	1.6 E-6	NA	1.5 E-5	5.9 E-6	NA	NA	1.3 E-5	3.2 E-4
03D-SP127	10	4.9 E-6	NA	NA	1.2 E-4	NA	NA	1.1 E-5	NA	NA	3.2 E-6	NA	NA	NA	NA	2.4 E-5	1.2 E-5	NA	NA	9.4 E-6	1.0 E-3
03D-SP127	20	1.9 E-6	NA	NA	7.1 E-5	NA	8.7 E-7	7.8 E-6	NA	8.7 E-6	NA	NA	7.2 E-8	1.4 E-6	NA	2.2 E-5	1.0 E-5	NA	NA	9.7 E-6	5.5 E-4
03D-SP128	10	3.6 E-6	NA	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	1.2 E-4
03D-SP128	20	9.3 E-3	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	NA	NA	7.7 E-5	3.9 E-5	NA	NA	1.8 E-5	1.4 E-2
03D-SP128	30	2.1 E-2	NA	NA	5.6 E-4	NA	4.3 E-6	6.6 E-5	NA	NA	1.8 E-5	NA	NA	9.0 E-6	NA	3.4 E-5	NA	NA	NA	2.2 E-5	5.8 E-2
03D-SP129	15	4.2 E-5	NA	NA	1.6 E-4	NA	2.3 E-6	1.2 E-5	2.0 E-7	1.4 E-5	NA	NA	NA	4.3 E-6	NA	3.8 E-5	2.0 E-5	NA	NA	2.7 E-5	8.4 E-4

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Trichloroethylene	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	HI
Unit Hazard																					
Unit Risk																					
03D-SP129	25	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
03D-SP130	10	NA	NA	NA	NA	NA	9.7 E-7	NA	NA	1.5 E-5	NA	NA	NA	2.3 E-6	NA	9.2 E-6	NA	NA	NA	1.2 E-5	2.0 E-4
03D-SP130	20	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	2.7 E-5	NA	NA	NA	2.6 E-6	NA	6.3 E-6	NA	NA	6.2 E-7	5.7 E-6	1.4 E-4
03D-SP131	10	NA	NA	NA	4.3 E-4	2.8 E-5	NA	4.0 E-5	NA	NA	1.6 E-5	NA	NA	NA	NA	7.2 E-5	3.0 E-5	2.5 E-5	NA	7.0 E-4	2.9 E-3
03D-SP131	20	NA	NA	NA	8.6 E-5	NA	7.8 E-7	7.9 E-6	NA	1.0 E-5	NA	NA	NA	1.2 E-6	NA	2.0 E-5	1.0 E-5	NA	NA	9.4 E-6	5.4 E-4
03D-SP132	10	6.8 E-5	NA	1.5 E-6	NA	NA	NA	NA	NA	6.2 E-6	1.9 E-6	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	1.1 E-5	8.9 E-4
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	1.4 E-5	NA	NA	NA	NA	4.8 E-6	NA	NA	4.4 E-5	4.0 E-5	3.6 E-6	1.4 E-6	4.8 E-6	NA	1.7 E-5	9.2 E-6	NA	NA	3.7 E-5	1.4 E-3
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	1.4 E-6	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	8.2 E-6	1.5 E-4
03D-SP133	20	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	6.1 E-6	6.2 E-7	NA	NA	1.7 E-6	NA	3.2 E-5	1.6 E-5	NA	NA	1.1 E-5	9.8 E-5
03D-SP134	10	2.7 E-6	NA	NA	1.4 E-4	NA	NA	1.3 E-5	3.4 E-7	4.5 E-6	1.6 E-6	1.9 E-6	2.2 E-7	5.3 E-6	NA	2.9 E-5	9.8 E-6	NA	NA	1.5 E-5	3.3 E-3
03D-SP134	20	NA	4.8 E-5	NA	1.1 E-4	2.6 E-3	7.0 E-7	NA	NA	7.4 E-6	1.6 E-5	8.3 E-5	6.7 E-5	9.4 E-7	NA	2.3 E-5	1.1 E-5	2.3 E-4	NA	1.3 E-5	6.3 E-3
03D-SP135	10	4.6 E-5	1.5 E-4	1.4 E-6	1.8 E-4	2.6 E-3	NA	1.9 E-5	NA	4.2 E-6	5.8 E-6	2.2 E-6	2.1 E-6	1.6 E-6	NA	8.3 E-5	3.0 E-5	NA	2.0 E-6	4.5 E-5	4.3 E-2
03D-SP135	20	NA	2.5 E-2	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	1.0 E-4	3.3 E-4	NA	NA	9.9 E-5	NA	2.3 E-4	NA	4.0 E-5	4.7 E-2
03D-SP136	10	NA	NA	NA	3.4 E-4	NA	NA	1.9 E-5	NA	2.2 E-6	NA	4.9 E-6	2.0 E-7	5.3 E-6	NA	3.2 E-5	NA	3.7 E-5	NA	1.3 E-5	1.7 E-3
03D-SP137	10	1.3 E-4	NA	5.8 E-7	3.7 E-4	2.3 E-3	NA	3.9 E-5	NA	4.9 E-6	4.6 E-6	NA	4.4 E-7	NA	NA	1.1 E-4	5.3 E-5	NA	NA	3.6 E-5	9.3 E-3
03D-SP138	10	9.3 E-4	NA	8.4 E-7	1.9 E-4	1.2 E-4	7.7 E-7	1.5 E-5	4.5 E-7	7.1 E-6	2.2 E-5	NA	1.1 E-6	3.6 E-6	1.9 E-5	3.8 E-5	1.5 E-5	NA	9.3 E-7	2.9 E-5	2.2 E-3
03D-SP138	19	2.5 E-3	NA	5.5 E-7	NA	4.9 E-5	NA	NA	NA	NA	1.7 E-5	NA	2.8 E-7	1.0 E-5	4.9 E-5	2.7 E-5	NA	NA	NA	2.1 E-5	4.5 E-3
03D-SP138	30	9.8 E-4	NA	NA	NA	NA	2.0 E-6	NA	NA	7.6 E-5	4.0 E-6	NA	NA	6.9 E-6	6.6 E-6	7.1 E-6	NA	NA	NA	2.2 E-5	2.6 E-2
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	3.5 E-5	2.3 E-4
03D-SP139	20	2.8 E-5	NA	NA	NA	NA	6.5 E-7	NA	1.7 E-7	5.2 E-6	1.4 E-6	NA	9.6 E-8	1.4 E-6	NA	7.7 E-6	NA	NA	NA	1.1 E-5	3.6 E-4
03D-SP139	28	7.1 E-5	NA	NA	NA	NA	1.6 E-6	NA	1.6 E-7	2.6 E-5	2.7 E-6	NA	1.8 E-7	2.6 E-6	NA	7.5 E-6	3.8 E-6	NA	NA	2.6 E-5	2.2 E-3
03D-SP140	10	6.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	6.4 E-6	1.6 E-4
03D-SP140	20	3.4 E-6	NA	NA	NA	NA	1.6 E-6	NA	NA	2.5 E-5	NA	NA	NA	1.3 E-6	NA	2.6 E-5	1.1 E-5	NA	NA	2.8 E-5	2.1 E-4
03D-SP141	10	NA	NA	NA	NA	NA	6.3 E-7	NA	NA	1.0 E-5	NA	NA	NA	1.6 E-6	NA	8.9 E-6	NA	NA	NA	1.2 E-5	2.6 E-4
03D-SP141	20	4.3 E-6	NA	NA	NA	2.4 E-5	4.6 E-6	NA	NA	3.5 E-5	2.0 E-5	2.5 E-6	4.5 E-7	2.3 E-6	NA	1.9 E-5	7.3 E-6	2.9 E-5	NA	8.7 E-5	8.2 E-4
03D-SP142	10	8.2 E-6	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	8.7 E-6	1.5 E-5	NA	NA	NA	3.3 E-5	4.1 E-3
03D-SP142	20	3.4 E-6	NA	NA	NA	NA	2.1 E-6	NA	NA	2.0 E-5	2.9 E-6	NA	2.2 E-7	5.4 E-6	NA	1.9 E-5	NA	NA	NA	6.7 E-5	1.8 E-3
03D-SP142	30	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	1.7 E-2
03D-SP143	10	6.8 E-5	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	9.7 E-6	NA	NA	NA	1.1 E-5	6.0 E-3
03D-SP143	20	3.1 E-5	NA	3.1 E-7	NA	NA	NA	NA	NA	4.1 E-6	1.5 E-6	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	1.3 E-5	2.8 E-3
03D-SP143	30	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	2.8 E-3
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	4.9 E-6	4.8 E-3
03D-SP144	20	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	2.9 E-5	NA	NA	NA	9.0 E-7	NA	5.9 E-6	NA	NA	5.0 E-7	5.0 E-6	3.8 E-3
03D-SP144	30	NA	1.0 E-2	NA	NA	3.8 E-3	NA	NA	NA	2.2 E-5	NA	8.3 E-6	7.4 E-5	NA	NA	NA	NA	NA	NA	4.6 E-6	2.0 E-2
03D-SP145	10	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-6	2.7 E-3
03D-SP145	20	1.0 E-6	NA	NA	NA	NA	5.1 E-7	NA	NA	6.5 E-6	9.1 E-7	NA	NA	1.2 E-6	NA	5.9 E-6	NA	NA	NA	7.0 E-6	2.5 E-4
03D-SP146	10	1.1 E-3	NA	1.5 E-6	NA	NA	NA	NA	NA	1.8 E-5	4.0 E-6	NA	NA	7.2 E-6	1.9 E-5	9.9 E-6	NA	NA	NA	7.0 E-6	3.0 E-2
03D-SP146	20	9.0 E-4	NA	6.4 E-7	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	NA	1.6 E-5	1.4 E-2
03D-SP146	27	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
03D-SP147	10	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2
03D-SP147	20	1.6 E-3	NA	NA	NA	NA	3.4 E-7	NA	NA	1.4 E-5	1.1 E-6	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	1.1 E-5	2.5 E-3
03D-SP147	27	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	8.8 E-5	4.5 E-4
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	3.0 E-6	NA	NA	NA	NA	7.3 E-7	NA	NA	9.6 E-6	5.8 E-6	NA	NA	4.4 E-6	8.2 E-6	NA	NA	NA	NA	6.4 E-6	1.1 E-4
03D-SP149	20	1.1 E-6	NA	NA	NA	NA	3.2 E-6	6.4 E-6	5.6 E-7	4.3 E-5	1.5 E-6	NA	1.2 E-7	1.1 E-5	NA	4.4 E-5	2.1 E-5	NA	4.9 E-7	6.0 E-5	8.4 E-4
03D-SP150	30	7.3 E-7	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	4.2 E-7	NA	NA	3.1 E-6	NA	NA	NA	NA	NA	1.5 E-6	4.0 E-5
03D-SP84	15	1.8 E-5	6.2 E-4	NA	NA	3.2 E-4	1.6 E-6	NA	NA	1.4 E-5	3.5 E-6	NA	6.0 E-6	NA	NA	8.1 E-6	NA	NA	NA	2.2 E-5	1.5 E-3
03D-SP84	25	5.5 E-6	4.5 E-5	NA	NA	9.4 E-6	NA	NA	NA	3.2 E-6	3.9 E-6	NA	3.6 E-7	NA	NA	NA	NA	NA	NA	4.2 E-6	2.8 E-4
03D-SP85	25	1.0 E-3	1.6 E-1	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	3.9 E-4	7.2 E-4	NA	NA	NA	7.5 E-4	8.4 E-4	NA	NA	4.6 E-1
03D-SP85	30	5.1 E-6	4.8 E-6	NA	NA	NA	5.2 E-6	NA	3.5 E-7	4.4 E-5	1.4 E-6	NA	1.5 E-7	2.0 E-6	NA	1.4 E-5	7.9 E-6	NA	NA	2.6 E-5	6.5 E-4
03D-SP86	10	4.9 E-6	NA	5.2 E-7	NA	NA	9.7 E-7	NA	NA	1.0 E-5	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-6	2.0 E-4
03D-SP86	20	4.3 E-6	NA	NA	NA	NA	6.5 E-7	NA	NA	8.3 E-6	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	6.7 E-6	8.6 E-5
03D-SP87	10	NA	NA	NA	2.1 E-4	1.9 E-3	NA	2.8 E-5	NA	NA	2.2 E-6	NA	2.3 E-7	2.5 E-5	NA	1.8 E-4	4.4 E-5	NA	4.6 E-6	1.2 E-4	2.7 E-3
03D-SP88	10	4.9 E-5	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	7.6 E-6	2.7 E-3
03D-SP88	20	2.0 E-6	NA	NA	NA	NA	5.3 E-7	NA	NA	6.5 E-6	1.2 E-6	NA	9.2 E-8	NA	NA	1.3 E-5	5.8 E-6	NA	NA	1.0 E-5	1.5 E-3
03D-SP89	10	1.1 E-4	NA	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Trichloroethylene	Vinyl Chloride	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Carbon Disulfide	Cumene	Cyclohexane	Ethanol	Freon 11	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Toluene	HI
Unit Hazard																					
Unit Risk																					
03D-SP90	10	1.5 E-4	5.1 E-4	8.7 E-7	2.4 E-4	3.0 E-3	NA	3.9 E-5	NA	2.0 E-5	3.2 E-6	NA	7.4 E-6	5.8 E-6	NA	2.7 E-4	7.2 E-5	NA	2.2 E-6	1.3 E-4	7.5 E-3
03D-SP90	20	5.7 E-5	1.0 E-4	3.3 E-7	1.6 E-4	5.1 E-4	NA	2.1 E-5	NA	4.8 E-5	7.4 E-7	NA	1.4 E-6	2.9 E-6	NA	9.9 E-5	3.1 E-5	NA	2.1 E-6	4.4 E-5	2.2 E-3
03D-SP91	10	8.5 E-5	5.7 E-5	NA	1.4 E-4	NA	6.0 E-7	1.3 E-5	8.9 E-7	5.7 E-6	1.2 E-5	NA	1.6 E-7	NA	NA	4.9 E-5	1.7 E-5	NA	9.0 E-7	3.9 E-5	1.3 E-3
03D-SP91	20	5.3 E-5	1.1 E-4	1.8 E-7	9.0 E-5	NA	NA	8.6 E-6	3.5 E-7	NA	2.9 E-6	NA	NA	NA	NA	2.0 E-5	7.4 E-6	NA	5.4 E-7	1.2 E-5	1.2 E-3
03D-SP92	10	3.3 E-5	3.9 E-4	8.7 E-7	2.8 E-4	1.8 E-3	NA	2.8 E-5	NA	NA	5.5 E-6	NA	2.3 E-7	NA	NA	9.9 E-5	3.2 E-5	NA	2.0 E-6	4.2 E-5	3.6 E-3
03D-SP92	20	1.0 E-4	3.6 E-4	6.0 E-7	8.0 E-5	2.5 E-3	NA	1.1 E-5	NA	5.7 E-6	4.2 E-6	NA	1.5 E-7	NA	NA	8.1 E-5	2.6 E-5	NA	9.3 E-7	5.4 E-5	6.6 E-3
03D-SP93	15	NA	NA	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	4.2 E-3
03D-SP93	25	NA	NA	NA	9.6 E-5	4.2 E-4	NA	1.2 E-5	NA	NA	NA	NA	6.0 E-7	5.7 E-6	NA	4.9 E-5	1.6 E-5	NA	NA	2.6 E-5	7.3 E-4
03D-SP94	15	5.8 E-5	NA	2.9 E-7	1.7 E-4	NA	NA	7.9 E-6	NA	NA	2.9 E-6	NA	NA	NA	NA	1.7 E-5	7.7 E-6	NA	NA	4.1 E-6	2.2 E-2
03D-SP94	25	5.9 E-6	NA	NA	1.6 E-4	NA	7.7 E-7	1.5 E-5	NA	NA	1.3 E-6	NA	2.8 E-7	8.1 E-7	NA	9.8 E-5	3.7 E-5	NA	NA	3.1 E-5	6.9 E-3
03D-SP95	10	1.6 E-3	3.1 E-3	1.6 E-5	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	6.6 E-1
03D-SP95	18	1.1 E-3	2.5 E-3	9.6 E-6	NA	1.8 E-3	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	3.4 E-1
03D-SP96	10	1.1 E-5	NA	NA	8.0 E-4	5.4 E-4	NA	1.5 E-4	8.9 E-7	5.7 E-6	1.4 E-5	4.2 E-6	4.1 E-6	1.1 E-5	NA	8.4 E-4	3.3 E-4	8.9 E-5	NA	1.6 E-3	1.1 E-2
03D-SP96	17	1.5 E-5	NA	NA	2.2 E-4	2.7 E-4	1.4 E-6	2.0 E-5	NA	1.2 E-5	1.1 E-5	NA	1.7 E-6	6.9 E-6	NA	6.7 E-5	2.3 E-5	NA	1.4 E-6	2.7 E-4	6.6 E-3
03D-SP99	10	2.5 E-4	NA	3.5 E-5	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+0
11D-SP26	10	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	1.5 E-6	NA	1.6 E-7	NA	NA	1.1 E-5	NA	NA	NA	8.2 E-6	1.1 E-4
11D-SP26	20	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	7.0 E-6	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	2.0 E-6	4.8 E-5
11D-SP27	10	6.3 E-6	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	4.7 E-6	5.9 E-4
11D-SP27	20	1.2 E-6	NA	2.2 E-7	NA	NA	1.5 E-6	NA	1.4 E-7	1.6 E-5	3.4 E-6	NA	1.3 E-7	4.4 E-6	NA	1.5 E-5	5.8 E-6	NA	NA	1.9 E-5	4.3 E-4
11D-SP28	10	8.2 E-6	NA	8.7 E-7	NA	NA	NA	NA	NA	6.3 E-6	3.7 E-6	NA	NA	2.1 E-6	NA	1.9 E-5	NA	NA	NA	2.0 E-5	4.5 E-4
11D-SP28	20	6.5 E-5	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-7	NA	9.0 E-6	NA	NA	NA	2.2 E-6	5.7 E-4
11D-SP29	10	4.6 E-6	NA	1.2 E-6	NA	NA	NA	NA	NA	1.4 E-5	5.5 E-6	NA	NA	2.0 E-6	NA	8.4 E-6	NA	NA	NA	3.2 E-5	1.6 E-4
11D-SP29	30	2.8 E-5	NA	NA	NA	NA	3.6 E-7	NA	NA	1.2 E-5	5.1 E-6	NA	NA	2.2 E-6	NA	4.4 E-6	NA	NA	NA	1.9 E-5	6.4 E-4
11D-SP30	10	3.6 E-6	NA	1.2 E-6	NA	1.7 E-5	NA	NA	NA	5.1 E-6	1.4 E-5	NA	3.6 E-7	1.6 E-6	NA	8.6 E-6	NA	NA	NA	2.6 E-5	3.7 E-4
11D-SP30	20	4.3 E-6	NA	7.1 E-7	NA	1.1 E-5	NA	NA	NA	4.4 E-6	3.9 E-6	NA	NA	1.4 E-6	NA	4.8 E-6	NA	NA	NA	1.5 E-5	6.1 E-4
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	9.5 E-6	NA	NA	2.5 E-6	NA	NA	NA	NA	NA	2.5 E-5	8.0 E-5
11D-SP31	20	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	1.2 E-5	NA	NA	9.9 E-7	NA	NA	NA	NA	NA	1.7 E-5	2.1 E-4
11D-SP31	30	2.5 E-6	NA	NA	NA	4.5 E-6	NA	NA	NA	4.1 E-6	2.9 E-6	NA	1.9 E-7	9.7 E-7	NA	3.2 E-6	NA	NA	NA	6.6 E-6	3.5 E-4
50D-SP01	10	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	6.6 E-6	2.0 E-6	NA	1.6 E-7	NA	NA	1.6 E-5	NA	NA	NA	1.1 E-5	6.9 E-4
50D-SP01	20	NA	NA	NA	NA	1.7 E-4	2.5 E-6	6.9 E-6	NA	2.2 E-5	1.7 E-6	5.6 E-6	5.4 E-6	2.2 E-6	NA	3.1 E-5	1.5 E-5	4.7 E-5	4.9 E-7	3.1 E-5	8.2 E-4
51D-SP04	10	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	5.6 E-6	5.3 E-4
51D-SP04	20	NA	NA	NA	NA	1.1 E-4	1.0 E-6	9.1 E-6	NA	1.0 E-5	1.7 E-6	5.6 E-5	2.5 E-6	1.9 E-6	NA	2.4 E-5	1.4 E-5	3.9 E-4	NA	2.1 E-5	1.1 E-3
A20-B34-SP01	10	3.8 E-5	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	1.9 E-5	NA	NA	NA	7.6 E-6	4.7 E-4
A20-B34-SP01	20	3.4 E-5	NA	2.9 E-6	NA	5.8 E-6	1.2 E-6	NA	NA	1.1 E-5	7.4 E-6	1.6 E-6	2.3 E-7	NA	NA	2.0 E-5	7.6 E-6	1.6 E-5	NA	1.3 E-5	3.6 E-4
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	4.0 E-6	1.0 E-3
A20-B34-SP02	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	1.4 E-5	NA	NA	NA	2.2 E-6	NA	1.8 E-5	7.5 E-6	NA	NA	1.6 E-5	3.5 E-4
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-6	3.8 E-3
A20-B34-SP03	20	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	3.1 E-5	1.5 E-6	NA	7.2 E-8	1.0 E-6	NA	6.5 E-6	NA	NA	1.0 E-6	1.0 E-5	2.2 E-3
A20-B34-SP03	29	1.9 E-6	NA	NA	NA	NA	1.8 E-6	NA	NA	2.1 E-5	1.0 E-6	NA	4.8 E-8	2.0 E-6	NA	6.0 E-6	NA	NA	NA	1.6 E-5	2.0 E-3
A20-RB37-SP01	10	1.5 E-3	NA	8.7 E-6	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1
A20-RB37-SP01	20	1.0 E-3	NA	9.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1
A20-RB37-SP01	30	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-3
A20-RB37-SP02	10	2.5 E-4	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	3.1 E-2
A20-RB37-SP02	20	4.7 E-6	NA	NA	NA	NA	9.9 E-7	NA	NA	1.4 E-5	7.9 E-6	NA	NA	2.0 E-6	NA	1.3 E-5	7.0 E-6	NA	NA	1.5 E-5	7.4 E-4
A20-RC29-SP01	10	6.6 E-6	NA	2.9 E-7	NA	NA	NA	NA	NA	4.9 E-6	8.1 E-6	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	9.4 E-6	1.3 E-3
A20-RC29-SP01	20	2.2 E-5	NA	2.9 E-7	NA	NA	6.8 E-7	NA	NA	7.0 E-6	2.3 E-5	NA	NA	1.8 E-6	NA	9.9 E-6	NA	NA	NA	4.4 E-6	9.4 E-4
A20-RX73-SP01	10	1.9 E-5	NA	1.3 E-6	NA	NA	NA	NA	NA	4.2 E-6	4.3 E-6	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	2.8 E-5	2.6 E-3
A20-RX73-SP01	20	3.9 E-5	NA	6.0 E-7	NA	NA	1.5 E-6	NA	NA	1.6 E-5	2.7 E-6	NA	2.3 E-6	6.7 E-6	NA	1.6 E-5	7.8 E-6	NA	NA	8.0 E-5	2.2 E-3
A20-ST01-1-SP01	10	1.5 E-5	5.3 E-5	3.1 E-7	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	1.0 E-5	1.1 E-3
A20-ST01-1-SP01	20	3.1 E-6	NA	NA	NA	NA	1.2 E-6	NA	NA	1.2 E-5	NA	NA	NA	2.0 E-6	NA	1.6 E-5	7.9 E-6	NA	NA	1.2 E-5	1.8 E-4
A20-ST01-2-SP01	10	1.3 E-5	NA	4.5 E-7	1.6 E-4	NA	NA	3.0 E-5	NA	NA	4.0 E-6	NA	NA	NA	NA	4.6 E-5	1.7 E-5	2.8 E-5	NA	4.6 E-5	2.2 E-3
A20-ST01-2-SP01	20	3.4 E-6	NA	NA	NA	NA	1.2 E-6	NA	1.6 E-7	1.2 E-5	2.5 E-6	NA	3.0 E-7	NA	NA	1.8 E-5	8.1 E-6	NA	NA	3.1 E-5	7.0 E-4
A20-ST01-3-SP01	10	5.2 E-6	NA	NA	NA	NA	7.3 E-7	NA	NA	8.1 E-6	1.9 E-6	NA	NA	1.6 E-6	NA	4.5 E-5	1.8 E-5	NA	NA	1.9 E-5	4.5 E-4
A20-ST01-3-SP01	20	5.0 E-6	NA	NA	NA	1.0 E-3	2.1 E-6	NA	NA	1.8 E-5	3.0 E-6	2.1 E-5	3.3 E-5	NA	NA	3.1 E-5	1.2 E-5	1.2 E-4	NA	3.7 E-5	2.8 E-3
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	5.6 E-5	1.6 E-5	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	7.5 E-5	4.7 E-5	NA	NA	NA	NA	1.0 E-4	NA	1.6 E-5	5.8 E-3
A20-ST02-SP01	30	5.2 E-6	5.6 E-6	NA	NA	9.9 E-4	3.9 E-6	NA	NA	3.2 E-5	3.8 E-6	4.8 E-6	4.1 E-6	1.4 E-6	NA	1.2 E-5	7.3 E-6	NA	NA	1.7 E-5	2.1 E-3
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
A20-ST02-SP02	20	2.9 E-6	NA	NA	NA	5.3 E-4	NA	NA	NA	4.1 E-6	NA	4.5 E-5	NA	NA	NA	5.1 E-6	9.9 E-6	9.5 E-5	NA	5.4 E-6	9.2 E-4
A20-ST02-SP02	30	1.3 E-6	NA	NA	3.8 E-5	6.6 E-5	4.2 E-6	4.2 E-6	NA	5.5 E-5	9.0 E-7	3.0 E-6	1.3 E-7	5.2 E-6	NA	1.1 E-5	6.6 E-6	9.3 E-6	8.5 E-7	1.9 E-5	9.4 E-4
A20-ST02-SP03	20	9.8 E-6	NA	NA	NA	NA	1.1 E-6	NA	NA	9.2 E-6	NA	NA	NA	1.7 E-6	NA	1.2 E-5	6.1 E-6	NA	NA	2.7 E-5	3.2 E-4
A20-ST02-SP03	30	1.5 E-5	NA	NA	NA	NA	8.3 E-7	NA	NA	1.2 E-5	NA	NA	NA	1.4 E-6	NA	4.6 E-6	NA	NA	NA	1.4 E-5	2.6 E-4
A20-ST02-SP04	30	NA	NA	NA	1.0 E-4	NA	1.1 E-6	5.4 E-6	NA	1.9 E-5	1.3 E-6	NA	8.0 E-8	4.7 E-6	NA	1.1 E-5	5.5 E-6	NA	NA	9.7 E-6	6.3 E-3
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4
A20-ST05-SP01	20	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	1.9 E-1
A20-ST05-SP01	30	3.4 E-3	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-6	7.1 E-2
A20-ST05-SP02	10	4.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	8.2 E-6	6.0 E-4
A20-ST05-SP02	20	3.9 E-6	NA	NA	NA	NA	1.1 E-6	NA	NA	1.1 E-5	NA	NA	NA	3.1 E-6	NA	2.1 E-5	8.9 E-6	NA	NA	8.7 E-6	7.5 E-4
A20-ST05-SP03	10	2.7 E-5	3.5 E-5	NA	NA	2.1 E-5	NA	NA	NA	8.8 E-6	2.2 E-5	NA	4.9 E-7	1.8 E-6	NA	9.7 E-6	NA	NA	NA	5.9 E-5	3.6 E-3
A20-ST05-SP04	10	9.0 E-6	NA	NA	NA	NA	2.0 E-6	NA	NA	2.2 E-5	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	2.0 E-4
A20-ST05-SP05	10	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	1.8 E-5	1.5 E-6	NA	NA	3.6 E-6	NA	1.6 E-5	NA	NA	NA	1.9 E-5	1.9 E-4
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	1.3 E-6	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	4.9 E-6	4.0 E-3
A20-ST06-SP01	20	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	5.2 E-6	3.9 E-6	NA	NA	NA	NA	1.5 E-5	5.5 E-6	NA	NA	9.0 E-6	2.1 E-3
A20-ST14-SP01	10	1.1 E-4	NA	1.1 E-6	NA	NA	2.5 E-7	NA	NA	3.1 E-6	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	4.2 E-3
A20-ST14-SP01	20	4.5 E-6	NA	1.8 E-7	NA	NA	3.6 E-7	NA	NA	5.7 E-6	2.0 E-6	NA	NA	9.5 E-7	NA	5.0 E-6	NA	NA	NA	6.7 E-6	5.4 E-4
A20-ST14-SP02	10	1.9 E-6	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-6	3.4 E-3
A20-ST14-SP02	20	2.6 E-6	NA	2.4 E-7	NA	NA	NA	NA	NA	3.9 E-6	5.0 E-6	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	9.4 E-6	2.7 E-3
A20-ST20-SP01	10	2.7 E-5	NA	NA	NA	NA	1.0 E-6	NA	NA	1.5 E-5	NA	NA	NA	2.3 E-6	NA	1.5 E-5	NA	NA	NA	6.4 E-6	6.7 E-5
A20-ST20-SP01	20	4.8 E-6	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	6.8 E-6	NA	NA	NA	2.9 E-6	7.1 E-5
A20-ST22-SP01	10	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	4.2 E-6	2.0 E-6	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	4.6 E-6	4.2 E-5
A20-ST22-SP01	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	1.2 E-5	NA	NA	NA	1.7 E-6	NA	6.8 E-6	NA	NA	NA	1.3 E-5	2.6 E-4

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA
03D-SP100	20	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-3	NA	NA
03D-SP102	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-4	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA
03D-SP104	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA
03D-SP104	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA
03D-SP105	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA
03D-SP106	15	1.1 E-8	NA	NA	NA	NA	4.1 E-8	NA	NA	1.1 E-8	NA	2.6 E-9	NA	NA	NA	NA	NA	1.6 E-6	NA	NA
03D-SP106	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	NA	NA
03D-SP106	30	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA
03D-SP107	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA
03D-SP107	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA
03D-SP107	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA
03D-SP109	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA
03D-SP109	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	NA	NA
03D-SP109	30	NA	NA	NA	7.5 E-9	NA	1.2 E-8	NA	NA	NA	NA	6.6 E-10	NA	NA	NA	NA	NA	2.8 E-7	1.9 E-9	NA
03D-SP110	10	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA
03D-SP110	20	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	NA	NA
03D-SP111	10	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	4.4 E-10	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	5.6 E-7	NA	9.6 E-10	NA	NA	NA	NA	NA	8.7 E-8	NA	NA
03D-SP113	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	8.7 E-9	NA	NA	9.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	5.3 E-8	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP115	10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	6.6 E-7	NA	2.5 E-9	NA	NA	NA	NA	NA	4.9 E-8	NA	NA
03D-SP117	10	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	1.0 E-7	NA	2.2 E-9	NA	NA	NA	NA	NA	3.2 E-7	NA	NA
03D-SP118	10	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	4.5 E-6	1.7 E-9	NA
03D-SP118	20	NA	NA	NA	2.9 E-8	NA	1.1 E-7	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	6.4 E-7	NA	NA
03D-SP119	10	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	NA	3.2 E-6	NA	NA
03D-SP119	20	4.0 E-8	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	1.7 E-6	NA	NA
03D-SP119	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	5.8 E-8	NA	NA
03D-SP120	20	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	2.8 E-8	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	NA
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-6	NA	NA
03D-SP122	10	1.1 E-8	NA	NA	NA	NA	2.0 E-8	NA	NA	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA
03D-SP122	20	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA
03D-SP122	30	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA
03D-SP123	20	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	6.4 E-10	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	4.5 E-9	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	8.0 E-9	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	9.7 E-9	NA	NA
03D-SP125	10	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	1.1 E-8	NA	NA
03D-SP125	20	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	1.0 E-7	NA	1.4 E-9	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
03D-SP126	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	1.1 E-9	NA
03D-SP126	20	2.5 E-10	NA	NA	NA	NA	7.4 E-9	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	5.2 E-9	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	3.0 E-8	5.6 E-10	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA
03D-SP128	20	3.1 E-9	NA	NA	NA	NA	3.2 E-8	NA	NA	1.3 E-7	NA	3.8 E-9	NA	NA	NA	NA	NA	1.7 E-8	NA	NA
03D-SP128	30	4.6 E-8	NA	3.9 E-8	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA
03D-SP129	15	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	1.2 E-8	NA	NA

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	4.1 E-10	NA
03D-SP131	10	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	5.3 E-9	NA	NA	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	2.8 E-8	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	NA	NA	4.5 E-9	NA	1.0 E-7	NA	NA	2.0 E-8	NA	1.9 E-9	NA	NA	NA	NA	NA	1.9 E-8	2.7 E-9	NA
03D-SP133	10	NA	NA	NA	NA	NA	9.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-9	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	7.8 E-10	NA
03D-SP134	10	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	3.6 E-9	1.7 E-9	NA
03D-SP134	20	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	NA	NA	7.2 E-8	NA	NA	NA	NA	NA	3.5 E-9	NA	NA
03D-SP135	10	5.4 E-10	NA	NA	NA	NA	3.4 E-8	NA	NA	8.0 E-7	NA	2.4 E-9	NA	NA	NA	NA	NA	2.8 E-6	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	1.6 E-7	NA	NA
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	2.0 E-9	NA
03D-SP137	10	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	1.1 E-6	NA	2.4 E-9	NA	NA	NA	NA	NA	2.4 E-7	NA	NA
03D-SP138	10	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	3.8 E-8	NA	1.0 E-9	NA	NA	NA	NA	NA	1.9 E-8	5.4 E-9	NA
03D-SP138	19	1.6 E-9	NA	NA	NA	NA	1.8 E-8	NA	NA	7.6 E-8	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	2.6 E-9	NA
03D-SP138	30	4.3 E-10	NA	NA	7.9 E-9	NA	4.2 E-8	NA	NA	1.4 E-8	NA	4.2 E-10	NA	NA	NA	NA	NA	1.8 E-6	3.3 E-9	NA
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	1.6 E-9	NA
03D-SP139	20	NA	NA	NA	9.7 E-9	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	4.5 E-9	NA
03D-SP139	28	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	4.6 E-10	NA	NA	NA	NA	NA	1.1 E-7	2.2 E-9	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	3.8 E-9	5.3 E-10	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	2.4 E-9	NA
03D-SP141	20	NA	NA	NA	6.2 E-9	NA	5.6 E-8	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	8.9 E-9	3.1 E-9	NA
03D-SP142	10	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	8.3 E-8	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	1.2 E-9	NA
03D-SP142	20	NA	NA	NA	NA	NA	4.8 E-8	NA	NA	3.9 E-8	NA	1.3 E-9	NA	NA	NA	NA	NA	8.9 E-8	NA	NA
03D-SP142	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	5.6 E-7	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	1.7 E-9	NA
03D-SP143	20	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	3.5 E-7	NA	4.5 E-10	NA	NA	NA	NA	NA	1.2 E-7	1.7 E-9	NA
03D-SP143	30	NA	NA	NA	NA	NA	8.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	1.3 E-7	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	5.7 E-10	NA
03D-SP144	20	NA	NA	NA	NA	NA	7.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	4.0 E-10	NA
03D-SP144	30	7.0 E-9	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	1.8 E-7	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	8.3 E-7	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	9.1 E-10	NA
03D-SP145	20	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	8.2 E-10	NA
03D-SP146	10	6.4 E-10	NA	NA	NA	NA	1.7 E-8	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	2.0 E-6	7.2 E-10	NA
03D-SP146	20	1.7 E-9	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	1.8 E-9	NA
03D-SP146	27	9.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-7	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA
03D-SP147	20	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	1.8 E-9	NA
03D-SP147	27	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
03D-SP148	10	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	9.3 E-8	NA	9.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-10	NA
03D-SP149	20	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
03D-SP84	15	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	1.4 E-9	NA
03D-SP85	25	1.0 E-7	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	8.9 E-6	NA	NA
03D-SP85	30	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	NA	1.7 E-8	1.1 E-9	NA
03D-SP86	10	1.2 E-9	NA	NA	NA	NA	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	1.7 E-9	NA
03D-SP86	20	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	1.1 E-9	NA
03D-SP87	10	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA
03D-SP88	20	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
03D-SP90	10	9.0 E-10	NA	NA	NA	NA	4.2 E-8	NA	NA	4.3 E-7	NA	6.9 E-9	NA	NA	NA	NA	NA	8.7 E-8	NA	NA
03D-SP90	20	3.6 E-10	NA	NA	NA	NA	1.6 E-8	NA	NA	1.1 E-7	NA	2.3 E-9	NA	NA	NA	NA	NA	4.7 E-8	NA	NA
03D-SP91	10	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	3.8 E-8	NA	1.3 E-9	NA	NA	NA	NA	NA	1.7 E-8	4.3 E-9	NA
03D-SP91	20	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	1.4 E-7	NA	5.0 E-10	NA	NA	NA	NA	NA	3.3 E-8	8.3 E-10	NA
03D-SP92	10	7.0 E-10	NA	NA	NA	NA	2.5 E-8	NA	NA	4.0 E-8	NA	2.2 E-9	NA	NA	NA	NA	NA	4.5 E-8	NA	NA
03D-SP92	20	6.3 E-10	NA	NA	NA	NA	2.5 E-8	NA	NA	2.9 E-7	NA	1.9 E-9	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	6.0 E-9	NA	1.1 E-9	NA	NA	NA	NA	NA	1.6 E-9	NA	NA
03D-SP94	15	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	6.8 E-8	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA
03D-SP94	25	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	2.0 E-8	NA	3.1 E-9	NA	NA	NA	NA	NA	4.7 E-7	NA	NA
03D-SP95	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA
03D-SP95	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA
03D-SP96	10	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	2.0 E-6	NA	2.4 E-8	NA	NA	NA	NA	NA	2.9 E-8	NA	NA
03D-SP96	17	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	1.7 E-6	NA	2.6 E-9	NA	NA	NA	NA	NA	1.4 E-8	NA	NA
03D-SP99	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA
11D-SP27	20	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	2.3 E-9	4.5 E-10	NA
11D-SP28	10	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP28	20	3.7 E-10	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	2.8 E-10	NA
11D-SP29	10	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA
11D-SP29	30	3.3 E-10	NA	NA	6.2 E-9	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA
11D-SP30	10	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP30	20	1.1 E-9	NA	NA	NA	NA	8.1 E-9	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA
11D-SP31	20	NA	NA	NA	NA	NA	4.9 E-9	NA	2.0 E-8	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA
11D-SP31	30	8.9 E-10	NA	NA	3.4 E-9	NA	5.4 E-9	NA	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA
50D-SP01	10	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA
50D-SP01	20	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	8.7 E-9	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA
51D-SP04	20	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	5.6 E-9	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	1.2 E-8	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA
A20-B34-SP01	20	NA	NA	NA	NA	NA	2.0 E-8	NA	1.7 E-8	NA	NA	7.2 E-10	NA	NA	NA	NA	NA	7.8 E-9	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	4.7 E-9	7.9 E-10	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	9.9 E-10	NA
A20-B34-SP03	29	NA	NA	NA	5.1 E-9	NA	2.0 E-8	NA	4.3 E-8	4.3 E-9	NA	3.3 E-10	NA	NA	NA	NA	NA	1.2 E-7	2.1 E-9	NA
A20-RB37-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA
A20-RB37-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA
A20-RB37-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	1.8 E-9	NA
A20-RB37-SP02	20	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	2.8 E-8	2.5 E-9	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA
A20-RX73-SP01	10	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA
A20-RX73-SP01	20	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	2.8 E-7	NA	6.1 E-10	NA	NA	NA	NA	NA	3.0 E-8	NA	NA
A20-ST01-1-SP01	10	6.1 E-10	NA	NA	NA	NA	1.5 E-8	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	6.9 E-9	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	4.0 E-8	NA	1.5 E-9	NA	NA	NA	NA	NA	1.2 E-7	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	2.9 E-8	NA	7.5 E-10	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	2.1 E-8	2.1 E-9	NA
A20-ST01-3-SP01	20	NA	NA	1.1 E-8	NA	NA	7.6 E-8	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	30	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	7.4 E-9	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA

Table 5.2-41
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
A20-ST02-SP02	20	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	5.8 E-10	NA	NA	NA	NA	NA	1.3 E-8	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	7.1 E-10	NA	NA	NA	NA	NA	5.6 E-9	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	4.0 E-9	7.2 E-10	NA
A20-ST02-SP03	30	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	1.2 E-9	NA
A20-ST02-SP04	30	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	8.2 E-8	3.5 E-9	NA
A20-ST05-SP01	30	1.5 E-7	NA	7.2 E-8	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	3.2 E-9	NA
A20-ST05-SP02	10	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	1.8 E-9	NA
A20-ST05-SP02	20	NA	NA	NA	NA	NA	5.3 E-9	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	3.0 E-8	1.7 E-9	NA
A20-ST05-SP03	10	6.7 E-9	NA	NA	NA	NA	9.6 E-9	NA	NA	5.5 E-8	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	1.3 E-9	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
A20-ST14-SP01	10	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	2.0 E-9	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	1.6 E-9	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	1.8 E-9	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	5.2 E-10	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA

Table 5.2-41
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
03D-SP100	10	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-2
03D-SP102	28	5.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-4
03D-SP103	10	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4
03D-SP103	20	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP104	10	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP104	20	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4
03D-SP105	10	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP106	15	6.4 E-9	9.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP106	25	9.7 E-6	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-4
03D-SP106	30	6.0 E-6	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-5
03D-SP107	10	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-5
03D-SP107	20	7.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP107	29	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5
03D-SP108	10	3.7 E-8	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP109	10	2.7 E-7	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-6
03D-SP109	20	7.3 E-6	8.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4
03D-SP109	30	1.9 E-8	8.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP110	10	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP110	20	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP111	10	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP111	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
03D-SP112	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP113	10	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
03D-SP113	20	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP114	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP114	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP115	10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP116	10	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
03D-SP117	10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP118	10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP118	20	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
03D-SP119	10	7.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP119	20	3.0 E-6	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP119	29	7.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5
03D-SP120	10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP120	20	3.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP121	15	8.2 E-7	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-5
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP122	10	1.6 E-8	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP122	20	1.1 E-7	5.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP122	30	2.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP123	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP124	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP124	20	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP125	10	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP125	20	9.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP126	10	5.8 E-9	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP126	20	7.3 E-9	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP127	10	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP127	20	7.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP128	10	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP128	20	4.0 E-6	8.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP128	30	9.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP129	15	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8

Table 5.2-41
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP130	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP131	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP131	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP132	10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP132	30	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP133	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP134	10	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP134	20	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
03D-SP135	10	2.0 E-8	4.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP135	20	NA	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-5
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP137	10	5.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP138	10	4.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP138	19	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP138	30	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP139	20	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP139	28	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP140	10	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP140	20	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP141	20	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
03D-SP142	10	3.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP142	20	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP142	30	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP143	10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7
03D-SP143	20	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP143	30	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
03D-SP144	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP144	30	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5
03D-SP145	10	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7
03D-SP145	20	4.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP146	10	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
03D-SP146	20	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP146	27	8.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP147	10	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP147	20	6.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7
03D-SP147	27	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP149	10	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP149	20	4.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
03D-SP150	30	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
03D-SP84	15	7.8 E-9	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP84	25	2.4 E-9	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP85	25	4.2 E-7	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-4
03D-SP85	30	2.2 E-9	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
03D-SP86	10	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP86	20	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP87	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP88	10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP88	20	8.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP89	10	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5

Table 5.2-41
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
03D-SP90	10	6.5 E-8	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP90	20	2.4 E-8	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP91	10	3.6 E-8	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP91	20	2.2 E-8	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP92	10	1.4 E-8	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP92	20	4.4 E-8	9.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP93	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP94	15	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP94	25	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP95	10	6.6 E-7	8.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-5
03D-SP95	18	4.8 E-7	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5
03D-SP96	10	4.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP96	17	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP99	10	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-5
11D-SP26	10	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
11D-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
11D-SP27	10	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
11D-SP27	20	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
11D-SP28	10	3.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
11D-SP28	20	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
11D-SP29	10	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
11D-SP29	30	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
11D-SP30	10	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
11D-SP30	20	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
11D-SP31	20	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
11D-SP31	30	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
50D-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
50D-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
51D-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
51D-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
A20-B34-SP01	10	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-B34-SP01	20	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-B34-SP03	29	8.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-RB37-SP01	10	6.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
A20-RB37-SP01	20	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
A20-RB37-SP01	30	6.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
A20-RB37-SP02	10	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
A20-RB37-SP02	20	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
A20-RC29-SP01	10	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-RC29-SP01	20	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
A20-RX73-SP01	10	8.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
A20-RX73-SP01	20	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-ST01-1-SP01	10	6.4 E-9	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-ST01-1-SP01	20	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-ST01-2-SP01	10	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST01-2-SP01	20	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
A20-ST01-3-SP01	10	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
A20-ST01-3-SP01	20	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST02-SP01	20	2.4 E-8	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-ST02-SP01	30	2.2 E-9	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8

Table 5.2-41
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
A20-ST02-SP02	20	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
A20-ST02-SP02	30	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
A20-ST02-SP03	20	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST02-SP03	30	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST05-SP01	20	4.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5
A20-ST05-SP01	30	1.5 E-6	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
A20-ST05-SP02	10	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
A20-ST05-SP02	20	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
A20-ST05-SP03	10	1.2 E-8	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-ST05-SP04	10	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST14-SP01	10	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
A20-ST14-SP01	20	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
A20-ST14-SP02	10	8.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-ST14-SP02	20	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
A20-ST20-SP01	10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST20-SP01	20	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.2- 12) x the unit hazard or unit risk for the chemical).

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
03D-SP100	10												47000					430000		
03D-SP100	20	21											300					41000		
03D-SP102	10												59000					30000000		
03D-SP102	28					8700							29000					5900000		
03D-SP103	10									500			95000					830000		
03D-SP103	20												22000					130000		
03D-SP104	10		990								360		170000					640000		
03D-SP104	20		2600								820		250000					1600000		
03D-SP105	10		560								2000		140000					580000		
03D-SP106	15	180				11	32			9.2	41	27	5900		100	15		7200		
03D-SP106	25		120000										64000000					480000		
03D-SP106	30	1500	15000			16000					11000		2800000			1700		270000		
03D-SP107	10		3600			5600							1200000					98000		
03D-SP107	20		640										470000					12000		
03D-SP107	29		4900										340000					340000		
03D-SP108	10										140		86000			30		8700		
03D-SP109	10		1200										630000					16000		
03D-SP109	20		54000			41000							17000000			6400		500000		
03D-SP109	30		94		35	21	17				16	13	15000		36	46		2400	35	
03D-SP110	10		49							26	14		11000	10				11000		
03D-SP110	20		28				11			5.6	16		1600		13	51		2900		
03D-SP111	10		28				30						7200			30		56000		
03D-SP111	20						4.2						310			14		1300	5.3	
03D-SP112	10												23					240		
03D-SP112	20						27					14	130		13	18		190		
03D-SP113	10						15			340		6.9	9.2		16	22		270		
03D-SP113	20					18000							4600000			5100		2500		
03D-SP114	10						4.8			57			1200			7.8				
03D-SP114	20					18	16			57		6.5	2300		18	36				
03D-SP115	10		51							890			42000					650		
03D-SP116	10						6.7			400		18	100		15	16		150		
03D-SP117	10		5.3				27			62		16	2200		33	80		1000		
03D-SP118	10		6.9			17	11					10	10000		14	29		14000	12	
03D-SP118	20				88		110					15	24000		66	1100		3700		
03D-SP119	10	57	150			53					140	26	38000	53		20		10000		160
03D-SP119	20	830	2200				46				9100	32	48000		29	400		10000		15000
03D-SP119	29		11000			210000					5700		13000000	30000		5100		310000		
03D-SP120	10						8.6					15	310		5.1	14		180		
03D-SP120	20		6.2				200					33	3200		220	360		160		
03D-SP121	15										2300		3800000					320000		
03D-SP121	25					40000							15000000					68000		
03D-SP122	10	120	570				11			18	260		1800		56	120		9800		
03D-SP122	20	8100	19000								2800		3400000	8800				8200		
03D-SP122	30	9800	28000								2200		3400000			1000				
03D-SP123	10						5.5			16			650		5.3	6.5		180		
03D-SP123	20					24	9.3					8.6			14	11		190		
03D-SP124	10						7.6					17	1300	7.2		16		14		
03D-SP124	20						8.1					30	4800	12	10	16		56		
03D-SP125	10					15	54				4.7	14		110	110	210		33		
03D-SP125	20		26			26	45			110	46	19	73	37	130	220		140		21
03D-SP126	10					13												59	7.5	
03D-SP126	20	5.2	6.6				7.5				26	6.9	350		14	19		30		
03D-SP127	10														5.2	5.7		190		
03D-SP127	20						4.9					7.7			9.2	10		170	6.8	
03D-SP128	10																	25		
03D-SP128	20	64	1000				32			140	510	51	9800		85	340		99		580
03D-SP128	30	1400	770	54						750	18000		1800		53	55		170		3500
03D-SP129	15					19	12				8.6	15			30	19		55		
03D-SP129	25										8600							710		900

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
03D-SP130	10														5.4			36		
03D-SP130	20						5.2								10	9.7		33	5.0	
03D-SP131	10						7.2					17			24	9.6		350		
03D-SP131	20						5.4					6.5			7.1	9.8		160		
03D-SP132	10						8.6								5.3	7.8		170		
03D-SP132	20																			
03D-SP132	30		10		21	36	150			32	6.5	37	240		620	590		160	50	
03D-SP133	10						5.4						91			9.2		18		
03D-SP133	20						5.2					12			6.0	26			9.4	
03D-SP134	10					150	5.2					9.5			18	7.8		11	12	
03D-SP134	20		8.0			48	400				24	960			1000	2900		20		
03D-SP135	10	6	7.2				19			480	14	17	280		21	100		8600		
03D-SP135	20										120	290	150		5100	27000		940		
03D-SP136	10					55				25		12			7.1	5.8			14	
03D-SP137	10		6				6.8			670		17	560			26		740		
03D-SP138	10		28				19			23	27	7.2	12000	61	22	72		60	38	
03D-SP138	19	32	160				17			79	290		58000	270		45		140	31	
03D-SP138	30	13	39		37	41	61			22	190	8.3	11000	35	39	87		15000	60	29
03D-SP139	10															6.6		39	11	
03D-SP139	20				30		16								50	130		80	54	
03D-SP139	28		5.7			20	160					8.4	12		160	230		860	38	
03D-SP140	10																	31		
03D-SP140	20						14					14			30	21		22	6.4	
03D-SP141	10															7.4		48	17	
03D-SP141	20				19	14	57					14	30		190	200		51	37	
03D-SP142	10						11			50			56000	63	18	30		790	8.6	
03D-SP142	20						49			42		17	39000		94	170		510		
03D-SP142	30		1300								1700		1100000					4100		
03D-SP143	10						5.2			340			710			11		1000	12	
03D-SP143	20						16			380	4.9	6	640		14	27		720	21	
03D-SP143	30						120						300000				160	1100		
03D-SP144	10						7.8									4.3		1100	4	
03D-SP144	20						7.6								5.4	7.7		1600	4.9	
03D-SP144	30	210	100				41				800	23			1700	9400		1500		
03D-SP145	10							14		500			1300		5.8	16		98	6.4	
03D-SP145	20						16			55			110		12	20		12	9.9	
03D-SP146	10	7.1	41			50	9.2			7.8	58		81000	180	5.2	8.6		6200	5.1	110
03D-SP146	20	36	87				26				350		65000	150	26	56		4800	22	420
03D-SP146	27	270	860								1600		530000	680				2300		690
03D-SP147	10									390	76		10000					1100		
03D-SP147	20		5.7			35	16			28	48		630		12	31		110	22	
03D-SP147	27	300	450							440	3700		29000			170		760		150
03D-SP148	10						13			56		6.9			9.5	16				
03D-SP148	20																			
03D-SP149	10						10						1100		5.9	6.8			4.8	
03D-SP149	20					26	93					27	65		93	80				
03D-SP150	30						5						160			6		12		
03D-SP84	15		4.8				23			9.7	6.2		730		14	170		77		
03D-SP84	25						13			12			950		6	27		71	21	
03D-SP85	25	2600	810				2300				73000	260	12000		9500	64000		63000		
03D-SP85	30					18	66				7.2	15	43		35	63		140	20	
03D-SP86	10	13					4.8						26			12		30	12	
03D-SP86	20						5.3									12		17	13	
03D-SP87	10						29					30	19		19	33				
03D-SP88	10						8.1			22			110		11	30		580		
03D-SP88	20						19						10		31	54		590		
03D-SP89	10												890					33000		
03D-SP90	10	10	27				23			260	58	50	4900		73	530		270		
03D-SP90	20	7.5	8.8				16			120	25	31	1900		27	170		270		

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
03D-SP91	10					21	7.9			23		9.5	48		18	8		54	30	
03D-SP91	20						5.1			150	16	6.7	170		9.4	5.9		190	10	
03D-SP92	10	7.8					14			24	32	16	680		6.9	18		140		
03D-SP92	20	13	6.9				25			310	72	26	1000		20	45		1000		
03D-SP93	15									210			2400			420		290		
03D-SP93	25						16			8.0		18	160		22	78		11		
03D-SP94	15		5				5.3			57	27		1500			5.7		7100		
03D-SP94	25					18	27			26	11	51	240		46	61		3300		
03D-SP95	10		210								1200		25000					150000		
03D-SP95	18		220								1400		18000					130000		
03D-SP96	10					37	36			1200		170	44		130	73		89		
03D-SP96	17					65	28			1600		30	56		67	100		68		
03D-SP99	10		140										41000					280000		
11D-SP26	10						8.6						3200		8.4	12				
11D-SP26	20						6.6						850		6.3	30			6.6	
11D-SP27	10																	130		
11D-SP27	20					18	27					6.9			47	79		13	5.4	
11D-SP28	10					14	17								15	18				
11D-SP28	20	7.6	61							120	11		90					33	3.4	
11D-SP29	10						6.3						290		26	63			14	
11D-SP29	30	10	120		29	15	26				17		3400	9.3	210	1000			44	
11D-SP30	10						7.8			8.3			970	7.2	140	310				
11D-SP30	20	23	20				8.2			46	30		710	8.0	210	910				
11D-SP31	10												55			64			11	
11D-SP31	20						5.0		15	23	7.2		120		6.4	140			18	
11D-SP31	30	27	6.2		16		8.0			37	64		78		180	450			28	
50D-SP01	10						7.4						35		6.7	9.9		140		
50D-SP01	20					14	29					32			67	340		50		
51D-SP04	10						5.8									5.9		110		
51D-SP04	20					18	32					310			140	210		32		
A20-B34-SP01	10						6.9		20							8.0		63		
A20-B34-SP01	20		8.4				20		13			9.7			33	83		45		
A20-B34-SP02	10																	230		
A20-B34-SP02	20					16	11					7.5			20	20		27	9.6	
A20-B34-SP03	10						8.2											870		
A20-B34-SP03	20						44								36	56		860	12	
A20-B34-SP03	29				23	14	28		46	6.5	9.5	6.3			53	81		1000	38	
A20-RB37-SP01	10		300								280		370000					55000		
A20-RB37-SP01	20		500								190		430000					65000		
A20-RB37-SP01	30												490000			410		3100		
A20-RB37-SP02	10		38										24000			11		7000	13	
A20-RB37-SP02	20					21	12					6.8	18		20	34		160	30	
A20-RC29-SP01	10						15						15		10	21		270		
A20-RC29-SP01	20						16						22		12	26		350		
A20-RX73-SP01	10		9.1				5.8			450					30	5.6		100		
A20-RX73-SP01	20		64			34	25			300		8.2	9.5		1100	46		170		
A20-ST01-1-SP01	10	6.8					8.3			11			1300		6.7	10		200		
A20-ST01-1-SP01	20						7.9					7.6			15	15		40		
A20-ST01-2-SP01	10						5.9			24		11	4600		7.7	11		380		
A20-ST01-2-SP01	20					12	41			32		10	1500		68	130		95		
A20-ST01-3-SP01	10						9.0					11			8.3	6.7		64	15	
A20-ST01-3-SP01	20			11		16	77					84			430	2100		71		
A20-ST02-SP01	10																			
A20-ST02-SP01	20						160				33	630			520	1000				
A20-ST02-SP01	30		5.6			14	200				27	23			720	660		62		
A20-ST02-SP02	10												22					76		
A20-ST02-SP02	20						12					7.8			8	14		75		
A20-ST02-SP02	30					60	57					14	9.9		90	240		47		
A20-ST02-SP03	20					16	3.8					6.4				8.4		23	8.7	

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard		9.8 E-1	9.8 E+0	1.4 E+2	2.3 E-1	7.5 E+1	2.3 E+1	9.8 E+0	1.7 E+1	1.5 E+1	2.0 E+1	6.8 E-1	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	2.3 E-1	2.0 E+1	2.3 E+0	1.2 E+1
Unit Risk		4.0 E-4	NA	6.4 E-3	1.9 E-3	NA	7.0 E-3	9.1 E-3	1.0 E-2	5.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	2.4 E-4	1.5 E-3	4.8 E-4	NA
A20-ST02-SP03	30					15	24								12	27		24	22	
A20-ST02-SP04	30					810	41					5.6			39	67				
A20-ST05-SP01	10					20														
A20-ST05-SP01	20	2900	2900							1700	27000		3900			41		470	42	420
A20-ST05-SP01	30	4500	3100	100						1600	37000		23000		32	44		190	59	120
A20-ST05-SP02	10						6.0								5.9	9.2		120	13	
A20-ST05-SP02	20					23	5.4					7.5	9.9		11	19		170	21	
A20-ST05-SP03	10	74	110			14	5.3			33	260		4600		13	150		320		
A20-ST05-SP04	10						9.7						88		15	33		15	9.4	
A20-ST05-SP05	10						18								11	25			7.1	
A20-ST06-SP01	10						3.7						1500		49	25		900		
A20-ST06-SP01	20						11					5.6	2500		11	16		850		
A20-ST14-SP01	10		21				5.3			58			18000			7.1		840		
A20-ST14-SP01	20						12			32			11000		9.3	26		150	24	
A20-ST14-SP02	10						7.7						720		11	20		760	11	
A20-ST14-SP02	20						20						770		30	53		1100	22	
A20-ST20-SP01	10																			
A20-ST20-SP01	20						4.3						320			6.9		15	6.3	
A20-ST22-SP01	10						3.5									5.1				
A20-ST22-SP01	20					17	6.4								4.9	14			5.0	

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP100	10	580								510										
03D-SP100	20																			
03D-SP102	10																			
03D-SP102	28	12000		800																
03D-SP103	10	1700		140																
03D-SP103	20	330		2200																
03D-SP104	10	14000		7600																
03D-SP104	20	57000		1600																
03D-SP105	10	14000		17	26	12	52	27		160	15	5.9	17			65	36			120
03D-SP106	15	78	240										23000							
03D-SP106	25	190000	120000	6400		2700					2000		2900							1300
03D-SP106	30	140000	8400	3300							3100		610							
03D-SP107	10	86000		430																
03D-SP107	20	12000		5100																710
03D-SP107	29	250000		78								51	33							
03D-SP108	10	320	51																	
03D-SP109	10	2300	550								31000									
03D-SP109	20	110000	25000	14			290		20	800	6.4		5.4	37		29	9.9			52
03D-SP109	30	430	40	120																
03D-SP110	10	910		24		7.5	43			200	12		5.7	13		7.8				17
03D-SP110	20	460		120		160														23
03D-SP111	10	410				1100	22			140										13
03D-SP111	20					350										12				10
03D-SP112	10					970	38	6.2		220	8.7		5.6			30	11			76
03D-SP112	20					910		5.9		58	9.0		7.6			20	10			29
03D-SP113	10	18				4000					1800		2000							1500
03D-SP113	20		940				26			110				9.7		8.2				9.8
03D-SP114	10						110		6.8	460	5.4			45		14	6			97
03D-SP114	20										18									
03D-SP115	10	250			33	580		32			9.3		11	20		81	32			58
03D-SP116	10	70		19	8.8	2300		11	5.8	120	42		26	15		54	15		15	110
03D-SP117	10	140		38		1600				160	16		20	35		33	11		27	55
03D-SP118	10	130				5200			12	340	38		580	64		35	12		31	180
03D-SP118	20	93		33	28	990		29			22					100	31			92
03D-SP119	10	6400			35	1000		34			25		370			120	48			130
03D-SP119	20	46000	89								29000		6700			7800				7300
03D-SP119	29	170000		8.9	22	670		24		89	26		14	18		66	21		9.2	48
03D-SP120	10	100		10	18	1600		15		91	22			25		92	24		32	460
03D-SP120	20	53		3100																
03D-SP121	15	10000	2500								22000		9400							
03D-SP121	25					100							340			12				16
03D-SP122	10	140	240								1100		1900							
03D-SP122	20	1700	1600	4700																
03D-SP122	30	6400									20				18	11				17
03D-SP123	10				6.1		78	7.7		250				36		26	11			110
03D-SP123	20				43	760		38			18			16		80	32	6.4		53
03D-SP124	10				34	1400		37			69		9.9	12		130	51	7.6		94
03D-SP124	20	36				3700			13	500	200				170	34	9.9		19	130
03D-SP125	10	270				4900					170		41		51	44	17		61	160
03D-SP125	20	15000												13		5.7				12
03D-SP126	10	50	7.5				49			260	6.4			16		17	5.9			38
03D-SP126	20	110	60		6.2			6.3			11					15	6.6			16
03D-SP127	10	18			6.8		46	7.8		200			4.6	14		24	10			29
03D-SP127	20	12								56										9.9
03D-SP128	10	13									42					86	39			55
03D-SP128	20	60000	25		84		350	100			160			130		58				98
03D-SP128	30	210000			12		100	9.8	5.6	270				35		34	16			66
03D-SP129	15	220					220													
03D-SP129	25						29			200				14		5.8				20

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP130	10						94			610				26		7.0			6.6	17
03D-SP130	20				23	16		23			55					45	17	6.7		1200
03D-SP131	10				8.3		41	7.9		230				12		22	10			28
03D-SP131	20			46						84	6.6					9.7				18
03D-SP132	10	250																		
03D-SP132	20						390			1500	360	29	140	69		29	14			170
03D-SP132	30	140								92	4.8					12				14
03D-SP133	10						26			140	3.7			17		35	16			34
03D-SP133	20				7.5			7.2	6.5	61	5.4	5.5	8.2	32		18	5.6			26
03D-SP134	10	10			11	2600	37			170	98	430	4300	9.3		26	11	110		40
03D-SP134	20		40	45	9.7	1500		11		57	20	6.3	78	10		52	17		12	76
03D-SP135	10	170	71			9900						540	21000			110		110		120
03D-SP135	20		21000		18			11		30		14	7.4	32		20		10		22
03D-SP136	10			18	20	1300		22		66	16		16			72	30			61
03D-SP137	10	490		26	10	68	23	8.4	8.7	96	75		39	22	22	24	8.4		5.6	49
03D-SP138	10	3400		30		49					100		18	100	97	30				64
03D-SP138	19	16000					160			2600	36			100	20	12				99
03D-SP138	30	9700														9.4				59
03D-SP139	10						34		5.7	120	8.3		6.2	14		8.6				33
03D-SP139	20	180					120		7.6	840	23		17	35		12	5.4			110
03D-SP139	28	660														9.6				11
03D-SP140	10	25					86			570				13		29	11			85
03D-SP140	20	22					19			140				9.9		5.6				21
03D-SP141	10					24	240			800	120	13	29	23		21	7.3	14		260
03D-SP141	20	28		10							13				9.9	9.6				57
03D-SP142	10	30					110			460	17		14	53		21				200
03D-SP142	20	22													790					
03D-SP142	30	37000		18							5.7					6.1				19
03D-SP143	10	250		17						95	9					13				40
03D-SP143	20	200								1400										210
03D-SP143	30	1300									17								11	8.4
03D-SP144	10						22			670				8.9		6.6			5.4	15
03D-SP144	20					5800				760		66	7300							21
03D-SP144	30		13000								14									12
03D-SP145	10	46					27			150	5.4			12		6.6				21
03D-SP145	20	6.7		47						240	14			44	22	6.2				12
03D-SP146	10	4100		35						860				51						49
03D-SP146	20	5800																		
03D-SP146	27	18000																		
03D-SP147	10	140000					18			330	6.4					6.3				32
03D-SP147	20	10000																		
03D-SP147	27	230000									7.9					15				150
03D-SP148	10																			
03D-SP148	20						22			130	20			27	9.3					11
03D-SP149	10	11					170	6.4	19	980	9.0		7.9	110		49	21		5.3	180
03D-SP149	20	6.9								90	3.8			45						6.7
03D-SP150	30	7.2				260	67			260	17		310			7.3				54
03D-SP84	15	95	420			12				93	30		30							16
03D-SP84	25	46	48			18000						2600	60000				960	530		
03D-SP85	25	8300	170000				420		18	1500	13		15	29		24	12			120
03D-SP85	30	50	6.1	16			29			140	14									10
03D-SP86	10	18					34			190				13						20
03D-SP86	20	28			11	1100		16			7.8		8.3	150		110	25		28	200
03D-SP87	10			36							17					6.3				13
03D-SP88	10	180					28			150	7.3		5.9			14	5.8			30
03D-SP88	20	13		22																
03D-SP89	10	410		27	13	1700		22		270	11		270	35		170	41		13	220
03D-SP90	10	560	250	18	15	510		21		1100	4.4		91	29		110	31		22	130
03D-SP90	20	370	87		7.6		18	7.4	17	77	42		5.7			31	9.6		5.4	67

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP91	10	310	28	10	8.7			8.6	12		17					22	7.4		5.8	35
03D-SP91	20	340	94	27	15	1000		16			19		8.5			62	18		12	72
03D-SP92	10	120	190	33	7.7	2500		11		130	25		9.5			90	26		10	160
03D-SP92	20	660	300			2000							160							
03D-SP93	15				12	540		15					50	71		70	21			100
03D-SP93	25			13	13			6.4			14					15	6.2			10
03D-SP94	15	300			20		52	19			9.9		23	10		140	47			120
03D-SP94	25	49		510		1200														60
03D-SP95	10	5700	1500	500		1700					66									53
03D-SP95	18	6900	2000		43	310		87	17	78	50	12	150	64		530	190	24		2700
03D-SP96	10	42			19	240	67	18		240	57		100	62		67	21		14	720
03D-SP96	17	89		1100		960														
03D-SP99	10	920								68	5.3		5.8			7.1				14
11D-SP26	10	6.6					27			160				15						6.1
11D-SP26	20			15							5.0					9.7				8.1
11D-SP27	10	23		12			79		4.7	370	20		8.6	43		17	5.8			56
11D-SP27	20	7.8		27						86	13			13		12				34
11D-SP28	10	30		100										9.4		10				6.5
11D-SP28	20	420		37						190	19			12		5.3				54
11D-SP29	10	17					29			410	46			32		7.4				85
11D-SP29	30	280		38		9.6				69	47		13	9.7		5.4				45
11D-SP30	10	13		39		11				100	23			14		5.3				45
11D-SP30	20	28								82	33			15						43
11D-SP31	10									82	72			9.8						50
11D-SP31	20	11				6.8				140	26		19	14		5.5				30
11D-SP31	30	25					24			90	6.8		5.8			10				19
50D-SP01	10					170	130	6.9		500	10	29	350	22		34	15	23	5.3	94
50D-SP01	20			8.3							8.3					7				9.6
51D-SP04	10					110	55	9.1		230	10	290	160	19		27	14	190		63
51D-SP04	20			120									5			12				13
A20-B34-SP01	10	140		160		5.8	62			250	44	8.4	15			22	7.6	7.9		40
A20-B34-SP01	20	220														7.6				6.8
A20-B34-SP02	10						69			310				22		20	7.5			48
A20-B34-SP02	20									380	4.6									11
A20-B34-SP03	10						29			710	9.1		4.6	10		7.2			11	31
A20-B34-SP03	20						140			700	9.0		4.6	28		9.9				71
A20-B34-SP03	29	18		270							150									
A20-RB37-SP01	10	5500		500																
A20-RB37-SP01	20	6500																		
A20-RB37-SP01	30	1500		51							10									9.3
A20-RB37-SP02	10	930					52			310	47			20		14	7			45
A20-RB37-SP02	20	30		9.0						66	28					7.4				16
A20-RC29-SP01	10	24		16			36			160	140			18		11				13
A20-RC29-SP01	20	140		39						57	15					6.6				48
A20-RX73-SP01	10	69		33			78			360	16		150	66		18	7.8			240
A20-RX73-SP01	20	250		9.5							7.4					9.1				17
A20-ST01-1-SP01	10	55	26				65			270				20		18	7.9			35
A20-ST01-1-SP01	20	20		14	8.4			17			14					29	9.8	7.5		79
A20-ST01-2-SP01	10	47					62		5.4	270	15		19			20	8.1			93
A20-ST01-2-SP01	20	22					22			110	6.7			10		28	10			32
A20-ST01-3-SP01	10	19				990	110			420	18	110	2100			34	12	59		110
A20-ST01-3-SP01	20	32																		
A20-ST02-SP01	10					4400						390	3000					49		47
A20-ST02-SP01	20	360	13			1500	310			1100	34	38	400	20		20	11			78
A20-ST02-SP01	30	51	7.1							220										
A20-ST02-SP02	10					530				93		230				5.7	9.8	46		16
A20-ST02-SP02	20	19			5.7	100	340	6.3		1900	8.1	24	13	75		19	10	7.0	14	88
A20-ST02-SP02	30	13					57			210				17		13	6.1			80
A20-ST02-SP03	20	63					67			400				20		7.9				63

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**
Unit Hazard		1.2 E+0	6.8 E+0	1.4 E-1	9.8 E+1	6.8 E+0	1.4 E-1	6.8 E+0	2.3 E-1	2.2 E-1	9.8 E-1	1.7 E+0	1.1 E-1	3.9 E-1	3.4 E+0	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.3 E+0
Unit Risk		4.9 E-4	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP03	30	150			15		87	8.2		650	12		7.9	68		19	8.3			44
A20-ST02-SP04	30																			
A20-ST05-SP01	10									500										45
A20-ST05-SP01	20	700000									24									25
A20-ST05-SP01	30	34000	160													12				14
A20-ST05-SP02	10	16					56			260				31		23	8.9			26
A20-ST05-SP02	20	25				12				120	77		18	11		6.1				100
A20-ST05-SP03	10	99	17				59			300	17									21
A20-ST05-SP04	10	33					32			240	5.1			22		10				33
A20-ST05-SP05	10									82	4.5					9.2				8.3
A20-ST06-SP01	10						28			120	23					17	5.5			27
A20-ST06-SP01	20			33			7.5			42	52									5.8
A20-ST14-SP01	10	400		9.9			19			130	12			9.4		5.5				20
A20-ST14-SP01	20	29		9.8							24									14
A20-ST14-SP02	10	7.1		13						90	30					10				28
A20-ST14-SP02	20	17					30			200				14		9.5				11
A20-ST20-SP01	10	99		8							12					7.6				8.6
A20-ST20-SP01	20	31		9.3						57	7.1				9.2					7.8
A20-ST22-SP01	10						69			280				17		7.5				39
A20-ST22-SP01	20																			

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	4.8 E-2	NA	NA
03D-SP100	20	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	2.3 E-3	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	NA	3.4 E+0	NA	NA
03D-SP102	28	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	2.4 E-1	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	1.3 E-5	NA	NA	NA	NA	9.3 E-2	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	7.3 E-3	NA	NA
03D-SP104	10	NA	7.0 E-5	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	2.4 E-5	NA	NA	NA	NA	7.2 E-2	NA	NA
03D-SP104	20	NA	9.1 E-5	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	1.8 E-5	NA	NA	NA	NA	9.0 E-2	NA	NA
03D-SP105	10	NA	3.9 E-5	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	2.0 E-5	NA	NA	NA	NA	6.5 E-2	NA	NA
03D-SP106	15	7.0 E-7	NA	NA	NA	3.8 E-6	3.4 E-6	NA	NA	7.7 E-7	3.1 E-6	7.4 E-8	5.6 E-7	NA	3.6 E-7	1.6 E-7	NA	5.4 E-4	NA	NA
03D-SP106	25	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	NA	2.2 E-2	NA	NA
03D-SP106	30	2.9 E-6	3.5 E-4	NA	NA	2.8 E-3	NA	NA	NA	NA	4.2 E-4	NA	1.3 E-4	NA	NA	8.9 E-6	NA	1.0 E-2	NA	NA
03D-SP107	10	NA	2.5 E-4	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	1.1 E-2	NA	NA
03D-SP107	20	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	6.8 E-4	NA	NA
03D-SP107	29	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.3 E-2	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	1.2 E-5	NA	NA	4.7 E-7	NA	9.8 E-4	NA	NA
03D-SP109	10	NA	8.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-5	NA	NA	NA	NA	1.8 E-3	NA	NA
03D-SP109	20	NA	1.9 E-3	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	5.0 E-5	NA	2.8 E-2	NA	NA
03D-SP109	30	NA	2.2 E-6	NA	2.1 E-8	3.6 E-6	9.1 E-7	NA	NA	NA	6.1 E-7	1.8 E-8	7.1 E-7	NA	6.4 E-8	2.4 E-7	NA	9.0 E-5	2.2 E-7	NA
03D-SP110	10	NA	3.4 E-6	NA	NA	NA	NA	NA	NA	3.3 E-6	1.6 E-6	NA	1.6 E-6	2.2 E-7	NA	NA	NA	1.2 E-3	NA	NA
03D-SP110	20	NA	9.8 E-7	NA	NA	NA	8.8 E-7	NA	NA	3.5 E-7	9.2 E-7	NA	1.1 E-7	NA	3.5 E-8	4.0 E-7	NA	1.6 E-4	NA	NA
03D-SP111	10	NA	2.0 E-6	NA	NA	NA	4.8 E-6	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	4.7 E-7	NA	6.3 E-3	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	1.1 E-7	NA	7.3 E-5	5.1 E-8	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	2.7 E-5	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	2.9 E-8	9.2 E-9	NA	3.5 E-8	1.4 E-7	NA	1.1 E-5	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	4.3 E-5	NA	2.8 E-8	1.3 E-9	NA	8.6 E-8	3.4 E-7	NA	3.0 E-5	NA	NA
03D-SP113	20	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	4.0 E-5	NA	1.4 E-4	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	7.1 E-6	NA	NA	1.7 E-7	NA	NA	1.2 E-7	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	4.7 E-6	1.3 E-6	NA	NA	3.6 E-6	NA	1.3 E-8	1.6 E-7	NA	4.8 E-8	2.8 E-7	NA	NA	NA	NA
03D-SP115	10	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	6.0 E-6	NA	NA	NA	NA	7.3 E-5	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	5.0 E-5	NA	7.4 E-8	1.4 E-8	NA	8.0 E-8	2.5 E-7	NA	1.7 E-5	NA	NA
03D-SP117	10	NA	3.7 E-7	NA	NA	NA	4.3 E-6	NA	NA	7.8 E-6	NA	6.6 E-8	3.1 E-7	NA	1.8 E-7	1.3 E-6	NA	1.1 E-4	NA	NA
03D-SP118	10	NA	4.9 E-7	NA	NA	8.8 E-6	1.8 E-6	NA	NA	NA	NA	4.1 E-8	1.4 E-6	NA	7.5 E-8	4.5 E-7	NA	1.6 E-3	2.3 E-7	NA
03D-SP118	20	NA	NA	NA	7.9 E-8	NA	8.8 E-6	NA	NA	NA	NA	3.1 E-8	1.7 E-6	NA	1.8 E-7	8.6 E-6	NA	2.1 E-4	NA	NA
03D-SP119	10	3.3 E-7	1.1 E-5	NA	NA	2.7 E-5	NA	NA	NA	NA	1.6 E-5	1.1 E-7	5.4 E-6	1.2 E-6	NA	3.1 E-7	NA	1.1 E-3	NA	1.0 E-5
03D-SP119	20	2.4 E-6	7.7 E-5	NA	NA	NA	3.7 E-6	NA	NA	NA	5.2 E-4	6.6 E-8	3.4 E-6	NA	7.8 E-8	3.1 E-6	NA	5.6 E-4	NA	4.9 E-4
03D-SP119	29	NA	2.7 E-4	NA	NA	3.7 E-2	NA	NA	NA	NA	2.3 E-4	NA	6.4 E-4	2.3 E-4	NA	2.7 E-5	NA	1.2 E-2	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	6.2 E-8	4.4 E-8	NA	2.7 E-8	2.2 E-7	NA	2.0 E-5	NA	NA
03D-SP120	20	NA	2.2 E-7	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	6.8 E-8	2.3 E-7	NA	5.9 E-7	2.8 E-6	NA	9.0 E-6	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	3.6 E-4	NA	NA	NA	NA	2.4 E-2	NA	NA
03D-SP121	25	NA	NA	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	3.1 E-3	NA	NA
03D-SP122	10	7.0 E-7	4.0 E-5	NA	NA	NA	1.8 E-6	NA	NA	2.3 E-6	3.0 E-5	NA	2.6 E-7	NA	3.0 E-7	1.9 E-6	NA	1.1 E-3	NA	NA
03D-SP122	20	2.3 E-5	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	2.4 E-4	9.6 E-5	NA	NA	NA	4.6 E-4	NA	NA
03D-SP122	30	1.9 E-5	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	8.4 E-5	NA	1.6 E-4	NA	NA	5.2 E-6	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	2.0 E-6	NA	NA	9.2 E-8	NA	2.8 E-8	1.0 E-7	NA	2.0 E-5	NA	NA
03D-SP123	20	NA	NA	NA	NA	6.2 E-6	7.4 E-7	NA	NA	NA	NA	1.8 E-8	NA	NA	3.7 E-8	8.6 E-8	NA	1.1 E-5	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	7.0 E-8	1.8 E-7	1.6 E-7	NA	2.5 E-7	NA	1.6 E-6	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	6.5 E-7	NA	NA	NA	NA	6.2 E-8	3.4 E-7	1.3 E-7	2.7 E-8	1.3 E-7	NA	3.2 E-6	NA	NA
03D-SP125	10	NA	NA	NA	NA	7.8 E-6	8.6 E-6	NA	NA	NA	5.4 E-7	5.7 E-8	NA	2.4 E-6	5.9 E-7	3.3 E-6	NA	3.7 E-6	NA	NA
03D-SP125	20	NA	9.1 E-7	NA	NA	6.7 E-6	3.6 E-6	NA	NA	6.9 E-6	2.6 E-6	3.9 E-8	5.2 E-9	4.0 E-7	3.5 E-7	1.7 E-6	NA	7.9 E-6	NA	6.8 E-7
03D-SP126	10	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	1.4 E-7	NA
03D-SP126	20	1.5 E-8	2.3 E-7	NA	NA	NA	6.0 E-7	NA	NA	NA	1.5 E-6	1.4 E-8	2.5 E-8	NA	3.7 E-8	1.5 E-7	NA	1.7 E-6	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	8.9 E-8	NA	2.1 E-5	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	1.6 E-8	NA	NA	2.5 E-8	7.8 E-8	NA	9.6 E-6	6.5 E-8	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA
03D-SP128	20	1.9 E-7	3.5 E-5	NA	NA	NA	2.6 E-6	NA	NA	8.8 E-6	2.9 E-5	1.0 E-7	6.9 E-7	NA	2.3 E-7	2.7 E-6	NA	5.6 E-6	NA	1.9 E-5
03D-SP128	30	2.7 E-6	1.8 E-5	2.1 E-5	NA	NA	NA	NA	NA	3.1 E-5	6.9 E-4	NA	8.5 E-8	NA	9.4 E-8	2.9 E-7	NA	6.4 E-6	NA	7.6 E-5
03D-SP129	15	NA	NA	NA	NA	6.5 E-6	1.3 E-6	NA	NA	NA	6.6 E-7	4.1 E-8	NA	NA	1.1 E-7	2.0 E-7	NA	4.1 E-6	NA	NA
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	2.3 E-5

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	4.1 E-6	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	7.6 E-8	NA	1.9 E-6	4.8 E-8	NA
03D-SP131	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	7.0 E-8	NA	NA	1.3 E-7	1.5 E-7	NA	3.9 E-5	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	1.3 E-8	NA	NA	1.9 E-8	7.7 E-8	NA	9.0 E-6	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	1.2 E-7	NA	1.9 E-5	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	2.3 E-7	NA	1.3 E-8	6.2 E-6	8.0 E-6	NA	NA	1.3 E-6	2.5 E-7	5.1 E-8	1.1 E-8	NA	1.1 E-6	3.1 E-6	NA	6.0 E-6	3.2 E-7	NA
03D-SP133	10	NA	NA	NA	NA	NA	8.6 E-7	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	1.4 E-7	NA	2.0 E-6	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	2.5 E-8	NA	NA	1.6 E-8	2.0 E-7	NA	NA	9.0 E-8	NA
03D-SP134	10	NA	NA	NA	NA	7.8 E-5	8.3 E-7	NA	NA	NA	NA	3.9 E-8	NA	NA	9.6 E-8	1.2 E-7	NA	1.2 E-6	2.3 E-7	NA
03D-SP134	20	NA	2.8 E-7	NA	NA	1.2 E-5	3.2 E-5	NA	NA	NA	1.4 E-6	2.0 E-6	NA	NA	2.7 E-6	2.3 E-5	NA	1.1 E-6	NA	NA
03D-SP135	10	3.5 E-8	5.1 E-7	NA	NA	NA	3.0 E-6	NA	NA	6.0 E-5	1.6 E-6	7.0 E-8	4.0 E-8	NA	1.1 E-7	1.6 E-6	NA	9.7 E-4	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	5.9 E-7	1.1 E-8	NA	1.4 E-5	2.1 E-4	NA	5.3 E-5	NA	NA
03D-SP136	10	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	3.1 E-6	NA	4.9 E-8	NA	NA	3.8 E-8	9.1 E-8	NA	NA	2.7 E-7	NA
03D-SP137	10	NA	4.2 E-7	NA	NA	NA	1.1 E-6	NA	NA	8.4 E-5	NA	7.0 E-8	7.9 E-8	NA	NA	4.1 E-7	NA	8.3 E-5	NA	NA
03D-SP138	10	NA	2.0 E-6	NA	NA	NA	3.0 E-6	NA	NA	2.9 E-6	3.1 E-6	3.0 E-8	1.7 E-6	1.3 E-6	1.2 E-7	1.1 E-6	NA	6.8 E-6	7.3 E-7	NA
03D-SP138	19	9.8 E-8	5.9 E-6	NA	NA	NA	1.4 E-6	NA	NA	5.2 E-6	1.8 E-5	NA	4.3 E-6	3.1 E-6	NA	3.7 E-7	NA	8.3 E-6	3.1 E-7	NA
03D-SP138	30	2.5 E-8	9.1 E-7	NA	2.2 E-8	7.1 E-6	3.3 E-6	NA	NA	9.2 E-7	7.3 E-6	1.1 E-8	5.2 E-7	2.6 E-7	6.9 E-8	4.5 E-7	NA	5.6 E-4	3.8 E-7	6.3 E-7
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	4.4 E-6	2.1 E-7	NA
03D-SP139	20	NA	NA	NA	2.7 E-8	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.0 E-6	NA	4.5 E-6	5.2 E-7	NA
03D-SP139	28	NA	1.4 E-7	NA	NA	3.7 E-6	9.1 E-6	NA	NA	NA	NA	1.2 E-8	6.1 E-10	NA	3.1 E-7	1.3 E-6	NA	3.5 E-5	2.6 E-7	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	2.9 E-8	NA	NA	8.0 E-8	1.6 E-7	NA	1.2 E-6	6.1 E-8	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	5.4 E-6	3.2 E-7	NA
03D-SP141	20	NA	NA	NA	1.7 E-8	3.6 E-6	4.6 E-6	NA	NA	NA	NA	2.9 E-8	2.1 E-9	NA	5.1 E-7	1.6 E-6	NA	2.9 E-6	3.5 E-7	NA
03D-SP142	10	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	6.3 E-6	NA	NA	7.9 E-6	1.4 E-6	9.6 E-8	4.7 E-7	NA	8.9 E-5	1.6 E-7	NA
03D-SP142	20	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	2.6 E-6	NA	3.5 E-8	2.8 E-6	NA	2.5 E-7	1.3 E-6	NA	2.9 E-5	NA	NA
03D-SP142	30	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	5.2 E-5	NA	NA	NA	NA	1.5 E-4	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	4.3 E-5	NA	NA	1.0 E-7	NA	NA	1.7 E-7	NA	1.1 E-4	2.3 E-7	NA
03D-SP143	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	2.4 E-5	2.8 E-7	1.2 E-8	4.5 E-8	NA	3.7 E-8	2.1 E-7	NA	4.1 E-5	2.0 E-7	NA
03D-SP143	30	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	9.8 E-8	4.1 E-5	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	1.2 E-4	7.6 E-8	NA
03D-SP144	20	NA	NA	NA	NA	NA	6.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	6.0 E-8	NA	9.0 E-5	4.7 E-8	NA
03D-SP144	30	4.1 E-7	2.3 E-6	NA	NA	NA	2.2 E-6	NA	NA	NA	3.1 E-5	3.1 E-8	NA	NA	3.0 E-6	4.9 E-5	NA	5.6 E-5	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	6.3 E-5	NA	NA	1.8 E-7	NA	3.1 E-8	2.5 E-7	NA	1.1 E-5	1.2 E-7	NA
03D-SP145	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	3.4 E-6	NA	NA	7.8 E-9	NA	3.2 E-8	1.6 E-7	NA	6.8 E-7	9.4 E-8	NA
03D-SP146	10	4.1 E-8	2.9 E-6	NA	NA	2.6 E-5	1.5 E-6	NA	NA	9.8 E-7	6.7 E-6	NA	1.1 E-5	3.9 E-6	2.8 E-8	1.3 E-7	NA	7.0 E-4	9.7 E-8	7.1 E-6
03D-SP146	20	1.0 E-7	3.1 E-6	NA	NA	NA	2.1 E-6	NA	NA	NA	2.0 E-5	NA	4.6 E-6	1.6 E-6	6.9 E-8	4.4 E-7	NA	2.7 E-4	2.1 E-7	1.4 E-5
03D-SP146	27	5.8 E-7	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	NA	2.8 E-5	5.5 E-6	NA	NA	NA	9.6 E-5	NA	1.7 E-5
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	8.7 E-6	NA	1.4 E-6	NA	NA	NA	NA	1.2 E-4	NA	NA
03D-SP147	20	NA	2.0 E-7	NA	NA	9.0 E-6	1.3 E-6	NA	NA	1.8 E-6	2.8 E-6	NA	4.5 E-8	NA	3.2 E-8	2.4 E-7	NA	6.2 E-6	2.1 E-7	NA
03D-SP147	27	6.4 E-7	1.2 E-5	NA	NA	NA	NA	NA	NA	2.0 E-5	1.6 E-4	NA	1.5 E-6	NA	NA	9.8 E-7	NA	3.2 E-5	NA	3.6 E-6
03D-SP148	10	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	7.0 E-6	NA	2.8 E-8	NA	NA	5.1 E-8	2.5 E-7	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	1.6 E-7	NA	3.2 E-8	1.1 E-7	NA	NA	9.2 E-8	NA
03D-SP149	20	NA	NA	NA	NA	6.7 E-6	7.4 E-6	NA	NA	NA	NA	5.5 E-8	4.6 E-9	NA	2.5 E-7	6.3 E-7	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	3.1 E-8	NA	4.5 E-7	NA	NA
03D-SP84	15	NA	2.3 E-7	NA	NA	NA	2.5 E-6	NA	NA	8.1 E-7	4.8 E-7	NA	6.9 E-8	NA	5.0 E-8	1.8 E-6	NA	5.8 E-6	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	6.0 E-7	NA	NA	5.4 E-8	NA	1.3 E-8	1.7 E-7	NA	3.2 E-6	1.6 E-7	NA
03D-SP85	25	6.0 E-6	2.3 E-5	NA	NA	NA	1.5 E-4	NA	NA	NA	3.4 E-3	4.3 E-7	6.8 E-7	NA	2.0 E-5	4.0 E-4	NA	2.8 E-3	NA	NA
03D-SP85	30	NA	NA	NA	NA	3.1 E-6	3.5 E-6	NA	NA	NA	2.8 E-7	2.1 E-8	2.0 E-9	NA	6.2 E-8	3.3 E-7	NA	5.3 E-6	1.3 E-7	NA
03D-SP86	10	7.5 E-8	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	1.9 E-7	NA	3.4 E-6	2.3 E-7	NA
03D-SP86	20	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-8	NA	9.6 E-7	1.2 E-7	NA
03D-SP87	10	NA	NA	NA	NA	NA	4.6 E-6	NA	NA	NA	NA	1.2 E-7	2.7 E-9	NA	1.0 E-7	5.2 E-7	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	2.8 E-6	NA	NA	1.6 E-8	NA	5.9 E-8	4.7 E-7	NA	6.5 E-5	NA	NA
03D-SP88	20	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	7.1 E-10	NA	8.3 E-8	4.2 E-7	NA	3.3 E-5	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	3.7 E-3	NA	NA
03D-SP90	10	5.8 E-8	1.9 E-6	NA	NA	NA	3.7 E-6	NA	NA	3.3 E-5	6.7 E-6	2.1 E-7	6.9 E-7	NA	3.9 E-7	8.3 E-6	NA	3.0 E-5	NA	NA
03D-SP90	20	2.2 E-8	3.1 E-7	NA	NA	NA	1.3 E-6	NA	NA	7.5 E-6	1.4 E-6	6.4 E-8	1.3 E-7	NA	7.2 E-8	1.3 E-6	NA	1.5 E-5	NA	NA

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
03D-SP91	10	NA	NA	NA	NA	1.1 E-5	1.3 E-6	NA	NA	2.9 E-6	NA	3.9 E-8	6.8 E-9	NA	9.6 E-8	1.3 E-7	NA	6.1 E-6	5.7 E-7	NA
03D-SP91	20	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	9.4 E-6	9.2 E-7	1.4 E-8	1.2 E-8	NA	2.5 E-8	4.6 E-8	NA	1.1 E-5	9.5 E-8	NA
03D-SP92	10	4.5 E-8	NA	NA	NA	NA	2.2 E-6	NA	NA	3.0 E-6	3.7 E-6	6.6 E-8	9.6 E-8	NA	3.7 E-8	2.8 E-7	NA	1.6 E-5	NA	NA
03D-SP92	20	3.8 E-8	2.4 E-7	NA	NA	NA	2.0 E-6	NA	NA	1.9 E-5	4.1 E-6	5.3 E-8	7.1 E-8	NA	5.3 E-8	3.5 E-7	NA	5.6 E-5	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	2.3 E-7	NA	NA	4.4 E-6	NA	2.2 E-5	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	4.0 E-7	NA	3.0 E-8	9.1 E-9	NA	4.7 E-8	4.9 E-7	NA	5.0 E-7	NA	NA
03D-SP94	15	NA	2.3 E-7	NA	NA	NA	5.7 E-7	NA	NA	4.8 E-6	2.1 E-6	NA	1.4 E-7	NA	NA	5.9 E-8	NA	5.3 E-4	NA	NA
03D-SP94	25	NA	NA	NA	NA	3.7 E-6	1.7 E-6	NA	NA	1.3 E-6	5.1 E-7	8.4 E-8	1.4 E-8	NA	9.8 E-8	3.8 E-7	NA	1.5 E-4	NA	NA
03D-SP95	10	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	3.5 E-6	NA	NA	NA	NA	1.7 E-2	NA	NA
03D-SP95	18	NA	8.6 E-6	NA	NA	NA	NA	NA	NA	NA	8.9 E-5	NA	1.4 E-6	NA	NA	NA	NA	8.1 E-3	NA	NA
03D-SP96	10	NA	NA	NA	NA	1.9 E-5	5.8 E-6	NA	NA	1.5 E-4	NA	7.0 E-7	6.2 E-9	NA	6.9 E-7	1.1 E-6	NA	1.0 E-5	NA	NA
03D-SP96	17	NA	NA	NA	NA	2.0 E-5	2.6 E-6	NA	NA	1.2 E-4	NA	7.2 E-8	4.7 E-9	NA	2.1 E-7	9.2 E-7	NA	4.5 E-6	NA	NA
03D-SP99	10	NA	9.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	NA	NA	NA	3.2 E-2	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	4.5 E-7	NA	4.5 E-8	1.9 E-7	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	NA	NA	6.0 E-8	NA	1.7 E-8	2.3 E-7	NA	NA	6.3 E-8	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA
11D-SP27	20	NA	NA	NA	NA	4.7 E-6	2.2 E-6	NA	NA	NA	NA	1.4 E-8	NA	NA	1.3 E-7	6.2 E-7	NA	7.3 E-7	5.2 E-8	NA
11D-SP28	10	NA	NA	NA	NA	7.2 E-6	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	2.8 E-7	NA	NA	NA	NA
11D-SP28	20	2.2 E-8	2.1 E-6	NA	NA	NA	NA	NA	NA	7.5 E-6	6.3 E-7	NA	6.4 E-9	NA	NA	NA	NA	1.9 E-6	3.2 E-8	NA
11D-SP29	10	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	4.1 E-8	NA	1.4 E-7	9.8 E-7	NA	NA	2.7 E-7	NA
11D-SP29	30	1.9 E-8	2.8 E-6	NA	1.7 E-8	2.6 E-6	1.4 E-6	NA	NA	NA	6.5 E-7	NA	1.6 E-7	6.8 E-8	3.7 E-7	5.2 E-6	NA	NA	2.8 E-7	NA
11D-SP30	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	1.0 E-6	NA	NA	1.4 E-7	1.6 E-7	7.5 E-7	4.8 E-6	NA	NA	NA	NA
11D-SP30	20	6.7 E-8	7.0 E-7	NA	NA	NA	6.6 E-7	NA	NA	2.9 E-6	1.7 E-6	NA	5.0 E-8	8.8 E-8	5.6 E-7	7.1 E-6	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	1.0 E-6	NA	NA	2.1 E-7	NA
11D-SP31	20	NA	NA	NA	NA	NA	4.0 E-7	NA	8.0 E-7	1.4 E-6	4.1 E-7	NA	8.5 E-9	NA	1.7 E-8	1.1 E-6	NA	NA	1.7 E-7	NA
11D-SP31	30	5.2 E-8	1.5 E-7	NA	9.6 E-9	NA	4.3 E-7	NA	NA	1.5 E-6	2.5 E-6	NA	3.7 E-9	NA	3.2 E-7	2.3 E-6	NA	NA	1.8 E-7	NA
50D-SP01	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	5.0 E-9	NA	3.6 E-8	1.5 E-7	NA	1.6 E-5	NA	NA
50D-SP01	20	NA	NA	NA	NA	3.6 E-6	2.3 E-6	NA	NA	NA	NA	6.6 E-8	NA	NA	1.8 E-7	2.7 E-6	NA	2.8 E-6	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	9.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	1.2 E-5	NA	NA
51D-SP04	20	NA	NA	NA	NA	4.7 E-6	2.6 E-6	NA	NA	NA	NA	6.4 E-7	NA	NA	3.7 E-7	1.6 E-6	NA	1.8 E-6	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	1.1 E-6	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	7.1 E-6	NA	NA
A20-B34-SP01	20	NA	3.0 E-7	NA	NA	NA	1.6 E-6	NA	6.9 E-7	NA	NA	2.0 E-8	NA	NA	8.8 E-8	6.5 E-7	NA	2.5 E-6	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	4.1 E-6	8.8 E-7	NA	NA	NA	NA	1.5 E-8	NA	NA	5.3 E-8	1.6 E-7	NA	1.5 E-6	9.2 E-8	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	4.4 E-7	NA	4.8 E-5	1.1 E-7	NA
A20-B34-SP03	29	NA	NA	NA	1.4 E-8	2.5 E-6	1.5 E-6	NA	1.7 E-6	2.8 E-7	3.8 E-7	8.9 E-9	NA	NA	9.8 E-8	4.4 E-7	NA	3.9 E-5	2.5 E-7	NA
A20-RB37-SP01	10	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	5.2 E-5	NA	NA	NA	NA	6.2 E-3	NA	NA
A20-RB37-SP01	20	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	3.0 E-5	NA	NA	NA	NA	3.7 E-3	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	2.1 E-6	NA	1.2 E-4	NA	NA
A20-RB37-SP02	10	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	1.7 E-7	NA	7.9 E-4	2.5 E-7	NA
A20-RB37-SP02	20	NA	NA	NA	NA	5.4 E-6	9.6 E-7	NA	NA	NA	NA	1.4 E-8	1.3 E-9	NA	5.3 E-8	2.7 E-7	NA	9.0 E-6	2.9 E-7	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	2.1 E-9	NA	5.3 E-8	3.3 E-7	NA	3.0 E-5	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	1.6 E-9	NA	3.2 E-8	2.0 E-7	NA	2.0 E-5	NA	NA
A20-RX73-SP01	10	NA	6.4 E-7	NA	NA	NA	9.3 E-7	NA	NA	5.6 E-5	NA	NA	NA	NA	1.6 E-7	8.8 E-8	NA	1.1 E-5	NA	NA
A20-RX73-SP01	20	NA	2.3 E-6	NA	NA	8.8 E-6	2.0 E-6	NA	NA	1.9 E-5	NA	1.7 E-8	6.7 E-10	NA	2.9 E-6	3.6 E-7	NA	9.6 E-6	NA	NA
A20-ST01-1-SP01	10	3.9 E-8	NA	NA	NA	NA	1.3 E-6	NA	NA	1.4 E-6	NA	NA	1.8 E-7	NA	3.6 E-8	1.6 E-7	NA	2.3 E-5	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	6.3 E-7	NA	NA	NA	NA	1.6 E-8	NA	NA	4.0 E-8	1.2 E-7	NA	2.3 E-6	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	9.4 E-7	NA	NA	3.0 E-6	NA	4.5 E-8	6.5 E-7	NA	4.1 E-8	1.7 E-7	NA	4.3 E-5	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	3.1 E-6	3.3 E-6	NA	NA	2.0 E-6	NA	2.1 E-8	1.1 E-7	NA	1.8 E-7	1.0 E-6	NA	5.3 E-6	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	4.5 E-8	NA	NA	4.4 E-8	1.0 E-7	NA	7.2 E-6	2.9 E-7	NA
A20-ST01-3-SP01	20	NA	NA	6.4 E-6	NA	4.1 E-6	6.2 E-6	NA	NA	NA	NA	1.7 E-7	NA	NA	1.1 E-6	1.6 E-5	NA	4.0 E-6	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	1.9 E-6	1.3 E-6	NA	NA	1.4 E-6	7.8 E-6	NA	NA	NA	NA
A20-ST02-SP01	30	NA	1.3 E-7	NA	NA	2.4 E-6	1.1 E-5	NA	NA	NA	1.0 E-6	3.1 E-8	NA	NA	1.3 E-6	3.4 E-6	NA	2.3 E-6	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	NA	NA	8.6 E-6	NA	NA
A20-ST02-SP02	20	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	NA	1.6 E-8	NA	NA	2.1 E-8	1.1 E-7	NA	4.2 E-6	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	1.0 E-5	3.0 E-6	NA	NA	NA	NA	1.9 E-8	4.7 E-10	NA	1.6 E-7	1.3 E-6	NA	1.8 E-6	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	4.1 E-6	3.0 E-7	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	6.6 E-8	NA	1.3 E-6	8.3 E-8	NA

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																				
Unit Risk																				
A20-ST02-SP03	30	NA	NA	NA	NA	2.6 E-6	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	1.4 E-7	NA	9.0 E-7	1.4 E-7	NA
A20-ST02-SP04	30	NA	NA	NA	NA	1.4 E-4	2.2 E-6	NA	NA	NA	NA	7.7 E-9	NA	NA	6.9 E-8	3.5 E-7	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	8.4 E-6	1.0 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	1.6 E-3	NA	2.8 E-7	NA	NA	3.2 E-7	NA	2.6 E-5	4.0 E-7	1.4 E-5
A20-ST05-SP01	30	8.7 E-6	7.3 E-5	3.9 E-5	NA	NA	NA	NA	NA	6.7 E-5	1.4 E-3	NA	1.1 E-6	NA	5.7 E-8	2.3 E-7	NA	7.1 E-6	3.8 E-7	2.6 E-6
A20-ST05-SP02	10	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	1.4 E-7	NA	1.4 E-5	2.5 E-7	NA
A20-ST05-SP02	20	NA	NA	NA	NA	5.9 E-6	4.3 E-7	NA	NA	NA	NA	1.5 E-8	7.0 E-10	NA	2.9 E-8	1.5 E-7	NA	9.6 E-6	2.0 E-7	NA
A20-ST05-SP03	10	4.3 E-7	7.7 E-6	NA	NA	7.2 E-6	8.5 E-7	NA	NA	4.1 E-6	3.0 E-5	NA	6.5 E-7	NA	6.9 E-8	2.3 E-6	NA	3.6 E-5	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	1.2 E-8	NA	8.0 E-8	5.2 E-7	NA	1.7 E-6	1.8 E-7	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	3.9 E-7	NA	NA	1.4 E-7	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	2.1 E-7	NA	2.6 E-7	3.9 E-7	NA	1.0 E-4	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	NA	NA	1.1 E-8	1.8 E-7	NA	2.9 E-8	1.3 E-7	NA	4.8 E-5	NA	NA
A20-ST14-SP01	10	NA	1.5 E-6	NA	NA	NA	8.5 E-7	NA	NA	7.3 E-6	NA	NA	2.6 E-6	NA	NA	1.1 E-7	NA	9.5 E-5	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	2.0 E-6	NA	NA	7.8 E-7	NA	2.5 E-8	2.0 E-7	NA	8.4 E-6	2.3 E-7	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	1.0 E-7	NA	5.9 E-8	3.1 E-7	NA	8.6 E-5	2.1 E-7	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	5.5 E-8	NA	8.0 E-8	4.1 E-7	NA	6.2 E-5	2.1 E-7	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	5.4 E-8	NA	8.4 E-7	6.0 E-8	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	4.4 E-6	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	1.1 E-7	NA	NA	4.8 E-8	NA

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
03D-SP100	10	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-2
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-3
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E+0
03D-SP102	28	3.1 E-5	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1
03D-SP103	10	1.2 E-5	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2
03D-SP103	20	1.2 E-6	NA	9.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-3
03D-SP104	10	1.0 E-4	NA	6.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-2
03D-SP104	20	2.1 E-4	NA	6.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2
03D-SP105	10	1.0 E-4	NA	1.5 E-8	1.2 E-5	5.7 E-7	4.6 E-8	1.3 E-6	NA	3.4 E-7	1.2 E-7	5.2 E-8	1.2 E-8	NA	NA	2.7 E-6	1.7 E-6	NA	NA	1.9 E-6	6.6 E-2
03D-SP106	15	3.8 E-7	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	5.7 E-4
03D-SP106	25	5.5 E-4	2.1 E-3	2.2 E-6	NA	5.1 E-5	NA	NA	NA	NA	6.5 E-6	NA	8.5 E-7	NA	NA	NA	NA	NA	NA	8.2 E-6	3.1 E-2
03D-SP106	30	3.4 E-4	1.2 E-4	9.4 E-7	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SP107	10	6.2 E-4	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
03D-SP107	20	4.4 E-5	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-6	7.8 E-4
03D-SP107	29	6.3 E-4	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
03D-SP108	10	2.3 E-6	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
03D-SP109	10	1.7 E-5	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-3
03D-SP109	20	4.0 E-4	5.4 E-4	6.0 E-9	NA	NA	1.3 E-7	NA	1.4 E-8	8.6 E-7	2.6 E-8	NA	2.0 E-9	9.1 E-8	NA	6.1 E-7	2.4 E-7	NA	NA	4.1 E-7	4.3 E-2
03D-SP109	30	1.0 E-6	5.8 E-7	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4
03D-SP110	10	6.6 E-6	NA	2.0 E-8	NA	3.6 E-7	3.8 E-8	NA	NA	4.3 E-7	9.8 E-8	NA	4.2 E-9	6.4 E-8	NA	3.3 E-7	NA	NA	NA	2.7 E-7	1.3 E-3
03D-SP110	20	1.7 E-6	NA	5.1 E-8	NA	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	1.7 E-4
03D-SP111	10	3.0 E-6	NA	NA	NA	5.2 E-5	1.9 E-8	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	6.4 E-3
03D-SP111	20	NA	NA	NA	NA	8.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	7.9 E-8	8.2 E-5
03D-SP112	10	NA	NA	NA	NA	4.6 E-5	3.4 E-8	3.0 E-7	NA	4.7 E-7	7.1 E-8	NA	4.1 E-9	NA	NA	1.3 E-6	5.2 E-7	NA	NA	1.2 E-6	7.7 E-5
03D-SP112	20	NA	NA	NA	NA	2.2 E-5	NA	1.4 E-7	NA	6.2 E-8	3.7 E-8	NA	2.8 E-9	NA	NA	4.2 E-7	2.4 E-7	NA	NA	2.3 E-7	3.6 E-5
03D-SP113	10	1.3 E-7	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	1.5 E-5	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	2.4 E-5	3.1 E-4
03D-SP113	20	NA	2.0 E-5	NA	NA	NA	1.1 E-8	NA	NA	1.2 E-7	NA	NA	NA	2.4 E-8	NA	1.7 E-7	NA	NA	NA	7.8 E-8	5.2 E-3
03D-SP114	10	NA	NA	NA	NA	NA	9.7 E-8	NA	9.3 E-9	9.9 E-7	4.4 E-8	NA	NA	2.2 E-7	NA	5.9 E-7	2.9 E-7	NA	NA	1.5 E-6	1.2 E-5
03D-SP114	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5
03D-SP115	10	1.8 E-6	NA	NA	1.6 E-5	2.8 E-5	NA	1.5 E-6	NA	NA	7.6 E-8	NA	8.0 E-9	9.8 E-8	NA	3.4 E-6	1.5 E-6	NA	NA	9.2 E-7	2.5 E-4
03D-SP116	10	5.1 E-7	NA	1.6 E-8	4.2 E-6	1.1 E-4	NA	5.2 E-7	7.9 E-9	2.6 E-7	3.4 E-7	NA	1.9 E-8	7.4 E-8	NA	2.3 E-6	7.1 E-7	NA	6.5 E-8	1.7 E-6	1.9 E-4
03D-SP117	10	1.0 E-6	NA	3.2 E-8	NA	7.6 E-5	NA	NA	NA	3.4 E-7	1.3 E-7	NA	1.5 E-8	1.7 E-7	NA	1.4 E-6	5.2 E-7	NA	1.2 E-7	8.7 E-7	2.1 E-4
03D-SP118	10	9.4 E-7	NA	NA	NA	2.5 E-4	NA	NA	1.6 E-8	7.3 E-7	3.1 E-7	NA	4.2 E-7	3.1 E-7	NA	1.5 E-6	5.7 E-7	NA	1.3 E-7	2.9 E-6	1.8 E-3
03D-SP118	20	3.4 E-7	NA	1.4 E-8	6.6 E-6	2.4 E-5	NA	6.9 E-7	NA	NA	8.9 E-8	NA	NA	NA	NA	2.1 E-6	7.4 E-7	NA	NA	7.3 E-7	2.6 E-4
03D-SP119	10	4.6 E-5	NA	NA	1.7 E-5	4.8 E-5	NA	1.6 E-6	NA	NA	2.0 E-7	NA	2.7 E-7	NA	NA	5.0 E-6	2.3 E-6	NA	NA	2.1 E-6	1.3 E-3
03D-SP119	20	1.7 E-4	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	2.4 E-6	NA	NA	1.6 E-4	NA	NA	NA	5.8 E-5	2.2 E-3
03D-SP119	29	4.3 E-4	NA	2.6 E-9	3.6 E-6	1.1 E-5	NA	3.9 E-7	NA	6.6 E-8	7.3 E-8	NA	3.5 E-9	3.0 E-8	NA	9.6 E-7	3.4 E-7	NA	1.4 E-8	2.6 E-7	5.1 E-2
03D-SP120	10	7.3 E-7	NA	8.5 E-9	8.5 E-6	7.6 E-5	NA	7.1 E-7	NA	2.0 E-7	1.8 E-7	NA	NA	1.2 E-7	NA	3.9 E-6	1.1 E-6	NA	1.4 E-7	7.3 E-6	1.2 E-4
03D-SP120	20	1.9 E-7	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5
03D-SP121	15	4.8 E-5	7.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
03D-SP121	25	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	9.9 E-8	NA	NA	2.0 E-7	NA	NA	NA	1.0 E-7	1.2 E-2
03D-SP122	10	1.0 E-6	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	8.9 E-6	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
03D-SP122	20	6.2 E-6	3.5 E-5	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
03D-SP122	30	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	1.4 E-7	1.5 E-7	NA	NA	NA	9.0 E-8	9.4 E-4
03D-SP123	10	NA	NA	NA	2.9 E-6	NA	6.9 E-8	3.7 E-7	NA	5.4 E-7	NA	NA	NA	1.8 E-7	NA	1.1 E-6	5.2 E-7	NA	NA	1.7 E-6	3.1 E-5
03D-SP123	20	NA	NA	NA	1.0 E-5	1.8 E-5	NA	9.0 E-7	NA	NA	7.3 E-8	NA	NA	3.9 E-8	NA	1.7 E-6	7.6 E-7	3.0 E-7	NA	4.2 E-7	5.0 E-5
03D-SP124	10	NA	NA	NA	1.6 E-5	6.7 E-5	NA	1.8 E-6	NA	NA	5.6 E-7	NA	7.2 E-9	5.9 E-8	NA	5.5 E-6	2.4 E-6	7.1 E-7	NA	1.5 E-6	9.9 E-5
03D-SP124	20	1.3 E-7	NA	NA	NA	8.8 E-5	NA	NA	8.9 E-9	5.4 E-7	8.1 E-7	NA	NA	NA	2.0 E-6	7.2 E-7	2.4 E-7	NA	4.1 E-8	1.0 E-6	9.8 E-5
03D-SP125	10	2.0 E-6	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	1.4 E-6	NA	3.0 E-8	NA	1.2 E-6	1.9 E-6	8.1 E-7	NA	2.6 E-7	2.5 E-6	2.7 E-4
03D-SP125	20	5.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	1.2 E-7	NA	NA	NA	9.5 E-8	8.7 E-5
03D-SP126	10	3.6 E-7	3.2 E-7	NA	NA	NA	4.3 E-8	NA	NA	5.6 E-7	5.2 E-8	NA	NA	7.8 E-8	NA	7.2 E-7	2.8 E-7	NA	NA	6.0 E-7	1.7 E-5
03D-SP126	20	4.0 E-7	1.3 E-6	NA	1.5 E-6	NA	NA	1.5 E-7	NA	NA	4.5 E-8	NA	NA	NA	NA	3.2 E-7	1.6 E-7	NA	NA	1.3 E-7	8.2 E-6
03D-SP127	10	1.3 E-7	NA	NA	3.2 E-6	NA	4.1 E-8	3.7 E-7	NA	4.3 E-7	NA	NA	3.4 E-9	6.9 E-8	NA	1.0 E-6	4.8 E-7	NA	NA	4.6 E-7	2.8 E-5
03D-SP127	20	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-8	1.0 E-5
03D-SP128	10	9.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	3.6 E-6	1.9 E-6	NA	NA	8.7 E-7	9.6 E-6
03D-SP128	20	2.2 E-4	5.4 E-7	NA	2.0 E-5	NA	1.5 E-7	2.4 E-6	NA	NA	6.5 E-7	NA	NA	3.2 E-7	NA	1.2 E-6	NA	NA	NA	7.8 E-7	3.5 E-4
03D-SP128	30	5.1 E-4	NA	NA	1.9 E-6	NA	2.9 E-8	1.6 E-7	2.6 E-9	1.9 E-7	NA	NA	NA	5.7 E-8	NA	4.8 E-7	2.5 E-7	NA	NA	3.5 E-7	1.4 E-3
03D-SP129	15	1.1 E-6	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5
03D-SP129	25	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	1.7 E-7	NA	NA	NA	2.7 E-8	NA	9.8 E-8	NA	NA	NA	1.3 E-7	4.5 E-4

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
03D-SP130	10	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	1.3 E-6	NA	NA	NA	1.3 E-7	NA	2.9 E-7	NA	NA	2.8 E-8	2.7 E-7	6.2 E-6
03D-SP130	20	NA	NA	NA	5.4 E-6	3.8 E-7	NA	5.5 E-7	NA	NA	2.2 E-7	NA	NA	NA	NA	9.5 E-7	4.0 E-7	3.1 E-7	NA	9.5 E-6	2.0 E-5
03D-SP131	10	NA	NA	NA	3.9 E-6	NA	3.6 E-8	3.8 E-7	NA	5.0 E-7	NA	NA	NA	5.9 E-8	NA	9.3 E-7	4.8 E-7	NA	NA	4.4 E-7	4.8 E-5
03D-SP131	20	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	9.0 E-8	2.7 E-8	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	1.4 E-7	1.0 E-5
03D-SP132	10	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5
03D-SP132	20	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	1.6 E-6	1.5 E-6	1.3 E-7	5.1 E-8	1.7 E-7	NA	6.1 E-7	3.3 E-7	NA	NA	1.3 E-6	5.9 E-6
03D-SP132	30	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	1.3 E-8	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	7.4 E-8	2.7 E-5
03D-SP133	10	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	3.0 E-7	3.0 E-8	NA	NA	8.3 E-8	NA	1.5 E-6	7.6 E-7	NA	NA	5.4 E-7	6.3 E-6
03D-SP133	20	NA	NA	NA	1.8 E-6	NA	NA	1.7 E-7	4.4 E-9	6.6 E-8	2.2 E-8	2.4 E-8	3.0 E-9	7.8 E-8	NA	3.8 E-7	1.3 E-7	NA	NA	2.1 E-7	3.6 E-6
03D-SP134	10	7.3 E-8	NA	NA	5.2 E-6	1.2 E-4	3.3 E-8	NA	NA	3.7 E-7	8.0 E-7	3.8 E-6	3.1 E-6	4.6 E-8	NA	1.1 E-6	5.2 E-7	1.0 E-5	NA	6.3 E-7	2.3 E-4
03D-SP134	20	NA	8.6 E-7	1.9 E-8	2.3 E-6	3.6 E-5	NA	2.6 E-7	NA	6.1 E-8	8.1 E-8	2.8 E-8	2.8 E-8	2.5 E-8	NA	1.1 E-6	4.0 E-7	NA	2.6 E-8	6.0 E-7	1.2 E-4
03D-SP135	10	1.2 E-6	3.1 E-6	NA	NA	4.7 E-4	NA	NA	NA	NA	NA	4.8 E-6	1.5 E-5	NA	NA	4.6 E-6	NA	1.0 E-5	NA	1.9 E-6	1.5 E-3
03D-SP135	20	NA	4.5 E-4	NA	4.3 E-6	NA	NA	2.6 E-7	NA	3.2 E-8	NA	6.2 E-8	2.7 E-9	7.8 E-8	NA	4.2 E-7	NA	4.7 E-7	NA	1.7 E-7	7.4 E-4
03D-SP136	10	NA	NA	1.5 E-8	9.5 E-6	6.2 E-5	NA	1.0 E-6	NA	1.4 E-7	1.3 E-7	NA	1.2 E-8	NA	NA	3.0 E-6	1.4 E-6	NA	NA	9.7 E-7	1.1 E-4
03D-SP137	10	3.6 E-6	NA	2.2 E-8	4.7 E-6	3.2 E-6	2.0 E-8	4.0 E-7	1.2 E-8	2.1 E-7	6.1 E-7	NA	2.8 E-8	1.1 E-7	5.2 E-7	1.0 E-6	4.0 E-7	NA	2.4 E-8	7.8 E-7	1.8 E-4
03D-SP138	10	2.5 E-5	NA	2.6 E-8	NA	2.3 E-6	NA	NA	NA	NA	8.1 E-7	NA	1.3 E-8	4.9 E-7	2.3 E-6	1.3 E-6	NA	NA	NA	1.0 E-6	5.6 E-5
03D-SP138	19	6.1 E-5	NA	NA	NA	NA	7.4 E-8	NA	NA	2.9 E-6	1.5 E-7	NA	NA	2.6 E-7	2.5 E-7	2.7 E-7	NA	NA	NA	8.3 E-7	1.1 E-4
03D-SP138	30	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	3.1 E-7	6.1 E-4
03D-SP139	10	NA	NA	NA	NA	NA	3.0 E-8	NA	7.8 E-9	2.6 E-7	6.7 E-8	NA	4.5 E-9	6.9 E-8	NA	3.6 E-7	NA	NA	NA	5.2 E-7	6.0 E-6
03D-SP139	20	6.5 E-7	NA	NA	NA	NA	5.3 E-8	NA	5.2 E-9	9.0 E-7	9.3 E-8	NA	6.2 E-9	8.6 E-8	NA	2.5 E-7	1.3 E-7	NA	NA	8.7 E-7	1.1 E-5
03D-SP139	28	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	6.2 E-8	5.1 E-5
03D-SP140	10	1.8 E-7	NA	NA	NA	NA	7.6 E-8	NA	NA	1.2 E-6	NA	NA	NA	6.4 E-8	NA	1.2 E-6	5.2 E-7	NA	NA	1.3 E-6	8.1 E-6
03D-SP140	20	8.0 E-8	NA	NA	NA	NA	8.4 E-9	NA	NA	1.5 E-7	NA	NA	NA	2.4 E-8	NA	1.2 E-7	NA	NA	NA	1.7 E-7	3.2 E-6
03D-SP141	10	NA	NA	NA	NA	1.1 E-6	2.1 E-7	NA	NA	1.7 E-6	9.8 E-7	1.2 E-7	2.1 E-8	1.1 E-7	NA	8.8 E-7	3.5 E-7	1.3 E-6	NA	4.1 E-6	1.7 E-5
03D-SP141	20	1.0 E-7	NA	4.3 E-9	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	1.2 E-7	2.0 E-7	NA	NA	NA	4.5 E-7	1.4 E-5
03D-SP142	10	2.2 E-7	NA	NA	NA	NA	9.7 E-8	NA	NA	9.9 E-7	1.4 E-7	NA	1.0 E-8	2.6 E-7	NA	8.8 E-7	NA	NA	NA	3.2 E-6	1.1 E-4
03D-SP142	20	8.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	NA	NA	NA	4.9 E-5
03D-SP142	30	9.0 E-5	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	8.6 E-8	NA	NA	NA	1.0 E-7	3.9 E-4
03D-SP143	10	1.8 E-6	NA	1.5 E-8	NA	NA	NA	NA	NA	2.0 E-7	7.3 E-8	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	6.3 E-7	1.6 E-4
03D-SP143	20	7.3 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	7.0 E-5
03D-SP143	30	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	4.4 E-8	6.5 E-5
03D-SP144	10	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	1.4 E-6	NA	NA	NA	4.4 E-8	NA	2.8 E-7	NA	NA	2.3 E-8	2.4 E-7	1.3 E-4
03D-SP144	20	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	8.2 E-7	NA	2.9 E-7	2.7 E-6	NA	NA	NA	NA	NA	NA	1.7 E-7	2.3 E-4
03D-SP144	30	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	3.3 E-4
03D-SP145	10	3.3 E-7	NA	NA	NA	NA	2.4 E-8	NA	NA	3.2 E-7	4.4 E-8	NA	NA	5.9 E-8	NA	2.8 E-7	NA	NA	NA	3.3 E-7	7.6 E-5
03D-SP145	20	2.4 E-8	NA	2.0 E-8	NA	NA	NA	NA	NA	2.6 E-7	5.7 E-8	NA	NA	1.1 E-7	2.6 E-7	1.3 E-7	NA	NA	NA	9.5 E-8	6.6 E-6
03D-SP146	10	3.0 E-5	NA	3.0 E-8	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	7.8 E-7	7.9 E-4
03D-SP146	20	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4
03D-SP146	27	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4
03D-SP147	10	1.0 E-3	NA	NA	NA	NA	1.6 E-8	NA	NA	7.1 E-7	5.2 E-8	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	5.1 E-7	1.2 E-3
03D-SP147	20	3.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5
03D-SP147	27	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	8.8 E-7	8.5 E-4
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6
03D-SP148	20	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	1.4 E-7	8.1 E-8	NA	NA	6.6 E-8	1.1 E-7	NA	NA	NA	NA	8.7 E-8	5.0 E-7
03D-SP149	10	8.0 E-8	NA	NA	NA	NA	1.5 E-7	3.0 E-7	2.6 E-8	2.1 E-6	7.3 E-8	NA	5.8 E-9	5.4 E-7	NA	2.1 E-6	1.0 E-6	NA	2.3 E-8	2.9 E-6	1.1 E-5
03D-SP149	20	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	1.5 E-8	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	5.3 E-8	1.5 E-5
03D-SP150	30	1.7 E-8	NA	NA	NA	4.1 E-6	2.0 E-8	NA	NA	1.9 E-7	4.6 E-8	NA	7.5 E-8	NA	NA	1.0 E-7	NA	NA	NA	2.9 E-7	5.6 E-6
03D-SP84	15	4.6 E-7	1.2 E-5	NA	NA	3.8 E-7	NA	NA	NA	1.3 E-7	1.6 E-7	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	1.7 E-7	2.5 E-5
03D-SP84	25	1.3 E-7	8.3 E-7	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	9.2 E-6	1.8 E-5	NA	NA	NA	1.8 E-5	2.0 E-5	NA	NA	4.1 E-4
03D-SP85	25	2.4 E-5	2.9 E-3	NA	NA	NA	1.5 E-7	NA	9.8 E-9	1.3 E-6	4.2 E-8	NA	4.4 E-9	5.7 E-8	NA	4.0 E-7	2.3 E-7	NA	NA	7.6 E-7	9.8 E-3
03D-SP85	30	1.2 E-7	8.8 E-8	4.6 E-9	NA	NA	8.5 E-9	NA	NA	1.0 E-7	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	1.3 E-5
03D-SP86	10	1.3 E-7	NA	NA	NA	NA	3.0 E-8	NA	NA	4.1 E-7	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	3.2 E-7	5.6 E-6
03D-SP86	20	1.0 E-7	NA	NA	2.6 E-6	2.6 E-5	NA	3.8 E-7	NA	NA	3.2 E-8	NA	3.0 E-9	3.7 E-7	NA	2.3 E-6	5.9 E-7	NA	6.0 E-8	1.6 E-6	3.6 E-5
03D-SP87	10	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	2.1 E-7	6.0 E-6
03D-SP88	10	1.3 E-6	NA	NA	NA	NA	2.5 E-8	NA	NA	3.2 E-7	5.9 E-8	NA	4.3 E-9	NA	NA	5.9 E-7	2.8 E-7	NA	NA	4.8 E-7	7.3 E-5
03D-SP88	20	4.7 E-8	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5
03D-SP89	10	3.0 E-6	NA	2.3 E-8	6.2 E-6	8.1 E-5	NA	1.0 E-6	NA	5.8 E-7	8.9 E-8	NA	2.0 E-7	1.7 E-7	NA	7.2 E-6	2.0 E-6	NA	5.6 E-8	3.5 E-6	3.8 E-3
03D-SP90	10	4.1 E-6	1.1 E-5	1.5 E-8	7.1 E-6	2.4 E-5	NA	1.0 E-6	NA	2.4 E-6	3.6 E-8	NA	6.6 E-8	1.4 E-7	NA	4.6 E-6	1.5 E-6	NA	9.5 E-8	2.1 E-6	1.4 E-4
03D-SP90	20	1.3 E-6	1.9 E-6	NA	1.8 E-6	NA	8.0 E-9	1.8 E-7	1.2 E-8	8.3 E-8	1.7 E-7	NA	2.1 E-9	NA	NA	6.5 E-7	2.3 E-7	NA	1.2 E-8	5.3 E-7	3.4 E-5

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
03D-SP91	10	2.3 E-6	1.2 E-6	8.5 E-9	4.1 E-6	NA	NA	4.1 E-7	1.6 E-8	NA	1.4 E-7	NA	NA	NA	NA	9.3 E-7	3.5 E-7	NA	2.5 E-8	5.6 E-7	3.2 E-5
03D-SP91	20	1.2 E-6	2.0 E-6	1.2 E-8	3.6 E-6	2.4 E-5	NA	3.8 E-7	NA	NA	7.7 E-8	NA	3.1 E-9	NA	NA	1.3 E-6	4.3 E-7	NA	2.6 E-8	5.7 E-7	5.5 E-5
03D-SP92	10	8.7 E-7	8.2 E-6	2.8 E-8	3.6 E-6	1.2 E-4	NA	5.2 E-7	NA	2.8 E-7	2.0 E-7	NA	6.9 E-9	NA	NA	3.8 E-6	1.2 E-6	NA	4.3 E-8	2.5 E-6	1.7 E-4
03D-SP92	20	2.4 E-6	6.5 E-6	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
03D-SP93	15	NA	NA	NA	3.8 E-6	1.7 E-5	NA	4.8 E-7	NA	NA	NA	NA	2.4 E-8	2.3 E-7	NA	2.0 E-6	6.7 E-7	NA	NA	1.1 E-6	6.9 E-5
03D-SP93	25	NA	NA	4.4 E-9	2.5 E-6	NA	NA	1.2 E-7	NA	NA	4.6 E-8	NA	NA	NA	NA	2.5 E-7	1.2 E-7	NA	NA	6.3 E-8	5.6 E-6
03D-SP94	15	1.5 E-6	NA	NA	6.3 E-6	NA	3.1 E-8	6.0 E-7	NA	NA	5.4 E-8	NA	1.1 E-8	3.3 E-8	NA	3.9 E-6	1.5 E-6	NA	NA	1.3 E-6	5.6 E-4
03D-SP94	25	1.4 E-7	NA	1.7 E-7	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	1.8 E-4
03D-SP95	10	4.1 E-5	6.5 E-5	4.3 E-7	NA	8.1 E-5	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-7	1.7 E-2
03D-SP95	18	2.8 E-5	4.8 E-5	NA	1.1 E-5	8.2 E-6	NA	2.3 E-6	1.3 E-8	9.3 E-8	2.3 E-7	5.9 E-8	6.1 E-8	1.7 E-7	NA	1.2 E-5	5.0 E-6	1.3 E-6	NA	2.4 E-5	8.4 E-3
03D-SP96	10	3.1 E-7	NA	NA	9.0 E-6	1.1 E-5	5.9 E-8	8.6 E-7	NA	5.2 E-7	4.6 E-7	NA	7.3 E-8	3.0 E-7	NA	2.8 E-6	1.0 E-6	NA	6.0 E-8	1.1 E-5	2.3 E-4
03D-SP96	17	3.8 E-7	NA	5.5 E-7	NA	2.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4
03D-SP99	10	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	4.3 E-8	NA	4.2 E-9	NA	NA	3.0 E-7	NA	NA	NA	2.2 E-7	3.2 E-2
11D-SP26	10	4.8 E-8	NA	NA	NA	NA	2.4 E-8	NA	NA	3.4 E-7	NA	NA	NA	7.4 E-8	NA	NA	NA	NA	NA	9.7 E-8	2.6 E-6
11D-SP26	20	NA	NA	6.4 E-9	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	6.4 E-8	1.2 E-6
11D-SP27	10	1.7 E-7	NA	1.0 E-8	NA	NA	7.0 E-8	NA	6.4 E-9	8.0 E-7	1.6 E-7	NA	6.3 E-9	2.1 E-7	NA	7.2 E-7	2.8 E-7	NA	NA	8.9 E-7	1.8 E-5
11D-SP27	20	2.8 E-8	NA	1.2 E-8	NA	NA	NA	NA	NA	9.3 E-8	5.3 E-8	NA	NA	3.2 E-8	NA	2.5 E-7	NA	NA	NA	2.7 E-7	9.1 E-6
11D-SP28	10	2.2 E-7	NA	8.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	4.2 E-7	NA	NA	NA	1.0 E-7	1.1 E-5
11D-SP28	20	1.5 E-6	NA	1.6 E-8	NA	NA	NA	NA	NA	2.0 E-7	7.7 E-8	NA	NA	2.9 E-8	NA	1.1 E-7	NA	NA	NA	4.3 E-7	1.5 E-5
11D-SP29	10	1.2 E-7	NA	NA	NA	NA	2.6 E-8	NA	NA	8.8 E-7	3.7 E-7	NA	NA	1.6 E-7	NA	3.1 E-7	NA	NA	NA	1.3 E-6	5.7 E-6
11D-SP29	30	6.8 E-7	NA	1.1 E-8	NA	1.5 E-7	NA	NA	NA	5.0 E-8	1.3 E-7	NA	3.2 E-9	1.6 E-8	NA	7.6 E-8	NA	NA	NA	2.4 E-7	1.5 E-5
11D-SP30	10	9.4 E-8	NA	3.3 E-8	NA	5.2 E-7	NA	NA	NA	2.2 E-7	1.9 E-7	NA	NA	6.9 E-8	NA	2.2 E-7	NA	NA	NA	7.1 E-7	1.0 E-5
11D-SP30	20	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	1.3 E-7	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	3.4 E-7	1.5 E-5
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	5.9 E-7	NA	NA	4.8 E-8	NA	NA	NA	NA	NA	7.9 E-7	2.8 E-6
11D-SP31	20	4.0 E-8	NA	NA	NA	1.6 E-7	NA	NA	NA	1.5 E-7	1.1 E-7	NA	6.9 E-9	3.4 E-8	NA	1.2 E-7	NA	NA	NA	2.4 E-7	5.2 E-6
11D-SP31	30	6.1 E-8	NA	NA	NA	NA	7.1 E-9	NA	NA	6.5 E-8	1.8 E-8	NA	1.4 E-9	NA	NA	1.4 E-7	NA	NA	NA	1.0 E-7	7.9 E-6
50D-SP01	10	NA	NA	NA	NA	8.1 E-6	1.1 E-7	3.3 E-7	NA	1.1 E-6	8.1 E-8	2.6 E-7	2.6 E-7	1.1 E-7	NA	1.4 E-6	7.1 E-7	2.2 E-6	2.3 E-8	1.5 E-6	3.3 E-5
50D-SP01	20	NA	NA	3.5 E-9	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	7.6 E-8	1.2 E-5
51D-SP04	10	NA	NA	NA	NA	5.2 E-6	4.9 E-8	4.3 E-7	NA	5.0 E-7	8.1 E-8	2.6 E-6	1.2 E-7	9.3 E-8	NA	1.1 E-6	6.7 E-7	1.8 E-5	NA	1.0 E-6	4.3 E-5
51D-SP04	20	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	2.5 E-7	NA	NA	NA	1.0 E-7	1.2 E-5
A20-B34-SP01	10	1.0 E-6	NA	1.4 E-7	NA	2.8 E-7	5.5 E-8	NA	NA	5.4 E-7	3.6 E-7	7.5 E-8	1.1 E-8	NA	NA	9.3 E-7	3.6 E-7	7.4 E-7	NA	6.3 E-7	1.6 E-5
A20-B34-SP01	20	8.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	5.4 E-8	6.9 E-6
A20-B34-SP02	10	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	6.7 E-7	NA	NA	NA	1.1 E-7	NA	8.4 E-7	3.6 E-7	NA	NA	7.6 E-7	2.9 E-5
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	7.4 E-6
A20-B34-SP03	10	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	1.5 E-6	7.4 E-8	NA	3.4 E-9	4.9 E-8	NA	3.0 E-7	NA	NA	4.7 E-8	4.9 E-7	1.0 E-4
A20-B34-SP03	20	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	7.5 E-7	3.7 E-8	NA	1.7 E-9	6.9 E-8	NA	2.1 E-7	NA	NA	NA	5.6 E-7	5.4 E-5
A20-B34-SP03	29	4.5 E-8	NA	7.9 E-8	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5
A20-RB37-SP01	10	4.0 E-5	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
A20-RB37-SP01	20	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-3
A20-RB37-SP01	30	3.6 E-6	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	1.5 E-4
A20-RB37-SP02	10	6.8 E-6	NA	NA	NA	NA	4.6 E-8	NA	NA	6.7 E-7	3.8 E-7	NA	NA	9.8 E-8	NA	5.9 E-7	3.3 E-7	NA	NA	7.1 E-7	8.0 E-4
A20-RB37-SP02	20	1.1 E-7	NA	3.8 E-9	NA	NA	NA	NA	NA	7.1 E-8	1.1 E-7	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	1.3 E-7	1.7 E-5
A20-RC29-SP01	10	1.7 E-7	NA	1.4 E-8	NA	NA	3.2 E-8	NA	NA	3.4 E-7	1.1 E-6	NA	NA	8.8 E-8	NA	4.6 E-7	NA	NA	NA	2.1 E-7	3.6 E-5
A20-RC29-SP01	20	5.1 E-7	NA	1.7 E-8	NA	NA	NA	NA	NA	6.1 E-8	6.1 E-8	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	3.8 E-7	2.2 E-5
A20-RX73-SP01	10	5.0 E-7	NA	2.8 E-8	NA	NA	6.9 E-8	NA	NA	7.8 E-7	1.3 E-7	NA	1.1 E-7	3.2 E-7	NA	7.6 E-7	3.7 E-7	NA	NA	3.8 E-6	7.6 E-5
A20-RX73-SP01	20	9.1 E-7	NA	4.1 E-9	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.3 E-7	4.6 E-5
A20-ST01-1-SP01	10	4.0 E-7	1.1 E-6	NA	NA	NA	5.7 E-8	NA	NA	5.8 E-7	NA	NA	NA	9.8 E-8	NA	7.6 E-7	3.8 E-7	NA	NA	5.6 E-7	3.0 E-5
A20-ST01-1-SP01	20	7.3 E-8	NA	6.0 E-9	2.0 E-6	NA	NA	4.0 E-7	NA	NA	5.7 E-8	NA	NA	NA	NA	6.1 E-7	2.3 E-7	3.5 E-7	NA	6.3 E-7	7.4 E-6
A20-ST01-2-SP01	10	3.4 E-7	NA	NA	NA	NA	5.5 E-8	NA	7.4 E-9	5.8 E-7	1.2 E-7	NA	1.4 E-8	NA	NA	8.4 E-7	3.9 E-7	NA	NA	1.5 E-6	5.1 E-5
A20-ST01-2-SP01	20	8.0 E-8	NA	NA	NA	NA	9.7 E-9	NA	NA	1.2 E-7	2.7 E-8	NA	NA	2.5 E-8	NA	5.9 E-7	2.4 E-7	NA	NA	2.5 E-7	1.6 E-5
A20-ST01-3-SP01	10	1.4 E-7	NA	NA	NA	4.7 E-5	9.7 E-8	NA	NA	9.0 E-7	1.5 E-7	9.8 E-7	1.5 E-6	NA	NA	1.4 E-6	5.7 E-7	5.5 E-6	NA	1.7 E-6	6.9 E-5
A20-ST01-3-SP01	20	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5
A20-ST02-SP01	10	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	3.5 E-6	2.2 E-6	NA	NA	NA	NA	4.6 E-6	NA	7.5 E-7	2.2 E-4
A20-ST02-SP01	20	1.3 E-6	2.8 E-7	NA	NA	3.6 E-5	1.4 E-7	NA	NA	1.2 E-6	1.4 E-7	1.7 E-7	1.5 E-7	4.9 E-8	NA	4.2 E-7	2.6 E-7	NA	NA	6.2 E-7	6.6 E-5
A20-ST02-SP01	30	1.2 E-7	1.0 E-7	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5
A20-ST02-SP02	10	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	2.0 E-7	NA	2.0 E-6	NA	NA	NA	2.4 E-7	4.7 E-7	4.3 E-6	NA	2.5 E-7	4.1 E-5
A20-ST02-SP02	20	6.9 E-8	NA	NA	1.3 E-6	2.4 E-6	1.5 E-7	1.5 E-7	NA	2.0 E-6	3.3 E-8	1.1 E-7	4.7 E-9	1.8 E-7	NA	4.0 E-7	2.4 E-7	3.3 E-7	3.0 E-8	7.0 E-7	1.3 E-5
A20-ST02-SP02	30	3.1 E-8	NA	NA	NA	NA	1.7 E-8	NA	NA	1.5 E-7	NA	NA	NA	2.8 E-8	NA	1.8 E-7	9.7 E-8	NA	NA	4.2 E-7	1.7 E-5
A20-ST02-SP03	20	2.3 E-7	NA	NA	NA	NA	3.0 E-8	NA	NA	4.3 E-7	NA	NA	NA	4.9 E-8	NA	1.7 E-7	NA	NA	NA	5.0 E-7	7.3 E-6

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
A20-ST02-SP03	30	3.6 E-7	NA	NA	2.4 E-6	NA	2.6 E-8	1.3 E-7	NA	4.7 E-7	3.3 E-8	NA	1.9 E-9	1.1 E-7	NA	2.7 E-7	1.3 E-7	NA	NA	2.3 E-7	9.2 E-6
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	1.2 E-5
A20-ST05-SP01	20	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	4.4 E-3
A20-ST05-SP01	30	8.2 E-5	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	7.4 E-8	1.7 E-3
A20-ST05-SP02	10	1.2 E-7	NA	NA	NA	NA	5.0 E-8	NA	NA	5.6 E-7	NA	NA	NA	1.5 E-7	NA	9.7 E-7	4.2 E-7	NA	NA	4.1 E-7	1.8 E-5
A20-ST05-SP02	20	9.1 E-8	NA	NA	NA	2.9 E-7	NA	NA	NA	1.3 E-7	3.1 E-7	NA	6.6 E-9	2.7 E-8	NA	1.3 E-7	NA	NA	NA	7.9 E-7	1.8 E-5
A20-ST05-SP03	10	7.2 E-7	7.3 E-7	NA	NA	NA	5.2 E-8	NA	NA	6.5 E-7	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	9.2 E-5
A20-ST05-SP04	10	2.4 E-7	NA	NA	NA	NA	2.8 E-8	NA	NA	5.2 E-7	4.1 E-8	NA	NA	1.1 E-7	NA	4.2 E-7	NA	NA	NA	5.2 E-7	5.9 E-6
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	3.7 E-8	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	1.3 E-7	4.2 E-6
A20-ST06-SP01	10	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	2.6 E-7	1.9 E-7	NA	NA	NA	NA	7.2 E-7	2.6 E-7	NA	NA	4.3 E-7	1.0 E-4
A20-ST06-SP01	20	NA	NA	1.4 E-8	NA	NA	3.3 E-9	NA	NA	4.5 E-8	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	4.9 E-5
A20-ST14-SP01	10	2.9 E-6	NA	8.4 E-9	NA	NA	1.7 E-8	NA	NA	2.8 E-7	9.8 E-8	NA	NA	4.6 E-8	NA	2.3 E-7	NA	NA	NA	3.2 E-7	1.1 E-4
A20-ST14-SP01	20	1.1 E-7	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	1.3 E-5
A20-ST14-SP02	10	5.2 E-8	NA	1.1 E-8	NA	NA	NA	NA	NA	1.9 E-7	2.4 E-7	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	4.4 E-7	8.9 E-5
A20-ST14-SP02	20	6.2 E-8	NA	NA	NA	NA	1.3 E-8	NA	NA	2.2 E-7	NA	NA	NA	3.4 E-8	NA	2.0 E-7	NA	NA	NA	8.7 E-8	6.5 E-5
A20-ST20-SP01	10	7.2 E-7	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	1.4 E-7	1.3 E-6
A20-ST20-SP01	20	1.1 E-7	NA	4.0 E-9	NA	NA	NA	NA	NA	6.1 E-8	2.9 E-8	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	6.2 E-8	1.7 E-6
A20-ST22-SP01	10	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	6.0 E-7	NA	NA	NA	8.3 E-8	NA	3.2 E-7	NA	NA	NA	6.2 E-7	2.3 E-6
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-6

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																					
Unit Risk																					
03D-SP100	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA
03D-SP100	20	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA
03D-SP102	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA
03D-SP103	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA
03D-SP103	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA
03D-SP104	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA
03D-SP104	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	NA	NA
03D-SP105	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	NA
03D-SP106	15	2.8 E-10	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	2.9 E-10	NA	6.6 E-11	NA	NA	NA	NA	NA	4.1 E-8	NA	NA
03D-SP106	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA
03D-SP106	30	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-7	NA	NA
03D-SP107	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA
03D-SP107	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA
03D-SP107	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-7	NA	NA
03D-SP108	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA
03D-SP109	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
03D-SP109	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA
03D-SP109	30	NA	NA	NA	NA	1.7 E-10	NA	2.8 E-10	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	6.8 E-9	4.6 E-11	NA
03D-SP110	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA
03D-SP110	20	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
03D-SP111	10	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	NA
03D-SP111	20	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	1.1 E-11	NA
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA
03D-SP112	20	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	8.0 E-10	NA	NA
03D-SP113	10	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	1.6 E-8	NA	2.5 E-11	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
03D-SP113	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA
03D-SP114	10	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP114	20	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	1.3 E-9	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP115	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	NA
03D-SP116	10	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	1.9 E-8	NA	6.6 E-11	NA	NA	NA	NA	NA	1.3 E-9	NA	NA
03D-SP117	10	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	2.9 E-9	NA	5.8 E-11	NA	NA	NA	NA	NA	8.4 E-9	NA	NA
03D-SP118	10	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	3.6 E-11	NA	NA	NA	NA	NA	1.2 E-7	4.8 E-11	NA
03D-SP118	20	NA	NA	NA	NA	6.6 E-10	NA	2.7 E-9	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
03D-SP119	10	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-11	NA	NA	NA	NA	NA	8.4 E-8	NA	NA
03D-SP119	20	9.8 E-10	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	5.8 E-11	NA	NA	NA	NA	NA	4.2 E-8	NA	NA
03D-SP119	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-7	NA	NA
03D-SP120	10	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	5.5 E-11	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
03D-SP120	20	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA	NA	NA	6.0 E-11	NA	NA	NA	NA	NA	6.8 E-10	NA	NA
03D-SP121	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA
03D-SP122	10	2.8 E-10	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	NA	NA
03D-SP122	20	9.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA
03D-SP122	30	7.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP123	10	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
03D-SP123	20	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	8.0 E-10	NA	NA
03D-SP124	10	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	NA	6.2 E-11	NA	NA	NA	NA	NA	1.2 E-10	NA	NA
03D-SP124	20	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	5.5 E-11	NA	NA	NA	NA	NA	2.4 E-10	NA	NA
03D-SP125	10	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	NA	NA	2.8 E-10	NA	NA
03D-SP125	20	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	2.6 E-9	NA	3.5 E-11	NA	NA	NA	NA	NA	5.9 E-10	NA	NA
03D-SP126	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-10	3.0 E-11	NA
03D-SP126	20	6.1 E-12	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	1.3 E-10	NA	NA
03D-SP127	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA
03D-SP127	20	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	7.2 E-10	1.4 E-11	NA
03D-SP128	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA
03D-SP128	20	7.6 E-11	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	3.3 E-9	NA	9.3 E-11	NA	NA	NA	NA	NA	4.2 E-10	NA	NA
03D-SP128	30	1.1 E-9	NA	9.5 E-10	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	NA
03D-SP129	15	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	3.6 E-11	NA	NA	NA	NA	NA	3.1 E-10	NA	NA
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																					
Unit Risk																					
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA
03D-SP130	20	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	1.0 E-11	NA
03D-SP131	10	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	NA	NA	6.2 E-11	NA	NA	NA	NA	NA	3.0 E-9	NA	NA
03D-SP131	20	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	6.8 E-10	NA	NA
03D-SP132	10	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP132	30	NA	NA	NA	NA	1.0 E-10	NA	2.5 E-9	NA	NA	5.0 E-10	NA	4.5 E-11	NA	NA	NA	NA	NA	4.5 E-10	6.6 E-11	NA
03D-SP133	10	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA
03D-SP133	20	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	1.9 E-11	NA
03D-SP134	10	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	3.5 E-11	NA	NA	NA	NA	NA	9.3 E-11	4.8 E-11	NA
03D-SP134	20	NA	NA	NA	NA	NA	NA	9.8 E-9	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	8.4 E-11	NA	NA
03D-SP135	10	1.4 E-11	NA	NA	NA	NA	NA	9.3 E-10	NA	NA	2.2 E-8	NA	6.2 E-11	NA	NA	NA	NA	NA	7.3 E-8	NA	NA
03D-SP135	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	NA	NA	NA	NA	NA	4.0 E-9	NA	NA
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	4.4 E-11	NA	NA	NA	NA	NA	NA	5.6 E-11	NA
03D-SP137	10	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	3.1 E-8	NA	6.2 E-11	NA	NA	NA	NA	NA	6.2 E-9	NA	NA
03D-SP138	10	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	NA	1.1 E-9	NA	2.6 E-11	NA	NA	NA	NA	NA	5.1 E-10	1.5 E-10	NA
03D-SP138	19	4.0 E-11	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	6.5 E-11	NA
03D-SP138	30	1.0 E-11	NA	NA	NA	1.8 E-10	NA	1.0 E-9	NA	NA	3.4 E-10	NA	1.0 E-11	NA	NA	NA	NA	NA	4.2 E-8	8.0 E-11	NA
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	4.4 E-11	NA
03D-SP139	20	NA	NA	NA	NA	2.2 E-10	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	1.1 E-10	NA
03D-SP139	28	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	2.6 E-9	5.4 E-11	NA
03D-SP140	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA
03D-SP140	20	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	9.3 E-11	1.3 E-11	NA
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	6.8 E-11	NA
03D-SP141	20	NA	NA	NA	NA	1.4 E-10	NA	1.4 E-9	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	2.2 E-10	7.4 E-11	NA
03D-SP142	10	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	3.4 E-11	NA
03D-SP142	20	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	9.8 E-10	NA	3.1 E-11	NA	NA	NA	NA	NA	2.2 E-9	NA	NA
03D-SP142	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
03D-SP143	10	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	4.8 E-11	NA
03D-SP143	20	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	8.9 E-9	NA	1.1 E-11	NA	NA	NA	NA	NA	3.0 E-9	4.2 E-11	NA
03D-SP143	30	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	3.1 E-9	NA	NA
03D-SP144	10	NA	NA	NA	NA	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-9	1.6 E-11	NA
03D-SP144	20	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	9.8 E-12	NA
03D-SP144	30	1.7 E-10	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	NA	NA	2.8 E-11	NA	NA	NA	NA	NA	4.2 E-9	NA	NA
03D-SP145	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	8.3 E-10	2.6 E-11	NA
03D-SP145	20	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	2.0 E-11	NA
03D-SP146	10	1.7 E-11	NA	NA	NA	NA	NA	4.5 E-10	NA	NA	3.6 E-10	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	2.0 E-11	NA
03D-SP146	20	4.2 E-11	NA	NA	NA	NA	NA	6.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	4.4 E-11	NA
03D-SP146	27	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-9	NA	NA
03D-SP147	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	9.3 E-9	NA	NA
03D-SP147	20	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	4.4 E-11	NA
03D-SP147	27	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA
03D-SP148	10	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	NA	2.6 E-9	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP149	10	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA
03D-SP149	20	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP150	30	NA	NA	NA	NA	NA	NA	8.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-11	NA	NA
03D-SP84	15	NA	NA	NA	NA	NA	NA	7.5 E-10	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA
03D-SP84	25	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	3.3 E-11	NA
03D-SP85	25	2.5 E-9	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	2.1 E-7	NA	NA
03D-SP85	30	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	3.9 E-10	2.7 E-11	NA
03D-SP86	10	3.1 E-11	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	4.8 E-11	NA
03D-SP86	20	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-11	2.6 E-11	NA
03D-SP87	10	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA
03D-SP88	10	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA
03D-SP88	20	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA
03D-SP89	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA
03D-SP90	10	2.4 E-11	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	1.2 E-8	NA	1.8 E-10	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
03D-SP90	20	8.9 E-12	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	2.8 E-9	NA	5.6 E-11	NA	NA	NA	NA	NA	1.1 E-9	NA	NA

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																					
Unit Risk																					
03D-SP91	10	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	1.1 E-9	NA	3.5 E-11	NA	NA	NA	NA	NA	4.6 E-10	1.2 E-10	NA
03D-SP91	20	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	3.5 E-9	NA	1.2 E-11	NA	NA	NA	NA	NA	8.0 E-10	2.0 E-11	NA
03D-SP92	10	1.8 E-11	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	1.1 E-9	NA	5.8 E-11	NA	NA	NA	NA	NA	1.2 E-9	NA	NA
03D-SP92	20	1.5 E-11	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	7.2 E-9	NA	4.7 E-11	NA	NA	NA	NA	NA	4.2 E-9	NA	NA
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA
03D-SP93	25	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	1.5 E-10	NA	2.6 E-11	NA	NA	NA	NA	NA	3.7 E-11	NA	NA
03D-SP94	15	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
03D-SP94	25	NA	NA	NA	NA	NA	NA	5.3 E-10	NA	NA	4.9 E-10	NA	7.4 E-11	NA	NA	NA	NA	NA	1.1 E-8	NA	NA
03D-SP95	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA
03D-SP95	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-7	NA	NA
03D-SP96	10	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	5.6 E-8	NA	6.2 E-10	NA	NA	NA	NA	NA	7.5 E-10	NA	NA
03D-SP96	17	NA	NA	NA	NA	NA	NA	8.1 E-10	NA	NA	4.4 E-8	NA	6.4 E-11	NA	NA	NA	NA	NA	3.4 E-10	NA	NA
03D-SP99	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA
11D-SP26	10	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP26	20	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA
11D-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
11D-SP27	20	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	5.5 E-11	1.1 E-11	NA
11D-SP28	10	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP28	20	9.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	6.8 E-12	NA
11D-SP29	10	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA
11D-SP29	30	7.9 E-12	NA	NA	NA	1.4 E-10	NA	4.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-11	NA
11D-SP30	10	NA	NA	NA	NA	NA	NA	3.8 E-10	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP30	20	2.7 E-11	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-11	NA
11D-SP31	20	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	4.9 E-10	5.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA
11D-SP31	30	2.1 E-11	NA	NA	NA	8.0 E-11	NA	1.3 E-10	NA	NA	5.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-11	NA
50D-SP01	10	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA
50D-SP01	20	NA	NA	NA	NA	NA	NA	7.1 E-10	NA	NA	NA	NA	5.8 E-11	NA	NA	NA	NA	NA	2.1 E-10	NA	NA
51D-SP04	10	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	NA
51D-SP04	20	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	1.4 E-10	NA	NA
A20-B34-SP01	10	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	NA	NA
A20-B34-SP01	20	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	4.2 E-10	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	1.9 E-10	NA	NA
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	1.1 E-10	1.9 E-11	NA
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	2.4 E-11	NA
A20-B34-SP03	29	NA	NA	NA	NA	1.2 E-10	NA	4.7 E-10	NA	1.0 E-9	1.0 E-10	NA	7.9 E-12	NA	NA	NA	NA	NA	2.9 E-9	5.2 E-11	NA
A20-RB37-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA
A20-RB37-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA
A20-RB37-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-9	NA	NA
A20-RB37-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	5.2 E-11	NA
A20-RB37-SP02	20	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	6.8 E-10	6.0 E-11	NA
A20-RC29-SP01	10	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
A20-RC29-SP01	20	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
A20-RX73-SP01	10	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA
A20-RX73-SP01	20	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	7.0 E-9	NA	1.5 E-11	NA	NA	NA	NA	NA	7.2 E-10	NA	NA
A20-ST01-1-SP01	10	1.6 E-11	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA
A20-ST01-1-SP01	20	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	1.7 E-10	NA	NA
A20-ST01-2-SP01	10	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	1.1 E-9	NA	4.0 E-11	NA	NA	NA	NA	NA	3.2 E-9	NA	NA
A20-ST01-2-SP01	20	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	7.5 E-10	NA	1.8 E-11	NA	NA	NA	NA	NA	4.0 E-10	NA	NA
A20-ST01-3-SP01	10	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	5.4 E-10	6.0 E-11	NA
A20-ST01-3-SP01	20	NA	NA	2.9 E-10	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	3.0 E-10	NA	NA
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	20	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST02-SP01	30	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	2.8 E-11	NA	NA	NA	NA	NA	1.7 E-10	NA	NA
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	NA
A20-ST02-SP02	20	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	3.2 E-10	NA	NA
A20-ST02-SP02	30	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	1.3 E-10	NA	NA
A20-ST02-SP03	20	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	9.7 E-11	1.7 E-11	NA

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,3-Butadiene**	**1,4-Dioxane**	**2-Propanol**	**Benzene**	**Bromodichloromethane**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Ethylbenzene**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**Methylene Chloride**	**Tetrachloroethylene**	**Tetrahydrofuran**	**trans-1,2-Dichloroethene**
Unit Hazard																					
Unit Risk																					
A20-ST02-SP03	30	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	2.9 E-11	NA
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	NA	NA	6.8 E-12	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST05-SP01	20	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	8.4 E-11	NA
A20-ST05-SP01	30	3.5 E-9	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	7.8 E-11	NA
A20-ST05-SP02	10	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	5.2 E-11	NA
A20-ST05-SP02	20	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	7.2 E-10	4.2 E-11	NA
A20-ST05-SP03	10	1.7 E-10	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA
A20-ST05-SP04	10	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	3.7 E-11	NA
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	8.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	1.0 E-11	NA	NA	NA	NA	NA	3.6 E-9	NA	NA
A20-ST14-SP01	10	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA
A20-ST14-SP01	20	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	4.8 E-11	NA
A20-ST14-SP02	10	NA	NA	NA	NA	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-9	4.4 E-11	NA
A20-ST14-SP02	20	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	4.4 E-11	NA
A20-ST20-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST20-SP01	20	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-11	1.3 E-11	NA
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
03D-SP100	10	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP100	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP102	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4
03D-SP102	28	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
03D-SP103	10	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP103	20	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP104	10	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP104	20	8.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
03D-SP105	10	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6
03D-SP106	15	1.6 E-10	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP106	25	2.3 E-7	5.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-6
03D-SP106	30	1.4 E-7	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP107	10	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP107	20	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP107	29	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP108	10	9.9 E-10	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
03D-SP109	10	7.1 E-9	6.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP109	20	1.7 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
03D-SP109	30	4.4 E-10	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
03D-SP110	10	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP110	20	7.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP111	10	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP111	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP112	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP112	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP113	10	5.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP113	20	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP114	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP114	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP115	10	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP116	10	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP117	10	4.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP118	10	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP118	20	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP119	10	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP119	20	7.1 E-8	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP119	29	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP120	10	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP120	20	8.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP121	15	2.1 E-8	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
03D-SP121	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP122	10	4.3 E-10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP122	20	2.6 E-9	9.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP122	30	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP123	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP123	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP124	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
03D-SP124	20	5.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP125	10	8.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP125	20	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP126	10	1.5 E-10	8.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP126	20	1.7 E-10	3.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP127	10	5.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP127	20	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
03D-SP128	10	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP128	20	9.3 E-8	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP128	30	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
03D-SP129	15	4.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP129	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
03D-SP130	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP130	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP131	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP131	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
03D-SP132	10	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP132	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP132	30	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP133	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
03D-SP133	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
03D-SP134	10	3.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP134	20	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP135	10	5.2 E-10	8.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
03D-SP135	20	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP136	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP137	10	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP138	10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP138	19	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP138	30	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP139	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
03D-SP139	20	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
03D-SP139	28	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP140	10	7.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP140	20	3.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP141	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP141	20	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP142	10	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP142	20	3.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
03D-SP142	30	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP143	10	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP143	20	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP143	30	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP144	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP144	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP144	30	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP145	10	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP145	20	1.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP146	10	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
03D-SP146	20	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP146	27	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP147	10	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
03D-SP147	20	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
03D-SP147	27	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP148	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP148	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
03D-SP149	10	3.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP149	20	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP150	30	7.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
03D-SP84	15	2.0 E-10	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP84	25	5.7 E-11	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP85	25	1.0 E-8	8.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-6
03D-SP85	30	5.1 E-11	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP86	10	5.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
03D-SP86	20	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
03D-SP87	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
03D-SP88	10	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
03D-SP88	20	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
03D-SP89	10	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
03D-SP90	10	1.7 E-9	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP90	20	5.7 E-10	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
03D-SP91	10	9.6 E-10	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
03D-SP91	20	5.2 E-10	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP92	10	3.7 E-10	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP92	20	1.0 E-9	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
03D-SP93	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
03D-SP93	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
03D-SP94	15	6.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
03D-SP94	25	6.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
03D-SP95	10	1.8 E-8	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
03D-SP95	18	1.2 E-8	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
03D-SP96	10	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
03D-SP96	17	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
03D-SP99	10	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
11D-SP26	10	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
11D-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
11D-SP27	10	7.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
11D-SP27	20	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
11D-SP28	10	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
11D-SP28	20	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
11D-SP29	10	5.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
11D-SP29	30	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
11D-SP30	10	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
11D-SP30	20	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
11D-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
11D-SP31	20	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
11D-SP31	30	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
50D-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
50D-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
51D-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
51D-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-B34-SP01	10	4.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
A20-B34-SP01	20	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-B34-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-B34-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
A20-B34-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
A20-B34-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
A20-B34-SP03	29	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
A20-RB37-SP01	10	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
A20-RB37-SP01	20	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
A20-RB37-SP01	30	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-RB37-SP02	10	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
A20-RB37-SP02	20	4.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-RC29-SP01	10	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
A20-RC29-SP01	20	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-RX73-SP01	10	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
A20-RX73-SP01	20	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
A20-ST01-1-SP01	10	1.7 E-10	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
A20-ST01-1-SP01	20	3.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
A20-ST01-2-SP01	10	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
A20-ST01-2-SP01	20	3.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-ST01-3-SP01	10	5.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-ST01-3-SP01	20	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
A20-ST02-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST02-SP01	20	5.6 E-10	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
A20-ST02-SP01	30	5.2 E-11	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
A20-ST02-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
A20-ST02-SP02	20	2.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
A20-ST02-SP02	30	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-ST02-SP03	20	9.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10

Table 5.2-42
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Trichloroethylene**	**Vinyl Chloride**	**1,1,1-Trichloroethane**	**1,2,4-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Carbon Disulfide**	**Cumene**	**Cyclohexane**	**Ethanol**	**Freon 11**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
A20-ST02-SP03	30	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
A20-ST02-SP04	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
A20-ST05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A20-ST05-SP01	20	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
A20-ST05-SP01	30	3.5 E-8	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
A20-ST05-SP02	10	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
A20-ST05-SP02	20	3.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
A20-ST05-SP03	10	3.1 E-10	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
A20-ST05-SP04	10	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
A20-ST05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
A20-ST06-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
A20-ST06-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
A20-ST14-SP01	10	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
A20-ST14-SP01	20	4.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
A20-ST14-SP02	10	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
A20-ST14-SP02	20	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
A20-ST20-SP01	10	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
A20-ST20-SP01	20	4.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-ST22-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
A20-ST22-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.2-43 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
03D-AH01	0.01	2.6 E-1	2.8 E-2	6.6 E-2	2.0 E-2	**NA**	**NA**	**NA**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-AH01	3	4.6 E-1	6.4 E-2	1.2 E-1	4.9 E-2	**2 E-3**	**7 E-5**	**7 E-4**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-AH02	0.01	3.1 E-1	3.3 E-2	7.8 E-2	2.4 E-2	**NA**	**NA**	**NA**	5.7 E+0	3.5 E+0	3.6 E+0	3.4 E+0
03D-AH02	3	4.7 E-1	5.2 E-2	1.2 E-1	4.1 E-2	**2 E-3**	**7 E-5**	**7 E-4**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB01	1	7.1 E-1	7.6 E-2	1.8 E-1	5.5 E-2	**3 E-6**	8 E-8	1 E-6	6.1 E+0	3.5 E+0	3.7 E+0	3.4 E+0
03D-SB01	5	5.9 E-1	6.4 E-2	1.5 E-1	4.5 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-SB01	10	7.9 E-1	8.4 E-2	2.0 E-1	6.0 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-SB02	0.01	4.3 E-1	4.6 E-2	1.1 E-1	3.3 E-2	**NA**	**NA**	**NA**	5.5 E+0	3.5 E+0	3.6 E+0	3.4 E+0
03D-SB02	1	**3.0 E+0**	3.5 E-1	7.8 E-1	3.0 E-1	**3 E-5**	9 E-7	**9 E-6**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB02	3	5.0 E-1	5.3 E-2	1.3 E-1	3.8 E-2	**NA**	**NA**	**NA**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-SB02	6	3.6 E-1	3.8 E-2	9.1 E-2	2.7 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB02	7	1.5 E-4	1.8 E-5	4.4 E-5	1.5 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB02	10	3.2 E-4	3.7 E-5	9.1 E-5	3.1 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB02	11	3.7 E-1	4.0 E-2	9.4 E-2	2.9 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB03	1	4.2 E-1	4.5 E-2	1.1 E-1	3.2 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB03	5	4.3 E-1	4.6 E-2	1.1 E-1	3.3 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB03	10	5.6 E-1	6.1 E-2	1.5 E-1	4.4 E-2	5 E-9	7 E-8	2 E-9	5.7 E+0	3.5 E+0	3.6 E+0	3.4 E+0
03D-SB04	0.01	3.9 E-1	4.2 E-2	9.9 E-2	3.0 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB04	1	4.7 E-1	5.2 E-2	1.2 E-1	3.9 E-2	**6 E-6**	1 E-7	**2 E-6**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB04	3	3.4 E-1	3.6 E-2	8.6 E-2	2.6 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB04	5	3.9 E-1	4.2 E-2	9.9 E-2	3.0 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB04	6	4.4 E-5	5.1 E-6	1.3 E-5	4.3 E-6	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB04	10	3.9 E-1	4.2 E-2	9.8 E-2	3.0 E-2	**3 E-6**	5 E-8	1 E-6	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB05	0.01	2.3 E-1	2.5 E-2	5.9 E-2	1.8 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB05	1	4.0 E-1	4.4 E-2	1.0 E-1	3.4 E-2	**2 E-6**	6 E-8	9 E-7	**NA**	**NA**	NA	NA
03D-SB05	4	3.7 E-1	3.9 E-2	9.3 E-2	2.8 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB05	5	**2.4 E+0**	2.9 E-1	6.3 E-1	2.5 E-1	**3 E-5**	8 E-7	**8 E-6**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB05	10	3.9 E-1	4.2 E-2	9.8 E-2	3.2 E-2	1 E-6	3 E-8	3 E-7	**NA**	**NA**	NA	NA
03D-SB06	1	4.8 E-1	5.1 E-2	1.2 E-1	3.8 E-2	6 E-7	2 E-8	2 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB06	5	1.7 E-1	1.8 E-2	4.3 E-2	1.3 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB06	10	**4.1 E+0**	4.5 E-1	**1.1 E+0**	3.3 E-1	**5 E-6**	1 E-7	1 E-6	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB07	0.01	4.4 E-1	4.7 E-2	1.1 E-1	3.4 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB07	1	1.9 E-3	6.9 E-4	5.7 E-4	5.0 E-4	**5 E-6**	1 E-7	**2 E-6**	**NA**	**NA**	NA	NA
03D-SB07	5	3.6 E-1	3.8 E-2	9.0 E-2	2.7 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB07	7	8.7 E-5	1.0 E-5	2.5 E-5	8.7 E-6	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB07	10	3.5 E-4	4.0 E-5	9.9 E-5	3.4 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB08	0.01	4.3 E-1	4.6 E-2	1.1 E-1	3.3 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB08	1	4.8 E-1	5.2 E-2	1.2 E-1	3.7 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB08	3	3.3 E-1	3.5 E-2	8.3 E-2	2.5 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB08	5	4.3 E-1	4.6 E-2	1.1 E-1	3.3 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB08	10	2.8 E-1	3.0 E-2	7.1 E-2	2.1 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
03D-SB09	5	7.6 E-3	8.4 E-4	1.8 E-2	6.0 E-4	2 E-8	3 E-7	9 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-SB09	11	3.9 E-3	4.3 E-4	1.2 E-2	3.1 E-4	1 E-8	2 E-7	7 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0

Table 5.2-43 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
03D-SB10	5	3.5 E-3	3.9 E-4	1.1 E-2	2.8 E-4	1 E-8	2 E-7	6 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB10	11	1.1 E-2	1.2 E-3	1.5 E-2	8.9 E-4	2 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB11	1	3.9 E-2	4.7 E-3	2.9 E-2	4.0 E-3	5 E-7	3 E-7	1 E-7	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB11	5	1.5 E-2	1.6 E-3	1.8 E-2	1.2 E-3	2 E-8	2 E-7	8 E-9	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB11	11	2.8 E-2	3.0 E-3	3.1 E-2	2.2 E-3	3 E-8	4 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB12	5	1.3 E-2	1.5 E-3	1.3 E-2	1.1 E-3	6 E-8	2 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB12	11	1.3 E-2	1.4 E-3	1.7 E-2	1.0 E-3	1 E-7	2 E-7	3 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB13	6	9.2 E-3	1.0 E-3	1.8 E-2	7.7 E-4	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB13	11.5	6.1 E-3	6.9 E-4	1.5 E-2	5.2 E-4	2 E-8	2 E-7	8 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB14	3.5	7.9 E-3	8.9 E-4	1.0 E-2	6.7 E-4	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB14	7.5	8.7 E-3	9.7 E-4	1.3 E-2	7.3 E-4	1 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB14	11	3.4 E-3	4.0 E-4	2.2 E-2	2.9 E-4	3 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB15	3	8.5 E-3	9.4 E-4	2.2 E-3	7.2 E-4	7 E-10	9 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB15	6	2.4 E-2	2.6 E-3	6.7 E-3	1.9 E-3	5 E-10	7 E-9	2 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB15	11.5	6.4 E-3	7.1 E-4	1.7 E-3	5.4 E-4	6 E-10	7 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB16	5	1.8 E-2	2.0 E-3	2.5 E-2	1.5 E-3	3 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB16	11.5	9.3 E-3	1.0 E-3	1.4 E-2	7.9 E-4	2 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB17	1	2.0 E-2	2.2 E-3	3.2 E-2	1.6 E-3	2 E-7	4 E-7	8 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB17	5	4.1 E-3	4.4 E-4	1.1 E-3	3.1 E-4	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB17	11	3.5 E-3	3.8 E-4	9.4 E-3	2.7 E-4	1 E-8	1 E-7	5 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB18	11	1.0 E-2	1.2 E-3	2.3 E-2	8.7 E-4	3 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB19	7.5	1.0 E-2	1.2 E-3	1.2 E-2	8.6 E-4	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB19	11.5	7.7 E-3	8.6 E-4	8.2 E-3	6.5 E-4	8 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB20	5	2.3 E-2	2.7 E-3	1.6 E-2	2.2 E-3	1 E-7	2 E-7	4 E-8	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB20	11	3.9 E-1	4.6 E-2	1.1 E-1	4.1 E-2	**5 E-6**	3 E-7	1 E-6	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB22	7.75	2.4 E-1	2.9 E-2	7.3 E-2	2.5 E-2	**3 E-6**	2 E-7	9 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB22	11	9.1 E-3	1.0 E-3	2.9 E-2	8.0 E-4	3 E-8	4 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB23	6	7.8 E-3	8.8 E-4	1.0 E-2	6.7 E-4	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB23	11	7.6 E-3	8.5 E-4	8.2 E-3	6.5 E-4	8 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB24	7.5	1.3 E-2	1.4 E-3	1.7 E-2	1.0 E-3	2 E-8	2 E-7	8 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB24	11.5	3.3 E-3	3.5 E-4	8.7 E-4	2.5 E-4	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB25	1	7.9 E-3	8.8 E-4	2.4 E-2	6.3 E-4	3 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB25	5	7.0 E-3	8.0 E-4	3.4 E-2	5.7 E-4	4 E-8	5 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB25	11	1.0 E-2	1.2 E-3	6.9 E-2	8.7 E-4	8 E-8	1 E-6	4 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB26	1	3.0 E-3	3.3 E-4	7.0 E-3	2.4 E-4	2 E-8	1 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB26	5	3.8 E-3	4.4 E-4	1.1 E-2	3.3 E-4	1 E-8	2 E-7	6 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB26	11	6.3 E-3	7.3 E-4	3.4 E-2	5.2 E-4	4 E-8	5 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB27	1	5.5 E-3	6.2 E-4	1.3 E-2	4.5 E-4	2 E-7	2 E-7	7 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB27	5	2.9 E-3	3.3 E-4	1.3 E-2	2.4 E-4	2 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB27	11	6.8 E-3	7.6 E-4	2.8 E-2	5.5 E-4	3 E-8	4 E-7	2 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB30	5	1.3 E-2	1.4 E-3	3.0 E-2	1.1 E-3	3 E-8	4 E-7	2 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB30	11	1.5 E-2	1.7 E-3	5.3 E-2	1.2 E-3	6 E-8	8 E-7	3 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB31	1.5	1.3 E-2	1.5 E-3	1.9 E-2	1.1 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0

Table 5.2-43 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
03D-SB31	5.5	1.2 E-2	1.3 E-3	1.5 E-2	9.7 E-4	2 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB31	11.5	1.7 E-2	1.9 E-3	3.2 E-2	1.4 E-3	3 E-8	4 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB32	5	6.6 E-3	7.4 E-4	1.8 E-2	5.3 E-4	2 E-8	3 E-7	9 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-SB32	11	4.7 E-3	5.2 E-4	1.2 E-2	3.7 E-4	1 E-8	2 E-7	6 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB33	5	**4.2 E+1**	**5.0 E+0**	**1.1 E+1**	**4.4 E+0**	**5 E-4**	**2 E-5**	**2 E-4**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB33	11	9.2 E-2	1.1 E-2	3.2 E-2	9.6 E-3	1 E-6	2 E-7	3 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB35	5	9.8 E-3	1.1 E-3	2.3 E-2	8.3 E-4	3 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB35	11	8.2 E-3	9.1 E-4	7.9 E-3	6.9 E-4	8 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB36	1	1.9 E-2	2.3 E-3	2.4 E-2	1.9 E-3	3 E-7	3 E-7	8 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB36	5	8.6 E-3	9.6 E-4	3.0 E-2	6.9 E-4	4 E-8	4 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB36	11	5.5 E-3	6.4 E-4	2.7 E-2	4.7 E-4	7 E-8	4 E-7	3 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB37	5	1.4 E-1	1.6 E-2	6.5 E-2	1.4 E-2	**2 E-6**	5 E-7	5 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB37	11	1.4 E-2	1.5 E-3	2.0 E-2	1.1 E-3	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB38	1	9.8 E-3	1.1 E-3	6.9 E-3	8.7 E-4	6 E-9	8 E-8	3 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB38	5	2.9 E-2	3.2 E-3	2.5 E-2	2.4 E-3	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB38	11	6.0 E-3	6.7 E-4	1.6 E-3	5.1 E-4	5 E-10	7 E-9	2 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB39	3.5	5.7 E-2	6.2 E-3	2.4 E-2	4.5 E-3	1 E-8	2 E-7	6 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB39	5	5.4 E-3	6.1 E-4	9.4 E-3	4.6 E-4	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB39	11.5	1.7 E-3	1.9 E-4	4.5 E-4	1.3 E-4	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB40	3.75	8.4 E-3	9.5 E-4	1.9 E-2	7.1 E-4	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB40	7.5	8.4 E-3	9.4 E-4	1.6 E-2	7.1 E-4	2 E-8	2 E-7	8 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB40	11.75	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB41	3	7.3 E-3	8.1 E-4	6.8 E-3	6.2 E-4	7 E-9	9 E-8	3 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB41	6	6.3 E-3	7.0 E-4	1.7 E-3	5.3 E-4	5 E-10	7 E-9	2 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB41	11.75	4.2 E-4	4.5 E-5	1.2 E-4	3.2 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB42	1	2.6 E-2	3.1 E-3	6.9 E-3	2.6 E-3	3 E-7	8 E-9	8 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB42	5	4.3 E-3	4.9 E-4	1.9 E-2	3.5 E-4	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB42	11	1.3 E-2	1.4 E-3	1.3 E-2	1.0 E-3	1 E-8	2 E-7	6 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-SB43	5	1.1 E-1	1.3 E-2	5.2 E-2	1.1 E-2	1 E-6	4 E-7	4 E-7	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB43	11	4.1 E-2	4.9 E-3	3.4 E-2	4.2 E-3	4 E-7	4 E-7	1 E-7	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB44	5	1.3 E-2	1.5 E-3	2.2 E-2	1.1 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB44	11	5.7 E-3	6.4 E-4	1.1 E-2	4.9 E-4	1 E-8	2 E-7	6 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB45	5	1.0 E-2	2.7 E-3	1.8 E-2	1.9 E-3	1 E-7	3 E-7	6 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB46	5	4.3 E-2	1.5 E-2	3.1 E-2	1.1 E-2	8 E-7	3 E-7	4 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB46	11	**9.8 E+0**	**1.2 E+0**	**2.6 E+0**	**1.0 E+0**	**1 E-4**	**4 E-6**	**4 E-5**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB47	7.5	1.2 E-2	1.3 E-3	1.6 E-2	1.0 E-3	2 E-8	2 E-7	8 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB47	11.5	1.4 E-2	1.5 E-3	1.4 E-2	1.1 E-3	1 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB48	5	1.3 E-2	1.4 E-3	4.5 E-2	1.1 E-3	5 E-8	7 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB48	11	2.5 E-2	2.7 E-3	1.2 E-2	2.0 E-3	1 E-8	9 E-8	6 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB49	5	7.2 E-3	8.1 E-4	9.4 E-3	6.2 E-4	1 E-8	1 E-7	5 E-9	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB49	11.5	7.1 E-3	8.0 E-4	1.1 E-2	6.1 E-4	1 E-8	2 E-7	6 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB50	1	7.0 E-2	8.3 E-3	6.3 E-2	7.1 E-3	8 E-7	7 E-7	2 E-7	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB50	5	4.5 E-3	5.1 E-4	2.0 E-2	3.7 E-4	2 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0

Table 5.2-43 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
03D-SB50	11	3.5 E-3	3.9 E-4	1.1 E-2	2.8 E-4	1 E-8	2 E-7	6 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB51	5	1.5 E-2	1.6 E-3	3.5 E-2	1.2 E-3	4 E-8	5 E-7	2 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
03D-SB51	11	4.5 E-3	5.3 E-4	2.9 E-2	3.8 E-4	4 E-8	4 E-7	2 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB52	1	5.5 E-2	6.4 E-3	1.4 E-2	5.5 E-3	5 E-7	2 E-8	2 E-7	5.6 E+0	3.5 E+0	3.6 E+0	3.4 E+0
03D-SB52	5	3.4 E-3	3.8 E-4	9.3 E-3	2.7 E-4	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB52	11	1.0 E-3	1.1 E-4	2.7 E-4	8.0 E-5	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB53	5	4.9 E-3	5.7 E-4	2.3 E-2	4.2 E-4	3 E-8	4 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB53	11	3.8 E-3	4.3 E-4	1.7 E-2	3.1 E-4	2 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB54	1	2.3 E-2	2.7 E-3	6.0 E-3	2.3 E-3	2 E-7	7 E-9	7 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB54	5	7.0 E-3	8.1 E-4	4.6 E-2	5.8 E-4	6 E-8	7 E-7	3 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB54	11	2.6 E-3	3.0 E-4	1.4 E-2	2.2 E-4	2 E-8	2 E-7	8 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB55	1	5.9 E-3	6.7 E-4	2.9 E-2	4.8 E-4	3 E-8	4 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB55	5	8.6 E-3	9.8 E-4	4.0 E-2	7.0 E-4	5 E-8	6 E-7	2 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB55	11	5.3 E-3	6.2 E-4	3.6 E-2	4.5 E-4	4 E-8	5 E-7	2 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB56	5	7.8 E-3	8.8 E-4	1.4 E-2	6.6 E-4	2 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB56	11	1.2 E-2	1.3 E-3	2.9 E-2	9.8 E-4	5 E-8	4 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB57	5	7.9 E-3	8.8 E-4	1.5 E-2	6.6 E-4	2 E-8	2 E-7	8 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
03D-SB57	11	3.1 E-2	3.7 E-3	2.1 E-2	3.2 E-3	3 E-7	2 E-7	1 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB61	5	1.8 E-2	2.0 E-3	1.9 E-2	1.5 E-3	2 E-8	2 E-7	9 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB61	11	7.0 E-3	8.0 E-4	2.1 E-2	6.0 E-4	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB62	5	4.2 E-3	4.5 E-4	1.1 E-3	3.2 E-4	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB62	11	2.7 E-3	2.9 E-4	7.2 E-4	2.1 E-4	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SB63	1	2.1 E-2	2.6 E-3	5.6 E-3	2.3 E-3	3 E-7	8 E-9	8 E-8	**NA**	**NA**	**NA**	**NA**
03D-SB63	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB63	10	4.1 E-2	4.9 E-3	1.1 E-2	4.3 E-3	5 E-7	2 E-8	2 E-7	**NA**	**NA**	**NA**	**NA**
03D-SB64	1	4.4 E-2	5.3 E-3	1.2 E-2	4.7 E-3	6 E-7	2 E-8	2 E-7	**NA**	**NA**	**NA**	**NA**
03D-SB64	5	4.2 E-2	5.0 E-3	1.1 E-2	4.4 E-3	5 E-7	2 E-8	2 E-7	**NA**	**NA**	**NA**	**NA**
03D-SB64	10	1.7 E-2	2.0 E-3	4.4 E-3	1.8 E-3	2 E-7	6 E-9	6 E-8	**NA**	**NA**	**NA**	**NA**
03D-SB65	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB65	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB65	12	4.9 E-2	5.9 E-3	1.3 E-2	5.2 E-3	6 E-7	2 E-8	2 E-7	**NA**	**NA**	**NA**	**NA**
03D-SB66	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB66	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB66	10	4.5 E-2	5.4 E-3	1.2 E-2	4.8 E-3	6 E-7	2 E-8	2 E-7	**NA**	**NA**	**NA**	**NA**
03D-SB67	1	4.5 E-1	5.4 E-2	1.2 E-1	4.8 E-2	**6 E-6**	2 E-7	**2 E-6**	**NA**	**NA**	**NA**	**NA**
03D-SB67	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SB67	10	1.2 E-1	1.5 E-2	3.3 E-2	1.3 E-2	**2 E-6**	5 E-8	5 E-7	**NA**	**NA**	**NA**	**NA**
03D-SB68	1	**1.5 E+0**	1.8 E-1	4.0 E-1	1.6 E-1	**2 E-5**	6 E-7	**6 E-6**	**NA**	**NA**	**NA**	**NA**
03D-SB68	5	7.7 E-2	9.2 E-3	2.0 E-2	8.1 E-3	1 E-6	3 E-8	3 E-7	**NA**	**NA**	**NA**	**NA**
03D-SB68	10	2.8 E-1	3.4 E-2	7.5 E-2	3.0 E-2	**4 E-6**	1 E-7	1 E-6	**NA**	**NA**	**NA**	**NA**
03D-SB69	1	3.3 E-1	4.0 E-2	8.7 E-2	3.5 E-2	**4 E-6**	1 E-7	1 E-6	**NA**	**NA**	**NA**	**NA**
03D-SB69	5	1.9 E-2	2.2 E-3	4.9 E-3	2.0 E-3	2 E-7	7 E-9	7 E-8	**NA**	**NA**	**NA**	**NA**
03D-SB69	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 5.2-43 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
03D-SNS02	0.01	3.6 E-1	3.9 E-2	9.1 E-2	2.8 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SNS02	3	3.9 E-1	4.2 E-2	9.9 E-2	3.0 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SNS03	0.01	3.0 E-1	3.2 E-2	7.7 E-2	2.3 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SNS03	3	3.2 E-1	3.4 E-2	8.0 E-2	2.4 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SNS04	0.01	3.6 E-1	3.8 E-2	9.0 E-2	2.7 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SNS04	3	3.0 E-1	3.2 E-2	7.5 E-2	2.3 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
03D-SNS05	0.01	3.5 E-1	3.7 E-2	8.8 E-2	2.7 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SNS05	3	3.4 E-1	3.7 E-2	8.6 E-2	2.6 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SNS06	0.01	4.1 E-1	4.4 E-2	1.0 E-1	3.1 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
03D-SNS34	0.25	**1.8 E+0**	2.1 E-1	6.5 E-1	1.9 E-1	**2 E-5**	**4 E-6**	**7 E-6**	9.3 E+0	3.9 E+0	4.7 E+0	3.7 E+0
03D-SNS35	0.25	3.1 E-2	3.5 E-3	5.2 E-2	2.7 E-3	6 E-8	7 E-7	3 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB01	1	4.6 E-3	5.3 E-4	2.4 E-2	3.8 E-4	3 E-8	4 E-7	1 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
11D-SB01	5	3.7 E-3	4.4 E-4	3.0 E-2	3.1 E-4	4 E-8	5 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB01	11	4.0 E-3	4.4 E-4	7.3 E-3	3.1 E-4	8 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB02	1	1.1 E-2	1.2 E-3	4.0 E-2	9.0 E-4	5 E-8	6 E-7	2 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB02	5	3.2 E-3	3.5 E-4	4.3 E-3	2.5 E-4	4 E-9	6 E-8	2 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB02	11	2.1 E-2	2.2 E-3	1.2 E-2	1.6 E-3	8 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB03	1	5.9 E-3	6.6 E-4	1.7 E-2	4.7 E-4	2 E-8	2 E-7	9 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB03	5	1.3 E-3	1.6 E-4	1.4 E-2	1.2 E-4	2 E-8	2 E-7	8 E-9	**NA**	**NA**	**NA**	**NA**
11D-SB03	11	1.3 E-3	1.6 E-4	1.3 E-2	1.1 E-4	2 E-8	2 E-7	8 E-9	**NA**	**NA**	**NA**	**NA**
11D-SB04	1	4.0 E-2	4.5 E-3	2.6 E-2	3.5 E-3	3 E-7	3 E-7	8 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB04	5	5.0 E-2	5.4 E-3	3.3 E-2	3.9 E-3	3 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB04	11	1.8 E-2	2.0 E-3	2.2 E-2	1.5 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB05	1	1.1 E-2	1.3 E-3	6.0 E-3	1.0 E-3	2 E-7	6 E-8	6 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB05	5	1.2 E-2	1.3 E-3	2.0 E-2	1.0 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB05	11	8.2 E-3	9.2 E-4	1.7 E-2	7.0 E-4	2 E-8	3 E-7	9 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB06	1	**1.4 E+0**	1.7 E-1	3.7 E-1	1.5 E-1	**2 E-5**	5 E-7	**5 E-6**	**NA**	**NA**	**NA**	**NA**
11D-SB06	5	2.0 E-3	2.4 E-4	5.4 E-4	2.1 E-4	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
11D-SB06	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
11D-SB07	1	9.3 E-4	1.1 E-4	2.4 E-4	9.7 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
11D-SB07	5	2.1 E-4	2.5 E-5	5.5 E-5	2.2 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
11D-SB08	1	6.3 E-3	7.3 E-4	3.8 E-2	5.2 E-4	5 E-8	6 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB08	5	4.8 E-3	5.5 E-4	2.7 E-2	3.9 E-4	3 E-8	4 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB09	1	2.9 E-3	3.2 E-4	9.2 E-3	2.3 E-4	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB09	5	1.2 E-2	1.4 E-3	2.9 E-2	1.0 E-3	3 E-8	4 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SB09	11	2.6 E-3	3.0 E-4	1.2 E-2	2.1 E-4	1 E-8	2 E-7	7 E-9	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS01	0.01	2.8 E-1	3.0 E-2	7.0 E-2	2.1 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS02	0.01	6.5 E-1	7.0 E-2	1.6 E-1	5.1 E-2	1 E-8	1 E-7	5 E-9	**2.1 E+1**	5.4 E+0	8.1 E+0	4.8 E+0
11D-SNS12	0.5	4.8 E-1	5.8 E-2	1.4 E-1	5.1 E-2	**6 E-6**	4 E-7	**2 E-6**	6.2 E+0	3.5 E+0	3.8 E+0	3.4 E+0
11D-SNS12	2.5	4.8 E-1	5.7 E-2	1.6 E-1	5.0 E-2	**6 E-6**	8 E-7	**2 E-6**	6.5 E+0	3.6 E+0	3.9 E+0	3.5 E+0
11D-SNS13	0.5	3.9 E-1	4.7 E-2	1.2 E-1	4.1 E-2	**5 E-6**	5 E-7	1 E-6	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
11D-SNS13	2.5	3.9 E-3	4.6 E-4	8.6 E-3	3.7 E-4	1 E-8	1 E-7	4 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS14	0.5	1.8 E-1	2.1 E-2	5.6 E-2	1.8 E-2	**2 E-6**	2 E-7	6 E-7	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0

Table 5.2-43 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
11D-SNS14	2.5	2.4 E-4	2.6 E-5	6.7 E-5	1.8 E-5	NA	NA	NA	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS15	0.5	**9.0 E+0**	**1.1 E+0**	**2.4 E+0**	9.5 E-1	**1 E-4**	**4 E-6**	**3 E-5**	**1.1 E+1**	4.2 E+0	5.2 E+0	3.9 E+0
11D-SNS15	2.5	4.8 E-2	5.5 E-3	2.1 E-2	4.6 E-3	3 E-7	2 E-7	1 E-7	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS16	0.5	**1.0 E+0**	1.2 E-1	2.8 E-1	1.1 E-1	**1 E-5**	6 E-7	**4 E-6**	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
11D-SNS16	2.5	8.8 E-2	1.0 E-2	4.3 E-2	8.2 E-3	5 E-7	4 E-7	2 E-7	5.8 E+0	3.5 E+0	3.7 E+0	3.4 E+0
11D-SNS17	0.5	1.7 E-1	2.0 E-2	6.6 E-2	1.8 E-2	**3 E-6**	5 E-7	1 E-6	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS17	2.5	2.6 E-2	3.0 E-3	2.1 E-2	2.5 E-3	2 E-7	2 E-7	6 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS18	0.5	4.2 E-2	5.1 E-3	1.8 E-2	4.4 E-3	5 E-7	1 E-7	2 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS18	2.5	4.3 E-2	5.1 E-3	1.9 E-2	4.5 E-3	5 E-7	1 E-7	2 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS19	0.5	3.2 E-2	3.6 E-3	2.3 E-2	2.8 E-3	3 E-7	3 E-7	1 E-7	6.6 E+0	3.6 E+0	3.9 E+0	3.5 E+0
11D-SNS19	2.5	1.1 E-1	1.3 E-2	3.4 E-2	1.2 E-2	1 E-6	1 E-7	4 E-7	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS20	0.5	8.5 E-3	9.6 E-4	2.0 E-2	7.2 E-4	2 E-8	3 E-7	1 E-8	6.6 E+0	3.6 E+0	3.9 E+0	3.5 E+0
11D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS21	0.5	6.4 E-3	7.2 E-4	1.3 E-2	5.5 E-4	1 E-8	2 E-7	7 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS21	2.5	6.3 E-3	7.0 E-4	1.7 E-3	5.3 E-4	5 E-10	7 E-9	2 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS22	0.5	**1.2 E+0**	1.5 E-1	3.4 E-1	1.3 E-1	**2 E-5**	8 E-7	**4 E-6**	5.6 E+0	3.5 E+0	3.6 E+0	3.4 E+0
11D-SNS22	2.5	1.9 E-2	2.1 E-3	1.6 E-2	1.6 E-3	5 E-7	2 E-7	2 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS23	3.5	5.8 E-3	6.4 E-4	6.4 E-3	4.7 E-4	6 E-9	8 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS23	4.5	2.7 E-3	3.1 E-4	5.6 E-3	2.4 E-4	6 E-9	8 E-8	3 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS24	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS24	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11D-SNS25	0.5	NA	NA	NA	NA	NA	NA	NA	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS25	2.5	NA	NA	NA	NA	NA	NA	NA	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS26	0.5	NA	NA	NA	NA	NA	NA	NA	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS26	2.5	NA	NA	NA	NA	NA	NA	NA	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS27	0.5	NA	NA	NA	NA	NA	NA	NA	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS27	2.5	NA	NA	NA	NA	NA	NA	NA	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS28	0.5	NA	NA	NA	NA	NA	NA	NA	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
11D-SNS28	2.5	NA	NA	NA	NA	NA	NA	NA	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
50D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
50D-SB02	1	2.7 E-4	3.1 E-5	7.7 E-5	2.7 E-5	NA	NA	NA	NA	NA	NA	NA
50D-SB03	1	4.4 E-4	5.2 E-5	1.3 E-4	4.4 E-5	NA	NA	NA	NA	NA	NA	NA
50D-SB03	5	2.0 E-4	2.4 E-5	5.8 E-5	2.0 E-5	NA	NA	NA	NA	NA	NA	NA
50D-SB03	10	7.3 E-4	8.6 E-5	2.1 E-4	7.3 E-5	NA	NA	NA	NA	NA	NA	NA
50D-SB04	5	3.8 E-3	4.1 E-4	1.0 E-3	2.9 E-4	NA	NA	NA	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
50D-SB04	11	2.6 E-3	3.0 E-4	7.1 E-4	2.2 E-4	3 E-9	7 E-11	1 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB01	2	1.3 E-4	1.5 E-5	3.6 E-5	1.2 E-5	NA	NA	NA	NA	NA	NA	NA
51D-SB01	10	6.5 E-5	7.7 E-6	1.9 E-5	6.5 E-6	NA	NA	NA	NA	NA	NA	NA
51D-SB02	1	2.1 E-3	7.1 E-4	6.0 E-4	5.1 E-4	**5 E-6**	1 E-7	**2 E-6**	NA	NA	NA	NA
51D-SB02	5	9.4 E-5	1.1 E-5	2.7 E-5	9.3 E-6	NA	NA	NA	NA	NA	NA	NA
51D-SB02	10	2.8 E-3	3.3 E-4	8.0 E-4	2.8 E-4	NA	NA	NA	NA	NA	NA	NA
51D-SB03	1	1.7 E-4	2.0 E-5	4.9 E-5	1.7 E-5	NA	NA	NA	NA	NA	NA	NA
51D-SB03	10	9.3 E-4	1.1 E-4	2.7 E-4	9.2 E-5	NA	NA	NA	NA	NA	NA	NA

Table 5.2-43 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
51D-SB04	1	3.1 E-3	1.1 E-3	9.0 E-4	7.6 E-4	**8 E-6**	2 E-7	**3 E-6**	**NA**	**NA**	**NA**	**NA**
51D-SB04	1.5	1.5 E-4	1.7 E-5	4.2 E-5	1.5 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
51D-SB04	5	2.1 E-3	2.5 E-4	6.0 E-4	2.1 E-4	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
51D-SB04	11	4.5 E-4	5.3 E-5	1.3 E-4	4.5 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
51D-SB05	5	3.6 E-3	4.0 E-4	8.1 E-3	2.8 E-4	9 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB05	9	7.1 E-3	7.7 E-4	1.1 E-2	5.5 E-4	1 E-8	1 E-7	6 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB06	5	8.9 E-3	9.6 E-4	8.2 E-3	6.9 E-4	7 E-9	9 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB06	9	3.5 E-2	3.9 E-3	9.1 E-3	3.0 E-3	4 E-9	5 E-8	2 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB07	5	2.9 E-3	3.3 E-4	8.3 E-3	2.3 E-4	9 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB07	9	2.6 E-2	2.8 E-3	1.3 E-2	2.0 E-3	8 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
51D-SB08	5	4.4 E-3	5.0 E-4	2.0 E-2	3.6 E-4	2 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB08	9	3.9 E-3	4.5 E-4	1.8 E-2	3.2 E-4	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB09	5	6.2 E-3	7.0 E-4	1.3 E-2	5.3 E-4	1 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
51D-SB09	9	1.1 E-2	1.2 E-3	1.4 E-2	8.3 E-4	1 E-8	2 E-7	7 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB10	5	7.3 E-3	8.1 E-4	2.3 E-2	5.8 E-4	8 E-8	3 E-7	3 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
51D-SB10	9	6.1 E-3	6.9 E-4	2.6 E-2	4.9 E-4	3 E-8	4 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-B34-SB01	1	1.5 E-2	1.7 E-3	4.4 E-2	1.3 E-3	5 E-8	6 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-B34-SB01	5	1.0 E-2	1.2 E-3	4.0 E-2	8.9 E-4	5 E-8	6 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-B34-SB01	11	2.6 E-3	3.0 E-4	1.3 E-2	2.1 E-4	2 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-B34-SB02	1	3.9 E-3	4.4 E-4	1.7 E-2	3.1 E-4	3 E-8	2 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-B34-SB02	5	4.9 E-3	5.6 E-4	2.2 E-2	4.0 E-4	3 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-B34-SB02	11	2.9 E-3	3.3 E-4	1.2 E-2	2.3 E-4	1 E-8	2 E-7	7 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB01	1	**3.0 E+0**	3.6 E-1	8.3 E-1	3.1 E-1	**4 E-5**	1 E-6	**1 E-5**	**1.4 E+1**	4.5 E+0	6.0 E+0	4.1 E+0
A20-RB37-SB01	5	4.5 E-3	5.2 E-4	2.8 E-2	3.7 E-4	3 E-8	4 E-7	2 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB01	11	2.9 E-3	3.4 E-4	1.9 E-2	2.4 E-4	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB02	1	**1.8 E+0**	2.2 E-1	5.0 E-1	1.9 E-1	**2 E-5**	1 E-6	**7 E-6**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
A20-RB37-SB02	5	1.1 E-2	1.2 E-3	2.2 E-2	9.1 E-4	2 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB02	11	9.0 E-3	1.0 E-3	3.8 E-2	7.7 E-4	5 E-8	6 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB03	1	1.9 E-1	2.3 E-2	6.2 E-2	2.0 E-2	**2 E-6**	3 E-7	7 E-7	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB03	5	2.8 E-3	3.1 E-4	7.8 E-3	2.2 E-4	9 E-9	1 E-7	4 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB03	11	1.5 E-3	1.6 E-4	3.9 E-4	1.2 E-4	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB04	1	9.8 E-3	1.1 E-3	2.5 E-2	8.2 E-4	3 E-8	4 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB04	5	8.2 E-3	9.2 E-4	1.7 E-2	6.8 E-4	2 E-8	2 E-7	9 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RB37-SB04	11	9.6 E-3	1.1 E-3	3.1 E-2	8.1 E-4	4 E-8	5 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RC29-SB01	1	5.8 E-2	6.9 E-3	2.1 E-2	6.0 E-3	7 E-7	1 E-7	2 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RC29-SB01	5	9.8 E-3	1.1 E-3	1.4 E-2	8.4 E-4	2 E-8	2 E-7	7 E-9	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RC29-SB01	11	1.1 E-2	1.2 E-3	1.0 E-2	9.3 E-4	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RX73-SB01	1	6.7 E-3	7.3 E-4	1.1 E-2	5.2 E-4	2 E-8	1 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RX73-SB01	5	1.9 E-2	2.2 E-3	2.3 E-2	1.9 E-3	2 E-7	3 E-7	6 E-8	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
A20-RX73-SB01	11	4.0 E-3	4.5 E-4	1.7 E-2	3.2 E-4	2 E-8	3 E-7	9 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RX73-SB02	1	7.1 E-3	8.1 E-4	3.0 E-2	5.8 E-4	4 E-8	5 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RX73-SB02	5	1.9 E-2	2.1 E-3	3.5 E-2	1.5 E-3	4 E-8	5 E-7	2 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RX73-SB02	11	2.2 E-2	2.4 E-3	1.7 E-2	1.7 E-3	1 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0

Table 5.2-43 ***All Receptors Hazard Index and Cancer Risk Results - Soil***
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	**Depth**	**Child**	**Adult**	**Worker**	**Worker**	**Resident**	**Worker**	**Worker**	**Child**	**Adult**	**Worker**	**Worker**
A20-RX73-SB03	1	9.4 E-3	1.0 E-3	2.1 E-2	7.7 E-4	3 E-7	3 E-7	8 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RX73-SB03	5	2.0 E-2	2.2 E-3	4.0 E-2	1.5 E-3	4 E-8	5 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-RX73-SB03	11	6.3 E-3	6.9 E-4	1.0 E-2	5.0 E-4	1 E-8	1 E-7	5 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB01	1	7.4 E-3	8.4 E-4	3.3 E-2	6.0 E-4	4 E-8	5 E-7	2 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB01	5	7.8 E-3	8.7 E-4	2.8 E-2	6.2 E-4	3 E-8	4 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB01	11	3.2 E-2	3.8 E-3	2.3 E-2	3.2 E-3	4 E-7	2 E-7	1 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB02	1	4.1 E-3	4.5 E-4	1.1 E-3	3.2 E-4	7 E-8	2 E-9	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB02	5	2.0 E-2	2.1 E-3	8.6 E-3	1.5 E-3	4 E-9	5 E-8	2 E-9	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
A20-ST01-SB02	11	1.0 E-2	1.1 E-3	2.7 E-3	8.5 E-4	9 E-10	1 E-8	4 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB03	1	1.2 E-1	1.5 E-2	4.2 E-2	1.3 E-2	1 E-6	2 E-7	4 E-7	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB03	5	6.2 E-3	6.8 E-4	6.6 E-3	4.8 E-4	6 E-9	8 E-8	3 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST01-SB03	11	6.2 E-3	6.9 E-4	1.6 E-3	5.3 E-4	6 E-10	8 E-9	3 E-10	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
A20-ST02-SB01	1	7.1 E-3	7.8 E-4	1.5 E-2	5.6 E-4	2 E-8	2 E-7	8 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST02-SB01	5	3.6 E-3	4.0 E-4	7.2 E-3	2.8 E-4	9 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST02-SB01	11	3.5 E-3	3.9 E-4	1.2 E-2	2.8 E-4	1 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST05-SB01	1	8.5 E-3	9.5 E-4	1.2 E-2	7.2 E-4	2 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST05-SB01	5	9.2 E-3	1.0 E-3	2.3 E-2	7.8 E-4	3 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST05-SB01	11	5.0 E-3	5.8 E-4	3.4 E-2	4.2 E-4	4 E-8	5 E-7	2 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST05-SB02	1	1.1 E-2	1.2 E-3	3.2 E-2	9.1 E-4	4 E-8	5 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST05-SB02	5	9.0 E-3	1.0 E-3	2.4 E-2	7.5 E-4	3 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST05-SB02	11	2.8 E-3	3.4 E-4	2.8 E-2	2.4 E-4	3 E-8	4 E-7	2 E-8	**NA**	**NA**	**NA**	**NA**
A20-ST06-SB01	1	7.5 E-3	8.3 E-4	2.2 E-2	5.9 E-4	3 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST06-SB01	5	3.8 E-3	4.3 E-4	1.4 E-2	3.1 E-4	2 E-8	2 E-7	8 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST06-SB01	11	5.6 E-4	6.0 E-5	1.5 E-4	4.3 E-5	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
A20-ST14-SB01	1	7.8 E-3	8.6 E-4	1.4 E-2	6.1 E-4	2 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
A20-ST14-SB01	5	6.2 E-3	7.0 E-4	2.2 E-2	5.0 E-4	3 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST14-SB01	11	1.1 E-2	1.1 E-3	6.3 E-3	8.2 E-4	4 E-9	5 E-8	2 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST20-SB01	1	1.1 E-2	1.2 E-3	3.3 E-2	8.8 E-4	4 E-8	5 E-7	2 E-8	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
A20-ST20-SB01	5	4.5 E-2	4.9 E-3	4.3 E-2	3.5 E-3	4 E-8	5 E-7	2 E-8	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
A20-ST20-SB01	11	6.2 E-2	6.7 E-3	2.3 E-2	4.8 E-3	8 E-9	1 E-7	4 E-9	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST22-SB01	1	1.1 E-2	1.2 E-3	9.2 E-3	9.4 E-4	9 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST22-SB01	5	1.6 E-2	1.8 E-3	8.3 E-3	1.3 E-3	6 E-9	8 E-8	3 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
A20-ST22-SB01	11	4.8 E-3	5.3 E-4	1.3 E-3	4.0 E-4	3 E-10	4 E-9	1 E-10	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
Minimum		4.4 E-5	5.1 E-6	1.3 E-5	4.3 E-6	3 E-10	7 E-11	1 E-10	**4.7 E+0**	**3.4 E+0**	**3.3 E+0**	**3.3 E+0**
Median		1.0 E-2	1.2 E-3	2.0 E-2	8.7 E-4	3 E-8	2 E-7	1 E-8	**4.9 E+0**	**3.4 E+0**	**3.4 E+0**	**3.3 E+0**
Maximum		4.2 E+1	5.0 E+0	1.1 E+1	4.4 E+0	2 E-3	7 E-5	7 E-4	2.1 E+1	5.4 E+0	8.1 E+0	4.8 E+0

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.2-44 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
03D-SP100	10	**1.2 E+1**	**5.3 E+0**	4.8 E-2	**1.9 E+0**	**6 E-4**	1 E-7	**1 E-4**
03D-SP100	20	6.3 E-1	2.7 E-1	2.3 E-3	9.7 E-2	**3 E-5**	7 E-9	**7 E-6**
03D-SP102	10	**8.6 E+2**	**3.7 E+2**	**3.4 E+0**	**1.3 E+2**	**4 E-2**	**1 E-5**	**1 E-2**
03D-SP102	28	**6.6 E+1**	**2.8 E+1**	2.4 E-1	**1.0 E+1**	**3 E-3**	7 E-7	**8 E-4**
03D-SP103	10	**2.4 E+1**	**1.0 E+1**	9.3 E-2	**3.7 E+0**	**1 E-3**	3 E-7	**3 E-4**
03D-SP103	20	**2.0 E+0**	8.5 E-1	7.3 E-3	3.1 E-1	**1 E-4**	2 E-8	**2 E-5**
03D-SP104	10	**1.8 E+1**	**7.9 E+0**	7.2 E-2	**2.8 E+0**	**9 E-4**	2 E-7	**2 E-4**
03D-SP104	20	**2.5 E+1**	**1.1 E+1**	9.0 E-2	**3.8 E+0**	**1 E-3**	3 E-7	**3 E-4**
03D-SP105	10	**1.7 E+1**	**7.1 E+0**	6.6 E-2	**2.6 E+0**	**8 E-4**	2 E-7	**2 E-4**
03D-SP106	15	1.5 E-1	6.6 E-2	5.7 E-4	2.4 E-2	**1 E-5**	2 E-9	**3 E-6**
03D-SP106	25	**8.8 E+0**	**3.8 E+0**	3.1 E-2	**1.4 E+0**	**2 E-3**	3 E-7	**4 E-4**
03D-SP106	30	**4.0 E+0**	**1.7 E+0**	1.4 E-2	6.2 E-1	**2 E-4**	5 E-8	**6 E-5**
03D-SP107	10	**3.8 E+0**	**1.6 E+0**	1.5 E-2	5.9 E-1	**2 E-4**	4 E-8	**4 E-5**
03D-SP107	20	2.1 E-1	9.1 E-2	7.8 E-4	3.3 E-2	**1 E-5**	3 E-9	**3 E-6**
03D-SP107	29	**3.9 E+0**	**1.7 E+0**	1.4 E-2	6.0 E-1	**2 E-4**	5 E-8	**5 E-5**
03D-SP108	10	2.6 E-1	1.1 E-1	1.0 E-3	4.0 E-2	**1 E-5**	3 E-9	**3 E-6**
03D-SP109	10	5.1 E-1	2.2 E-1	2.3 E-3	7.9 E-2	**4 E-5**	8 E-9	**9 E-6**
03D-SP109	20	**1.2 E+1**	**5.1 E+0**	4.3 E-2	**1.8 E+0**	**8 E-4**	2 E-7	**2 E-4**
03D-SP109	30	2.8 E-2	1.2 E-2	1.0 E-4	4.4 E-3	**2 E-6**	4 E-10	4 E-7
03D-SP110	10	3.2 E-1	1.4 E-1	1.3 E-3	4.9 E-2	**2 E-5**	4 E-9	**4 E-6**
03D-SP110	20	4.6 E-2	2.0 E-2	1.7 E-4	7.1 E-3	**2 E-6**	5 E-10	6 E-7
03D-SP111	10	**1.6 E+0**	6.9 E-1	6.4 E-3	2.5 E-1	**8 E-5**	2 E-8	**2 E-5**
03D-SP111	20	2.7 E-2	1.2 E-2	8.2 E-5	4.2 E-3	1 E-6	2 E-10	2 E-7
03D-SP112	10	1.1 E-2	4.8 E-3	7.7 E-5	1.8 E-3	3 E-7	8 E-11	8 E-8
03D-SP112	20	1.1 E-2	4.5 E-3	3.6 E-5	1.6 E-3	3 E-7	6 E-11	6 E-8
03D-SP113	10	3.0 E-2	1.3 E-2	3.1 E-4	4.8 E-3	**3 E-6**	8 E-10	7 E-7
03D-SP113	20	**1.5 E+0**	6.5 E-1	5.2 E-3	2.4 E-1	**2 E-5**	3 E-9	**4 E-6**
03D-SP114	10	2.1 E-3	9.1 E-4	1.2 E-5	3.3 E-4	4 E-7	1 E-10	1 E-7
03D-SP114	20	3.3 E-3	1.4 E-3	1.0 E-5	5.1 E-4	3 E-7	7 E-11	7 E-8
03D-SP115	10	4.8 E-2	2.0 E-2	2.5 E-4	7.4 E-3	**7 E-6**	2 E-9	**2 E-6**
03D-SP116	10	2.9 E-2	1.3 E-2	1.9 E-4	4.6 E-3	**3 E-6**	8 E-10	8 E-7
03D-SP117	10	6.2 E-2	2.6 E-2	2.1 E-4	9.5 E-3	**2 E-6**	5 E-10	5 E-7
03D-SP118	10	4.2 E-1	1.8 E-1	1.8 E-3	6.6 E-2	**2 E-5**	5 E-9	**5 E-6**
03D-SP118	20	9.7 E-2	4.2 E-2	2.6 E-4	1.5 E-2	**3 E-6**	8 E-10	8 E-7
03D-SP119	10	3.3 E-1	1.4 E-1	1.3 E-3	5.1 E-2	**2 E-5**	4 E-9	**4 E-6**
03D-SP119	20	5.2 E-1	2.2 E-1	2.2 E-3	8.2 E-2	**2 E-5**	5 E-9	**5 E-6**
03D-SP119	29	**1.5 E+1**	**6.2 E+0**	5.1 E-2	**2.3 E+0**	**2 E-4**	4 E-8	**5 E-5**
03D-SP120	10	1.8 E-2	7.6 E-3	1.2 E-4	2.8 E-3	4 E-7	9 E-11	9 E-8
03D-SP120	20	2.2 E-2	9.3 E-3	3.0 E-5	3.3 E-3	1 E-6	2 E-10	2 E-7
03D-SP121	15	**6.6 E+0**	**2.8 E+0**	2.5 E-2	**1.0 E+0**	**4 E-4**	8 E-8	**9 E-5**
03D-SP121	25	**3.4 E+0**	**1.5 E+0**	1.2 E-2	5.3 E-1	**4 E-5**	9 E-9	**1 E-5**
03D-SP122	10	3.0 E-1	1.3 E-1	1.2 E-3	4.7 E-2	**2 E-5**	5 E-9	**5 E-6**
03D-SP122	20	4.7 E-1	2.0 E-1	1.7 E-3	7.3 E-2	**3 E-5**	6 E-9	**7 E-6**
03D-SP122	30	2.6 E-1	1.1 E-1	9.4 E-4	4.0 E-2	**3 E-6**	6 E-10	6 E-7
03D-SP123	10	6.2 E-3	2.7 E-3	3.1 E-5	9.7 E-4	4 E-7	1 E-10	1 E-7
03D-SP123	20	6.0 E-3	2.6 E-3	5.0 E-5	9.6 E-4	2 E-7	4 E-11	4 E-8
03D-SP124	10	1.7 E-2	7.3 E-3	9.9 E-5	2.7 E-3	9 E-8	2 E-11	2 E-8
03D-SP124	20	1.5 E-2	6.3 E-3	9.8 E-5	2.3 E-3	1 E-7	2 E-11	2 E-8
03D-SP125	10	5.3 E-2	2.3 E-2	2.7 E-4	8.2 E-3	6 E-7	2 E-10	1 E-7
03D-SP125	20	5.8 E-2	2.5 E-2	8.7 E-5	8.8 E-3	**5 E-6**	1 E-9	1 E-6
03D-SP126	10	3.7 E-3	1.6 E-3	1.7 E-5	5.8 E-4	3 E-7	6 E-11	7 E-8
03D-SP126	20	2.1 E-3	9.0 E-4	8.2 E-6	3.2 E-4	9 E-7	2 E-10	2 E-7
03D-SP127	10	6.6 E-3	2.8 E-3	2.8 E-5	1.0 E-3	3 E-7	7 E-11	7 E-8
03D-SP127	20	3.6 E-3	1.6 E-3	1.0 E-5	5.6 E-4	2 E-7	4 E-11	4 E-8
03D-SP128	10	8.0 E-4	3.4 E-4	9.6 E-6	1.3 E-4	4 E-8	1 E-11	1 E-8
03D-SP128	20	9.2 E-2	3.9 E-2	3.5 E-4	1.4 E-2	**2 E-5**	4 E-9	**4 E-6**
03D-SP128	30	3.8 E-1	1.6 E-1	1.4 E-3	5.9 E-2	**4 E-5**	9 E-9	**1 E-5**
03D-SP129	15	5.6 E-3	2.4 E-3	1.4 E-5	8.6 E-4	2 E-7	5 E-11	5 E-8
03D-SP129	25	1.2 E-1	5.3 E-2	4.5 E-4	1.9 E-2	4 E-7	1 E-10	1 E-7
03D-SP130	10	1.3 E-3	5.6 E-4	6.2 E-6	2.0 E-4	5 E-8	1 E-11	1 E-8
03D-SP130	20	9.5 E-4	4.1 E-4	2.0 E-5	1.6 E-4	5 E-8	1 E-11	1 E-8
03D-SP131	10	1.9 E-2	8.3 E-3	4.8 E-5	3.0 E-3	6 E-7	1 E-10	1 E-7

Table 5.2-44 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
03D-SP131	20	3.6 E-3	1.5 E-3	1.0 E-5	5.5 E-4	1 E-7	3 E-11	3 E-8
03D-SP132	10	5.9 E-3	2.5 E-3	2.2 E-5	9.2 E-4	4 E-7	1 E-10	1 E-7
03D-SP132	20	**NA**	**NA**	5.9 E-6	**NA**	0 E+0	0 E+0	0 E+0
03D-SP132	30	9.0 E-3	3.8 E-3	2.7 E-5	1.4 E-3	7 E-7	2 E-10	2 E-7
03D-SP133	10	9.9 E-4	4.2 E-4	6.3 E-6	1.6 E-4	7 E-8	2 E-11	2 E-8
03D-SP133	20	6.5 E-4	2.8 E-4	3.6 E-6	1.0 E-4	3 E-8	7 E-12	7 E-9
03D-SP134	10	2.2 E-2	9.3 E-3	2.3 E-4	3.5 E-3	7 E-8	2 E-11	2 E-8
03D-SP134	20	4.2 E-2	1.8 E-2	1.2 E-4	6.5 E-3	**3 E-6**	6 E-10	6 E-7
03D-SP135	10	2.8 E-1	1.2 E-1	1.5 E-3	4.4 E-2	**2 E-5**	4 E-9	**4 E-6**
03D-SP135	20	3.1 E-1	1.3 E-1	7.4 E-4	4.8 E-2	**3 E-4**	5 E-8	**7 E-5**
03D-SP136	10	1.1 E-2	4.7 E-3	1.1 E-4	1.8 E-3	2 E-7	5 E-11	5 E-8
03D-SP137	10	6.1 E-2	2.6 E-2	1.8 E-4	9.5 E-3	**6 E-6**	2 E-9	1 E-6
03D-SP138	10	1.5 E-2	6.3 E-3	5.6 E-5	2.3 E-3	**2 E-6**	5 E-10	5 E-7
03D-SP138	19	3.0 E-2	1.3 E-2	1.1 E-4	4.6 E-3	**5 E-6**	1 E-9	1 E-6
03D-SP138	30	1.7 E-1	7.3 E-2	6.1 E-4	2.6 E-2	**1 E-5**	2 E-9	**2 E-6**
03D-SP139	10	1.5 E-3	6.5 E-4	6.0 E-6	2.3 E-4	6 E-8	1 E-11	1 E-8
03D-SP139	20	2.4 E-3	1.0 E-3	1.1 E-5	3.8 E-4	2 E-7	5 E-11	6 E-8
03D-SP139	28	1.5 E-2	6.3 E-3	5.1 E-5	2.3 E-3	1 E-6	2 E-10	3 E-7
03D-SP140	10	1.1 E-3	4.6 E-4	8.1 E-6	1.7 E-4	6 E-8	1 E-11	1 E-8
03D-SP140	20	1.4 E-3	6.0 E-4	3.2 E-6	2.1 E-4	9 E-8	2 E-11	2 E-8
03D-SP141	10	1.7 E-3	7.3 E-4	1.7 E-5	2.7 E-4	8 E-8	2 E-11	2 E-8
03D-SP141	20	5.4 E-3	2.3 E-3	1.4 E-5	8.4 E-4	3 E-7	8 E-11	8 E-8
03D-SP142	10	2.7 E-2	1.2 E-2	1.1 E-4	4.2 E-3	**2 E-6**	4 E-10	4 E-7
03D-SP142	20	1.2 E-2	5.0 E-3	4.9 E-5	1.8 E-3	8 E-7	2 E-10	2 E-7
03D-SP142	30	1.1 E-1	4.7 E-2	3.9 E-4	1.7 E-2	**9 E-6**	2 E-9	**2 E-6**
03D-SP143	10	3.9 E-2	1.7 E-2	1.6 E-4	6.1 E-3	**4 E-6**	1 E-9	1 E-6
03D-SP143	20	1.8 E-2	7.8 E-3	7.0 E-5	2.8 E-3	**2 E-6**	5 E-10	5 E-7
03D-SP143	30	1.9 E-2	8.0 E-3	6.5 E-5	2.9 E-3	1 E-6	3 E-10	3 E-7
03D-SP144	10	3.2 E-2	1.4 E-2	1.3 E-4	4.9 E-3	**2 E-6**	4 E-10	4 E-7
03D-SP144	20	2.5 E-2	1.1 E-2	2.3 E-4	4.0 E-3	1 E-6	3 E-10	3 E-7
03D-SP144	30	1.3 E-1	5.7 E-2	3.3 E-4	2.1 E-2	**1 E-4**	2 E-8	**3 E-5**
03D-SP145	10	1.8 E-2	7.7 E-3	7.6 E-5	2.8 E-3	**4 E-6**	1 E-9	9 E-7
03D-SP145	20	1.7 E-3	7.1 E-4	6.6 E-6	2.6 E-4	3 E-7	7 E-11	7 E-8
03D-SP146	10	2.0 E-1	8.6 E-2	7.9 E-4	3.1 E-2	**1 E-5**	3 E-9	**3 E-6**
03D-SP146	20	9.3 E-2	4.0 E-2	3.4 E-4	1.4 E-2	**5 E-6**	1 E-9	1 E-6
03D-SP146	27	7.9 E-2	3.4 E-2	2.9 E-4	1.2 E-2	**5 E-6**	1 E-9	1 E-6
03D-SP147	10	3.0 E-1	1.3 E-1	1.2 E-3	4.6 E-2	**7 E-5**	2 E-8	**2 E-5**
03D-SP147	20	1.7 E-2	7.1 E-3	5.8 E-5	2.6 E-3	**3 E-6**	7 E-10	7 E-7
03D-SP147	27	2.3 E-1	1.0 E-1	8.5 E-4	3.6 E-2	**5 E-5**	1 E-8	**1 E-5**
03D-SP148	10	3.0 E-3	1.3 E-3	9.4 E-6	4.6 E-4	5 E-7	1 E-10	1 E-7
03D-SP148	20	**NA**	**NA**	5.0 E-7	**NA**	0 E+0	0 E+0	0 E+0
03D-SP149	10	7.4 E-4	3.2 E-4	1.1 E-5	1.2 E-4	9 E-8	2 E-11	2 E-8
03D-SP149	20	5.5 E-3	2.4 E-3	1.5 E-5	8.5 E-4	4 E-7	9 E-11	1 E-7
03D-SP150	30	2.6 E-4	1.1 E-4	5.6 E-6	4.6 E-5	2 E-8	5 E-12	5 E-9
03D-SP84	15	9.7 E-3	4.1 E-3	2.5 E-5	1.5 E-3	**8 E-6**	1 E-9	**2 E-6**
03D-SP84	25	1.8 E-3	7.9 E-4	4.1 E-4	6.9 E-4	7 E-7	1 E-10	2 E-7
03D-SP85	25	**3.0 E+0**	**1.3 E+0**	9.8 E-3	4.7 E-1	**2 E-3**	3 E-7	**5 E-4**
03D-SP85	30	4.3 E-3	1.8 E-3	1.3 E-5	6.6 E-4	3 E-7	7 E-11	8 E-8
03D-SP86	10	1.3 E-3	5.7 E-4	5.6 E-6	2.1 E-4	1 E-7	2 E-11	2 E-8
03D-SP86	20	5.7 E-4	2.4 E-4	3.6 E-5	1.2 E-4	5 E-8	1 E-11	1 E-8
03D-SP87	10	1.8 E-2	7.8 E-3	6.0 E-6	2.7 E-3	2 E-7	6 E-11	6 E-8
03D-SP88	10	1.8 E-2	7.8 E-3	7.3 E-5	2.8 E-3	1 E-6	3 E-10	3 E-7
03D-SP88	20	9.8 E-3	4.2 E-3	3.5 E-5	1.5 E-3	5 E-7	1 E-10	1 E-7
03D-SP89	10	9.4 E-1	4.0 E-1	3.8 E-3	1.5 E-1	**5 E-5**	1 E-8	**1 E-5**
03D-SP90	10	5.0 E-2	2.1 E-2	1.4 E-4	7.7 E-3	**9 E-6**	2 E-9	**2 E-6**
03D-SP90	20	1.4 E-2	6.2 E-3	3.4 E-5	2.2 E-3	**2 E-6**	4 E-10	5 E-7
03D-SP91	10	8.3 E-3	3.6 E-3	3.2 E-5	1.3 E-3	1 E-6	3 E-10	3 E-7
03D-SP91	20	7.8 E-3	3.3 E-3	5.5 E-5	1.2 E-3	**2 E-6**	4 E-10	5 E-7
03D-SP92	10	2.4 E-2	1.0 E-2	1.7 E-4	3.8 E-3	**5 E-6**	1 E-9	1 E-6
03D-SP92	20	4.4 E-2	1.9 E-2	1.4 E-4	6.7 E-3	**7 E-6**	1 E-9	**2 E-6**
03D-SP93	15	2.8 E-2	1.2 E-2	6.9 E-5	4.2 E-3	1 E-6	3 E-10	3 E-7
03D-SP93	25	4.8 E-3	2.1 E-3	5.6 E-6	7.4 E-4	9 E-8	2 E-11	2 E-8

Table 5.2-44 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
03D-SP94	15	1.5 E-1	6.2 E-2	5.6 E-4	2.3 E-2	**7 E-6**	2 E-9	**2 E-6**
03D-SP94	25	4.5 E-2	1.9 E-2	1.8 E-4	7.1 E-3	**2 E-6**	5 E-10	5 E-7
03D-SP95	10	**4.4 E+0**	**1.9 E+0**	1.7 E-2	6.8 E-1	**2 E-4**	6 E-8	**6 E-5**
03D-SP95	18	**2.3 E+0**	9.7 E-1	8.4 E-3	3.5 E-1	**1 E-4**	3 E-8	**3 E-5**
03D-SP96	10	7.4 E-2	3.2 E-2	2.3 E-4	1.1 E-2	**9 E-6**	2 E-9	**2 E-6**
03D-SP96	17	4.4 E-2	1.9 E-2	1.7 E-4	6.8 E-3	**8 E-6**	2 E-9	**2 E-6**
03D-SP99	10	**8.0 E+0**	**3.4 E+0**	3.2 E-2	**1.2 E+0**	**4 E-4**	9 E-8	**9 E-5**
11D-SP26	10	7.0 E-4	3.0 E-4	2.6 E-6	1.1 E-4	7 E-8	2 E-11	2 E-8
11D-SP26	20	3.1 E-4	1.3 E-4	1.2 E-6	4.9 E-5	3 E-8	7 E-12	7 E-9
11D-SP27	10	3.9 E-3	1.7 E-3	1.8 E-5	6.1 E-4	2 E-7	5 E-11	5 E-8
11D-SP27	20	2.8 E-3	1.2 E-3	9.1 E-6	4.3 E-4	1 E-7	3 E-11	3 E-8
11D-SP28	10	3.0 E-3	1.3 E-3	1.1 E-5	4.6 E-4	1 E-7	4 E-11	4 E-8
11D-SP28	20	3.8 E-3	1.6 E-3	1.5 E-5	5.9 E-4	6 E-7	1 E-10	1 E-7
11D-SP29	10	1.0 E-3	4.4 E-4	5.7 E-6	1.6 E-4	7 E-8	2 E-11	2 E-8
11D-SP29	30	4.3 E-3	1.8 E-3	1.5 E-5	6.6 E-4	2 E-7	4 E-11	4 E-8
11D-SP30	10	2.5 E-3	1.1 E-3	1.0 E-5	3.8 E-4	1 E-7	3 E-11	3 E-8
11D-SP30	20	4.0 E-3	1.7 E-3	1.5 E-5	6.2 E-4	2 E-7	5 E-11	5 E-8
11D-SP31	10	5.3 E-4	2.3 E-4	2.8 E-6	8.3 E-5	7 E-9	2 E-12	2 E-9
11D-SP31	20	1.4 E-3	5.8 E-4	5.2 E-6	2.1 E-4	2 E-7	5 E-11	5 E-8
11D-SP31	30	2.3 E-3	9.9 E-4	7.9 E-6	3.6 E-4	2 E-7	3 E-11	4 E-8
50D-SP01	10	4.6 E-3	2.0 E-3	3.3 E-5	7.2 E-4	3 E-7	6 E-11	6 E-8
50D-SP01	20	5.5 E-3	2.3 E-3	1.2 E-5	8.4 E-4	2 E-7	4 E-11	4 E-8
51D-SP04	10	3.5 E-3	1.5 E-3	4.3 E-5	5.7 E-4	2 E-7	5 E-11	5 E-8
51D-SP04	20	7.6 E-3	3.3 E-3	1.2 E-5	1.2 E-3	3 E-7	6 E-11	6 E-8
A20-B34-SP01	10	3.1 E-3	1.3 E-3	1.6 E-5	4.8 E-4	4 E-7	1 E-10	1 E-7
A20-B34-SP01	20	2.4 E-3	1.0 E-3	6.9 E-6	3.7 E-4	3 E-7	6 E-11	6 E-8
A20-B34-SP02	10	6.7 E-3	2.9 E-3	2.9 E-5	1.0 E-3	3 E-7	8 E-11	8 E-8
A20-B34-SP02	20	2.3 E-3	1.0 E-3	7.4 E-6	3.6 E-4	7 E-8	2 E-11	2 E-8
A20-B34-SP03	10	2.5 E-2	1.1 E-2	1.0 E-4	3.9 E-3	1 E-6	3 E-10	3 E-7
A20-B34-SP03	20	1.5 E-2	6.3 E-3	5.4 E-5	2.3 E-3	8 E-7	2 E-10	2 E-7
A20-B34-SP03	29	1.3 E-2	5.6 E-3	4.7 E-5	2.0 E-3	9 E-7	2 E-10	2 E-7
A20-RB37-SP01	10	**1.6 E+0**	6.9 E-1	6.3 E-3	2.5 E-1	**8 E-5**	2 E-8	**2 E-5**
A20-RB37-SP01	20	**1.0 E+0**	4.4 E-1	3.7 E-3	1.6 E-1	**5 E-5**	1 E-8	**1 E-5**
A20-RB37-SP01	30	4.0 E-2	1.7 E-2	1.5 E-4	6.3 E-3	**2 E-6**	4 E-10	4 E-7
A20-RB37-SP02	10	2.0 E-1	8.7 E-2	8.0 E-4	3.1 E-2	**1 E-5**	2 E-9	**2 E-6**
A20-RB37-SP02	20	4.9 E-3	2.1 E-3	1.7 E-5	7.5 E-4	2 E-7	4 E-11	5 E-8
A20-RC29-SP01	10	8.7 E-3	3.7 E-3	3.6 E-5	1.3 E-3	5 E-7	1 E-10	1 E-7
A20-RC29-SP01	20	6.2 E-3	2.7 E-3	2.2 E-5	9.6 E-4	4 E-7	8 E-11	9 E-8
A20-RX73-SP01	10	1.7 E-2	7.3 E-3	7.6 E-5	2.6 E-3	**3 E-6**	9 E-10	8 E-7
A20-RX73-SP01	20	1.4 E-2	6.2 E-3	4.6 E-5	2.2 E-3	**1 E-6**	3 E-10	4 E-7
A20-ST01-1-SP01	10	7.1 E-3	3.0 E-3	3.0 E-5	1.1 E-3	1 E-6	2 E-10	3 E-7
A20-ST01-1-SP01	20	1.2 E-3	5.1 E-4	7.4 E-6	1.9 E-4	7 E-8	2 E-11	2 E-8
A20-ST01-2-SP01	10	1.4 E-2	6.1 E-3	5.1 E-5	2.2 E-3	8 E-7	2 E-10	2 E-7
A20-ST01-2-SP01	20	4.7 E-3	2.0 E-3	1.6 E-5	7.2 E-4	4 E-7	9 E-11	9 E-8
A20-ST01-3-SP01	10	3.0 E-3	1.3 E-3	6.9 E-5	5.2 E-4	2 E-7	5 E-11	4 E-8
A20-ST01-3-SP01	20	1.9 E-2	8.0 E-3	3.9 E-5	2.9 E-3	5 E-7	1 E-10	1 E-7
A20-ST02-SP01	10	**NA**	**NA**	2.2 E-4	**NA**	0 E+0	0 E+0	0 E+0
A20-ST02-SP01	20	3.8 E-2	1.6 E-2	6.6 E-5	5.9 E-3	1 E-6	3 E-10	3 E-7
A20-ST02-SP01	30	1.4 E-2	5.8 E-3	2.2 E-5	2.1 E-3	7 E-7	2 E-10	2 E-7
A20-ST02-SP02	10	2.3 E-3	9.8 E-4	4.1 E-5	3.9 E-4	1 E-7	3 E-11	3 E-8
A20-ST02-SP02	20	6.1 E-3	2.6 E-3	1.3 E-5	9.3 E-4	1 E-7	3 E-11	3 E-8
A20-ST02-SP02	30	6.2 E-3	2.7 E-3	1.7 E-5	9.6 E-4	2 E-7	4 E-11	5 E-8
A20-ST02-SP03	20	2.1 E-3	9.0 E-4	7.3 E-6	3.3 E-4	6 E-8	1 E-11	1 E-8
A20-ST02-SP03	30	1.7 E-3	7.5 E-4	9.2 E-6	2.7 E-4	1 E-7	3 E-11	3 E-8
A20-ST02-SP04	30	4.2 E-2	1.8 E-2	1.4 E-4	6.4 E-3	1 E-7	3 E-11	3 E-8
A20-ST05-SP01	10	2.6 E-3	1.1 E-3	1.2 E-5	4.1 E-4	0 E+0	0 E+0	0 E+0
A20-ST05-SP01	20	**1.2 E+0**	5.3 E-1	4.4 E-3	1.9 E-1	**2 E-4**	5 E-8	**5 E-5**
A20-ST05-SP01	30	4.7 E-1	2.0 E-1	1.7 E-3	7.3 E-2	**1 E-5**	3 E-9	**3 E-6**
A20-ST05-SP02	10	4.0 E-3	1.7 E-3	1.8 E-5	6.2 E-4	2 E-7	6 E-11	5 E-8
A20-ST05-SP02	20	4.9 E-3	2.1 E-3	1.8 E-5	7.6 E-4	2 E-7	4 E-11	4 E-8
A20-ST05-SP03	10	2.4 E-2	1.0 E-2	9.2 E-5	3.7 E-3	1 E-6	3 E-10	3 E-7
A20-ST05-SP04	10	1.3 E-3	5.7 E-4	5.9 E-6	2.1 E-4	1 E-7	3 E-11	3 E-8

Table 5.2-44 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	**Depth**	**Resident Child**	**Adult**	**Construction Worker**	**Commercial Worker**	**Resident**	**Construction Worker**	**Commercial Worker**
A20-ST05-SP05	10	1.2 E-3	5.3 E-4	4.2 E-6	1.9 E-4	1 E-7	4 E-11	3 E-8
A20-ST06-SP01	10	2.6 E-2	1.1 E-2	1.0 E-4	4.1 E-3	1 E-6	3 E-10	3 E-7
A20-ST06-SP01	20	1.4 E-2	5.8 E-3	4.9 E-5	2.1 E-3	7 E-7	2 E-10	2 E-7
A20-ST14-SP01	10	2.8 E-2	1.2 E-2	1.1 E-4	4.3 E-3	**2 E-6**	5 E-10	4 E-7
A20-ST14-SP01	20	3.6 E-3	1.5 E-3	1.3 E-5	5.6 E-4	3 E-7	7 E-11	7 E-8
A20-ST14-SP02	10	2.2 E-2	9.5 E-3	8.9 E-5	3.5 E-3	1 E-6	3 E-10	3 E-7
A20-ST14-SP02	20	1.8 E-2	7.6 E-3	6.5 E-5	2.7 E-3	9 E-7	2 E-10	2 E-7
A20-ST20-SP01	10	4.4 E-4	1.9 E-4	1.3 E-6	6.8 E-5	5 E-8	1 E-11	1 E-8
A20-ST20-SP01	20	4.7 E-4	2.0 E-4	1.7 E-6	7.2 E-5	4 E-8	9 E-12	1 E-8
A20-ST22-SP01	10	2.8 E-4	1.2 E-4	2.3 E-6	4.4 E-5	3 E-8	7 E-12	7 E-9
A20-ST22-SP01	20	1.7 E-3	7.2 E-4	5.1 E-6	2.6 E-4	3 E-8	7 E-12	7 E-9
Minimum		2.6 E-4	1.1 E-4	5.0 E-7	4.4 E-5	0 E+0	0 E+0	0 E+0
Median		1.7 E-2	7.4 E-3	6.6 E-5	2.7 E-3	9 E-7	2 E-10	2 E-7
Maximum		8.6 E+2	3.7 E+2	3.4 E+0	1.3 E+2	4 E-2	1 E-5	1 E-2

Key:
NA = Not applicable

Table 5.2-45 ***Soil Unit Hazard and Unit Cancer Risk Results - Resident***
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Antimony	1.0 E+0	3.2 E-2	0.0 E+0	1.2 E-6	3.2 E-2	3.4 E-3	0.0 E+0	5.0 E-7	3.4 E-3	NA	NA	NA	NA
Cadmium	1.0 E+0	1.3 E-2	1.4 E-3	4.7 E-7	1.4 E-2	1.4 E-3	2.2 E-4	2.0 E-7	1.6 E-3	NA	NA	1.6 E-9	1.6 E-9
Chromium	1.0 E+0	8.5 E-6	0.0 E+0	3.1 E-10	8.5 E-6	9.1 E-7	0.0 E+0	1.3 E-10	9.1 E-7	NA	NA	NA	NA
Chromium VI	1.0 E+0	4.3 E-3	0.0 E+0	2.1 E-4	4.5 E-3	4.6 E-4	0.0 E+0	9.2 E-5	5.5 E-4	NA	NA	5.6 E-8	5.6 E-8
Copper	1.0 E+0	3.5 E-4	0.0 E+0	1.3 E-8	3.5 E-4	3.7 E-5	0.0 E+0	5.4 E-9	3.7 E-5	NA	NA	NA	NA
Iron	1.0 E+0	1.8 E-5	0.0 E+0	NA	1.8 E-5	2.0 E-6	0.0 E+0	NA	2.0 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	4.3 E-2	0.0 E+0	5.5 E-6	4.3 E-2	4.6 E-3	0.0 E+0	2.4 E-6	4.6 E-3	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.6 E-3	0.0 E+0	9.4 E-8	2.6 E-3	2.7 E-4	0.0 E+0	4.0 E-8	2.7 E-4	NA	NA	NA	NA
Nickel	1.0 E+0	6.4 E-4	0.0 E+0	3.3 E-5	6.7 E-4	6.8 E-5	0.0 E+0	1.4 E-5	8.3 E-5	NA	NA	NA	NA
Perchlorate	1.0 E+0	1.8 E-2	0.0 E+0	NA	1.8 E-2	2.0 E-3	0.0 E+0	NA	2.0 E-3	NA	NA	NA	NA
Silver	1.0 E+0	2.6 E-3	0.0 E+0	9.4 E-8	2.6 E-3	2.7 E-4	0.0 E+0	4.0 E-8	2.7 E-4	NA	NA	NA	NA
Zinc	1.0 E+0	4.3 E-5	0.0 E+0	1.6 E-9	4.3 E-5	4.6 E-6	0.0 E+0	6.7 E-10	4.6 E-6	NA	NA	NA	NA
Semivolatile Organic Compounds													
Anthracene	1.0 E+0	4.3 E-5	1.6 E-5	1.6 E-9	5.8 E-5	4.6 E-6	2.4 E-6	6.7 E-10	6.9 E-6	NA	NA	NA	NA
Benzo (a) anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	4.7 E-7	8.0 E-11	1.6 E-6
Benzo (a) pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	7.7 E-6	4.3 E-10	2.6 E-5
Benzo (b & k) fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo (b) fluoranthene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo (ghi) perylene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Chrysene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	7.7 E-8	4.3 E-12	2.6 E-7
Dibenz (a,h) anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	4.7 E-6	4.5 E-10	1.6 E-5
Di-n-butyl phthalate	1.0 E+0	1.3 E-4	3.6 E-5	4.7 E-9	1.6 E-4	1.4 E-5	5.5 E-6	2.0 E-9	1.9 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
PCB-1254	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
PCB-1260	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
Phenanthrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Volatile Organic Compounds													
1,1,2,2-Tetrachloroethane	1.0 E+0	2.1 E-4	0.0 E+0	7.6 E-4	9.7 E-4	2.3 E-5	0.0 E+0	3.2 E-4	3.5 E-4	4.2 E-7	0.0 E+0	2.1 E-6	2.5 E-6

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.2-46 Inhalation Hazard and Unit Cancer Risk Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Indoor Vapor Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds				
1,1,1-Trichloroethane	1.0 E+0	4.5 E-1	1.9 E-1	NA
1,1-Dichloroethane	1.0 E+0	3.2 E+0	1.4 E+0	8.5 E-4
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
1,4-Dichlorobenzene	1.0 E+0	2.8 E+0	1.2 E+0	3.3 E-3
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2,2,4-Trimethylpentane	1.0 E+0	2.2 E+1	9.6 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.6 E-1	2.0 E-1	NA
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
4-Ethyltoluene	1.0 E+0	2.2 E+1	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	7.4 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.9 E-2
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Carbon Tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Cyclohexane	1.0 E+0	3.8 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
Ethylbenzene	1.0 E+0	2.2 E+0	9.4 E-1	1.3 E-3
Freon 11	1.0 E+0	1.1 E+1	4.8 E+0	NA
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexachlorobutadiene	1.0 E+0	6.4 E+2	2.7 E+2	1.2 E-2
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
o-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Styrene	1.0 E+0	2.5 E+0	1.1 E+0	NA
Tetrachloroethene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Toluene	1.0 E+0	7.4 E+0	3.2 E+0	NA
Trichloroethene	1.0 E+0	3.7 E+0	1.6 E+0	1.0 E-3
Vinyl Chloride	1.0 E+0	2.2 E+1	9.4 E+0	4.0 E-2

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc
Unit Hazard Child		9.7 E-4	5.8 E-5	3.2 E-2	NA	NA	NA	NA	5.8 E-4	1.4 E-2	8.5 E-6	4.5 E-3	NA	3.5 E-4	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	6.7 E-4	8.9 E-1	8.9 E-1	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	2.6 E-3	4.3 E-5
Unit Hazard Adult		3.5 E-4	6.9 E-6	3.4 E-3	NA	NA	NA	NA	6.9 E-5	1.6 E-3	9.1 E-7	5.5 E-4	NA	3.7 E-5	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	8.3 E-5	1.1 E-1	1.1 E-1	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	2.7 E-4	4.6 E-6
Unit Risk		2.5 E-6	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	1.6 E-9	NA	5.6 E-8	2.6 E-7	NA	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA	NA
05D-SNS06	0									7.4	408			98					20100	126	0.68		46							21	339
08D-GS02	0										61			27		3.81			22600	12			46.8								73
D(b)-SD01	0		0.0054	0.66	0.013	0.021	0.075			9.3	36		0.038	32			0.073			29	0.098	3.2	23		0.17		0.052		0.057	9.4	3600
05D-SNS01	0.01									1.4	121			119					17100	106	0.54		28							16	430
05D-SNS02	0.01									9.6	2030			196					13800	210	1.32		55.2							86	996
05D-SNS03	0.01									6.4	437			165					16300	134	31		81.6							9	655
05D-SNS04	0.01									12	2140			365					18100	285	1.62		193							160	1400
05D-SNS05	0.01									4.0	191			100					12700	60	0.37		70.9							3.9	781
05D-SNS06	0.01									7.4	408			98					20100	98	0.68		46							4.7	339
06D-SNS01	0.01			26						11	10100			497					37700	26			1470								6410
06D-SNS02	0.01										279			42					19800	7.3			74.5								206
06D-SNS03	0.01										210			32					20400	10			52.2								143
06D-SNS04	0.01			8.7						4.8	3380			169					26800	17	0.11		577								1530
06D-SNS05	0.01										84			35					23300	16			34.7							1.5	61
08D-GS01	0.01									5.1	31			57					6330	17	0.57		16.8							77	128
08D-GS02	0.01										65			33		3.8			22600	14			52.5								73
08D-SNS02	0.01									1.1	69			47					45200	16	0.15		77.7							1.9	63
09D-SNS01	0.01										73			40					37000	15			46.3								48
09D-SNS02	0.01										50			27					24200	15	0.13		27.3								49
09D-SNS03	0.01										38			27					18600	39			24.1								67
09D-SNS04	0.01										34			14					15300	9	0.10		19.1								67
12D-CS01	0.01									1.4	89			44					29200	33			39.5							2.4	141
12D-CS02	0.01										78			50					14300	23	0.13		21.9							8.2	119
12D-SNS01	0.01			7.0						1.6	121			41					24100	38	0.15		31.6							3.8	271
12D-SNS02	0.01			6.0							36			22					24700	9.8			25.4								38
12D-SNS03	0.01			6.8							81			30					24600	11			32.3							2.6	83
12D-SNS04	0.01										69			37					24100	25			32							2.5	79
12D-SNS05	0.01			6.1						1.2	85			61					30600	42	0.236		43.2							4.0	185
12D-SNS06	0.01										28			14					14800	11			15.8								60
12D-SNS07	0.01										46			26					20300	29			24.3							1.1	107
D(C)-GS01	0.01										24			14					10900				23.3							1.8	25
09D-SD01	0.25			0.11						0.55	32	0.088		22						5.1	0.015	0.86	26								64
D(d)-SD01	0.25			2.8						1.0	46			150						120	0.39	1.6	28							0.27	1100
05D-SNS08	0.5			0.33						1.5	64	1.3	0.031	54			0.029			70	0.34	0.55	36				0.012		0.049	8.5	510
05D-SNS09	0.5		0.0068	0.15	0.068	0.089	0.23		0.019	1.6	58		0.088	49	0.0068		0.14	0.02		18	0.33	5.9	40				0.038		0.14	1.2	100
05D-SNS10	0.5			0.96						5.8	170	7.8		32						100	0.15	0.56	37							0.62	190
05D-SNS11	0.5			0.15						3.9	76	0.25		28			0.005			15	0.035	0.2	25							0.37	220
05D-SNS12	0.5			0.36						42	160	3.6		50						34	0.29	1	40							0.65	360
05D-SNS13	0.5		0.0036	1.1	0.019	0.026	0.097		0.016	54	1800	2.1	0.038	230			0.057	0.01		140	1.3	2.4	150				0.020		0.077	49	1400
05D-SNS14	0.5			1.6	0.016	0.032	0.096		0.0076	2.5	130	0.96	0.035	130			0.033	0.0073		50	2.2	9.7	48				0.011		0.024	2.1	480
05D-SNS15	0.5		0.0037	0.62	0.02	0.041	0.16	0.13	0.026	16	2300	0.91	0.074	540			0.089	0.018		260	2	15	250				0.028		0.11	42	1400
05D-SNS16	0.5			0.31	0.047		0.26		0.086	4.6	49	0.11	0.17	88			0.15			65	0.69	0.9	29				0.058		0.36	4.4	2100
05D-SNS17	0.5			0.52						5.6	460	0.86		110						130	0.11	0.56	49							18	460
05D-SNS18	0.5			0.89	0.009	0.014	0.038			1.7	61	0.21	0.019	76			0.021			48	0.23	0.87	44		0.1		0.0077		0.028	0.61	250
05D-SNS19	0.5			0.48						1.2	72	0.53		62						41	0.34	0.55	50								290
05D-SNS20	0.5			0.74						1.8	140			94						150	0.45	2.5	47							33	790
06D-SNS06	0.5			7.5						12	19000	0.046		620			0.0021			100	0.45	44	1500							2.2	5000
06D-SNS07	0.5			49						33	43000		0.0049	960			0.0027			640	1.4	70	1600							11	4600
06D-SNS08	0.5									16	27000		0.0096	620			0.0074			300	1.2	43	1300				0.0052			6.1	3600
06D-SNS09	0.5			0.4						0.73	48	0.17		32						4.4	0.082	0.23	25							0.63	44
06D-SNS10	0.5			0.30						0.7	68	0.2		30						6.7	0.34	0.43	33							0.60	45
06D-SNS11	0.5			0.19						0.83	70	0.074		34						6.9	0.051	0.44	28							0.35	49
08D-SB02	0.5		0.011		0.022	0.02	0.031		0.0081	1.2	37	0.065	0.023	23			0.039	0.0084		5.1	0.084	0.73	25	0.27			0.037		0.037	22	56
08D-SB03	0.5			0.16						0.51	61	0.31		30						9	0.021	0.56	48			0.099						42
08D-SNS01	0.5			0.18						0.62	65	0.32		40			0.0025			13	0.019	0.41	45							0.37	80
09D-SNS05	0.5			0.46						2.5	170	0.21		60			0.0045			24	0.16	1.0	52							3.8	170
09D-SNS06	0.5			0.31						0.44	33	0.85		27						13		0.18	20								94
12D-SNS08	0.5			0.39						0.52	47	0.64		20						9.9		0.24	24								76
12D-SNS09	0.5									0.15	67	1.8		26						13	0.02		42							0.94	76
52D-SB09	0.5									0.29	27	0.26		9.5						2		0.19	37					0.22			27
52D-SB16	0.5									0.75	34			33						6.8			27					0.30			71
52D-SNS01	0.5			1.3						1.4	280	7.3	0.0051	28			0.0024			130	0.16	1.4	26							0.46	96
52D-SNS02	0.5			2.0						3.6	130	2.2	0.0056	45			0.0064			36	0.17	1.0	68				0.0044				230
52D-SNS03	0.5			0.24	0.0051		0.014			0.72	34	0.11	0.036	32			0.0056			5.6	0.012	0.63	27				0.013		0.015		63
52D-SNS04	0.5			0.087						0.96	29	0.18		24			0.0046			6.5	0.010	0.16	16				0.0027				92
52D-SNS05	0.5																			5.7											

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc
Unit Hazard Child		9.7 E-4	5.8 E-5	3.2 E-2	NA	NA	NA	NA	5.8 E-4	1.4 E-2	8.5 E-6	4.5 E-3	NA	3.5 E-4	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	6.7 E-4	8.9 E-1	8.9 E-1	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	2.6 E-3	4.3 E-5
Unit Hazard Adult		3.5 E-4	6.9 E-6	3.4 E-3	NA	NA	NA	NA	6.9 E-5	1.6 E-3	9.1 E-7	5.5 E-4	NA	3.7 E-5	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	8.3 E-5	1.1 E-1	1.1 E-1	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	2.7 E-4	4.6 E-6
Unit Risk		2.5 E-6	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	1.6 E-9	NA	5.6 E-8	2.6 E-7	NA	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA	NA
D(c)-SNS01	0.5			0.40						0.55	65	0.55		31						8.8		0.57	57								48
05D-SB01	1			0.097						0.53	28	0.13		29						7.7	0.056	0.49	21	0.076				1.4			53
05D-SB02	1			0.76						0.35	37	7.5		26						4.4	1.0	1.0	31								28
05D-SB03	1			3.5						190	5300			260						330	2.2	14	130							200	700
05D-SB04	1									1.7	92			36						8.5	0.51	2.3	38								58
05D-SB05	1									0.4	65			49						17	0.10	0.27	45.1							0.33	71
05D-SB06	1			0.16						9.6	670	0.61		66						30	0.24	0.98	48.5	2.5						16	173
05D-SB07	1									2.6	197	0.41		39						15	0.10	0.41	34.1		0.8					3.5	98
05D-SB08	1									0.15	47	0.091		34						8.5	0.28	0.24	42.9								40
05D-SB09	1									0.24	48	0.061		26						7.8	0.069	0.33	31.5	0.61						1.2	46
05D-SB10	1									0.24	88	0.14		71						15	0.30	0.23	79.4	0.046						1.4	66
06D-SB02	1									0.64	50	0.22		29						7.0	0.091	1.0	32								39
06D-SB06	1			0.19						3.3	290			49						26	0.17	1.5	39							3.8	130
08D-AH01	1										57			25		0.865			20000	11.6		2.3	41.7								41
08D-SB01	1									0.65	74	0.56		30						7.3	0.017	0.56	66								45
08D-SB04	1			0.19						0.56	60	0.49		29						9.9	0.021	0.68	45								47
08D-SB05	1			0.20						0.5	54	0.49		22						8.8	0.0099	0.53	31			0.031					41
08D-SB06	1										49	0.49		20						7.9	0.19	0.41	31			0.078					37
52D-AH01	1															0.771															
52D-AH02	1															3.2															
52D-FCS-SB01	1										22			16		0.758			22900	6.4			21.9								44.2
52D-SB01	1			5.5							40			32		1.61			41400	9.0			27.4							1.09	83.9
52D-SB02	1									14	3040			152		1.48			42800	45	3.6		2090							2.12	379
52D-SB04	1			0.045						0.39	31	0.15		32						6.2	0.0060		17								48
52D-SB05	1			0.08						0.53	25			24						5.3	0.0096	0.25	19					0.82			50
52D-SB06	1									0.32	30			8.3							0.0039	0.21	37								27
52D-SB07	1																														
52D-SB08	1			0.12						0.46	29	0.21		20						3.7	0.020		29								36
52D-SB10	1			0.16							39	0.49		14						4.7	0.0084	0.43	36					0.25			300
52D-SB11	1			0.43						1.2	110	2.9		34						37	0.094	1.0	25					0.64			120
52D-SB13	1			0.23							57	0.43		55						6.2	0.011	2.1	31								47
52D-SB14	1			0.093						0.51	22	0.081		24						5.2			19					1.9			49
52D-SB15	1			0.14						0.62	52	0.24		37						6.0	0.022	0.55	34					2.0			53
52D-SB17	1			0.2						0.6	61	0.18		38						6.6	0.014	0.30	32								40
AW-AF1-SB01	1									0.5	50	0.094		25						6.2		0.24	21							0.20	75
AW-AF1-SB02	1			0.21							26	0.071		21						4.0	0.02	0.27	17								41
AW-AF1-SB03	1			0.15							39	0.075		28						5.2	0.022	0.95	26								44
AW-AF2-SB01	1			0.22					0.013		52		0.0078	58						6.7	0.059	0.75	46								47
AW-AF2-SB02	1			0.15							51			22						10	0.022	0.45	33								43
D(b)-SB01	1			0.14						0.34	34	0.2		26						3.3	0.066	0.55	27					0.11			31
D(b)-SB02	1			1.6						1.0	60	0.2		40						7.6	0.018	2.4	29					1.1			100
D(b)-SB03	1			0.3						1.1	92	0.42	0.0061	65			0.0019			13	0.14	0.79	70				0.0053	0.36			75
D(b)-SB04	1		0.0052		0.049	0.059	0.12						0.064				0.052	0.0081									0.022		0.061		
D(b)-SB05	1			0.092						0.53	29	0.063		26						6.1	0.021		22				0.004	4.5			55
D(C)-SB01	1										56			26		2.08			22100	12			40								47
D(c)-SB02	1			0.18						0.68	53	0.5		29						19	0.076	0.55	36							6.7	60
D(c)-SB03	1									0.34	42	0.26		32						2.6		0.60	39								31
D(c)-SB04	1			0.19						0.47	60	0.41		30						7.6	0.016	0.78	39			0.011		0.42			39
D(c)-SB05	1			0.085	0.077	0.10	0.20		0.064	0.44	43	0.61	0.11	24	0.018		0.089	0.059		9.3	0.049	0.36	29				0.022		0.097		180
DC-AH01	1										56			26		2.1			22100	12			40								47
06D-SB03	1.5									0.13	41	0.13		45						7.4	0.077	1.1	40							0.075	45
06D-SB04	1.5			0.22						0.18	42	0.13		60						14	0.29	0.82	72							0.15	55
06D-SB05	1.5			0.56						15	210	1.6		69						80	0.72	5.0	83							1.8	79
09D-SD01	1.5			0.23						0.52	64	0.39		24						7.5	0.02	0.21	26								39
52D-SB07	1.5									0.77	31			27						6.8		0.17	27								56
05D-SNS01	2.5									2.6	43			37					16600	12			29							1.73	144
05D-SNS08	2.5			0.32						1.5	72	1.8		67			0.016			67	0.48	0.71	32							24	320
05D-SNS09	2.5			0.067						0.97	36	0.21		33						8.9	0.1	4.6	26							2	74
05D-SNS10	2.5			0.13						0.88	43	0.23		30						5.8	0.014	0.61	25								59
05D-SNS11	2.5			0.25						6.4	96	4.9		33						20	0.18	0.61	30							0.5	110
05D-SNS12	2.5			0.17						4.1	960	0.14		110						76	0.009	5.1	30							0.63	230
05D-SNS13	2.5			0.27			0.019			15	380	1.2	0.0082	70			0.012			29	0.34	1.1	53				0.0041		0.015	22	350
05D-SNS14	2.5			1.0						9.4	1800	0.82		600						120	2.8	5.0	58							9.8	690
05D-SNS15	2.5			0.36						6.3	150	0.87		81						110	0.11	2.4	120							8.7	180
05D-SNS16	2.5				0.0049	0.007	0.030		0.0095	3.9	82	0.63	0.020	65			0.015			76	0.15	1.6	39				0.0091		0.03	3.9	2000
05D-SNS17	2.5									2.3	58	0.44		32						10	0.069	0.21	35							1.1	91

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc
Unit Hazard Child		9.7 E-4	5.8 E-5	3.2 E-2	NA	NA	NA	NA	5.8 E-4	1.4 E-2	8.5 E-6	4.5 E-3	NA	3.5 E-4	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	6.7 E-4	8.9 E-1	8.9 E-1	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	2.6 E-3	4.3 E-5
Unit Hazard Adult		3.5 E-4	6.9 E-6	3.4 E-3	NA	NA	NA	NA	6.9 E-5	1.6 E-3	9.1 E-7	5.5 E-4	NA	3.7 E-5	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	8.3 E-5	1.1 E-1	1.1 E-1	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	2.7 E-4	4.6 E-6
Unit Risk		2.5 E-6	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	1.6 E-9	NA	5.6 E-8	2.6 E-7	NA	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA	NA
05D-SNS18	2.5			0.51						1.0	53	0.43		73			0.0024			62	0.18	0.45	36		0.065						180
05D-SNS19	2.5			0.29						0.72	51	0.46		34						9.9	0.041	0.60	28								90
05D-SNS20	2.5									0.41	36			33						4.3	0.045	0.52	36							0.9	50
06D-SNS01	2.5										480			44					21000	14.2			70.1								160
06D-SNS06	2.5			2.3						3.0	4500			95						32	0.58	4.7	170							1.1	460
06D-SNS07	2.5			5.3						3.7	5700			150						57	0.16	7.3	300							1.1	790
06D-SNS08	2.5			1.6						1.4	1000			58						12	0.11	2.4	100								270
06D-SNS09	2.5			0.25						0.49	47	0.098		31						4.7	0.041	0.54	32			1.3					35
06D-SNS10	2.5			0.21						0.39	35	0.26		20						4.9	0.027	0.81	23			0.53				0.33	30
06D-SNS11	2.5			0.39						1.0	75	0.05		31						8.4	0.059	0.87	28			1.9				0.45	60
08D-SNS01	2.5			0.18						0.63	77	0.36		42						10		0.41	60							0.4	71
09D-SNS05	2.5			0.72						1.7	98	0.15		41						12	0.096	0.76	40							1.6	84
09D-SNS06	2.5			0.56						0.64	69	0.36		38						9.9		0.55	39								53
12D-SNS08	2.5			0.36						1.7	54	0.24		35			0.004			12	0.042	0.28	31							0.45	94
12D-SNS09	2.5			0.22						0.18	64	0.90		29						14	0.049	0.69	37							2.6	75
52D-SNS01	2.5			0.64						0.72	47	0.35		37						5.5	0.54	8.3	29								56
52D-SNS02	2.5			0.85						0.84	56	1.3	0.0074	40			0.0042			9.0	0.032	0.43	31				0.0028				78
52D-SNS03	2.5			0.23						0.98	32	0.099		29						6.9	0.011		34								74
52D-SNS04	2.5			0.12						0.40	29	0.38		19						2.0	0.017	0.41	18							0.38	27
52D-SNS05	2.5																			6.4											
D(c)-SNS01	2.5			0.29						0.43	78	0.62		24						6.1		0.88	54								34
05D-SNS06	3										34			27					19600	5.1			21								38
09D-SNS01	3										43			19					21100	6.9			20								30
09D-SNS02	3										57			31					27400	9.1			32								44
09D-SNS03	3										59			31					26600	9.5	0.74		52								45
09D-SNS04	3										76			26					30400	9.4			38								51
12D-SNS01	3										39			20					27000	5.7			24							1.06	38
12D-SNS02	3										62			28					26500	5.1			30								52
12D-SNS03	3										77			37					21300	5.8			51							1.1	43
12D-SNS04	3										58			29					28100	7.3			34								51
12D-SNS05	3										42			29					26400	9.6			34								44
12D-SNS06	3										34			21					25700	6.7			25							1.36	50
12D-SNS07	3										24			14					17300	6.6	0.109		22								29
52D-AH03	3															1.02															
52D-SB09	4.5									0.44	40	0.41		20						4		0.29	47					0.62			44
05D-AH01	5										26			21.3		1.1			12800	6.4			21								30
05D-SB01	5			0.11						0.38	40	0.43		39						3.9	0.02	5.7	25					0.17			30
05D-SB02	5			0.15						25	1100	1.8		85						74	0.082	3.6	71							22	270
05D-SB03	5										27			24						3.5	0.026		21								29
05D-SB04	5										31			38						3.1	0.02		52								39
05D-SNS12	5			0.14						0.19	33			29						4.0	0.17	0.92	26							0.065	45
05D-SNS13	5			0.14						0.59	39	0.29		32						4.6	0.58	0.35	27							0.24	44
05D-SNS14	5			0.13						1.4	100	2.4		62						5.4	0.26	0.41	44							8.5	190
05D-SNS15	5			0.29						4.0	87	2.7		52						14	0.056	0.82	51							15	120
05D-SNS16	5			0.18						2.0	38	0.46		29						18	0.022	1.3	16							1.7	830
05D-SNS20	5									0.17	43			44						5	0.034	0.66	32							0.42	45
06D-SB02	5			0.96						0.94	820	430		51						14	0.043	2.5	87								210
06D-SB03	5									0.33	82	0.12		48						6.9	0.11	0.79	170							0.091	56
06D-SB04	5			0.13						0.11	27	0.11		30						4.6	0.028	0.81	34							0.10	38
06D-SB05	5			0.14						0.084	23	0.098		25						3.9	0.023	0.83	20							0.068	29
06D-SB06	5			0.19						0.15	32			37						3.4	0.019	1.2	25							0.086	34
08D-AH01	5										63			26		2.5			22300	12.6			54								39
08D-AH02	5										63			28		1.6			19600	10.8			65								42
08D-SB01	5									0.55	83	0.34		40						7.2	0.019	0.43	79								43
08D-SB02	5		0.0046		0.0099	0.0084	0.013			0.6	63	0.71	0.010	27			0.017			7.5	0.023	0.54	50	0.034			0.016		0.017	0.74	44
08D-SB03	5			0.22						0.61	68	0.37		29						10		0.51	49								48
08D-SB04	5			0.20						0.56	65	0.34		29						11	0.018	0.44	50								49
08D-SB05	5			0.14						0.34	54	0.30		31						4.9		0.52	38								28
08D-SB06	5									0.41	52	0.32		20						8.6		0.45	35			0.018					43
09D-SD01	5			0.31						0.57	72	0.47		33						8.6	0.023	0.47	36								48
52D-AH01	5															1.7															
52D-AH03	5	0.4																													
52D-SA-SB03	5									1.4	85			36.5		20			18600	8.77			26							1.17	53
52D-SB01	5			5.2							96.1			66.2		5.91			47200	11.8	0.332		81							1.07	61
52D-SB02	5										35.8			28.5					17400	6.91			20								33
52D-SB05	5			0.11						0.52	27			32						6.2	0.013	0.37	21								63

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																													
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard Child		9.7 E-4	5.8 E-5	3.2 E-2	NA	NA	NA	NA	5.8 E-4	1.4 E-2	8.5 E-6	4.5 E-3	NA	3.5 E-4	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	6.7 E-4	8.9 E-1	8.9 E-1	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	2.6 E-3	4.3 E-5
Unit Hazard Adult		3.5 E-4	6.9 E-6	3.4 E-3	NA	NA	NA	NA	6.9 E-5	1.6 E-3	9.1 E-7	5.5 E-4	NA	3.7 E-5	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	8.3 E-5	1.1 E-1	1.1 E-1	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	2.7 E-4	4.6 E-6
Unit Risk		2.5 E-6	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	1.6 E-9	NA	5.6 E-8	2.6 E-7	NA	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA	NA
52D-SB06	5									0.82	31			34						8.0		0.22	28					0.27			73
52D-SB07	5		0.093		0.33	0.34	0.45		0.093	0.65	28		0.43	130			0.53	0.059		6.4	0.014	0.37	27				0.44		0.74		290
52D-SB08	5									0.29	33	0.18		11						2.3	0.015		39					2.4			29
52D-SB10	5			0.095							44	0.31		22						5.1	0.0094	0.52	37					3.6			100
52D-SB11	5			0.10						0.45	40	0.56		28						5.2	1.4	0.72	21								49
52D-SB13	5			0.10							41	0.23		31						3.4	0.033	1.6	24					0.55			33
52D-SB14	5			0.10							79			38						3.2	0.0082	0.69	70					0.73			32
52D-SB15	5			0.11						0.4	31	0.14		31						2.7	0.23	1.1	23				0.0024	0.61			31
52D-SB17	5			0.47						1.0	94	0.48		70						12	0.086	0.58	90							0.13	72
AW-AF1-SB01	5			0.15						0.27	46	0.37		28						5.7		2.4	20							0.13	34
AW-AF1-SB02	5			0.12							23	0.022		33						3.5	0.075	0.92	17								24
AW-AF1-SB03	5			0.13							17	0.081		19						2.3	0.02	0.61	11								20
AW-AF2-SB01	5			0.16							61			24						11	0.009	0.58	43								48
AW-AF2-SB02	5			0.18							65			27						12	0.0098	0.56	46								51
D(b)-SB01	5			0.093						0.34	26			21						2.4	0.039	0.46	17								30
D(b)-SB02	5			0.14						0.45	33			33						3.5	0.06	0.20	25								35
D(b)-SB03	5			0.19						0.34	34			27						5.6	0.0039	1.5	22								37
D(b)-SB04	5				0.0086	0.0072	0.011						0.011				0.013										0.0048		0.014		
D(b)-SB05	5			0.20							55			40						4.5		0.3	27								40
D(C)-SB01	5										62			27		1.28			23000	12.5			49.3								42
D(c)-SB02	5			0.19						0.49	56	0.85		28						8.3	0.0038	0.72	33								43
D(c)-SB03	5									0.32	54	0.14		30						2.9		2.2	28							0.54	25
D(c)-SB04	5			0.20							70	0.63		27						8.0	0.0039	1.0	42								47
D(c)-SB05	5			0.11						0.51	51	0.35		22						8.9		0.4	35								41
DC-AH01	5										62			27		1.3			23000	12.5			49.3								42
52D-SB16	5.5									0.46	54			37						11			27					0.90			32
06D-SB01	6										31			26		1.1			14600	7.18			18.1								28
52D-FCS-SB01	7										42			25		0.67			21200	5.71			29.4								36
05D-AH01	10										27			37		1.8			15100	7.88			18.3								39
05D-SNS12	10										31			46						3.8	0.017	1.1	21							0.092	39
05D-SNS13	10									4.7	150	2.2		79						21	0.22	1.3	57							7.6	240
05D-SNS14	10									4.7	160	3.0		58						15	0.36	2.0	54							11	120
05D-SNS15	10			0.28						6.5	110	3.3		42						19	0.073	1.4	39							11	100
05D-SNS16	10			0.20						0.10	45	0.49		32						5.5	0.054	0.74	34							0.16	43
05D-SNS20	10			0.67						0.24	36			36						5.9	0.086		34							0.28	47
06D-SNS07	10			0.21						0.12	88	0.83		36						6.2	0.043	0.77	28							0.10	41
08D-AH02	10	0.4									29			56					22300				18								40
52D-AH02	10															5															
52D-SB01	10										40			31		0.72			21200	5.8	0.11		26								39
52D-SB02	10															1.1															
D(C)-SB01	10										52			25		2.0			17400	9.17			54								40
DC-AH01	10										52			25		2			17400	9.17			54								40
52D-SB09	10.5									0.53	21	0.27		30						7.1		0.20	17					0.26			62
D(c)-SB05	10.5			0.14							84	0.58		41						6.6	0.0063	0.84	53								36
05D-SB01	11			0.13						0.38	26	0.37		30						4.2	0.020	0.35	29					1.2			29
05D-SB02	11			0.74						0.3	49	0.45		27						3.8	0.028	1.1	28								33
06D-SB02	11									0.72	730	630		42						11	0.052	2.1	67								170
06D-SB03	11									0.14	42	0.16		47						8.2	0.043	0.85	47							0.096	63
06D-SB04	11			0.17						0.12	35	0.10		38						6.1	0.048	0.55	31							0.093	31
06D-SB05	11			0.15						0.11	34	0.10		37						4.7	0.025	0.62	42							0.081	41
06D-SB06	11			0.063						0.099	39			35						3.4	0.026	0.32	39							0.052	32
08D-SB01	11									0.45	69	0.26		41						4.6	0.019	2.0	42			0.058				0.42	35
08D-SB02	11									0.71	85	0.40		48						5.5	0.01	3.1	71							1.4	45
08D-SB05	11			0.22							46	0.37		37						3.4		2.0	32								24
08D-SB06	11											0.40																			
52D-SB05	11			0.096							37			34						5.4		0.43	21								36
52D-SB06	11									0.8	31	0.36		33						5.3	0.0032	0.24	28					0.42			54
52D-SB07	11									0.78	38	0.31		46						8.7			25					0.72			78
52D-SB08	11			0.12						0.35	37	0.3		42						2.9	0.10	0.66	25					0.44			36
52D-SB10	11			0.23							550	720		58						16	0.011	9.2	77					0.53			110
52D-SB11	11			0.14							24	0.14		29						3.1	0.014	0.72	17								30
52D-SB12	11			0.081							42	0.35		26						5.0	0.027	6.3	16								39
52D-SB13	11			0.11							37	0.16		27						4.8	0.0072	0.88	33					0.15			38
52D-SB14	11			0.10						0.33	24			23						2.9	0.021	0.26	20								32
52D-SB15	11			0.19						0.44	33	0.15		25						3.1	0.024	0.19	25								28
52D-SB17	11			0.16						0.55	47	0.28		38						5.5	0.034	0.25	34								41

		Concentrations (mg/kg)																													
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard Child		9.7 E-4	5.8 E-5	3.2 E-2	NA	NA	NA	NA	5.8 E-4	1.4 E-2	8.5 E-6	4.5 E-3	NA	3.5 E-4	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	6.7 E-4	8.9 E-1	8.9 E-1	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	2.6 E-3	4.3 E-5
Unit Hazard Adult		3.5 E-4	6.9 E-6	3.4 E-3	NA	NA	NA	NA	6.9 E-5	1.6 E-3	9.1 E-7	5.5 E-4	NA	3.7 E-5	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	8.3 E-5	1.1 E-1	1.1 E-1	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	2.7 E-4	4.6 E-6
Unit Risk		2.5 E-6	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	1.6 E-9	NA	5.6 E-8	2.6 E-7	NA	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA	NA
AW-AF1-SB01	11			0.094						0.12	33	0.15		22						4.9		1.0	20							0.16	45
AW-AF1-SB02	11			0.11							22	0.035		21						2.9	0.015	0.8	14								25
AW-AF1-SB03	11			0.23							51	1.1		39						7.4	0.011	1.3	35								43
AW-AF2-SB01	11										52			20						8.5		0.41	35								36
AW-AF2-SB02	11										51			22						8.2		0.53	43								41
D(b)-SB02	11									0.5	40			35						5.8	0.14		30								46
D(b)-SB03	11			0.17						0.41	40			31						3.5	0.5	0.52	30				0.16				33
D(b)-SB04	11												0.0043				0.0036														
D(b)-SB05	11			0.29						0.48	35			30						3.6	0.064	0.28	31								40
D(c)-SB02	11											0.70																			
D(c)-SB03	11									0.25	57	0.023		28						2.1		5.4	29							0.50	25
D(c)-SB04	11			0.16							60	0.52		32						6.4	0.0077	0.63	43								48
08D-SB03	11.5			0.17							76	0.52		42						7.6	0.0098	0.87	73								68
08D-SB04	11.5			0.067							22	0.52		16						5.8		0.86	14								14
08D-SB05	11.5																														
08D-SB06	11.5																									0.027					
52D-SB16	11.5									0.24	21			33						2.8		0.28	18								24

		Child Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
05D-SNS06	0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	3.5 E-3	NA	NA	3.4 E-2	NA	NA	NA	NA	3.7 E-1	NA	2.9 E-2	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	5.4 E-2	1.4 E-2	6.4 E-1
08D-GS02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	9.3 E-3	NA	6.2 E-4	NA	NA	4.1 E-1	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	4.6 E-1
D(b)-SD01	0	NA	3.1 E-7	2.1 E-2	NA	NA	NA	NA	NA	1.3 E-1	3.1 E-4	NA	NA	1.1 E-2	NA	NA	3.2 E-5	NA	NA	NA	4.2 E-3	8.2 E-3	1.5 E-2	NA	1.5 E-1	NA	3.0 E-5	NA	3.3 E-5	2.4 E-2	1.5 E-1	5.2 E-1
05D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	1.0 E-3	NA	NA	4.1 E-2	NA	NA	NA	NA	3.1 E-1	NA	2.3 E-2	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	4.1 E-2	1.8 E-2	4.8 E-1
05D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	1.7 E-2	NA	NA	6.8 E-2	NA	NA	NA	NA	2.5 E-1	NA	5.6 E-2	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	2.2 E-1	4.2 E-2	8.3 E-1
05D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-2	3.7 E-3	NA	NA	5.7 E-2	NA	NA	NA	NA	3.0 E-1	NA	1.3 E+0	NA	5.5 E-2	NA	NA	NA	NA	NA	NA	2.2 E-2	2.8 E-2	1.9 E+0
05D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	1.8 E-2	NA	NA	1.3 E-1	NA	NA	NA	NA	3.3 E-1	NA	6.9 E-2	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	4.1 E-1	6.0 E-2	1.3 E+0
05D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-2	1.6 E-3	NA	NA	3.4 E-2	NA	NA	NA	NA	2.3 E-1	NA	1.6 E-2	NA	4.8 E-2	NA	NA	NA	NA	NA	NA	9.9 E-3	3.3 E-2	4.3 E-1
05D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	3.5 E-3	NA	NA	3.4 E-2	NA	NA	NA	NA	3.7 E-1	NA	2.9 E-2	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	1.4 E-2	6.0 E-1
06D-SNS01	0.01	NA	NA	8.4 E-1	NA	NA	NA	NA	NA	1.5 E-1	8.6 E-2	NA	NA	1.7 E-1	NA	NA	NA	NA	6.9 E-1	NA	NA	NA	9.9 E-1	NA	NA	NA	NA	NA	NA	NA	2.7 E-1	3.2 E+0
06D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	NA	1.4 E-2	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	8.8 E-3	4.4 E-1
06D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	1.1 E-2	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	6.1 E-3	4.3 E-1
06D-SNS04	0.01	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	6.8 E-2	2.9 E-2	NA	NA	5.8 E-2	NA	NA	NA	NA	4.9 E-1	NA	4.5 E-3	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	6.5 E-2	1.4 E+0
06D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	4.3 E-1	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	3.7 E-3	2.6 E-3	4.7 E-1
08D-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-2	2.7 E-4	NA	NA	2.0 E-2	NA	NA	NA	NA	1.2 E-1	NA	2.4 E-2	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.0 E-1	5.5 E-3	4.4 E-1
08D-GS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	1.1 E-2	NA	6.2 E-4	NA	NA	4.1 E-1	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	4.6 E-1
08D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	5.8 E-4	NA	NA	1.6 E-2	NA	NA	NA	NA	8.3 E-1	NA	6.4 E-3	NA	5.2 E-2	NA	NA	NA	NA	NA	NA	4.8 E-3	2.7 E-3	9.2 E-1
09D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	1.4 E-2	NA	NA	NA	NA	6.8 E-1	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	7.2 E-1
09D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	9.3 E-3	NA	NA	NA	NA	4.4 E-1	NA	5.7 E-3	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	4.8 E-1
09D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	9.3 E-3	NA	NA	NA	NA	3.4 E-1	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	3.7 E-1
09D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	4.8 E-3	NA	NA	NA	NA	2.8 E-1	NA	4.3 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	3.0 E-1
12D-CS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	7.5 E-4	NA	NA	1.5 E-2	NA	NA	NA	NA	5.3 E-1	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	6.1 E-3	6.0 E-3	6.1 E-1
12D-CS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	1.7 E-2	NA	NA	NA	NA	2.6 E-1	NA	5.3 E-3	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	2.1 E-2	5.1 E-3	3.3 E-1
12D-SNS01	0.01	NA	NA	2.2 E-1	NA	NA	NA	NA	NA	2.2 E-2	1.0 E-3	NA	NA	1.4 E-2	NA	NA	NA	NA	4.4 E-1	NA	6.6 E-3	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	9.8 E-3	1.2 E-2	7.5 E-1
12D-SNS02	0.01	NA	NA	1.9 E-1	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	7.5 E-3	NA	NA	NA	NA	4.5 E-1	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	6.7 E-1
12D-SNS03	0.01	NA	NA	2.2 E-1	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	NA	1.0 E-2	NA	NA	NA	NA	4.5 E-1	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	6.5 E-3	3.5 E-3	7.1 E-1
12D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	4.4 E-1	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	6.4 E-3	3.4 E-3	4.8 E-1
12D-SNS05	0.01	NA	NA	1.9 E-1	NA	NA	NA	NA	NA	1.8 E-2	7.3 E-4	NA	NA	2.1 E-2	NA	NA	NA	NA	5.6 E-1	NA	1.0 E-2	NA	2.9 E-2	NA	NA	NA	NA	NA	NA	1.0 E-2	7.9 E-3	8.5 E-1
12D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	4.8 E-3	NA	NA	NA	NA	2.7 E-1	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	2.9 E-1
12D-SNS07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	9.0 E-3	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	2.8 E-3	4.6 E-3	4.0 E-1
D(C)-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	4.8 E-3	NA	NA	NA	NA	2.0 E-1	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	4.5 E-3	1.1 E-3	2.3 E-1
09D-SD01	0.25	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	7.8 E-3	2.7 E-4	3.9 E-4	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	6.4 E-4	2.2 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	4.3 E-2
D(d)-SD01	0.25	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	1.4 E-2	3.9 E-4	NA	NA	5.2 E-2	NA	NA	NA	NA	NA	NA	1.7 E-2	4.1 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	6.9 E-4	4.7 E-2	2.4 E-1
05D-SNS08	0.5	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	2.1 E-2	5.5 E-4	5.8 E-3	NA	1.9 E-2	NA	NA	1.3 E-5	NA	NA	NA	1.4 E-2	1.4 E-3	2.4 E-2	NA	NA	NA	7.0 E-6	NA	2.8 E-5	2.2 E-2	2.2 E-2	1.4 E-1
05D-SNS09	0.5	NA	4.0 E-7	4.8 E-3	NA	NA	NA	NA	1.1 E-5	2.3 E-2	4.9 E-4	NA	NA	1.7 E-2	NA	NA	6.1 E-5	NA	NA	NA	1.4 E-2	1.5 E-2	2.7 E-2	NA	NA	NA	2.2 E-5	NA	8.1 E-5	3.1 E-3	4.3 E-3	1.1 E-1
05D-SNS10	0.5	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	8.2 E-2	1.4 E-3	3.5 E-2	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	6.4 E-3	1.4 E-3	2.5 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	8.1 E-3	2.0 E-1
05D-SNS11	0.5	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	5.5 E-2	6.5 E-4	1.1 E-3	NA	9.7 E-3	NA	NA	2.2 E-6	NA	NA	NA	1.5 E-3	5.1 E-4	1.7 E-2	NA	NA	NA	NA	NA	NA	9.5 E-4	9.4 E-3	1.0 E-1
05D-SNS12	0.5	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	6.0 E-1	1.4 E-3	1.6 E-2	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	2.6 E-3	2.7 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	1.5 E-2	7.0 E-1
05D-SNS13	0.5	NA	2.1 E-7	3.5 E-2	NA	NA	NA	NA	9.3 E-6	7.7 E-1	1.5 E-2	9.4 E-3	NA	7.9 E-2	NA	NA	2.5 E-5	NA	NA	NA	5.5 E-2	6.1 E-3	1.0 E-1	NA	NA	NA	1.2 E-5	NA	4.5 E-5	1.3 E-1	6.0 E-2	1.3 E+0
05D-SNS14	0.5	NA	NA	5.1 E-2	NA	NA	NA	NA	4.4 E-6	3.6 E-2	1.1 E-3	4.3 E-3	NA	4.5 E-2	NA	NA	1.4 E-5	NA	NA	NA	9.4 E-2	2.5 E-2	3.2 E-2	NA	NA	NA	6.4 E-6	NA	1.4 E-5	5.4 E-3	2.0 E-2	3.1 E-1
05D-SNS15	0.5	NA	2.2 E-7	2.0 E-2	NA	NA	NA	NA	1.5 E-5	2.3 E-1	2.0 E-2	4.1 E-3	NA	1.9 E-1	NA	NA	3.9 E-5	NA	NA	NA	8.5 E-2	3.8 E-2	1.7 E-1	NA	NA	NA	1.6 E-5	NA	6.4 E-5	1.1 E-1	6.0 E-2	9.2 E-1
05D-SNS16	0.5	NA	NA	9.9 E-3	NA	NA	NA	NA	5.0 E-5	6.5 E-2	4.2 E-4	4.9 E-4	NA	3.0 E-2	NA	NA	6.5 E-5	NA	NA	NA	2.9 E-2	2.3 E-3	1.9 E-2	NA	NA	NA	3.4 E-5	NA	2.1 E-4	1.1 E-2	9.0 E-2	2.6 E-1
05D-SNS17	0.5	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	8.0 E-2	3.9 E-3	3.8 E-3	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	4.7 E-3	1.4 E-3	3.3 E-2	NA	NA	NA	NA	NA	NA	4.6 E-2	2.0 E-2	2.5 E-1
05D-SNS18	0.5	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	2.4 E-2	5.2 E-4	9.4 E-4	NA	2.6 E-2	NA	NA	9.2 E-6	NA	NA	NA	9.8 E-3	2.2 E-3	3.0 E-2	NA	8.9 E-2	NA	4.5 E-6	NA	1.6 E-5	1.6 E-3	1.1 E-2	2.2 E-1
05D-SNS19	0.5	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	1.7 E-2	6.1 E-4	2.4 E-3	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	1.4 E-2	1.4 E-3	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	1.2 E-1
05D-SNS20	0.5	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	2.6 E-2	1.2 E-3	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	1.9 E-2	6.4 E-3	3.2 E-2	NA	NA	NA	NA	NA	NA	8.4 E-2	3.4 E-2	2.6 E-1
06D-SNS06	0.5	NA	NA	2.4 E-1	NA	NA	NA	NA	NA	1.7 E-1	1.6 E-1	2.1 E-4	NA	2.1 E-1	NA	NA	9.2 E-7	NA	NA	NA	1.9 E-2	1.1 E-1	1.0 E+0	NA	NA	NA	NA	NA	NA	5.6 E-3	2.1 E-1	2.1 E+0
06D-SNS07	0.5	NA	NA	1.6 E+0	NA	NA	NA	NA	NA	4.7 E-1	3.7 E-1	NA	NA	3.3 E-1	NA	NA	1.2 E-6	NA	NA	NA	6.0 E-2	1.8 E-1	1.1 E+0	NA	NA	NA	NA	NA	NA	2.8 E-2	2.0 E-1	4.3 E+0
06D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	2.3 E-1	NA	NA	2.1 E-1	NA	NA	3.2 E-6	NA	NA	NA	5.1 E-2	1.1 E-1	8.7 E-1	NA	NA	NA	3.0 E-6	NA	NA	1.6 E-2	1.5 E-1	1.9 E+0
06D-SNS09	0.5	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	1.0 E-2	4.1 E-4	7.6 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	3.5 E-3	5.9 E-4	1.7 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	1.9 E-3	6.0 E-2
06D-SNS10	0.5	NA	NA	9.6 E-3	NA	NA	NA	NA	NA	1.0 E-2	5.8 E-4	9.0 E-4	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	1.4 E-2	1.1 E-3	2.2 E-2	NA	NA	NA	NA	NA	NA	1.5 E-3	1.9 E-3	7.3 E-2
06D-SNS11	0.5	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	1.2 E-2	6.0 E-4	3.3 E-4	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	2.2 E-3	1.1 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	9.0 E-4	2.1 E-3	5.6 E-2
08D-SB02	0.5	NA	6.4 E-7	NA	NA	NA	NA	NA	4.7 E-6	1.7 E-2	3.2 E-4	2.9 E-4	NA	7.9 E-3	NA	NA	1.7 E-5	NA	NA	NA	3.6 E-3	1.9 E-3	1.7 E-2	2.4 E-1	NA	NA	2.2 E-5	NA	2.2 E-5	5.6 E-2	2.4 E-3	3.5 E-1
08D-SB03	0.5	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	7.3 E-3	5.2 E-4	1.4 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	9.0 E-4	1.4 E-3	3.2 E-2	NA	NA	1.8 E-3	NA	NA	NA	NA	1.8 E-3	6.3 E-2
08D-SNS01	0.5	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	8.8 E-3	5.5 E-4	1.4 E-3	NA	1.4 E-2	NA	NA	1.1 E-6	NA	NA	NA	8.1 E-4	1.0 E-3	3.0 E-2	NA	NA	NA	NA	NA	NA	9.5 E-4	3.4 E-3	6.7 E-2
09D-SNS05	0.5	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	3.6 E-2	1.4 E-3	9.4 E-4	NA	2.1 E-2	NA	NA	2.0 E-6	NA	NA	NA	6.8 E-3	2.6 E-3	3.5 E-2	NA	NA	NA	NA	NA	NA	9.7 E-3	7.2 E-3	1.3 E-1
09D-SNS06	0.5	NA	NA	9.9 E-3	NA	NA	NA	NA	NA	6.3 E-3	2.8 E-4	3.8 E-3	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	4.7 E-2
12D-SNS08	0.5	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	7.4 E-3	4.0 E-4	2.9 E-3	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	5.0 E-2
12D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	5.7 E-4	8.1 E-3	NA	9.0 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	2.4 E-3	3.2 E-3	5.4 E-2
52D-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	2.3 E-4	1.2 E-3	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	2.5 E-2	NA	NA	NA	NA	1.2 E-5	NA	NA	1.2 E-3	3.5 E-2
52D-SB16	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	2.9 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	1.6 E-5	NA	NA	3.0 E-3	4.4 E-2
52D-SNS01	0.5	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	2.0 E-2	2.4 E-3	3.3 E-2	NA	9.7 E-3	NA	NA	1.0 E-6	NA	NA	NA	6.8 E-3	3.6 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	4.1 E-3	1.4 E-1
52D-SNS02	0.5	NA	NA	6.4 E-2	NA	NA	NA	NA	NA	5.1 E-2	1.1 E-3	9.8 E-3	NA	1.6 E-2	NA	NA	2.8 E-6	NA	NA	NA	7.2 E-3	2.6 E-3	4.6 E-2	NA	NA	NA	2.6 E-6	NA	NA	NA	9.8 E-3	2.1 E-1
52D-SNS03	0.5	NA	NA	7.7 E-3	NA	NA	NA	NA	NA	1.0 E-2	2.9 E-4	4.9 E-4	NA	1.1 E-2	NA	NA	2.4 E-6	NA	NA	NA	5.1 E-4	1.6 E-3	1.8 E-2	NA	NA	NA	7.6 E-6	NA	8.7 E-6	NA	2.7 E-3	5.3 E-2
52D-SNS04	0.5	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	1.4 E-2	2.5 E-4	8.1 E-4	NA	8.3 E-3	NA	NA	2.0 E-6	NA	NA	NA	4.3 E-4	4.1 E-4	1.1 E-2	NA	NA	NA	1.6 E-6	NA	NA	NA	3.9 E-3	4.1 E-2
52D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																	
Unit Hazard Adult																																	
Unit Risk																																	
D(c)-SNS01	0.5	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	7.8 E-3	5.5 E-4	2.5 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	7.6 E-2
05D-SB01	1	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	7.5 E-3	2.4 E-4	5.8 E-4	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	2.4 E-3	1.3 E-3	1.4 E-2	6.8 E-2	NA	NA	NA	7.6 E-5	NA	NA	2.3 E-3	1.1 E-1
05D-SB02	1	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	5.0 E-3	3.2 E-4	3.4 E-2	NA	9.0 E-3	NA	NA	NA	NA	NA	NA	4.3 E-2	2.6 E-3	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.4 E-1
05D-SB03	1	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	2.7 E+0	4.5 E-2	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	NA	9.4 E-2	3.6 E-2	8.7 E-2	NA	NA	NA	NA	NA	NA	5.1 E-1	3.0 E-2	3.7 E+0
05D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	7.8 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	2.2 E-2	5.9 E-3	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	9.3 E-2
05D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3	5.5 E-4	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	4.3 E-3	6.9 E-4	3.0 E-2	NA	NA	NA	NA	NA	NA	8.4 E-4	3.0 E-3	6.2 E-2
05D-SB06	1	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	1.4 E-1	5.7 E-3	2.7 E-3	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	1.0 E-2	2.5 E-3	3.3 E-2	2.2 E+0	NA	NA	NA	NA	NA	4.0 E-2	7.4 E-3	2.5 E+0
05D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	1.7 E-3	1.8 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	4.3 E-3	1.0 E-3	2.3 E-2	NA	7.1 E-1	NA	NA	NA	NA	9.0 E-3	4.2 E-3	8.1 E-1
05D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	4.0 E-4	4.1 E-4	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	6.1 E-4	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.8 E-2
05D-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	4.1 E-4	2.7 E-4	NA	9.0 E-3	NA	NA	NA	NA	NA	NA	2.9 E-3	8.4 E-4	2.1 E-2	5.4 E-1	NA	NA	NA	NA	NA	3.1 E-3	2.0 E-3	5.9 E-1
05D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	7.5 E-4	6.3 E-4	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	1.3 E-2	5.9 E-4	5.3 E-2	4.1 E-2	NA	NA	NA	NA	NA	3.6 E-3	2.8 E-3	1.4 E-1
06D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-3	4.3 E-4	9.8 E-4	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	3.9 E-3	2.6 E-3	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.0 E-2
06D-SB06	1	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	4.7 E-2	2.5 E-3	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	7.2 E-3	3.8 E-3	2.6 E-2	NA	NA	NA	NA	NA	NA	9.7 E-3	5.5 E-3	1.2 E-1
08D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	8.5 E-3	NA	1.4 E-4	NA	NA	3.7 E-1	NA	NA	5.8 E-3	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.1 E-1
08D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-3	6.3 E-4	2.5 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	7.2 E-4	1.4 E-3	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	7.1 E-2
08D-SB04	1	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	8.0 E-3	5.1 E-4	2.2 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	9.0 E-4	1.7 E-3	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	6.2 E-2
08D-SB05	1	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	7.1 E-3	4.6 E-4	2.2 E-3	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	4.2 E-4	1.4 E-3	2.1 E-2	NA	NA	5.7 E-4	NA	NA	NA	NA	1.7 E-3	4.9 E-2
08D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	2.2 E-3	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	8.1 E-3	1.0 E-3	2.1 E-2	NA	NA	1.4 E-3	NA	NA	NA	NA	1.6 E-3	4.3 E-2
52D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4
52D-AH02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4
52D-FCS-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	5.6 E-3	NA	1.2 E-4	NA	NA	4.2 E-1	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	4.4 E-1
52D-SB01	1	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	1.1 E-2	NA	2.6 E-4	NA	NA	7.6 E-1	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	2.8 E-3	3.6 E-3	9.7 E-1
52D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	2.6 E-2	NA	NA	5.3 E-2	NA	2.4 E-4	NA	NA	7.8 E-1	NA	1.5 E-1	NA	1.4 E+0	NA	NA	NA	NA	NA	NA	5.4 E-3	1.6 E-2	2.6 E+0
52D-SB04	1	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	5.5 E-3	2.6 E-4	6.7 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	3.3 E-2
52D-SB05	1	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	7.5 E-3	2.1 E-4	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	4.1 E-4	6.4 E-4	1.3 E-2	NA	NA	NA	NA	4.5 E-5	NA	NA	2.1 E-3	3.5 E-2
52D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-3	2.6 E-4	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	5.4 E-4	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	3.4 E-2
52D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB08	1	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	6.5 E-3	2.5 E-4	9.4 E-4	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.0 E-2
52D-SB10	1	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	2.2 E-3	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	1.1 E-3	2.4 E-2	NA	NA	NA	NA	1.4 E-5	NA	NA	1.3 E-2	5.1 E-2
52D-SB11	1	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	1.7 E-2	9.4 E-4	1.3 E-2	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	4.0 E-3	2.6 E-3	1.7 E-2	NA	NA	NA	NA	3.5 E-5	NA	NA	5.1 E-3	8.5 E-2
52D-SB13	1	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	4.9 E-4	1.9 E-3	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	4.7 E-4	5.4 E-3	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	5.7 E-2
52D-SB14	1	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	7.3 E-3	1.9 E-4	3.6 E-4	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	1.0 E-4	NA	NA	2.1 E-3	3.4 E-2
52D-SB15	1	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	8.8 E-3	4.4 E-4	1.1 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	9.4 E-4	1.4 E-3	2.3 E-2	NA	NA	NA	NA	1.1 E-4	NA	NA	2.3 E-3	5.5 E-2
52D-SB17	1	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	8.5 E-3	5.2 E-4	8.1 E-4	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	6.0 E-4	7.7 E-4	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.4 E-2
AW-AF1-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3	4.3 E-4	4.2 E-4	NA	8.6 E-3	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	1.4 E-2	NA	NA	NA	NA	NA	NA	5.1 E-4	3.2 E-3	3.5 E-2
AW-AF1-SB02	1	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	2.2 E-4	3.2 E-4	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	6.9 E-4	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	2.9 E-2
AW-AF1-SB03	1	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	3.4 E-4	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	9.4 E-4	2.4 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	3.8 E-2
AW-AF2-SB01	1	NA	NA	7.0 E-3	NA	NA	NA	NA	7.6 E-6	NA	4.4 E-4	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	2.5 E-3	1.9 E-3	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	6.5 E-2
AW-AF2-SB02	1	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	9.4 E-4	1.2 E-3	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	3.9 E-2
D(b)-SB01	1	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	4.8 E-3	2.9 E-4	9.0 E-4	NA	9.0 E-3	NA	NA	NA	NA	NA	NA	2.8 E-3	1.4 E-3	1.8 E-2	NA	NA	NA	NA	6.0 E-6	NA	NA	1.3 E-3	4.3 E-2
D(b)-SB02	1	NA	NA	5.1 E-2	NA	NA	NA	NA	NA	1.4 E-2	5.1 E-4	9.0 E-4	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	7.7 E-4	6.1 E-3	1.9 E-2	NA	NA	NA	NA	6.0 E-5	NA	NA	4.3 E-3	1.1 E-1
D(b)-SB03	1	NA	NA	9.6 E-3	NA	NA	NA	NA	NA	1.6 E-2	7.8 E-4	1.9 E-3	NA	2.2 E-2	NA	NA	8.3 E-7	NA	NA	NA	6.0 E-3	2.0 E-3	4.7 E-2	NA	NA	NA	3.1 E-6	2.0 E-5	NA	NA	3.2 E-3	1.1 E-1
D(b)-SB04	1	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	3.5 E-5	NA	NA	7.1 E-5
D(b)-SB05	1	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	7.5 E-3	2.5 E-4	2.8 E-4	NA	9.0 E-3	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	1.5 E-2	NA	NA	NA	2.3 E-6	2.5 E-4	NA	NA	2.3 E-3	3.8 E-2
D(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	9.1 E-3	NA	3.4 E-4	NA	NA	4.0 E-1	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	4.4 E-1
D(c)-SB02	1	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	9.7 E-3	4.5 E-4	2.2 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	3.2 E-3	1.4 E-3	2.4 E-2	NA	NA	NA	NA	NA	NA	1.7 E-2	2.6 E-3	7.7 E-2
D(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3	3.6 E-4	1.2 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	4.6 E-2
D(c)-SB04	1	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	6.7 E-3	5.1 E-4	1.8 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	6.8 E-4	2.0 E-3	2.6 E-2	NA	NA	2.0 E-4	NA	2.3 E-5	NA	NA	1.7 E-3	5.6 E-2
D(c)-SB05	1	NA	NA	2.7 E-3	NA	NA	NA	NA	3.7 E-5	6.3 E-3	3.7 E-4	2.7 E-3	NA	8.3 E-3	NA	NA	3.9 E-5	NA	NA	NA	2.1 E-3	9.2 E-4	1.9 E-2	NA	NA	NA	1.3 E-5	NA	5.6 E-5	NA	7.7 E-3	5.1 E-2
DC-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	9.1 E-3	NA	3.4 E-4	NA	NA	4.0 E-1	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	4.4 E-1
06D-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	3.5 E-4	5.8 E-4	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	3.3 E-3	2.8 E-3	2.7 E-2	NA	NA	NA	NA	NA	NA	1.9 E-4	1.9 E-3	5.3 E-2
06D-SB04	1.5	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	2.6 E-3	3.6 E-4	5.8 E-4	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	2.1 E-3	4.8 E-2	NA	NA	NA	NA	NA	NA	3.8 E-4	2.3 E-3	9.7 E-2
06D-SB05	1.5	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	2.1 E-1	1.8 E-3	7.2 E-3	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	3.1 E-2	1.3 E-2	5.6 E-2	NA	NA	NA	NA	NA	NA	4.6 E-3	3.4 E-3	3.7 E-1
09D-SD01	1.5	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	7.4 E-3	5.5 E-4	1.7 E-3	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	5.4 E-4	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.6 E-2
52D-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	2.6 E-4	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	4.2 E-2
05D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	3.6 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	3.0 E-1	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	4.4 E-3	6.1 E-3	3.8 E-1
05D-SNS08	2.5	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	2.1 E-2	6.1 E-4	8.1 E-3	NA	2.3 E-2	NA	NA	7.0 E-6	NA	NA	NA	2.0 E-2	1.8 E-3	2.2 E-2	NA	NA	NA	NA	NA	NA	6.1 E-2	1.4 E-2	1.8 E-1
05D-SNS09	2.5	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	1.4 E-2	3.1 E-4	9.4 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	4.3 E-3	1.2 E-2	1.7 E-2	NA	NA	NA	NA	NA	NA	5.1 E-3	3.2 E-3	7.0 E-2
05D-SNS10	2.5	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	1.3 E-2	3.7 E-4	1.0 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	6.0 E-4	1.6 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	5.0 E-2
05D-SNS11	2.5	NA	NA	8.0 E-3	NA	NA	NA	NA	NA	9.1 E-2	8.2 E-4	2.2 E-2	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	7.7 E-3	1.6 E-3	2.0 E-2	NA	NA	NA	NA	NA	NA	1.3 E-3	4.7 E-3	1.7 E-1
05D-SNS12	2.5	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	5.8 E-2	8.2 E-3	6.3 E-4	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	3.8 E-4	1.3 E-2	2.0 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	9.8 E-3	1.6 E-1
05D-SNS13	2.5	NA	NA	8.6 E-3	NA	NA	NA	NA	NA	2.1 E-1	3.2 E-3	5.4 E-3	NA	2.4 E-2	NA	NA	5.2 E-6	NA	NA	NA	1.4 E-2	2.8 E-3	3.6 E-2	NA	NA	NA	2.4 E-6	NA	8.7 E-6	5.6 E-2	1.5 E-2	3.8 E-1
05D-SNS14	2.5	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	1.3 E-1	1.5 E-2	3.7 E-3	NA	2.1 E-1	NA	NA	NA	NA	NA	NA	1.2 E-1	1.3 E-2	3.9 E-2	NA	NA	NA	NA	NA	NA	2.5 E-2	2.9 E-2	6.2 E-1
05D-SNS15	2.5	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	9.0 E-2	1.3 E-3	3.9 E-3	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	4.7 E-3	6.1 E-3	8.1 E-2	NA	NA	NA	NA	NA	NA	2.2 E-2	7.7 E-3	2.6 E-1
05D-SNS16	2.5	NA	NA	NA	NA	NA	NA	NA	5.5 E-6	5.5 E-2	7.0 E-4	2.8 E-3	NA	2.2 E-2	NA	NA	6.5 E-6	NA	NA	NA	6.4 E-3	4.1 E-3	2.6 E-2	NA	NA	NA	5.3 E-6	NA	1.7 E-5	1.0 E-2	8.5 E-2	2.1 E-1
05D-SNS17	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	4.9 E-4	2.0 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.9 E-3	5.4 E-4	2.4 E-2	NA	NA	NA	NA	NA	NA	2.8 E-3	3.9 E-3	8.0 E-2

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
05D-SNS18	2.5	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	1.4 E-2	4.5 E-4	1.9 E-3	NA	2.5 E-2	NA	NA	1.0 E-6	NA	NA	NA	7.7 E-3	1.2 E-3	2.4 E-2	NA	5.8 E-2	NA	NA	NA	NA	NA	7.7 E-3	1.6 E-1
05D-SNS19	2.5	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	1.0 E-2	4.3 E-4	2.1 E-3	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	1.5 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	6.0 E-2
05D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-3	3.1 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.9 E-3	1.3 E-3	2.4 E-2	NA	NA	NA	NA	NA	NA	2.3 E-3	2.1 E-3	4.9 E-2
06D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	NA	NA	1.5 E-2	NA	NA	NA	NA	3.8 E-1	NA	NA	NA	4.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-3	4.6 E-1
06D-SNS06	2.5	NA	NA	7.4 E-2	NA	NA	NA	NA	NA	4.3 E-2	3.8 E-2	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	2.5 E-2	1.2 E-2	1.1 E-1	NA	NA	NA	NA	NA	NA	2.8 E-3	2.0 E-2	3.6 E-1
06D-SNS07	2.5	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	5.3 E-2	4.9 E-2	NA	NA	5.2 E-2	NA	NA	NA	NA	NA	NA	6.8 E-3	1.9 E-2	2.0 E-1	NA	NA	NA	NA	NA	NA	2.8 E-3	3.4 E-2	5.9 E-1
06D-SNS08	2.5	NA	NA	5.1 E-2	NA	NA	NA	NA	NA	2.0 E-2	8.5 E-3	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	4.7 E-3	6.1 E-3	6.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	1.9 E-1
06D-SNS09	2.5	NA	NA	8.0 E-3	NA	NA	NA	NA	NA	7.0 E-3	4.0 E-4	4.4 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	1.4 E-3	2.2 E-2	NA	NA	2.4 E-2	NA	NA	NA	NA	1.5 E-3	7.6 E-2
06D-SNS10	2.5	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	5.5 E-3	3.0 E-4	1.2 E-3	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	2.1 E-3	1.5 E-2	NA	NA	9.7 E-3	NA	NA	NA	8.4 E-4	1.3 E-3	5.1 E-2
06D-SNS11	2.5	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	1.4 E-2	6.4 E-4	2.2 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.5 E-3	2.2 E-3	1.9 E-2	NA	NA	3.5 E-2	NA	NA	NA	1.2 E-3	2.6 E-3	1.0 E-1
08D-SNS01	2.5	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	9.0 E-3	6.6 E-4	1.6 E-3	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	4.0 E-2	NA	NA	NA	NA	NA	NA	1.0 E-3	3.0 E-3	7.7 E-2
09D-SNS05	2.5	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	2.4 E-2	8.4 E-4	6.7 E-4	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	4.1 E-3	1.9 E-3	2.7 E-2	NA	NA	NA	NA	NA	NA	4.1 E-3	3.6 E-3	1.0 E-1
09D-SNS06	2.5	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	9.1 E-3	5.9 E-4	1.6 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	7.2 E-2
12D-SNS08	2.5	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	2.4 E-2	4.6 E-4	1.1 E-3	NA	1.2 E-2	NA	NA	1.7 E-6	NA	NA	NA	1.8 E-3	7.2 E-4	2.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	4.0 E-3	7.8 E-2
12D-SNS09	2.5	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	2.6 E-3	5.5 E-4	4.0 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	2.1 E-3	1.8 E-3	2.5 E-2	NA	NA	NA	NA	NA	NA	6.6 E-3	3.2 E-3	6.3 E-2
52D-SNS01	2.5	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	1.0 E-2	4.0 E-4	1.6 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	2.3 E-2	2.1 E-2	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	1.1 E-1
52D-SNS02	2.5	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	1.2 E-2	4.8 E-4	5.8 E-3	NA	1.4 E-2	NA	NA	1.8 E-6	NA	NA	NA	1.4 E-3	1.1 E-3	2.1 E-2	NA	NA	NA	1.6 E-6	NA	NA	NA	3.3 E-3	8.6 E-2
52D-SNS03	2.5	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	1.4 E-2	2.7 E-4	4.4 E-4	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	5.8 E-2
52D-SNS04	2.5	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	5.7 E-3	2.5 E-4	1.7 E-3	NA	6.6 E-3	NA	NA	NA	NA	NA	NA	7.2 E-4	1.0 E-3	1.2 E-2	NA	NA	NA	NA	NA	NA	9.7 E-4	1.2 E-3	3.4 E-2
52D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SNS01	2.5	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	6.1 E-3	6.6 E-4	2.8 E-3	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	6.7 E-2
05D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	9.2 E-3	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	3.8 E-1
09D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	6.7 E-3	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	4.1 E-1
09D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	5.0 E-1	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	5.4 E-1
09D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	4.9 E-1	NA	3.2 E-2	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	5.7 E-1
09D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	8.9 E-3	NA	NA	NA	NA	5.6 E-1	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	5.9 E-1
12D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	7.0 E-3	NA	NA	NA	NA	4.9 E-1	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	2.7 E-3	1.6 E-3	5.2 E-1
12D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	9.6 E-3	NA	NA	NA	NA	4.8 E-1	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	5.2 E-1
12D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	NA	NA	2.8 E-3	1.8 E-3	4.4 E-1
12D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	1.0 E-2	NA	NA	NA	NA	5.1 E-1	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	5.5 E-1
12D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	9.9 E-3	NA	NA	NA	NA	4.8 E-1	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	5.2 E-1
12D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	7.2 E-3	NA	NA	NA	NA	4.7 E-1	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	3.5 E-3	2.1 E-3	5.0 E-1
12D-SNS07	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	4.8 E-3	NA	NA	NA	NA	3.2 E-1	NA	4.6 E-3	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	3.4 E-1
52D-AH03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4
52D-SB09	4.5	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3	3.4 E-4	1.8 E-3	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	3.2 E-2	NA	NA	NA	NA	3.4 E-5	NA	NA	1.9 E-3	5.0 E-2
05D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	7.4 E-3	NA	1.8 E-4	NA	NA	2.3 E-1	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	2.6 E-1
05D-SB01	5	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	5.4 E-3	3.4 E-4	1.9 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	8.5 E-4	1.5 E-2	1.7 E-2	NA	NA	NA	NA	9.3 E-6	NA	NA	1.3 E-3	5.8 E-2
05D-SB02	5	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	3.6 E-1	9.4 E-3	8.1 E-3	NA	2.9 E-2	NA	NA	NA	NA	NA	NA	3.5 E-3	9.2 E-3	4.8 E-2	NA	NA	NA	NA	NA	NA	5.6 E-2	1.2 E-2	5.4 E-1
05D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.5 E-2
05D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.1 E-2
05D-SNS12	5	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	2.7 E-3	2.8 E-4	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	7.2 E-3	2.4 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	1.7 E-4	1.9 E-3	4.7 E-2
05D-SNS13	5	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	8.4 E-3	3.3 E-4	1.3 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.5 E-2	9.0 E-4	1.8 E-2	NA	NA	NA	NA	NA	NA	6.1 E-4	1.9 E-3	7.2 E-2
05D-SNS14	5	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	2.0 E-2	8.5 E-4	1.1 E-2	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2	1.0 E-3	3.0 E-2	NA	NA	NA	NA	NA	NA	2.2 E-2	8.1 E-3	1.3 E-1
05D-SNS15	5	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	5.7 E-2	7.4 E-4	1.2 E-2	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	2.4 E-3	2.1 E-3	3.4 E-2	NA	NA	NA	NA	NA	NA	3.8 E-2	5.1 E-3	1.8 E-1
05D-SNS16	5	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	2.8 E-2	3.2 E-4	2.1 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	9.4 E-4	3.3 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	4.3 E-3	3.5 E-2	1.0 E-1
05D-SNS20	5	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	3.7 E-4	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	1.7 E-3	2.2 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	1.9 E-3	4.6 E-2
06D-SB02	5	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	1.3 E-2	7.0 E-3	1.9 E+0	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	1.8 E-3	6.4 E-3	5.8 E-2	NA	NA	NA	NA	NA	NA	NA	9.0 E-3	2.1 E+0
06D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-3	7.0 E-4	5.4 E-4	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	4.7 E-3	2.0 E-3	1.1 E-1	NA	NA	NA	NA	NA	NA	2.3 E-4	2.4 E-3	1.5 E-1
06D-SB04	5	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	1.6 E-3	2.3 E-4	4.9 E-4	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	2.1 E-3	2.3 E-2	NA	NA	NA	NA	NA	NA	2.6 E-4	1.6 E-3	4.5 E-2
06D-SB05	5	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	1.2 E-3	2.0 E-4	4.4 E-4	NA	8.6 E-3	NA	NA	NA	NA	NA	NA	9.8 E-4	2.1 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	1.7 E-4	1.2 E-3	3.3 E-2
06D-SB06	5	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	2.1 E-3	2.7 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	8.1 E-4	3.1 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	2.2 E-4	1.4 E-3	4.4 E-2
08D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	8.9 E-3	NA	4.1 E-4	NA	NA	4.1 E-1	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.5 E-1
08D-AH02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	9.7 E-3	NA	2.6 E-4	NA	NA	3.6 E-1	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	4.1 E-1
08D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-3	7.1 E-4	1.5 E-3	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	8.1 E-4	1.1 E-3	5.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	8.1 E-2
08D-SB02	5	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	8.5 E-3	5.4 E-4	3.2 E-3	NA	9.3 E-3	NA	NA	7.4 E-6	NA	NA	NA	9.8 E-4	1.4 E-3	3.4 E-2	3.0 E-2	NA	NA	9.3 E-6	NA	9.9 E-6	1.9 E-3	1.9 E-3	9.2 E-2
08D-SB03	5	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	8.7 E-3	5.8 E-4	1.7 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	6.4 E-2
08D-SB04	5	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	8.0 E-3	5.5 E-4	1.5 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	7.7 E-4	1.1 E-3	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	6.4 E-2
08D-SB05	5	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	4.8 E-3	4.6 E-4	1.3 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	5.0 E-2
08D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-3	4.4 E-4	1.4 E-3	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.4 E-2	NA	NA	3.3 E-4	NA	NA	NA	NA	1.8 E-3	4.1 E-2
09D-SD01	5	NA	NA	9.9 E-3	NA	NA	NA	NA	NA	8.1 E-3	6.1 E-4	2.1 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	9.8 E-4	1.2 E-3	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	6.1 E-2
52D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4
52D-AH03	5	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4
52D-SA-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	7.2 E-4	NA	NA	1.3 E-2	NA	3.3 E-3	NA	NA	3.4 E-1	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	3.0 E-3	2.3 E-3	4.0 E-1
52D-SB01	5	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	2.3 E-2	NA	9.7 E-4	NA	NA	8.6 E-1	NA	1.4 E-2	NA	5.4 E-2	NA	NA	NA	NA	NA	NA	2.7 E-3	2.6 E-3	1.1 E+0
52D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	9.8 E-3	NA	NA	NA	NA	3.2 E-1	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	3.4 E-1
52D-SB05	5	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	7.4 E-3	2.3 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	5.5 E-4	9.5 E-4	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	4.0 E-2

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
52D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	2.6 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	1.9 E-2	NA	NA	NA	NA	1.5 E-5	NA	NA	3.1 E-3	4.6 E-2
52D-SB07	5	NA	5.4 E-6	NA	NA	NA	NA	NA	5.4 E-5	9.2 E-3	2.4 E-4	NA	NA	4.5 E-2	NA	NA	2.3 E-4	NA	NA	NA	6.0 E-4	9.5 E-4	1.8 E-2	NA	NA	NA	2.6 E-4	NA	4.3 E-4	NA	1.2 E-2	8.7 E-2
52D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	2.8 E-4	8.1 E-4	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	2.6 E-2	NA	NA	NA	NA	1.3 E-4	NA	NA	1.2 E-3	3.7 E-2
52D-SB10	5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	3.8 E-4	1.4 E-3	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	4.0 E-4	1.3 E-3	2.5 E-2	NA	NA	NA	NA	2.0 E-4	NA	NA	4.3 E-3	4.3 E-2
52D-SB11	5	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	6.4 E-3	3.4 E-4	2.5 E-3	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	6.0 E-2	1.8 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	1.0 E-1
52D-SB13	5	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	3.5 E-4	1.0 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	4.1 E-3	1.6 E-2	NA	NA	NA	NA	3.0 E-5	NA	NA	1.4 E-3	3.8 E-2
52D-SB14	5	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	3.5 E-4	1.8 E-3	4.7 E-2	NA	NA	NA	NA	4.0 E-5	NA	NA	1.4 E-3	6.8 E-2
52D-SB15	5	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	5.7 E-3	2.6 E-4	6.3 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	9.8 E-3	2.8 E-3	1.5 E-2	NA	NA	NA	1.4 E-6	3.3 E-5	NA	NA	1.3 E-3	5.0 E-2
52D-SB17	5	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	1.4 E-2	8.0 E-4	2.1 E-3	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	3.7 E-3	1.5 E-3	6.0 E-2	NA	NA	NA	NA	NA	NA	3.3 E-4	3.1 E-3	1.3 E-1
AW-AF1-SB01	5	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	3.8 E-3	3.9 E-4	1.7 E-3	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	NA	6.1 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	3.3 E-4	1.4 E-3	4.2 E-2
AW-AF1-SB02	5	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	9.8 E-5	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	3.2 E-3	2.4 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	3.4 E-2
AW-AF1-SB03	5	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	1.4 E-4	3.6 E-4	NA	6.6 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	1.6 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	2.2 E-2
AW-AF2-SB01	5	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	3.8 E-4	1.5 E-3	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	4.7 E-2
AW-AF2-SB02	5	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	4.2 E-4	1.4 E-3	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	5.1 E-2
D(b)-SB01	5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	4.8 E-3	2.2 E-4	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	1.7 E-3	1.2 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	3.1 E-2
D(b)-SB02	5	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	6.4 E-3	2.8 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.6 E-3	5.1 E-4	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.4 E-2
D(b)-SB03	5	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	4.8 E-3	2.9 E-4	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	3.8 E-3	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	4.1 E-2
D(b)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	8.1 E-6	NA	NA	1.7 E-5
D(b)-SB05	5	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.1 E-2
D(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	9.3 E-3	NA	2.1 E-4	NA	NA	4.2 E-1	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	4.7 E-1
D(c)-SB02	5	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	7.0 E-3	4.8 E-4	3.8 E-3	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	1.6 E-4	1.8 E-3	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	5.3 E-2
D(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-3	4.6 E-4	6.3 E-4	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	5.6 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	1.1 E-3	4.3 E-2
D(c)-SB04	5	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	6.0 E-4	2.8 E-3	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	2.6 E-3	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	5.2 E-2
D(c)-SB05	5	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	7.3 E-3	4.3 E-4	1.6 E-3	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.7 E-2
DC-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	9.3 E-3	NA	2.1 E-4	NA	NA	4.2 E-1	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	4.7 E-1
52D-SB16	5.5	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-3	4.6 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	4.9 E-5	NA	NA	1.4 E-3	3.9 E-2
06D-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	9.0 E-3	NA	1.8 E-4	NA	NA	2.7 E-1	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.9 E-1
52D-FCS-SB01	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	8.8 E-3	NA	1.1 E-4	NA	NA	3.9 E-1	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.2 E-1
05D-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	1.3 E-2	NA	2.9 E-4	NA	NA	2.8 E-1	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.0 E-1
05D-SNS12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	7.2 E-4	2.8 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	2.4 E-4	1.7 E-3	3.6 E-2
05D-SNS13	10	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-2	1.3 E-3	9.8 E-3	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	9.4 E-3	3.3 E-3	3.8 E-2	NA	NA	NA	NA	NA	NA	1.9 E-2	1.0 E-2	1.9 E-1
05D-SNS14	10	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-2	1.4 E-3	1.3 E-2	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	1.5 E-2	5.1 E-3	3.6 E-2	NA	NA	NA	NA	NA	NA	2.8 E-2	5.1 E-3	1.9 E-1
05D-SNS15	10	NA	NA	9.0 E-3	NA	NA	NA	NA	NA	9.2 E-2	9.4 E-4	1.5 E-2	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	3.1 E-3	3.6 E-3	2.6 E-2	NA	NA	NA	NA	NA	NA	2.8 E-2	4.3 E-3	2.0 E-1
05D-SNS16	10	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	1.4 E-3	3.8 E-4	2.2 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.3 E-3	1.9 E-3	2.3 E-2	NA	NA	NA	NA	NA	NA	4.1 E-4	1.8 E-3	5.1 E-2
05D-SNS20	10	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	3.4 E-3	3.1 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	3.7 E-3	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	7.2 E-4	2.0 E-3	6.7 E-2
06D-SNS07	10	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	1.7 E-3	7.5 E-4	3.7 E-3	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.8 E-3	2.0 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	2.6 E-4	1.7 E-3	5.0 E-2
08D-AH02	10	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	1.9 E-2	NA	NA	NA	NA	4.1 E-1	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.4 E-1
52D-AH02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4
52D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	1.1 E-2	NA	1.2 E-4	NA	NA	3.9 E-1	NA	4.6 E-3	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.2 E-1
52D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4
D(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	8.5 E-3	NA	3.2 E-4	NA	NA	3.2 E-1	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.7 E-1
DC-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	8.5 E-3	NA	3.3 E-4	NA	NA	3.2 E-1	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.7 E-1
52D-SB09	10.5	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-3	1.8 E-4	1.2 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	1.1 E-2	NA	NA	NA	NA	1.4 E-5	NA	NA	2.6 E-3	3.4 E-2
D(c)-SB05	10.5	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	7.2 E-4	2.6 E-3	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	2.7 E-4	2.1 E-3	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	6.2 E-2
05D-SB01	11	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	5.4 E-3	2.2 E-4	1.7 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	8.5 E-4	9.0 E-4	1.9 E-2	NA	NA	NA	NA	6.5 E-5	NA	NA	1.2 E-3	4.4 E-2
05D-SB02	11	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	4.3 E-3	4.2 E-4	2.0 E-3	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	2.8 E-3	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	6.4 E-2
06D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	6.2 E-3	2.8 E+0	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	2.2 E-3	5.4 E-3	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	7.2 E-3	2.9 E+0
06D-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	3.6 E-4	7.2 E-4	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	1.8 E-3	2.2 E-3	3.2 E-2	NA	NA	NA	NA	NA	NA	2.5 E-4	2.7 E-3	5.8 E-2
06D-SB04	11	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	1.7 E-3	3.0 E-4	4.5 E-4	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	2.0 E-3	1.4 E-3	2.1 E-2	NA	NA	NA	NA	NA	NA	2.4 E-4	1.3 E-3	4.7 E-2
06D-SB05	11	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	1.6 E-3	2.9 E-4	4.5 E-4	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	1.6 E-3	2.8 E-2	NA	NA	NA	NA	NA	NA	2.1 E-4	1.7 E-3	5.3 E-2
06D-SB06	11	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	1.4 E-3	3.3 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	8.2 E-4	2.6 E-2	NA	NA	NA	NA	NA	NA	1.3 E-4	1.4 E-3	4.5 E-2
08D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	5.9 E-4	1.2 E-3	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	8.1 E-4	5.1 E-3	2.8 E-2	NA	NA	1.1 E-3	NA	NA	NA	1.1 E-3	1.5 E-3	6.0 E-2
08D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	7.2 E-4	1.8 E-3	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	4.3 E-4	7.9 E-3	4.8 E-2	NA	NA	NA	NA	NA	NA	3.6 E-3	1.9 E-3	9.1 E-2
08D-SB05	11	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	NA	3.9 E-4	1.7 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	5.0 E-2
08D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3
52D-SB05	11	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	3.2 E-2
52D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	2.6 E-4	1.6 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	1.4 E-4	6.1 E-4	1.9 E-2	NA	NA	NA	NA	2.3 E-5	NA	NA	2.3 E-3	4.7 E-2
52D-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	3.2 E-4	1.4 E-3	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	3.9 E-5	NA	NA	3.3 E-3	4.9 E-2
52D-SB08	11	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	5.0 E-3	3.2 E-4	1.3 E-3	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	4.3 E-3	1.7 E-3	1.7 E-2	NA	NA	NA	NA	2.4 E-5	NA	NA	1.5 E-3	4.9 E-2
52D-SB10	11	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	4.7 E-3	3.2 E+0	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	4.7 E-4	2.4 E-2	5.2 E-2	NA	NA	NA	NA	2.9 E-5	NA	NA	4.7 E-3	3.3 E+0
52D-SB11	11	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	6.3 E-4	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	6.0 E-4	1.8 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	3.0 E-2
52D-SB12	11	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	1.6 E-3	NA	9.0 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	1.6 E-2	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.3 E-2
52D-SB13	11	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	3.2 E-4	7.2 E-4	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	3.1 E-4	2.3 E-3	2.2 E-2	NA	NA	NA	NA	8.2 E-6	NA	NA	1.6 E-3	4.0 E-2
52D-SB14	11	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	4.7 E-3	2.0 E-4	NA	NA	7.9 E-3	NA	NA	NA	NA	NA	NA	9.0 E-4	6.6 E-4	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	3.2 E-2
52D-SB15	11	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	6.3 E-3	2.8 E-4	6.7 E-4	NA	8.6 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	4.9 E-4	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	4.1 E-2
52D-SB17	11	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	7.8 E-3	4.0 E-4	1.3 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	6.4 E-4	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.4 E-2

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
AW-AF1-SB01	11	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	1.7 E-3	2.8 E-4	6.7 E-4	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	4.1 E-4	1.9 E-3	3.2 E-2
AW-AF1-SB02	11	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	1.6 E-4	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	6.4 E-4	2.0 E-3	9.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.4 E-2
AW-AF1-SB03	11	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	4.3 E-4	4.9 E-3	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	4.7 E-4	3.3 E-3	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	5.5 E-2
AW-AF2-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	3.3 E-2
AW-AF2-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.0 E-2
D(b)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3	3.4 E-4	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	4.8 E-2
D(b)-SB03	11	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	5.8 E-3	3.4 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	2.1 E-2	1.3 E-3	2.0 E-2	NA	NA	NA	NA	8.7 E-6	NA	NA	1.4 E-3	6.7 E-2
D(b)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6
D(b)-SB05	11	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	6.8 E-3	3.0 E-4	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	2.7 E-3	7.2 E-4	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.3 E-2
D(c)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3
D(c)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	4.9 E-4	1.0 E-4	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	1.9 E-2	NA	NA	NA	NA	NA	NA	1.3 E-3	1.1 E-3	4.9 E-2
D(c)-SB04	11	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	2.3 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	3.3 E-4	1.6 E-3	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	5.2 E-2
08D-SB03	11.5	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	6.5 E-4	2.3 E-3	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	4.2 E-4	2.2 E-3	4.9 E-2	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	7.8 E-2
08D-SB04	11.5	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	2.3 E-3	NA	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	9.4 E-3	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	2.2 E-2
08D-SB05	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-SB06	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	4.9 E-4
52D-SB16	11.5	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	1.8 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.9 E-2

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																	
Unit Hazard Adult																																	
Unit Risk																																	
05D-SNS06	0	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	3.7 E-4	NA	NA	3.6 E-3	NA	NA	NA	NA	3.9 E-2	NA	3.1 E-3	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	5.8 E-3	1.5 E-3	6.9 E-2
08D-GS02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-5	NA	NA	1.0 E-3	NA	7.3 E-5	NA	NA	4.4 E-2	NA	NA	NA	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	5.0 E-2
D(b)-SD01	0	NA	3.7 E-8	2.3 E-3	NA	NA	NA	NA	NA	1.5 E-2	3.3 E-5	NA	NA	1.2 E-3	NA	NA	3.8 E-6	NA	NA	NA	4.5 E-4	8.8 E-4	1.9 E-3	NA	1.8 E-2	NA	3.6 E-6	NA	4.0 E-6	2.6 E-3	1.6 E-2	5.9 E-2
05D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	1.1 E-4	NA	NA	4.4 E-3	NA	NA	NA	NA	3.3 E-2	NA	2.4 E-3	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3	2.0 E-3	5.1 E-2
05D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-3	NA	NA	7.3 E-3	NA	NA	NA	NA	2.7 E-2	NA	6.0 E-3	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	2.4 E-2	4.5 E-3	9.0 E-2
05D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	4.0 E-4	NA	NA	6.1 E-3	NA	NA	NA	NA	3.2 E-2	NA	1.4 E-1	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	2.3 E-3	3.0 E-3	2.0 E-1
05D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	2.0 E-3	NA	NA	1.4 E-2	NA	NA	NA	NA	3.5 E-2	NA	7.4 E-3	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	4.4 E-2	6.4 E-3	1.4 E-1
05D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	1.7 E-4	NA	NA	3.7 E-3	NA	NA	NA	NA	2.5 E-2	NA	1.7 E-3	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	3.6 E-3	4.7 E-2
05D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	3.7 E-4	NA	NA	3.6 E-3	NA	NA	NA	NA	3.9 E-2	NA	3.1 E-3	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	1.5 E-3	6.5 E-2
06D-SNS01	0.01	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	1.7 E-2	9.2 E-3	NA	NA	1.8 E-2	NA	NA	NA	NA	7.4 E-2	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	3.6 E-1
06D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	1.6 E-3	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	6.2 E-3	NA	NA	NA	NA	NA	NA	NA	9.4 E-4	4.8 E-2
06D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	1.2 E-3	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	4.6 E-2
06D-SNS04	0.01	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	7.6 E-3	3.1 E-3	NA	NA	6.3 E-3	NA	NA	NA	NA	5.2 E-2	NA	4.8 E-4	NA	4.8 E-2	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	1.5 E-1
06D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	4.0 E-4	2.8 E-4	5.0 E-2
08D-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-3	2.9 E-5	NA	NA	2.1 E-3	NA	NA	NA	NA	1.2 E-2	NA	2.6 E-3	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	2.1 E-2	5.8 E-4	4.8 E-2
08D-GS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	NA	NA	1.2 E-3	NA	7.3 E-5	NA	NA	4.4 E-2	NA	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	5.0 E-2
08D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	6.3 E-5	NA	NA	1.8 E-3	NA	NA	NA	NA	8.8 E-2	NA	6.9 E-4	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	2.9 E-4	1.0 E-1
09D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	NA	NA	1.5 E-3	NA	NA	NA	NA	7.2 E-2	NA	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	7.8 E-2
09D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	4.7 E-2	NA	6.1 E-4	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	5.1 E-2
09D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	4.0 E-2
09D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	5.1 E-4	NA	NA	NA	NA	3.0 E-2	NA	4.7 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	3.3 E-2
12D-CS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	8.1 E-5	NA	NA	1.6 E-3	NA	NA	NA	NA	5.7 E-2	NA	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	6.6 E-4	6.4 E-4	6.6 E-2
12D-CS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	NA	1.8 E-3	NA	NA	NA	NA	2.8 E-2	NA	5.7 E-4	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	2.2 E-3	5.4 E-4	3.5 E-2
12D-SNS01	0.01	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	2.5 E-3	1.1 E-4	NA	NA	1.5 E-3	NA	NA	NA	NA	4.7 E-2	NA	7.0 E-4	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	1.2 E-3	8.1 E-2
12D-SNS02	0.01	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	8.1 E-4	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	7.2 E-2
12D-SNS03	0.01	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	7.0 E-4	3.8 E-4	7.6 E-2
12D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	1.4 E-3	NA	NA	NA	NA	4.7 E-2	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	6.9 E-4	3.6 E-4	5.2 E-2
12D-SNS05	0.01	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	2.0 E-3	7.8 E-5	NA	NA	2.3 E-3	NA	NA	NA	NA	6.0 E-2	NA	1.1 E-3	NA	3.6 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	8.4 E-4	9.2 E-2
12D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	5.1 E-4	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	3.1 E-2
12D-SNS07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	9.7 E-4	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	3.0 E-4	4.9 E-4	4.4 E-2
D(C)-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	5.1 E-4	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	4.8 E-4	1.2 E-4	2.4 E-2
09D-SD01	0.25	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	8.7 E-4	2.9 E-5	4.8 E-5	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	2.4 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	4.9 E-3
D(d)-SD01	0.25	NA	NA	9.6 E-3	NA	NA	NA	NA	NA	1.6 E-3	4.2 E-5	NA	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	1.8 E-3	4.4 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	7.4 E-5	5.0 E-3	2.6 E-2
05D-SNS08	0.5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	2.4 E-3	5.8 E-5	7.1 E-4	NA	2.0 E-3	NA	NA	1.5 E-6	NA	NA	NA	1.6 E-3	1.5 E-4	3.0 E-3	NA	NA	NA	8.3 E-7	NA	3.4 E-6	2.3 E-3	2.3 E-3	1.6 E-2
05D-SNS09	0.5	NA	4.7 E-8	5.1 E-4	NA	NA	NA	NA	1.3 E-6	2.5 E-3	5.3 E-5	NA	NA	1.8 E-3	NA	NA	7.3 E-6	NA	NA	NA	1.5 E-3	1.6 E-3	3.3 E-3	NA	NA	NA	2.6 E-6	NA	9.7 E-6	3.3 E-4	4.6 E-4	1.2 E-2
05D-SNS10	0.5	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	9.2 E-3	1.6 E-4	4.3 E-3	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	6.9 E-4	1.5 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	8.7 E-4	2.3 E-2
05D-SNS11	0.5	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	6.2 E-3	6.9 E-5	1.4 E-4	NA	1.0 E-3	NA	NA	2.6 E-7	NA	NA	NA	1.6 E-4	5.5 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	1.0 E-3	1.1 E-2
05D-SNS12	0.5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	6.7 E-2	1.5 E-4	2.0 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	2.7 E-4	3.3 E-3	NA	NA	NA	NA	NA	NA	1.8 E-4	1.6 E-3	7.9 E-2
05D-SNS13	0.5	NA	2.5 E-8	3.8 E-3	NA	NA	NA	NA	1.1 E-6	8.6 E-2	1.6 E-3	1.2 E-3	NA	8.5 E-3	NA	NA	3.0 E-6	NA	NA	NA	5.9 E-3	6.6 E-4	1.2 E-2	NA	NA	NA	1.4 E-6	NA	5.3 E-6	1.3 E-2	6.4 E-3	1.4 E-1
05D-SNS14	0.5	NA	NA	5.5 E-3	NA	NA	NA	NA	5.3 E-7	4.0 E-3	1.2 E-4	5.3 E-4	NA	4.8 E-3	NA	NA	1.7 E-6	NA	NA	NA	1.0 E-2	2.7 E-3	4.0 E-3	NA	NA	NA	7.6 E-7	NA	1.7 E-6	5.8 E-4	2.2 E-3	3.4 E-2
05D-SNS15	0.5	NA	2.6 E-8	2.1 E-3	NA	NA	NA	NA	1.8 E-6	2.5 E-2	2.1 E-3	5.0 E-4	NA	2.0 E-2	NA	NA	4.6 E-6	NA	NA	NA	9.1 E-3	4.1 E-3	2.1 E-2	NA	NA	NA	1.9 E-6	NA	7.6 E-6	1.2 E-2	6.4 E-3	1.0 E-1
05D-SNS16	0.5	NA	NA	1.1 E-3	NA	NA	NA	NA	6.0 E-6	7.3 E-3	4.5 E-5	6.0 E-5	NA	3.3 E-3	NA	NA	7.8 E-6	NA	NA	NA	3.2 E-3	2.5 E-4	2.4 E-3	NA	NA	NA	4.0 E-6	NA	2.5 E-5	1.2 E-3	9.6 E-3	2.8 E-2
05D-SNS17	0.5	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	8.9 E-3	4.2 E-4	4.7 E-4	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	5.0 E-4	1.5 E-4	4.0 E-3	NA	NA	NA	NA	NA	NA	4.9 E-3	2.1 E-3	2.7 E-2
05D-SNS18	0.5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	2.7 E-3	5.6 E-5	1.2 E-4	NA	2.8 E-3	NA	NA	1.1 E-6	NA	NA	NA	1.1 E-3	2.4 E-4	3.6 E-3	NA	1.1 E-2	NA	5.3 E-7	NA	1.9 E-6	1.7 E-4	1.1 E-3	2.6 E-2
05D-SNS19	0.5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.9 E-3	6.6 E-5	2.9 E-4	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	1.6 E-3	1.5 E-4	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	1.3 E-2
05D-SNS20	0.5	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	2.9 E-3	1.3 E-4	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	2.1 E-3	6.9 E-4	3.9 E-3	NA	NA	NA	NA	NA	NA	9.0 E-3	3.6 E-3	2.8 E-2
06D-SNS06	0.5	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	1.9 E-2	1.7 E-2	2.5 E-5	NA	2.3 E-2	NA	NA	1.1 E-7	NA	NA	NA	2.1 E-3	1.2 E-2	1.2 E-1	NA	NA	NA	NA	NA	NA	6.0 E-4	2.3 E-2	2.5 E-1
06D-SNS07	0.5	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	5.2 E-2	3.9 E-2	NA	NA	3.6 E-2	NA	NA	1.4 E-7	NA	NA	NA	6.4 E-3	1.9 E-2	1.3 E-1	NA	NA	NA	NA	NA	NA	3.0 E-3	2.1 E-2	4.8 E-1
06D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	2.5 E-2	NA	NA	2.3 E-2	NA	NA	3.8 E-7	NA	NA	NA	5.5 E-3	1.2 E-2	1.1 E-1	NA	NA	NA	3.6 E-7	NA	NA	1.7 E-3	1.6 E-2	2.2 E-1
06D-SNS09	0.5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	1.2 E-3	4.4 E-5	9.3 E-5	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	3.7 E-4	6.3 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	2.0 E-4	6.7 E-3
06D-SNS10	0.5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	1.1 E-3	6.2 E-5	1.1 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.6 E-3	1.2 E-4	2.7 E-3	NA	NA	NA	NA	NA	NA	1.6 E-4	2.1 E-4	8.2 E-3
06D-SNS11	0.5	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	1.3 E-3	6.4 E-5	4.1 E-5	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	2.3 E-4	1.2 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	9.6 E-5	2.2 E-4	6.3 E-3
08D-SB02	0.5	NA	7.6 E-8	NA	NA	NA	NA	NA	5.6 E-7	1.9 E-3	3.4 E-5	3.6 E-5	NA	8.5 E-4	NA	NA	2.0 E-6	NA	NA	NA	3.8 E-4	2.0 E-4	2.1 E-3	2.9 E-2	NA	NA	2.6 E-6	NA	2.6 E-6	6.0 E-3	2.6 E-4	4.1 E-2
08D-SB03	0.5	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	8.1 E-4	5.6 E-5	1.7 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	9.6 E-5	1.5 E-4	4.0 E-3	NA	NA	1.9 E-4	NA	NA	NA	NA	1.9 E-4	7.3 E-3
08D-SNS01	0.5	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	9.8 E-4	5.9 E-5	1.8 E-4	NA	1.5 E-3	NA	NA	1.3 E-7	NA	NA	NA	8.7 E-5	1.1 E-4	3.7 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	3.7 E-4	7.7 E-3
09D-SNS05	0.5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	4.0 E-3	1.6 E-4	1.2 E-4	NA	2.2 E-3	NA	NA	2.3 E-7	NA	NA	NA	7.3 E-4	2.7 E-4	4.3 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	7.8 E-4	1.5 E-2
09D-SNS06	0.5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	7.0 E-4	3.0 E-5	4.7 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	5.4 E-3
12D-SNS08	0.5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	8.3 E-4	4.3 E-5	3.5 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	5.7 E-3
12D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	6.1 E-5	9.9 E-4	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	2.6 E-4	3.5 E-4	6.4 E-3
52D-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	2.5 E-5	1.4 E-4	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	3.1 E-3	NA	NA	NA	NA	1.4 E-6	NA	NA	1.2 E-4	4.2 E-3
52D-SB16	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	3.1 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	1.9 E-6	NA	NA	3.2 E-4	5.0 E-3
52D-SNS01	0.5	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	2.2 E-3	2.6 E-4	4.0 E-3	NA	1.0 E-3	NA	NA	1.2 E-7	NA	NA	NA	7.3 E-4	3.8 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	4.4 E-4	1.6 E-2
52D-SNS02	0.5	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	5.7 E-3	1.2 E-4	1.2 E-3	NA	1.7 E-3	NA	NA	3.3 E-7	NA	NA	NA	7.8 E-4	2.7 E-4	5.6 E-3	NA	NA	NA	3.1 E-7	NA	NA	NA	1.1 E-3	2.3 E-2
52D-SNS03	0.5	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	1.1 E-3	3.1 E-5	6.0 E-5	NA	1.2 E-3	NA	NA	2.9 E-7	NA	NA	NA	5.5 E-5	1.7 E-4	2.2 E-3	NA	NA	NA	9.0 E-7	NA	1.0 E-6	NA	2.9 E-4	6.0 E-3
52D-SNS04	0.5	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	1.5 E-3	2.6 E-5	9.9 E-5	NA	8.9 E-4	NA	NA	2.4 E-7	NA	NA	NA	4.6 E-5	4.4 E-5	1.3 E-3	NA	NA	NA	1.9 E-7	NA	NA	NA	4.2 E-4	4.7 E-3
52D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Adult Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
D(c)-SNS01	0.5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	8.7 E-4	5.9 E-5	3.0 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	8.8 E-3
05D-SB01	1	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	8.4 E-4	2.6 E-5	7.1 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.6 E-4	1.3 E-4	1.7 E-3	8.1 E-3	NA	NA	NA	8.9 E-6	NA	NA	2.4 E-4	1.3 E-2
05D-SB02	1	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	5.6 E-4	3.4 E-5	4.1 E-3	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	4.6 E-3	2.7 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	1.6 E-2
05D-SB03	1	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	3.0 E-1	4.8 E-3	NA	NA	9.6 E-3	NA	NA	NA	NA	NA	NA	1.0 E-2	3.8 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	5.5 E-2	3.2 E-3	4.1 E-1
05D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	8.4 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	2.3 E-3	6.3 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	1.0 E-2
05D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	5.9 E-5	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	4.6 E-4	7.4 E-5	3.7 E-3	NA	NA	NA	NA	NA	NA	9.0 E-5	3.2 E-4	7.2 E-3
05D-SB06	1	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	1.5 E-2	6.1 E-4	3.3 E-4	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	2.7 E-4	4.0 E-3	2.7 E-1	NA	NA	NA	NA	NA	4.3 E-3	7.9 E-4	3.0 E-1
05D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	1.8 E-4	2.2 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	4.6 E-4	1.1 E-4	2.8 E-3	NA	8.5 E-2	NA	NA	NA	NA	9.6 E-4	4.5 E-4	9.6 E-2
05D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	4.3 E-5	5.0 E-5	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	6.6 E-5	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	6.7 E-3
05D-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	4.4 E-5	3.3 E-5	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	3.2 E-4	9.0 E-5	2.6 E-3	6.5 E-2	NA	NA	NA	NA	NA	3.3 E-4	2.1 E-4	7.0 E-2
05D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	8.0 E-5	7.7 E-5	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	1.4 E-3	6.3 E-5	6.6 E-3	4.9 E-3	NA	NA	NA	NA	NA	3.8 E-4	3.0 E-4	1.7 E-2
06D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	4.6 E-5	1.2 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	4.2 E-4	2.7 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	5.8 E-3
06D-SB06	1	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	5.2 E-3	2.6 E-4	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	7.8 E-4	4.1 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	5.9 E-4	1.4 E-2
08D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	9.1 E-4	NA	1.7 E-5	NA	NA	3.9 E-2	NA	NA	6.2 E-4	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.4 E-2
08D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	6.8 E-5	3.1 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	7.8 E-5	1.5 E-4	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	8.4 E-3
08D-SB04	1	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	8.9 E-4	5.5 E-5	2.7 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	9.6 E-5	1.9 E-4	3.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	7.2 E-3
08D-SB05	1	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	7.9 E-4	4.9 E-5	2.7 E-4	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	4.5 E-5	1.5 E-4	2.6 E-3	NA	NA	6.1 E-5	NA	NA	NA	NA	1.9 E-4	5.6 E-3
08D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	2.7 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	8.7 E-4	1.1 E-4	2.6 E-3	NA	NA	1.5 E-4	NA	NA	NA	NA	1.7 E-4	4.9 E-3
52D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5
52D-AH02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5
52D-FCS-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	6.0 E-4	NA	1.5 E-5	NA	NA	4.5 E-2	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	4.7 E-2
52D-SB01	1	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	1.2 E-3	NA	3.1 E-5	NA	NA	8.1 E-2	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	3.0 E-4	3.8 E-4	1.0 E-1
52D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	2.8 E-3	NA	NA	5.6 E-3	NA	2.8 E-5	NA	NA	8.4 E-2	NA	1.6 E-2	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	5.8 E-4	1.7 E-3	3.1 E-1
52D-SB04	1	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	6.2 E-4	2.8 E-5	8.2 E-5	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	3.7 E-3
52D-SB05	1	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	8.4 E-4	2.3 E-5	NA	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	4.4 E-5	6.9 E-5	1.6 E-3	NA	NA	NA	NA	5.2 E-6	NA	NA	2.3 E-4	3.9 E-3
52D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	2.7 E-5	NA	NA	3.1 E-4	NA	NA	NA	NA	NA	NA	1.8 E-5	5.8 E-5	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	4.1 E-3
52D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB08	1	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	7.3 E-4	2.6 E-5	1.2 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	4.7 E-3
52D-SB10	1	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	3.6 E-5	2.7 E-4	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	3.8 E-5	1.2 E-4	3.0 E-3	NA	NA	NA	NA	1.6 E-6	NA	NA	1.4 E-3	5.9 E-3
52D-SB11	1	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.0 E-4	1.6 E-3	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	4.3 E-4	2.7 E-4	2.1 E-3	NA	NA	NA	NA	4.1 E-6	NA	NA	5.5 E-4	9.6 E-3
52D-SB13	1	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	5.2 E-5	2.4 E-4	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	5.0 E-5	5.8 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	6.5 E-3
52D-SB14	1	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	8.1 E-4	2.0 E-5	4.4 E-5	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	1.2 E-5	NA	NA	2.2 E-4	3.9 E-3
52D-SB15	1	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	9.8 E-4	4.7 E-5	1.3 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	1.5 E-4	2.8 E-3	NA	NA	NA	NA	1.3 E-5	NA	NA	2.4 E-4	6.3 E-3
52D-SB17	1	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	9.5 E-4	5.6 E-5	9.9 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	6.4 E-5	8.2 E-5	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	6.2 E-3
AW-AF1-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-4	4.6 E-5	5.2 E-5	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	1.7 E-3	NA	NA	NA	NA	NA	NA	5.5 E-5	3.4 E-4	4.0 E-3
AW-AF1-SB02	1	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	2.4 E-5	3.9 E-5	NA	7.8 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	7.4 E-5	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	3.3 E-3
AW-AF1-SB03	1	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	3.6 E-5	4.1 E-5	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	2.6 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	4.3 E-3
AW-AF2-SB01	1	NA	NA	7.5 E-4	NA	NA	NA	NA	9.0 E-7	NA	4.7 E-5	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	2.1 E-4	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	7.4 E-3
AW-AF2-SB02	1	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	1.0 E-4	1.2 E-4	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	4.5 E-3
D(b)-SB01	1	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	5.4 E-4	3.1 E-5	1.1 E-4	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	3.0 E-4	1.5 E-4	2.2 E-3	NA	NA	NA	NA	7.0 E-7	NA	NA	1.4 E-4	4.9 E-3
D(b)-SB02	1	NA	NA	5.5 E-3	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-5	1.1 E-4	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	8.2 E-5	6.6 E-4	2.4 E-3	NA	NA	NA	NA	7.0 E-6	NA	NA	4.6 E-4	1.2 E-2
D(b)-SB03	1	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	1.7 E-3	8.4 E-5	2.3 E-4	NA	2.4 E-3	NA	NA	9.9 E-8	NA	NA	NA	6.4 E-4	2.2 E-4	5.8 E-3	NA	NA	NA	3.7 E-7	2.3 E-6	NA	NA	3.4 E-4	1.2 E-2
D(b)-SB04	1	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	4.2 E-6	NA	NA	8.5 E-6
D(b)-SB05	1	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	8.4 E-4	2.6 E-5	3.5 E-5	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	1.8 E-3	NA	NA	NA	2.8 E-7	2.9 E-5	NA	NA	2.5 E-4	4.4 E-3
D(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	9.8 E-4	NA	4.0 E-5	NA	NA	4.3 E-2	NA	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	4.8 E-2
D(c)-SB02	1	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	1.1 E-3	4.8 E-5	2.7 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	3.5 E-4	1.5 E-4	3.0 E-3	NA	NA	NA	NA	NA	NA	1.8 E-3	2.7 E-4	8.7 E-3
D(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	3.8 E-5	1.4 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	5.4 E-3
D(c)-SB04	1	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	7.5 E-4	5.5 E-5	2.2 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	7.3 E-5	2.1 E-4	3.2 E-3	NA	NA	2.2 E-5	NA	2.7 E-6	NA	NA	1.8 E-4	6.5 E-3
D(c)-SB05	1	NA	NA	2.9 E-4	NA	NA	NA	NA	4.4 E-6	7.0 E-4	3.9 E-5	3.3 E-4	NA	8.9 E-4	NA	NA	4.6 E-6	NA	NA	NA	2.2 E-4	9.9 E-5	2.4 E-3	NA	NA	NA	1.5 E-6	NA	6.7 E-6	NA	8.2 E-4	5.8 E-3
DC-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	9.8 E-4	NA	4.0 E-5	NA	NA	4.3 E-2	NA	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	4.8 E-2
06D-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	3.7 E-5	7.1 E-5	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	3.5 E-4	3.0 E-4	3.3 E-3	NA	NA	NA	NA	NA	NA	2.1 E-5	2.1 E-4	6.2 E-3
06D-SB04	1.5	NA	NA	7.5 E-4	NA	NA	NA	NA	NA	2.9 E-4	3.8 E-5	7.1 E-5	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	2.2 E-4	5.9 E-3	NA	NA	NA	NA	NA	NA	4.1 E-5	2.5 E-4	1.1 E-2
06D-SB05	1.5	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	2.4 E-2	1.9 E-4	8.8 E-4	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	3.3 E-3	1.4 E-3	6.9 E-3	NA	NA	NA	NA	NA	NA	4.9 E-4	3.6 E-4	4.2 E-2
09D-SD01	1.5	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	8.3 E-4	5.8 E-5	2.1 E-4	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	5.8 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	5.2 E-3
52D-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.8 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	4.8 E-3
05D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-3	3.9 E-5	NA	NA	1.4 E-3	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	4.7 E-4	6.6 E-4	4.2 E-2
05D-SNS08	2.5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	2.4 E-3	6.6 E-5	9.9 E-4	NA	2.5 E-3	NA	NA	8.3 E-7	NA	NA	NA	2.2 E-3	1.9 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	6.6 E-3	1.5 E-3	2.0 E-2
05D-SNS09	2.5	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	1.5 E-3	3.3 E-5	1.2 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	4.6 E-4	1.3 E-3	2.1 E-3	NA	NA	NA	NA	NA	NA	5.5 E-4	3.4 E-4	7.9 E-3
05D-SNS10	2.5	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	1.4 E-3	3.9 E-5	1.3 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	6.4 E-5	1.7 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	5.7 E-3
05D-SNS11	2.5	NA	NA	8.6 E-4	NA	NA	NA	NA	NA	1.0 E-2	8.8 E-5	2.7 E-3	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	8.2 E-4	1.7 E-4	2.5 E-3	NA	NA	NA	NA	NA	NA	1.4 E-4	5.0 E-4	1.9 E-2
05D-SNS12	2.5	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	6.5 E-3	8.8 E-4	7.7 E-5	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	4.1 E-5	1.4 E-3	2.5 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	1.1 E-3	1.7 E-2
05D-SNS13	2.5	NA	NA	9.2 E-4	NA	NA	NA	NA	NA	2.4 E-2	3.5 E-4	6.6 E-4	NA	2.6 E-3	NA	NA	6.2 E-7	NA	NA	NA	1.6 E-3	3.0 E-4	4.4 E-3	NA	NA	NA	2.8 E-7	NA	1.0 E-6	6.0 E-3	1.6 E-3	4.2 E-2
05D-SNS14	2.5	NA	NA	3.4 E-3	NA	NA	NA	NA	NA	1.5 E-2	1.6 E-3	4.5 E-4	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	1.3 E-2	1.4 E-3	4.8 E-3	NA	NA	NA	NA	NA	NA	2.7 E-3	3.2 E-3	6.7 E-2
05D-SNS15	2.5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.0 E-2	1.4 E-4	4.8 E-4	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	5.0 E-4	6.6 E-4	9.9 E-3	NA	NA	NA	NA	NA	NA	2.4 E-3	8.2 E-4	2.9 E-2
05D-SNS16	2.5	NA	NA	NA	NA	NA	NA	NA	6.6 E-7	6.2 E-3	7.5 E-5	3.5 E-4	NA	2.4 E-3	NA	NA	7.8 E-7	NA	NA	NA	6.9 E-4	4.4 E-4	3.2 E-3	NA	NA	NA	6.3 E-7	NA	2.1 E-6	1.1 E-3	9.1 E-3	2.4 E-2
05D-SNS17	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-3	5.3 E-5	2.4 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	3.2 E-4	5.8 E-5	2.9 E-3	NA	NA	NA	NA	NA	NA	3.0 E-4	4.2 E-4	9.1 E-3

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
05D-SNS18	2.5	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	1.6 E-3	4.8 E-5	2.4 E-4	NA	2.7 E-3	NA	NA	1.2 E-7	NA	NA	NA	8.2 E-4	1.2 E-4	3.0 E-3	NA	6.9 E-3	NA	NA	NA	NA	NA	8.2 E-4	1.8 E-2
05D-SNS19	2.5	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	1.1 E-3	4.7 E-5	2.5 E-4	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	1.6 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	6.8 E-3
05D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	3.3 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	1.4 E-4	3.0 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	2.3 E-4	5.7 E-3
06D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	1.6 E-3	NA	NA	NA	NA	4.1 E-2	NA	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	5.0 E-2
06D-SNS06	2.5	NA	NA	7.9 E-3	NA	NA	NA	NA	NA	4.8 E-3	4.1 E-3	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	2.6 E-3	1.3 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	3.0 E-4	2.1 E-3	4.1 E-2
06D-SNS07	2.5	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	5.9 E-3	5.2 E-3	NA	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	7.3 E-4	2.0 E-3	2.5 E-2	NA	NA	NA	NA	NA	NA	3.0 E-4	3.6 E-3	6.6 E-2
06D-SNS08	2.5	NA	NA	5.5 E-3	NA	NA	NA	NA	NA	2.2 E-3	9.1 E-4	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	5.0 E-4	6.6 E-4	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.1 E-2
06D-SNS09	2.5	NA	NA	8.6 E-4	NA	NA	NA	NA	NA	7.8 E-4	4.3 E-5	5.4 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	1.5 E-4	2.6 E-3	NA	NA	2.5 E-3	NA	NA	NA	NA	1.6 E-4	8.6 E-3
06D-SNS10	2.5	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	6.2 E-4	3.2 E-5	1.4 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	1.2 E-4	2.2 E-4	1.9 E-3	NA	NA	1.0 E-3	NA	NA	NA	9.0 E-5	1.4 E-4	5.8 E-3
06D-SNS11	2.5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.6 E-3	6.9 E-5	2.7 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	2.4 E-4	2.3 E-3	NA	NA	3.7 E-3	NA	NA	NA	1.2 E-4	2.7 E-4	1.1 E-2
08D-SNS01	2.5	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	1.0 E-3	7.0 E-5	2.0 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	5.0 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	3.2 E-4	8.9 E-3
09D-SNS05	2.5	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	2.7 E-3	9.0 E-5	8.2 E-5	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	4.4 E-4	2.1 E-4	3.3 E-3	NA	NA	NA	NA	NA	NA	4.4 E-4	3.8 E-4	1.2 E-2
09D-SNS06	2.5	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	1.0 E-3	6.3 E-5	2.0 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	8.2 E-3
12D-SNS08	2.5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	2.7 E-3	4.9 E-5	1.3 E-4	NA	1.3 E-3	NA	NA	2.1 E-7	NA	NA	NA	1.9 E-4	7.7 E-5	2.6 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	4.3 E-4	8.8 E-3
12D-SNS09	2.5	NA	NA	7.5 E-4	NA	NA	NA	NA	NA	2.9 E-4	5.8 E-5	4.9 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.2 E-4	1.9 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	7.1 E-4	3.4 E-4	7.2 E-3
52D-SNS01	2.5	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	1.1 E-3	4.3 E-5	1.9 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	2.5 E-3	2.3 E-3	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	1.2 E-2
52D-SNS02	2.5	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	1.3 E-3	5.1 E-5	7.1 E-4	NA	1.5 E-3	NA	NA	2.2 E-7	NA	NA	NA	1.5 E-4	1.2 E-4	2.6 E-3	NA	NA	NA	1.9 E-7	NA	NA	NA	3.6 E-4	9.7 E-3
52D-SNS03	2.5	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	1.6 E-3	2.9 E-5	5.4 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	5.0 E-5	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	6.7 E-3
52D-SNS04	2.5	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	6.4 E-4	2.6 E-5	2.1 E-4	NA	7.0 E-4	NA	NA	NA	NA	NA	NA	7.8 E-5	1.1 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	1.2 E-4	3.9 E-3
52D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SNS01	2.5	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	6.8 E-4	7.1 E-5	3.4 E-4	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	7.8 E-3
05D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	9.8 E-4	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	4.1 E-2
09D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	7.2 E-4	NA	NA	NA	NA	4.1 E-2	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	4.4 E-2
09D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	5.4 E-2	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	5.8 E-2
09D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	5.2 E-2	NA	3.4 E-3	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	6.1 E-2
09D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-5	NA	NA	9.5 E-4	NA	NA	NA	NA	5.9 E-2	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	6.4 E-2
12D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	7.5 E-4	NA	NA	NA	NA	5.3 E-2	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	2.9 E-4	1.7 E-4	5.6 E-2
12D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	5.2 E-2	NA	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	5.6 E-2
12D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-5	NA	NA	1.4 E-3	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	3.0 E-4	2.0 E-4	4.8 E-2
12D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	5.5 E-2	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	5.9 E-2
12D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	5.2 E-2	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	5.6 E-2
12D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	7.7 E-4	NA	NA	NA	NA	5.0 E-2	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	3.7 E-4	2.3 E-4	5.4 E-2
12D-SNS07	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	5.2 E-4	NA	NA	NA	NA	3.4 E-2	NA	5.0 E-4	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.7 E-2
52D-AH03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5
52D-SB09	4.5	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4	3.7 E-5	2.2 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	7.9 E-5	3.9 E-3	NA	NA	NA	NA	4.0 E-6	NA	NA	2.0 E-4	5.9 E-3
05D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	7.9 E-4	NA	2.1 E-5	NA	NA	2.5 E-2	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	2.8 E-2
05D-SB01	5	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	6.0 E-4	3.7 E-5	2.4 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	9.1 E-5	1.6 E-3	2.1 E-3	NA	NA	NA	NA	1.1 E-6	NA	NA	1.4 E-4	6.6 E-3
05D-SB02	5	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	4.0 E-2	1.0 E-3	9.9 E-4	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	3.7 E-4	9.9 E-4	5.9 E-3	NA	NA	NA	NA	NA	NA	6.0 E-3	1.2 E-3	6.0 E-2
05D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.9 E-3
05D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	9.1 E-5	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	6.0 E-3
05D-SNS12	5	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	3.0 E-4	3.0 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	7.8 E-4	2.5 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	1.8 E-5	2.1 E-4	5.3 E-3
05D-SNS13	5	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	9.4 E-4	3.6 E-5	1.6 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	2.6 E-3	9.6 E-5	2.2 E-3	NA	NA	NA	NA	NA	NA	6.6 E-5	2.0 E-4	8.0 E-3
05D-SNS14	5	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	2.2 E-3	9.1 E-5	1.3 E-3	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	1.1 E-4	3.6 E-3	NA	NA	NA	NA	NA	NA	2.3 E-3	8.7 E-4	1.5 E-2
05D-SNS15	5	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	6.4 E-3	7.9 E-5	1.5 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	2.6 E-4	2.2 E-4	4.2 E-3	NA	NA	NA	NA	NA	NA	4.1 E-3	5.5 E-4	2.0 E-2
05D-SNS16	5	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	3.2 E-3	3.5 E-5	2.5 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	3.6 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	4.7 E-4	3.8 E-3	1.1 E-2
05D-SNS20	5	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	3.9 E-5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	1.6 E-4	1.8 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	2.1 E-4	5.2 E-3
06D-SB02	5	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	1.5 E-3	7.5 E-4	2.4 E-1	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	6.9 E-4	7.2 E-3	NA	NA	NA	NA	NA	NA	NA	9.6 E-4	2.5 E-1
06D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	7.5 E-5	6.6 E-5	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	5.0 E-4	2.2 E-4	1.4 E-2	NA	NA	NA	NA	NA	NA	2.5 E-5	2.6 E-4	1.7 E-2
06D-SB04	5	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	1.7 E-4	2.5 E-5	6.0 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	2.2 E-4	2.8 E-3	NA	NA	NA	NA	NA	NA	2.7 E-5	1.7 E-4	5.2 E-3
06D-SB05	5	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	1.3 E-4	2.1 E-5	5.4 E-5	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	2.3 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	1.9 E-5	1.3 E-4	3.7 E-3
06D-SB06	5	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	2.4 E-4	2.9 E-5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	8.7 E-5	3.3 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	2.4 E-5	1.6 E-4	4.9 E-3
08D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	9.6 E-4	NA	4.8 E-5	NA	NA	4.4 E-2	NA	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.9 E-2
08D-AH02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	1.0 E-3	NA	3.1 E-5	NA	NA	3.8 E-2	NA	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.5 E-2
08D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-4	7.6 E-5	1.9 E-4	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	8.7 E-5	1.2 E-4	6.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	9.5 E-3
08D-SB02	5	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	9.5 E-4	5.8 E-5	3.9 E-4	NA	1.0 E-3	NA	NA	8.8 E-7	NA	NA	NA	1.1 E-4	1.5 E-4	4.1 E-3	3.6 E-3	NA	NA	1.1 E-6	NA	1.2 E-6	2.0 E-4	2.0 E-4	1.1 E-2
08D-SB03	5	NA	NA	7.5 E-4	NA	NA	NA	NA	NA	9.7 E-4	6.2 E-5	2.0 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	7.5 E-3
08D-SB04	5	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	8.9 E-4	5.9 E-5	1.9 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	8.2 E-5	1.2 E-4	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	7.5 E-3
08D-SB05	5	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	5.4 E-4	4.9 E-5	1.6 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	5.8 E-3
08D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	4.7 E-5	1.8 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.9 E-3	NA	NA	3.5 E-5	NA	NA	NA	NA	2.0 E-4	4.9 E-3
09D-SD01	5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	9.1 E-4	6.6 E-5	2.6 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	1.3 E-4	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	6.9 E-3
52D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5
52D-AH03	5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
52D-SA-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	7.8 E-5	NA	NA	1.4 E-3	NA	3.8 E-4	NA	NA	3.6 E-2	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	3.2 E-4	2.4 E-4	4.3 E-2
52D-SB01	5	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	2.5 E-3	NA	1.1 E-4	NA	NA	9.2 E-2	NA	1.5 E-3	NA	6.6 E-3	NA	NA	NA	NA	NA	NA	2.9 E-4	2.8 E-4	1.2 E-1
52D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.7 E-2
52D-SB05	5	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	8.3 E-4	2.5 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	5.9 E-5	1.0 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	4.6 E-3

		Adult Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
52D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	2.8 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	2.3 E-3	NA	NA	NA	NA	1.7 E-6	NA	NA	3.3 E-4	5.3 E-3
52D-SB07	5	NA	6.4 E-7	NA	NA	NA	NA	NA	6.4 E-6	1.0 E-3	2.6 E-5	NA	NA	4.8 E-3	NA	NA	2.8 E-5	NA	NA	NA	6.4 E-5	1.0 E-4	2.2 E-3	NA	NA	NA	3.1 E-5	NA	5.1 E-5	NA	1.3 E-3	9.7 E-3
52D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	3.0 E-5	9.9 E-5	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	3.2 E-3	NA	NA	NA	NA	1.5 E-5	NA	NA	1.3 E-4	4.4 E-3
52D-SB10	5	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	4.0 E-5	1.7 E-4	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	4.3 E-5	1.4 E-4	3.1 E-3	NA	NA	NA	NA	2.3 E-5	NA	NA	4.6 E-4	5.1 E-3
52D-SB11	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	7.1 E-4	3.7 E-5	3.1 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	6.4 E-3	2.0 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	1.1 E-2
52D-SB13	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	3.7 E-5	1.3 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.5 E-4	4.4 E-4	2.0 E-3	NA	NA	NA	NA	3.5 E-6	NA	NA	1.5 E-4	4.4 E-3
52D-SB14	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	3.7 E-5	1.9 E-4	5.8 E-3	NA	NA	NA	NA	4.7 E-6	NA	NA	1.5 E-4	8.0 E-3
52D-SB15	5	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	6.4 E-4	2.8 E-5	7.7 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	3.0 E-4	1.9 E-3	NA	NA	NA	1.7 E-7	3.9 E-6	NA	NA	1.4 E-4	5.7 E-3
52D-SB17	5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.6 E-3	8.6 E-5	2.6 E-4	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	3.9 E-4	1.6 E-4	7.4 E-3	NA	NA	NA	NA	NA	NA	3.6 E-5	3.3 E-4	1.4 E-2
AW-AF1-SB01	5	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	4.3 E-4	4.2 E-5	2.0 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	3.6 E-5	1.6 E-4	4.7 E-3
AW-AF1-SB02	5	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	2.1 E-5	1.2 E-5	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	3.4 E-4	2.5 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	3.8 E-3
AW-AF1-SB03	5	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	1.6 E-5	4.4 E-5	NA	7.0 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	1.7 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	2.5 E-3
AW-AF2-SB01	5	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	5.6 E-5	NA	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	4.1 E-5	1.6 E-4	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	5.5 E-3
AW-AF2-SB02	5	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	5.9 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	4.5 E-5	1.5 E-4	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	5.9 E-3
D(b)-SB01	5	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	5.4 E-4	2.4 E-5	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	NA	1.8 E-4	1.3 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.5 E-3
D(b)-SB02	5	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	7.1 E-4	3.0 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	5.5 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	5.0 E-3
D(b)-SB03	5	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	5.4 E-4	3.1 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.8 E-5	4.1 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	4.6 E-3
D(b)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	9.7 E-7	NA	NA	2.0 E-6
D(b)-SB05	5	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	5.0 E-5	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.7 E-3
D(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	1.0 E-3	NA	2.5 E-5	NA	NA	4.5 E-2	NA	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	5.0 E-2
D(c)-SB02	5	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	7.8 E-4	5.1 E-5	4.7 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.7 E-5	2.0 E-4	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	6.1 E-3
D(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	4.9 E-5	7.7 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	1.5 E-4	1.1 E-4	4.9 E-3
D(c)-SB04	5	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	6.4 E-5	3.5 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.8 E-5	2.7 E-4	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	6.1 E-3
D(c)-SB05	5	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	8.1 E-4	4.7 E-5	1.9 E-4	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	5.4 E-3
DC-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	1.0 E-3	NA	2.5 E-5	NA	NA	4.5 E-2	NA	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	5.0 E-2
52D-SB16	5.5	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	4.9 E-5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	5.8 E-6	NA	NA	1.5 E-4	4.5 E-3
06D-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	9.7 E-4	NA	2.1 E-5	NA	NA	2.9 E-2	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.1 E-2
52D-FCS-SB01	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	9.4 E-4	NA	1.3 E-5	NA	NA	4.1 E-2	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	4.5 E-2
05D-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	1.4 E-3	NA	3.4 E-5	NA	NA	3.0 E-2	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	3.3 E-2
05D-SNS12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	7.8 E-5	3.0 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	2.5 E-5	1.8 E-4	4.0 E-3
05D-SNS13	10	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-3	1.4 E-4	1.2 E-3	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	3.6 E-4	4.7 E-3	NA	NA	NA	NA	NA	NA	2.1 E-3	1.1 E-3	2.1 E-2
05D-SNS14	10	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-3	1.5 E-4	1.6 E-3	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	1.6 E-3	5.5 E-4	4.5 E-3	NA	NA	NA	NA	NA	NA	3.0 E-3	5.5 E-4	2.2 E-2
05D-SNS15	10	NA	NA	9.6 E-4	NA	NA	NA	NA	NA	1.0 E-2	1.0 E-4	1.8 E-3	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	3.8 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	3.0 E-3	4.6 E-4	2.2 E-2
05D-SNS16	10	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	1.6 E-4	4.1 E-5	2.7 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	2.0 E-4	2.8 E-3	NA	NA	NA	NA	NA	NA	4.4 E-5	2.0 E-4	5.8 E-3
05D-SNS20	10	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	3.8 E-4	3.3 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	7.7 E-5	2.1 E-4	7.5 E-3
06D-SNS07	10	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	1.9 E-4	8.0 E-5	4.5 E-4	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	2.1 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	2.7 E-5	1.9 E-4	5.7 E-3
08D-AH02	10	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	2.1 E-3	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.8 E-2
52D-AH02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5
52D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	1.1 E-3	NA	1.4 E-5	NA	NA	4.1 E-2	NA	4.9 E-4	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.6 E-2
52D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5
D(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	9.1 E-4	NA	3.7 E-5	NA	NA	3.4 E-2	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.0 E-2
DC-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	9.1 E-4	NA	3.8 E-5	NA	NA	3.4 E-2	NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.0 E-2
52D-SB09	10.5	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	1.9 E-5	1.5 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	1.4 E-3	NA	NA	NA	NA	1.7 E-6	NA	NA	2.8 E-4	3.9 E-3
D(c)-SB05	10.5	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	7.7 E-5	3.2 E-4	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	2.9 E-5	2.3 E-4	4.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	7.2 E-3
05D-SB01	11	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	6.0 E-4	2.4 E-5	2.0 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	9.1 E-5	9.6 E-5	2.4 E-3	NA	NA	NA	NA	7.7 E-6	NA	NA	1.3 E-4	5.1 E-3
05D-SB02	11	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	4.8 E-4	4.5 E-5	2.5 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	3.0 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	7.2 E-3
06D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	6.7 E-4	3.5 E-1	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	5.8 E-4	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	7.8 E-4	3.6 E-1
06D-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	3.8 E-5	8.8 E-5	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	2.3 E-4	3.9 E-3	NA	NA	NA	NA	NA	NA	2.6 E-5	2.9 E-4	6.7 E-3
06D-SB04	11	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	1.9 E-4	3.2 E-5	5.5 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	2.2 E-4	1.5 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	2.5 E-5	1.4 E-4	5.4 E-3
06D-SB05	11	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	1.7 E-4	3.1 E-5	5.5 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	1.7 E-4	3.5 E-3	NA	NA	NA	NA	NA	NA	2.2 E-5	1.9 E-4	6.1 E-3
06D-SB06	11	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	1.6 E-4	3.6 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	8.8 E-5	3.2 E-3	NA	NA	NA	NA	NA	NA	1.4 E-5	1.5 E-4	5.3 E-3
08D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	6.3 E-5	1.4 E-4	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	8.7 E-5	5.5 E-4	3.5 E-3	NA	NA	1.1 E-4	NA	NA	NA	1.2 E-4	1.6 E-4	6.9 E-3
08D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	7.8 E-5	2.2 E-4	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	4.6 E-5	8.5 E-4	5.9 E-3	NA	NA	NA	NA	NA	NA	3.8 E-4	2.1 E-4	1.1 E-2
08D-SB05	11	NA	NA	7.5 E-4	NA	NA	NA	NA	NA	NA	4.2 E-5	2.0 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	5.7 E-3
08D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4
52D-SB05	11	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	3.6 E-3
52D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	2.8 E-5	2.0 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.5 E-5	6.6 E-5	2.3 E-3	NA	NA	NA	NA	2.7 E-6	NA	NA	2.5 E-4	5.4 E-3
52D-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	3.5 E-5	1.7 E-4	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	4.6 E-6	NA	NA	3.6 E-4	5.6 E-3
52D-SB08	11	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	5.6 E-4	3.4 E-5	1.6 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	4.6 E-4	1.8 E-4	2.1 E-3	NA	NA	NA	NA	2.8 E-6	NA	NA	1.6 E-4	5.6 E-3
52D-SB10	11	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	5.0 E-4	3.9 E-1	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	5.0 E-5	2.5 E-3	6.4 E-3	NA	NA	NA	NA	3.4 E-6	NA	NA	5.0 E-4	4.1 E-1
52D-SB11	11	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	2.2 E-5	7.7 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	6.4 E-5	2.0 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.5 E-3
52D-SB12	11	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	NA	3.8 E-5	1.9 E-4	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	1.2 E-4	1.7 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.8 E-3
52D-SB13	11	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	3.4 E-5	8.8 E-5	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	3.3 E-5	2.4 E-4	2.7 E-3	NA	NA	NA	NA	9.6 E-7	NA	NA	1.7 E-4	4.7 E-3
52D-SB14	11	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	5.2 E-4	2.2 E-5	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	9.6 E-5	7.1 E-5	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.7 E-3
52D-SB15	11	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	7.0 E-4	3.0 E-5	8.2 E-5	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	5.2 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.7 E-3
52D-SB17	11	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	8.7 E-4	4.3 E-5	1.5 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	1.6 E-4	6.9 E-5	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	6.2 E-3

		Adult Non-Cancer Hazard Index																													
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**	**HI**
Unit Hazard Child																																	
Unit Hazard Adult																																	
Unit Risk																																	
AW-AF1-SB01	11	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	1.9 E-4	3.0 E-5	8.2 E-5	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	4.4 E-5	2.1 E-4	3.6 E-3
AW-AF1-SB02	11	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	2.0 E-5	1.9 E-5	NA	7.8 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	2.2 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.8 E-3
AW-AF1-SB03	11	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	4.7 E-5	6.0 E-4	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	5.0 E-5	3.6 E-4	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	6.4 E-3
AW-AF2-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	4.0 E-3
AW-AF2-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.7 E-3
D(b)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-4	3.7 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	5.5 E-3
D(b)-SB03	11	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	6.5 E-4	3.7 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.3 E-3	1.4 E-4	2.5 E-3	NA	NA	NA	NA	1.0 E-6	NA	NA	1.5 E-4	7.5 E-3
D(b)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7
D(b)-SB05	11	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	7.6 E-4	3.2 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.9 E-4	7.7 E-5	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	6.0 E-3
D(c)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
D(c)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	5.2 E-5	1.3 E-5	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	2.4 E-3	NA	NA	NA	NA	NA	NA	1.4 E-4	1.1 E-4	5.6 E-3
D(c)-SB04	11	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	5.5 E-5	2.9 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	3.5 E-5	1.7 E-4	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	6.1 E-3
08D-SB03	11.5	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	2.9 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	4.5 E-5	2.4 E-4	6.0 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	9.1 E-3
08D-SB04	11.5	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	2.0 E-5	2.9 E-4	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	2.6 E-3
08D-SB05	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-SB06	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	NA	NA	NA	5.3 E-5
52D-SB16	11.5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	1.9 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	3.3 E-3

		Incremental Lifetime Cancer Risk																														Incremental Lifetime Cancer Risk
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
05D-SNS06	0	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
08D-GS02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SD01	0	NA	NA	NA	2.1 E-8	5.6 E-7	2.0 E-7	NA	NA	1.5 E-8	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	3 E-6
05D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
05D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
05D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
05D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
05D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
05D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
06D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
06D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
06D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
06D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
06D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
08D-GS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
09D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
09D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
09D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
09D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12D-CS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
12D-CS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
12D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
12D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12D-SNS07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(C)-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
09D-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	4.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
D(d)-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
05D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	7.3 E-8	8.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
05D-SNS09	0.5	NA	NA	NA	1.1 E-7	2.4 E-6	6.1 E-7	NA	NA	2.6 E-9	NA	NA	2.3 E-8	NA	1.1 E-7	NA	NA	5.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
05D-SNS10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-9	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
05D-SNS11	0.5	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-9	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
05D-SNS12	0.5	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
05D-SNS13	0.5	NA	NA	NA	3.1 E-8	6.9 E-7	2.6 E-7	NA	NA	8.9 E-8	NA	1.2 E-7	1.0 E-8	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
05D-SNS14	0.5	NA	NA	NA	2.6 E-8	8.5 E-7	2.5 E-7	NA	NA	4.1 E-9	NA	5.4 E-8	9.3 E-9	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
05D-SNS15	0.5	NA	NA	NA	3.2 E-8	1.1 E-6	4.2 E-7	3.4 E-7	NA	2.6 E-8	NA	5.1 E-8	2.0 E-8	NA	NA	NA	NA	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
05D-SNS16	0.5	NA	NA	NA	7.6 E-8	NA	6.9 E-7	NA	NA	7.5 E-9	NA	6.1 E-9	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
05D-SNS17	0.5	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
05D-SNS18	0.5	NA	NA	NA	1.5 E-8	3.7 E-7	1.0 E-7	NA	NA	2.8 E-9	NA	1.2 E-8	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	2 E-6
05D-SNS19	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
05D-SNS20	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
06D-SNS06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
06D-SNS07	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
06D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
06D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	9.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
06D-SNS10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
06D-SNS11	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	4.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
08D-SB02	0.5	NA	NA	NA	3.5 E-8	5.3 E-7	8.2 E-8	NA	NA	2.0 E-9	NA	3.6 E-9	6.1 E-9	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	NA	NA	NA	4 E-6
08D-SB03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
08D-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
09D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-9	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
09D-SNS06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
12D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
12D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
52D-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52D-SB16	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
52D-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	4.1 E-7	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
52D-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-9	NA	1.2 E-7	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
52D-SNS03	0.5	NA	NA	NA	8.2 E-9	NA	3.7 E-8	NA	NA	1.2 E-9	NA	6.1 E-9	9.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
52D-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR
Unit Hazard Child																																											
Unit Hazard Adult																																											
Unit Risk																																											
D(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
05D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-10	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7
05D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
05D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
05D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
05D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
05D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5
05D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	NA	NA	NA	NA	9 E-6
05D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
05D-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6
05D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
06D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
06D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
08D-AH101	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
08D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-10	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
08D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
08D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
52D-AH101	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-AH02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-FCS-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
52D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-10	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
52D-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
52D-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
52D-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52D-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
AW-AF1-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
AW-AF1-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
AW-AF1-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
AW-AF2-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
AW-AF2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
D(b)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
D(b)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	2.3 E-8	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
D(b)-SB04	1	NA	NA	NA	7.9 E-8	1.6 E-6	3.2 E-7	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
D(b)-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-10	NA	3.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
D(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
D(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
D(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
D(c)-SB05	1	NA	NA	NA	1.2 E-7	2.6 E-6	5.3 E-7	NA	NA	7.2 E-10	NA	3.4 E-8	2.9 E-8	NA	2.9 E-7	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
DC-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
06D-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
06D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
06D-SB05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	8.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
09D-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
05D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
05D-SNS08	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
05D-SNS09	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
05D-SNS10	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
05D-SNS11	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
05D-SNS12	2.5	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
05D-SNS13	2.5	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	2.5 E-8	NA	6.7 E-8	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
05D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
05D-SNS15	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
05D-SNS16	2.5	NA	NA	NA	7.9 E-9	1.9 E-7	7.9 E-8	NA	NA	6.4 E-9	NA	3.5 E-8	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
05D-SNS17	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

| | | Incremental Lifetime Cancer Risk | | |

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																																									
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR
Unit Hazard Child																																											
Unit Hazard Adult																																											
Unit Risk																																											
52D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
52D-SB07	5	NA	NA	NA	5.3 E-7	9.0 E-6	1.2 E-6	NA	NA	1.1 E-9	NA	NA	1.1 E-7	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
52D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52D-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
52D-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52D-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
52D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
AW-AF1-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
AW-AF1-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
AW-AF1-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
AW-AF2-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AW-AF2-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
D(b)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
D(b)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
D(b)-SB04	5	NA	NA	NA	1.4 E-8	1.9 E-7	2.9 E-8	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
D(b)-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-10	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
D(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
D(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
D(c)-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
DC-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB16	5.5	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
06D-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-FCS-SB01	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
05D-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
05D-SNS12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
05D-SNS13	10	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-9	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
05D-SNS14	10	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-9	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
05D-SNS15	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
05D-SNS16	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
05D-SNS20	10	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
06D-SNS07	10	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
08D-AH02	10	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
52D-AH02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DC-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB09	10.5	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-10	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
D(c)-SB05	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
05D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
05D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
06D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	3.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-5
06D-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
06D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
06D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
06D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
08D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
08D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
08D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
08D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB08	11	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-5
52D-SB11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
52D-SB12	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SB13	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52D-SB14	11	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52D-SB15	11	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52D-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8

Table 5.2-47
Location-Specific Soil Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**	**ILCR**
Unit Hazard Child																																
Unit Hazard Adult																																
Unit Risk																																
AW-AF1-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
AW-AF1-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
AW-AF1-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
AW-AF2-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AW-AF2-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
D(b)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
D(b)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
D(b)-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
D(c)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
D(c)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
D(c)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
08D-SB03	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
08D-SB04	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
08D-SB05	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-SB06	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB16	11.5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10

Notes and Key:

All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+2	2.8 E+0	7.5 E-1	2.2 E+1	4.6 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	4.9 E+1
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+2	1.2 E+0	3.2 E-1	9.6 E+0	2.0 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1
Unit Risk		NA	8.5 E-4	NA	3.3 E-3	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	1.2 E-2
08D-SP07-10	10							140	13		4.8	840	18		17		
08D-SP08-10	10							260			7.8	830	66		32	26	
08D-SP09-10	10							65				250	26		95		
52D-SP24-10	10	12000	110	10			220			10			6.0				35
52D-SP25-10	10	2500	20	8.3			1700			8.2	41		10		80		24
52D-SP26-10	10	1300		18						11							
52D-SP29-10	10	1200											81		88		
52D-SP30-10	10	160										74	7.5		56		14
52D-SP31-10	10	1100	5.9										14		8.8		
52D-SP32-10	10	12000	53												39		
52D-SP33-10	10	98	9.7	9.5			820	20		10		110	12		14		29
52D-SP35-10	10	34										130			20		
52D-SP36-10	10	51										73			7.0		
52D-SP37-10	10	42				18			15						72		
52D-SP38-10	10	10													60		
52D-SP39-10	10						9.8					320	3.8		3.8		
52D-SP40-10	10												6.2		16		
52D-SP41-10	10	12											4.6		6.7		11
52D-SP42-10	10	11										140	3.9		5.4		22
52D-SP43-10	10	3200	8.5					27			12	210	5.4		29		12
AW-08D-SP10-10	10			8.6				31		9.0		120	57		360		
AW-AFI-SP01-10	10	44													6.4		
D(b)-SP03-10	10	28										98	12		22		
D(b)-SP04-10	10	39						32				150	20		21		
D(b)-SP05-10	10														30		
D(b)-SP06-10	10								15				8.1		9.3		
D(c)-SP05-10	10							120			5.6	620	49		30		
D(c)-SP06-10	10							34				120	22		80		560
D(c)-SP07-10	10											63			13		11
D(c)-SP09-10	10						50					150			13		49
D(c)-SP10-10	10											93					
D(c)-SP11-10	10											53	35		21		
D(c)-SP12-10	10							42				210	7.2				
05D-SP08-20	20	94						45				150	31		74		
08D-SP07-20	20							120			5.7	470	39		220		
08D-SP08-20	20											56	6.1		62		6.3
52D-SP24-20	20	1900	22	7.2			660			8.8		85	5.8		12		15
52D-SP25-20	20	890	5.4	8.3			1100			8.8	16		5.6		7.7		24
52D-SP27-20	20	75	7.0	12			560			15			9.9		3.6		12
52D-SP28-20	20	14						340	100		18	2000	35		22	41	
52D-SP29-20	20	510						32				150	11		29	21	8.3
52D-SP30-20	20	1000											9.1		12		17
52D-SP32-20	20	33000	170														
52D-SP33-20	20	140		8.3			2500			9.6			7.9		7.4		34
52D-SP35-20	20	32										110			53		7.1
52D-SP36-20	20	53	72												16		
52D-SP39-20	20	7.8	6.2				50					280	10		12		30
52D-SP40-20	20							200			12	490	23		17		
52D-SP41-20	20							36				200	6.6				
52D-SP42-20	20							58			5.6	300	17				
52D-SP43-20	20	4800	18									77	4.1		9.6		17
52D-SP44-20	20							22			5.5	310			6.8		

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+2	2.8 E+0	7.5 E-1	2.2 E+1	4.6 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	4.9 E+1
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+2	1.2 E+0	3.2 E-1	9.6 E+0	2.0 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1
Unit Risk		NA	8.5 E-4	NA	3.3 E-3	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	1.2 E-2
AW-08D-SP10-20	20							46				230	46		21		
D(b)-SP03-20	20	18											12		12		24
D(b)-SP04-20	20	14										58	5.3		7.5		
D(b)-SP06-20	20											72					
D(c)-SP05-20	20							130				550	22		230		180
D(c)-SP06-20	20														4		
D(c)-SP07-20	20														8.1		
D(c)-SP08-20	20						9.6					160	18		190		16
D(c)-SP09-20	20					20	13					97	8.7		81		290
D(c)-SP10-20	20	28										83			70		
D(c)-SP11-20	20					17							4.4		130		290
D(c)-SP12-20	20							200	21		6.6	950	21		16		
52D-SP40-28	28					17		61	20			330	16				
52D-SP24-30	30				7.7							100					
52D-SP25-30	30	1900	6.0	7.7			500			8.2			3.6		3.7		38
52D-SP27-30	30	31		14			2500			17			12		4.3		9.6
52D-SP28-30	30	93		6.8						6.2			6.4		12		52
52D-SP30-30	30																
52D-SP35-30	30	41	4.7			70						130		16	22		190
52D-SP36-30	30	62	100												8.9		6.4
52D-SP37-30	30		11									91	5.0		180		
52D-SP39-30	30							20				210	27		13		
52D-SP41-30	30											87					
52D-SP42-30	30	7.9	100					130				130	12				
52D-SP43-30	30	750	7.5						51			110					
52D-SP44-30	30							180	35		160	1100	68		16		
D(b)-SP05-30	30														4.9		
D(c)-SP05-30	30											57			11		710
52D-SP44-40	40		5.5					110	31			770	62		50		

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard Child		6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	6.4 E+2	3.2 E+0	2.2 E+1	2.2 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.4 E+0	3.7 E+0	2.2 E+1
Unit Hazard Adult		2.7 E+1	1.6 E-1	5.5 E-1	9.4 E-1	4.8 E+0	3.2 E-2	1.4 E+0	2.7 E+2	1.4 E+0	9.6 E+0	9.6 E+0	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.4 E+0
Unit Risk		NA	NA	NA	1.3 E-3	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
08D-SP07-10	10			82				6.8		14	7.8		4.8		8.9	31		
08D-SP08-10	10			31	8.8			29		72	12	5.6	7.9	71	3.6	74		
08D-SP09-10	10		5.9					26		56	7.4					36		
52D-SP24-10	10	96			8.1		1900	7.9		7.3	31	11	11	120	12	23	1600	
52D-SP25-10	10	20			10		250			15	36	15	11	54		49	1200	
52D-SP26-10	10						260				17	9.6		79		8.9	1100	
52D-SP29-10	10		30		8.7		220	30		76	28	17	17	65		79	2600	
52D-SP30-10	10		4.3				38	5.7		11	7.6			39		13	480	
52D-SP31-10	10		22				140			12				16		11	410	
52D-SP32-10	10						1500							98			780	
52D-SP33-10	10	10			9.5		98	12		21	36	11	8.4	92	18	46	280	
52D-SP35-10	10			10			380			13				97			8.8	
52D-SP36-10	10			27		66	1500							76				
52D-SP37-10	10			49		38	320			17				37	13	4.8	18	
52D-SP38-10	10						60			9.2				61	12			
52D-SP39-10	10			21				5.4			10				6.0	32		
52D-SP40-10	10							5.6		15				32	12	9.7	13	
52D-SP41-10	10						85			4.6				87	4.1	7.4	24	
52D-SP42-10	10						140							68	4.0	7.3	12	
52D-SP43-10	10	6.7	46			7.6	640			5.8				120		8.7	340	
AW-08D-SP10-10	10		15		11			71		120	35	13				76		
AW-AFI-SP01-10	10						280							240			22	
D(b)-SP03-10	10						190	7.2		16				130		11	1100	
D(b)-SP04-10	10		4.4				180	16	110	35				120		20	42	
D(b)-SP05-10	10						17			4.6				11		5.8		
D(b)-SP06-10	10			25			96			5.3				68	4.8	12		
D(c)-SP05-10	10			23				29		85	5.5					33		
D(c)-SP06-10	10						28	8.6		19						13	690	
D(c)-SP07-10	10									6.8					3.4		41	
D(c)-SP09-10	10			20						13					7.5	5.6		
D(c)-SP10-10	10			140						5.3					4.7	8.4		
D(c)-SP11-10	10		5.1		7.1		11	33		64	8.0			7.9	7.3	45		
D(c)-SP12-10	10						14			7.2				69	4.8	15	12	
05D-SP08-20	20							28		73						22		
08D-SP07-20	20		19	40				27		220	7.0				11	27		
08D-SP08-20	20						13			9.6						15	11	
52D-SP24-20	20	15		11	9.5		570	9.9		9.1	32	9.1		11		38	430	
52D-SP25-20	20	8.5			6.0		220			24	23	7.9	6.3	36		34	960	
52D-SP27-20	20	5.3			15		57	5.8		11	57	14	8	34		74	160	
52D-SP28-20	20		9.3	160			14	24		90						18	58	
52D-SP29-20	20		11				440	5.7		15				14		11	620	
52D-SP30-20	20	9.5	21				560	6.7		20				29		7.2	1200	
52D-SP32-20	20						2900										480	
52D-SP33-20	20	12			14		160	9.2		13	44	15	8.9	49		66	240	
52D-SP35-20	20			8.6			440			6.5				110			12	
52D-SP36-20	20	15				89	3400							82		5.0	200	3.4
52D-SP39-20	20		5.8	21			40	40		12	9.9				4.4	50	32	
52D-SP40-20	20				10			24		66	17	8.7		45	36	52	23	
52D-SP41-20	20			28				9.6		15	5.2			13	14	27	7.0	
52D-SP42-20	20			28			17	11		18	6.7			20	13	45	7.6	
52D-SP43-20	20	8.8	64			9.3	1000	5.3		8.6				99		5	280	
52D-SP44-20	20			72		9.4	91			8.1						7.1		

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard Child		6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	6.4 E+2	3.2 E+0	2.2 E+1	2.2 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.4 E+0	3.7 E+0	2.2 E+1
Unit Hazard Adult		2.7 E+1	1.6 E-1	5.5 E-1	9.4 E-1	4.8 E+0	3.2 E-2	1.4 E+0	2.7 E+2	1.4 E+0	9.6 E+0	9.6 E+0	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.4 E+0
Unit Risk		NA	NA	NA	1.3 E-3	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
AW-08D-SP10-20	20		6.7	12	5.1			37		80	12					54	7.3	
D(b)-SP03-20	20						210	6		12				24		9.2	310	
D(b)-SP04-20	20						63			11							7.1	
D(b)-SP06-20	20			26						7.6				200	10	7.7		
D(c)-SP05-20	20						49	24		70						24	320	
D(c)-SP06-20	20															5.1		
D(c)-SP07-20	20										5.4						19	
D(c)-SP08-20	20			27				20		120	6.5				20	24	12	
D(c)-SP09-20	20			30				14		17					6.3	7.9	6.9	
D(c)-SP10-20	20						250	5.7		17				36	13	18	53	
D(c)-SP11-20	20					7.8	23	6.3		23					16	19	13	
D(c)-SP12-20	20			23	7.7		12	18		29	12	6.7		100	18	46	28	
52D-SP40-28	28			31				16		45	7.4			18	46	41	18	
52D-SP24-30	30			14												12		
52D-SP25-30	30	8.2					590			5.0	17			98		20	1800	
52D-SP27-30	30		5.3	14	18		140	9.5		14	68	17	5.8		4.4	110	11	
52D-SP28-30	30	5.9					300	7.8		13	12			42		10	260	
52D-SP30-30	30																	
52D-SP35-30	30			27			1200	5.5		8.6	5.9			220	9.5	7.6	31	
52D-SP36-30	30	27				110	3400			6.6				60	7.6	4.4	250	6.0
52D-SP37-30	30	6.4		19		14	220	65		48				28	10	7.2	25	
52D-SP39-30	30		4.7	36				27		54						15		
52D-SP41-30	30			13				6.4		11	5.7			8.3	13	16		
52D-SP42-30	30	530					640	5.2		21				560	85	23	8300	4.0
52D-SP43-30	30		11	150			200				5.7			9.6		10	58	
52D-SP44-30	30		13	120			17	85		190						32		
D(b)-SP05-30	30			12			180	8.2		9.9				10	5.4	12		
D(c)-SP05-30	30						230							13	4.4		1300	
52D-SP44-40	40		6.1	140		23	890	64		180						50	12	3.5

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	3.1 E-5	1.7 E-3	NA	1.6 E-6	4.0 E-4	6.9 E-4	NA	3.2 E-5	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	2.6 E-6	4.0 E-4	2.5 E-3	NA	6.0 E-5	6.8 E-4	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	1.2 E-4	1.0 E-3	NA	1.8 E-4	NA	NA
52D-SP24-10	10	2.5 E-3	1.6 E-4	1.2 E-3	NA	NA	2.5 E-3	NA	NA	1.1 E-4	NA	NA	2.3 E-4	NA	NA	NA	1.0 E-3
52D-SP25-10	10	5.3 E-4	2.9 E-5	1.0 E-3	NA	NA	2.0 E-2	NA	NA	9.4 E-5	1.4 E-5	NA	3.9 E-4	NA	1.5 E-4	NA	7.0 E-4
52D-SP26-10	10	2.7 E-4	NA	2.2 E-3	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	1.7 E-4	NA	NA
52D-SP30-10	10	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	2.9 E-4	NA	1.1 E-4	NA	4.1 E-4
52D-SP31-10	10	2.3 E-4	8.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	1.7 E-5	NA	NA
52D-SP32-10	10	2.5 E-3	7.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	NA
52D-SP33-10	10	2.1 E-5	1.4 E-5	1.2 E-3	NA	NA	9.4 E-3	4.5 E-6	NA	1.1 E-4	NA	5.3 E-5	4.6 E-4	NA	2.6 E-5	NA	8.4 E-4
52D-SP35-10	10	7.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	NA	NA	3.8 E-5	NA	NA
52D-SP36-10	10	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	1.3 E-5	NA	NA
52D-SP37-10	10	8.8 E-6	NA	NA	NA	7.9 E-6	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	1.4 E-4	NA	NA
52D-SP38-10	10	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	1.5 E-4	1.5 E-4	NA	7.2 E-6	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	3.0 E-5	NA	NA
52D-SP41-10	10	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	1.3 E-5	NA	3.2 E-4
52D-SP42-10	10	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	1.5 E-4	NA	1.0 E-5	NA	6.4 E-4
52D-SP43-10	10	6.7 E-4	1.2 E-5	NA	NA	NA	NA	6.0 E-6	NA	NA	4.1 E-6	1.0 E-4	2.1 E-4	NA	5.5 E-5	NA	3.5 E-4
AW-08D-SP10-10	10	NA	NA	1.0 E-3	NA	NA	NA	6.9 E-6	NA	1.0 E-4	NA	5.8 E-5	2.2 E-3	NA	6.8 E-4	NA	NA
AW-AFI-SP01-10	10	9.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA
D(b)-SP03-10	10	5.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	4.6 E-4	NA	4.1 E-5	NA	NA
D(b)-SP04-10	10	8.2 E-6	NA	NA	NA	NA	NA	7.1 E-6	NA	NA	NA	7.2 E-5	7.7 E-4	NA	4.0 E-5	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	3.1 E-4	NA	1.8 E-5	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	1.9 E-6	3.0 E-4	1.9 E-3	NA	5.7 E-5	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	7.6 E-6	NA	NA	NA	5.8 E-5	8.5 E-4	NA	1.5 E-4	NA	1.6 E-2
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	2.4 E-5	NA	3.2 E-4
D(c)-SP09-10	10	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	7.2 E-5	NA	NA	2.4 E-5	NA	1.4 E-3
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	1.3 E-3	NA	4.0 E-5	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	1.0 E-4	2.8 E-4	NA	NA	NA	NA
05D-SP08-20	20	1.1 E-5	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	4.3 E-5	6.5 E-4	NA	8.1 E-5	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	1.1 E-6	1.3 E-4	8.2 E-4	NA	2.4 E-4	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	1.3 E-4	NA	6.8 E-5	NA	1.0 E-4
52D-SP24-20	20	2.3 E-4	1.7 E-5	4.9 E-4	NA	NA	4.3 E-3	NA	NA	5.8 E-5	NA	2.4 E-5	1.2 E-4	NA	1.3 E-5	NA	2.4 E-4
52D-SP25-20	20	1.1 E-4	4.2 E-6	5.6 E-4	NA	NA	7.2 E-3	NA	NA	5.8 E-5	3.1 E-6	NA	1.2 E-4	NA	8.4 E-6	NA	3.9 E-4
52D-SP27-20	20	8.9 E-6	5.4 E-6	8.1 E-4	NA	NA	3.7 E-3	NA	NA	9.9 E-5	NA	NA	2.1 E-4	NA	3.9 E-6	NA	1.9 E-4
52D-SP28-20	20	1.7 E-6	NA	NA	NA	NA	NA	4.3 E-5	7.4 E-3	NA	3.5 E-6	5.7 E-4	7.4 E-4	NA	2.4 E-5	5.8 E-4	NA
52D-SP29-20	20	6.1 E-5	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	4.3 E-5	2.3 E-4	NA	3.2 E-5	3.0 E-4	1.3 E-4
52D-SP30-20	20	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	1.3 E-5	NA	2.7 E-4
52D-SP32-20	20	3.9 E-3	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	1.7 E-5	NA	5.6 E-4	NA	NA	1.6 E-2	NA	NA	6.3 E-5	NA	NA	1.7 E-4	NA	8.1 E-6	NA	5.5 E-4
52D-SP35-20	20	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	5.8 E-5	NA	1.1 E-4
52D-SP36-20	20	6.3 E-6	5.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA
52D-SP39-20	20	9.3 E-7	4.8 E-6	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	8.0 E-5	2.1 E-4	NA	1.3 E-5	NA	4.8 E-4
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	2.3 E-6	1.4 E-4	4.8 E-4	NA	1.9 E-5	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	4.6 E-6	NA	NA	NA	5.7 E-5	1.4 E-4	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	NA	1.1 E-6	8.6 E-5	3.6 E-4	NA	NA	NA	NA
52D-SP43-20	20	5.7 E-4	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	8.6 E-5	NA	1.1 E-5	NA	2.7 E-4
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	1.1 E-6	8.8 E-5	NA	NA	7.5 E-6	NA	NA

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	NA	NA	6.6 E-5	9.7 E-4	NA	2.3 E-5	NA	NA
D(b)-SP03-20	20	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	1.3 E-5	NA	3.9 E-4
D(b)-SP04-20	20	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	1.1 E-4	NA	8.2 E-6	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	1.6 E-4	4.6 E-4	NA	2.5 E-4	NA	2.9 E-3
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-6	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	NA	NA	4.6 E-5	3.8 E-4	NA	2.1 E-4	NA	2.6 E-4
D(c)-SP09-20	20	NA	NA	NA	NA	5.1 E-6	8.5 E-5	NA	NA	NA	NA	2.8 E-5	1.8 E-4	NA	8.9 E-5	NA	4.7 E-3
D(c)-SP10-20	20	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	7.7 E-5	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	NA	NA	9.3 E-5	NA	1.4 E-4	NA	4.7 E-3
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	2.5 E-5	1.6 E-3	NA	1.3 E-6	2.7 E-4	4.4 E-4	NA	1.8 E-5	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	3.1 E-6	NA	5.4 E-6	1.0 E-3	NA	NA	6.7 E-5	2.5 E-4	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA
52D-SP25-30	30	1.5 E-4	3.2 E-6	3.4 E-4	NA	NA	2.2 E-3	NA	NA	3.5 E-5	NA	NA	5.2 E-5	NA	2.7 E-6	NA	4.2 E-4
52D-SP27-30	30	2.4 E-6	NA	6.2 E-4	NA	NA	1.1 E-2	NA	NA	7.3 E-5	NA	NA	1.7 E-4	NA	3.1 E-6	NA	1.1 E-4
52D-SP28-30	30	7.2 E-6	NA	3.0 E-4	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	9.3 E-5	NA	8.7 E-6	NA	5.8 E-4
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	3.2 E-6	2.5 E-6	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	2.5 E-5	NA	3.6 E-5	1.6 E-5	NA	2.1 E-3
52D-SP36-30	30	4.8 E-6	5.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	7.1 E-5
52D-SP37-30	30	NA	5.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	7.2 E-5	NA	1.3 E-4	NA	NA
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	4.0 E-5	3.9 E-4	NA	9.4 E-6	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA
52D-SP42-30	30	6.2 E-7	5.3 E-5	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	2.5 E-5	1.7 E-4	NA	NA	NA	NA
52D-SP43-30	30	5.8 E-5	4.0 E-6	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	2.1 E-5	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	1.5 E-5	1.7 E-3	NA	2.0 E-5	2.1 E-4	9.8 E-4	NA	1.2 E-5	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	8.0 E-6	NA	7.9 E-3
52D-SP44-40	40	NA	2.2 E-6	NA	NA	NA	NA	6.9 E-6	1.1 E-3	NA	NA	1.1 E-4	6.8 E-4	NA	2.8 E-5	NA	NA

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
08D-SP07-10	10	NA	NA	8.8 E-5	NA	NA	NA	2.0 E-5	NA	4.2 E-5	8.1 E-5	NA	5.1 E-6	NA	3.9 E-5	1.2 E-4	NA	NA	3.2 E-3
08D-SP08-10	10	NA	NA	3.3 E-5	8.8 E-6	NA	NA	8.6 E-5	NA	2.1 E-4	1.2 E-4	6.4 E-5	8.5 E-6	2.0 E-3	1.6 E-5	2.8 E-4	NA	NA	6.6 E-3
08D-SP09-10	10	NA	1.1 E-6	NA	NA	NA	NA	7.7 E-5	NA	1.7 E-4	7.7 E-5	NA	NA	NA	NA	1.4 E-4	NA	NA	1.8 E-3
52D-SP24-10	10	2.8 E-3	NA	NA	8.1 E-6	NA	6.6 E-5	2.3 E-5	NA	2.2 E-5	3.2 E-4	1.3 E-4	1.2 E-5	3.4 E-3	5.3 E-5	8.8 E-5	2.8 E-3	NA	1.7 E-2
52D-SP25-10	10	5.7 E-4	NA	NA	1.0 E-5	NA	8.7 E-6	NA	NA	4.5 E-5	3.7 E-4	1.7 E-4	1.2 E-5	1.5 E-3	NA	1.9 E-4	2.1 E-3	NA	2.7 E-2
52D-SP26-10	10	NA	NA	NA	NA	NA	9.1 E-6	NA	NA	NA	1.8 E-4	1.1 E-4	NA	2.2 E-3	NA	3.4 E-5	1.9 E-3	NA	7.1 E-3
52D-SP29-10	10	NA	5.4 E-6	NA	8.7 E-6	NA	7.7 E-6	8.9 E-5	NA	2.3 E-4	2.9 E-4	2.0 E-4	1.8 E-5	1.8 E-3	NA	3.0 E-4	4.6 E-3	NA	1.1 E-2
52D-SP30-10	10	NA	7.8 E-7	NA	NA	NA	1.3 E-6	1.7 E-5	NA	3.3 E-5	7.9 E-5	NA	NA	1.1 E-3	NA	5.0 E-5	8.5 E-4	NA	3.0 E-3
52D-SP31-10	10	NA	4.0 E-6	NA	NA	NA	4.9 E-6	NA	NA	3.6 E-5	NA	NA	NA	4.5 E-4	NA	4.2 E-5	7.3 E-4	NA	2.1 E-3
52D-SP32-10	10	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	1.4 E-3	NA	6.9 E-3
52D-SP33-10	10	2.9 E-4	NA	NA	9.5 E-6	NA	3.4 E-6	3.6 E-5	NA	6.2 E-5	3.7 E-4	1.3 E-4	9.0 E-6	2.6 E-3	8.0 E-5	1.8 E-4	5.0 E-4	NA	1.6 E-2
52D-SP35-10	10	NA	NA	1.1 E-5	NA	NA	1.3 E-5	NA	NA	3.9 E-5	NA	NA	NA	2.7 E-3	NA	NA	1.6 E-5	NA	2.9 E-3
52D-SP36-10	10	NA	NA	2.9 E-5	NA	3.8 E-4	5.2 E-5	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	2.7 E-3
52D-SP37-10	10	NA	NA	5.3 E-5	NA	2.2 E-4	1.1 E-5	NA	NA	5.0 E-5	NA	NA	NA	1.0 E-3	5.8 E-5	1.8 E-5	3.2 E-5	NA	3.6 E-3
52D-SP38-10	10	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	2.7 E-5	NA	NA	NA	1.7 E-3	5.3 E-5	NA	NA	NA	1.9 E-3
52D-SP39-10	10	NA	NA	2.3 E-5	NA	NA	NA	1.6 E-5	NA	NA	1.0 E-4	NA	NA	NA	2.7 E-5	1.2 E-4	NA	NA	7.1 E-4
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	4.5 E-5	NA	NA	NA	9.0 E-4	5.3 E-5	3.7 E-5	2.3 E-5	NA	1.3 E-3
52D-SP41-10	10	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	1.4 E-5	NA	NA	NA	2.5 E-3	1.8 E-5	2.8 E-5	4.3 E-5	NA	3.1 E-3
52D-SP42-10	10	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	1.9 E-3	1.8 E-5	2.8 E-5	2.1 E-5	NA	2.9 E-3
52D-SP43-10	10	1.9 E-4	8.3 E-6	NA	NA	4.4 E-5	2.2 E-5	NA	NA	1.7 E-5	NA	NA	NA	3.4 E-3	NA	3.3 E-5	6.0 E-4	NA	5.7 E-3
AW-08D-SP10-10	10	NA	2.7 E-6	NA	1.1 E-5	NA	NA	2.1 E-4	NA	3.6 E-4	3.6 E-4	1.5 E-4	NA	NA	NA	2.9 E-4	NA	NA	5.5 E-3
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	9.8 E-6	NA	NA	NA	NA	NA	NA	6.8 E-3	NA	NA	3.9 E-5	NA	6.8 E-3
D(b)-SP03-10	10	NA	NA	NA	NA	NA	6.6 E-6	2.1 E-5	NA	4.7 E-5	NA	NA	NA	3.7 E-3	NA	4.2 E-5	1.9 E-3	NA	6.3 E-3
D(b)-SP04-10	10	NA	7.9 E-7	NA	NA	NA	6.3 E-6	4.7 E-5	2.5 E-2	1.0 E-4	NA	NA	NA	3.4 E-3	NA	7.6 E-5	7.4 E-5	NA	3.0 E-2
D(b)-SP05-10	10	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	1.4 E-5	NA	NA	NA	3.1 E-4	NA	2.2 E-5	NA	NA	4.0 E-4
D(b)-SP06-10	10	NA	NA	2.7 E-5	NA	NA	3.4 E-6	NA	NA	1.6 E-5	NA	NA	NA	1.9 E-3	2.1 E-5	4.6 E-5	NA	NA	4.3 E-3
D(c)-SP05-10	10	NA	NA	2.5 E-5	NA	NA	NA	8.6 E-5	NA	2.5 E-4	5.7 E-5	NA	NA	NA	NA	1.3 E-4	NA	NA	2.8 E-3
D(c)-SP06-10	10	NA	NA	NA	NA	NA	9.8 E-7	2.6 E-5	NA	5.6 E-5	NA	NA	NA	NA	NA	5.0 E-5	1.2 E-3	NA	1.9 E-2
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	1.5 E-5	NA	7.3 E-5	NA	4.8 E-4
D(c)-SP09-10	10	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	3.3 E-5	2.1 E-5	NA	NA	2.2 E-3
D(c)-SP10-10	10	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	2.1 E-5	3.2 E-5	NA	NA	2.6 E-4
D(c)-SP11-10	10	NA	9.2 E-7	NA	7.1 E-6	NA	3.8 E-7	9.8 E-5	NA	1.9 E-4	8.3 E-5	NA	NA	2.2 E-4	3.2 E-5	1.7 E-4	NA	NA	2.2 E-3
D(c)-SP12-10	10	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	2.1 E-5	NA	NA	NA	1.9 E-3	2.1 E-5	5.7 E-5	2.1 E-5	NA	2.5 E-3
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	1.3 E-4	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	1.0 E-3
08D-SP07-20	20	NA	1.9 E-6	2.7 E-5	NA	NA	NA	5.0 E-5	NA	3.9 E-4	4.1 E-5	NA	NA	NA	2.8 E-5	5.9 E-5	NA	NA	1.8 E-3
08D-SP08-20	20	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	3.3 E-5	1.1 E-5	NA	3.7 E-4
52D-SP24-20	20	2.4 E-4	NA	7.3 E-6	5.1 E-6	NA	1.1 E-5	1.8 E-5	NA	1.6 E-5	1.9 E-4	6.0 E-5	NA	1.7 E-4	NA	8.3 E-5	4.3 E-4	NA	6.8 E-3
52D-SP25-20	20	1.4 E-4	NA	NA	3.2 E-6	NA	4.4 E-6	NA	NA	4.3 E-5	1.4 E-4	5.2 E-5	3.8 E-6	5.4 E-4	NA	7.4 E-5	9.6 E-4	NA	1.0 E-2
52D-SP27-20	20	8.6 E-5	NA	NA	8.1 E-6	NA	1.1 E-6	1.1 E-5	NA	2.0 E-5	3.4 E-4	9.2 E-5	4.8 E-6	5.1 E-4	NA	1.6 E-4	1.6 E-4	NA	6.4 E-3
52D-SP28-20	20	NA	9.5 E-7	1.1 E-4	NA	NA	2.8 E-7	4.5 E-5	NA	1.6 E-4	NA	NA	NA	NA	NA	3.9 E-5	5.8 E-5	NA	9.8 E-3
52D-SP29-20	20	NA	1.1 E-6	NA	NA	NA	8.7 E-6	1.1 E-5	NA	2.7 E-5	NA	NA	NA	2.1 E-4	NA	2.4 E-5	6.2 E-4	NA	1.7 E-3
52D-SP30-20	20	1.5 E-4	2.2 E-6	NA	NA	NA	1.1 E-5	1.3 E-5	NA	3.6 E-5	NA	NA	NA	4.4 E-4	NA	1.6 E-5	1.2 E-3	NA	2.5 E-3
52D-SP32-20	20	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	4.6 E-3
52D-SP33-20	20	1.9 E-4	NA	NA	7.6 E-6	NA	3.2 E-6	1.7 E-5	NA	2.3 E-5	2.6 E-4	9.9 E-5	5.4 E-6	7.4 E-4	NA	1.4 E-4	2.4 E-4	NA	2.0 E-2
52D-SP35-20	20	NA	NA	5.7 E-6	NA	NA	8.7 E-6	NA	NA	1.2 E-5	NA	NA	NA	1.7 E-3	NA	NA	1.2 E-5	NA	1.9 E-3
52D-SP36-20	20	2.4 E-4	NA	NA	NA	2.9 E-4	6.7 E-5	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	1.1 E-5	2.0 E-4	2.6 E-5	2.2 E-3
52D-SP39-20	20	NA	5.9 E-7	1.4 E-5	NA	NA	7.9 E-7	7.5 E-5	NA	2.2 E-5	5.8 E-5	NA	NA	NA	1.1 E-5	1.1 E-4	3.2 E-5	NA	1.4 E-3
52D-SP40-20	20	NA	NA	NA	5.4 E-6	NA	NA	4.5 E-5	NA	1.2 E-4	1.0 E-4	5.7 E-5	NA	6.8 E-4	9.3 E-5	1.1 E-4	2.3 E-5	NA	1.9 E-3
52D-SP41-20	20	NA	NA	1.9 E-5	NA	NA	NA	1.8 E-5	NA	2.7 E-5	3.1 E-5	NA	NA	2.0 E-4	3.6 E-5	5.9 E-5	7.0 E-6	NA	5.9 E-4
52D-SP42-20	20	NA	NA	1.9 E-5	NA	NA	3.4 E-7	2.1 E-5	NA	3.2 E-5	3.9 E-5	NA	NA	3.0 E-4	3.4 E-5	9.8 E-5	7.6 E-6	NA	1.0 E-3
52D-SP43-20	20	1.4 E-4	6.6 E-6	NA	NA	3.1 E-5	2.0 E-5	9.9 E-6	NA	1.5 E-5	NA	NA	NA	1.5 E-3	NA	1.1 E-5	2.8 E-4	NA	3.0 E-3
52D-SP44-20	20	NA	NA	4.8 E-5	NA	3.1 E-5	1.8 E-6	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	2.1 E-4

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
AW-08D-SP10-20	20	NA	6.9 E-7	8.0 E-6	2.8 E-6	NA	NA	6.9 E-5	NA	1.4 E-4	7.1 E-5	NA	NA	NA	NA	1.2 E-4	7.3 E-6	NA	1.5 E-3
D(b)-SP03-20	20	NA	NA	NA	NA	NA	4.2 E-6	1.1 E-5	NA	2.2 E-5	NA	NA	NA	3.6 E-4	NA	2.0 E-5	3.1 E-4	NA	1.4 E-3
D(b)-SP04-20	20	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	1.7 E-4
D(b)-SP06-20	20	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	3.0 E-3	2.6 E-5	1.7 E-5	NA	NA	3.1 E-3
D(c)-SP05-20	20	NA	NA	NA	NA	NA	9.7 E-7	4.5 E-5	NA	1.3 E-4	NA	NA	NA	NA	NA	5.2 E-5	3.2 E-4	NA	4.3 E-3
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	1.6 E-5
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	1.9 E-5	NA	6.0 E-5
D(c)-SP08-20	20	NA	NA	1.8 E-5	NA	NA	NA	3.7 E-5	NA	2.2 E-4	3.8 E-5	NA	NA	NA	5.2 E-5	5.2 E-5	1.2 E-5	NA	1.4 E-3
D(c)-SP09-20	20	NA	NA	2.0 E-5	NA	NA	NA	2.6 E-5	NA	3.0 E-5	NA	NA	NA	NA	1.6 E-5	1.7 E-5	6.9 E-6	NA	5.2 E-3
D(c)-SP10-20	20	NA	NA	NA	NA	NA	5.0 E-6	1.1 E-5	NA	3.0 E-5	NA	NA	NA	5.4 E-4	3.4 E-5	3.9 E-5	5.3 E-5	NA	8.2 E-4
D(c)-SP11-20	20	NA	NA	NA	NA	2.6 E-5	4.6 E-7	1.2 E-5	NA	4.1 E-5	NA	NA	NA	NA	4.1 E-5	4.1 E-5	1.3 E-5	NA	5.1 E-3
D(c)-SP12-20	20	NA	NA	1.5 E-5	4.2 E-6	NA	2.4 E-7	3.4 E-5	NA	5.2 E-5	7.1 E-5	4.4 E-5	NA	1.5 E-3	4.6 E-5	1.0 E-4	2.8 E-5	NA	4.2 E-3
52D-SP40-28	28	NA	NA	1.5 E-5	NA	NA	NA	2.2 E-5	NA	6.1 E-5	3.0 E-5	NA	NA	2.0 E-4	8.4 E-5	6.3 E-5	1.3 E-5	NA	1.8 E-3
52D-SP24-30	30	NA	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	4.6 E-5
52D-SP25-30	30	8.6 E-5	NA	NA	NA	NA	7.6 E-6	NA	NA	6.4 E-6	6.5 E-5	NA	NA	1.0 E-3	NA	2.9 E-5	1.2 E-3	NA	5.5 E-3
52D-SP27-30	30	NA	3.6 E-7	6.3 E-6	6.7 E-6	NA	1.8 E-6	1.2 E-5	NA	1.8 E-5	2.6 E-4	7.3 E-5	2.3 E-6	NA	7.5 E-6	1.6 E-4	7.2 E-6	NA	1.2 E-2
52D-SP28-30	30	6.2 E-5	NA	NA	NA	NA	3.9 E-6	1.0 E-5	NA	1.7 E-5	4.6 E-5	NA	NA	4.3 E-4	NA	1.4 E-5	1.7 E-4	NA	1.8 E-3
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	NA	1.2 E-5	NA	NA	1.6 E-5	7.1 E-6	NA	1.1 E-5	2.3 E-5	NA	NA	2.3 E-3	1.6 E-5	1.1 E-5	2.0 E-5	NA	4.6 E-3
52D-SP36-30	30	2.8 E-4	NA	NA	NA	2.4 E-4	4.4 E-5	NA	NA	8.5 E-6	NA	NA	NA	6.2 E-4	1.3 E-5	6.3 E-6	1.6 E-4	3.1 E-5	1.5 E-3
52D-SP37-30	30	6.8 E-5	NA	8.6 E-6	NA	3.0 E-5	2.8 E-6	8.4 E-5	NA	6.2 E-5	NA	NA	NA	2.9 E-4	1.7 E-5	1.0 E-5	1.6 E-5	NA	8.1 E-4
52D-SP39-30	30	NA	3.2 E-7	1.6 E-5	NA	NA	NA	3.5 E-5	NA	6.9 E-5	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	5.8 E-4
52D-SP41-30	30	NA	NA	5.9 E-6	NA	NA	NA	8.2 E-6	NA	1.4 E-5	2.2 E-5	NA	NA	8.6 E-5	2.2 E-5	2.3 E-5	NA	NA	2.0 E-4
52D-SP42-30	30	5.6 E-3	NA	NA	NA	NA	8.3 E-6	6.7 E-6	NA	2.7 E-5	NA	NA	NA	5.8 E-3	1.5 E-4	3.3 E-5	5.5 E-3	2.0 E-5	1.7 E-2
52D-SP43-30	30	NA	7.4 E-7	6.8 E-5	NA	NA	2.6 E-6	NA	NA	NA	2.2 E-5	NA	NA	9.9 E-5	NA	1.4 E-5	3.8 E-5	NA	2.8 E-3
52D-SP44-30	30	NA	8.7 E-7	5.4 E-5	NA	NA	2.2 E-7	1.1 E-4	NA	2.4 E-4	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	3.4 E-3
D(b)-SP05-30	30	NA	NA	5.4 E-6	NA	NA	2.3 E-6	1.1 E-5	NA	1.3 E-5	NA	NA	NA	1.0 E-4	9.2 E-6	1.7 E-5	NA	NA	1.6 E-4
D(c)-SP05-30	30	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	NA	NA	1.3 E-4	7.5 E-6	NA	8.5 E-4	NA	8.9 E-3
52D-SP44-40	40	NA	3.1 E-7	4.9 E-5	NA	3.8 E-5	8.8 E-6	6.4 E-5	NA	1.8 E-4	NA	NA	NA	NA	NA	5.5 E-5	6.0 E-6	1.4 E-5	2.4 E-3

		Adult Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	1.3 E-5	7.2 E-4	NA	7.0 E-7	1.7 E-4	3.0 E-4	NA	1.4 E-5	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	1.1 E-6	1.7 E-4	1.1 E-3	NA	2.6 E-5	2.9 E-4	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	6.2 E-6	NA	NA	NA	5.2 E-5	4.3 E-4	NA	7.7 E-5	NA	NA
52D-SP24-10	10	1.1 E-3	6.8 E-5	5.2 E-4	NA	NA	1.1 E-3	NA	NA	4.9 E-5	NA	NA	9.9 E-5	NA	NA	NA	4.3 E-4
52D-SP25-10	10	2.3 E-4	1.2 E-5	4.3 E-4	NA	NA	8.4 E-3	NA	NA	4.0 E-5	6.0 E-6	NA	1.7 E-4	NA	6.5 E-5	NA	3.0 E-4
52D-SP26-10	10	1.2 E-4	NA	9.4 E-4	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	7.1 E-5	NA	NA
52D-SP30-10	10	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	1.2 E-4	NA	4.5 E-5	NA	1.7 E-4
52D-SP31-10	10	9.9 E-5	3.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	7.1 E-6	NA	NA
52D-SP32-10	10	1.1 E-3	3.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA
52D-SP33-10	10	8.8 E-6	6.0 E-6	5.0 E-4	NA	NA	4.0 E-3	1.9 E-6	NA	4.9 E-5	NA	2.3 E-5	2.0 E-4	NA	1.1 E-5	NA	3.6 E-4
52D-SP35-10	10	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	1.6 E-5	NA	NA
52D-SP36-10	10	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	5.7 E-6	NA	NA
52D-SP37-10	10	3.8 E-6	NA	NA	NA	3.4 E-6	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	5.8 E-5	NA	NA
52D-SP38-10	10	9.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	6.6 E-5	6.3 E-5	NA	3.1 E-6	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	1.3 E-5	NA	NA
52D-SP41-10	10	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	5.4 E-6	NA	1.4 E-4
52D-SP42-10	10	9.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	6.4 E-5	NA	4.4 E-6	NA	2.7 E-4
52D-SP43-10	10	2.9 E-4	5.3 E-6	NA	NA	NA	NA	2.6 E-6	NA	NA	1.7 E-6	4.3 E-5	8.9 E-5	NA	2.3 E-5	NA	1.5 E-4
AW-08D-SP10-10	10	NA	NA	4.5 E-4	NA	NA	NA	3.0 E-6	NA	4.4 E-5	NA	2.5 E-5	9.4 E-4	NA	2.9 E-4	NA	NA
AW-AFI-SP01-10	10	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA
D(b)-SP03-10	10	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	2.0 E-4	NA	1.8 E-5	NA	NA
D(b)-SP04-10	10	3.5 E-6	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	3.1 E-5	3.3 E-4	NA	1.7 E-5	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	1.3 E-4	NA	7.5 E-6	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	8.1 E-7	1.3 E-4	8.1 E-4	NA	2.4 E-5	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	2.5 E-5	3.6 E-4	NA	6.5 E-5	NA	7.0 E-3
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	1.0 E-5	NA	1.4 E-4
D(c)-SP09-10	10	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	3.1 E-5	NA	NA	1.0 E-5	NA	6.1 E-4
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	5.8 E-4	NA	1.7 E-5	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	4.3 E-5	1.2 E-4	NA	NA	NA	NA
05D-SP08-20	20	4.8 E-6	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	1.8 E-5	2.8 E-4	NA	3.5 E-5	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	4.7 E-7	5.7 E-5	3.5 E-4	NA	1.0 E-4	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	5.5 E-5	NA	2.9 E-5	NA	4.3 E-5
52D-SP24-20	20	9.7 E-5	7.3 E-6	2.1 E-4	NA	NA	1.9 E-3	NA	NA	2.5 E-5	NA	1.0 E-5	5.2 E-5	NA	5.6 E-6	NA	1.0 E-4
52D-SP25-20	20	4.5 E-5	1.8 E-6	2.4 E-4	NA	NA	3.1 E-3	NA	NA	2.5 E-5	1.3 E-6	NA	5.0 E-5	NA	3.6 E-6	NA	1.7 E-4
52D-SP27-20	20	3.8 E-6	2.3 E-6	3.5 E-4	NA	NA	1.6 E-3	NA	NA	4.2 E-5	NA	NA	8.9 E-5	NA	1.7 E-6	NA	8.3 E-5
52D-SP28-20	20	7.2 E-7	NA	NA	NA	NA	NA	1.8 E-5	3.2 E-3	NA	1.5 E-6	2.4 E-4	3.2 E-4	NA	1.0 E-5	2.5 E-4	NA
52D-SP29-20	20	2.6 E-5	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	1.8 E-5	9.9 E-5	NA	1.4 E-5	1.3 E-4	5.7 E-5
52D-SP30-20	20	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	5.6 E-6	NA	1.2 E-4
52D-SP32-20	20	1.7 E-3	5.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	7.2 E-6	NA	2.4 E-4	NA	NA	7.0 E-3	NA	NA	2.7 E-5	NA	NA	7.1 E-5	NA	3.5 E-6	NA	2.3 E-4
52D-SP35-20	20	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	2.5 E-5	NA	4.9 E-5
52D-SP36-20	20	2.7 E-6	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	NA	NA
52D-SP39-20	20	4.0 E-7	2.1 E-6	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	3.4 E-5	9.0 E-5	NA	5.6 E-6	NA	2.1 E-4
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	9.9 E-7	6.0 E-5	2.1 E-4	NA	8.0 E-6	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	2.4 E-5	6.0 E-5	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	4.6 E-7	3.7 E-5	1.5 E-4	NA	NA	NA	NA
52D-SP43-20	20	2.5 E-4	6.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	3.7 E-5	NA	4.5 E-6	NA	1.2 E-4
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	4.5 E-7	3.8 E-5	NA	NA	3.2 E-6	NA	NA

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	2.8 E-5	4.1 E-4	NA	9.9 E-6	NA	NA
D(b)-SP03-20	20	9.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	5.6 E-6	NA	1.7 E-4
D(b)-SP04-20	20	7.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	4.8 E-5	NA	3.5 E-6	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	NA	6.7 E-5	2.0 E-4	NA	1.1 E-4	NA	1.2 E-3
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	2.0 E-5	1.6 E-4	NA	8.9 E-5	NA	1.1 E-4
D(c)-SP09-20	20	NA	NA	NA	NA	2.2 E-6	3.7 E-5	NA	NA	NA	NA	1.2 E-5	7.8 E-5	NA	3.8 E-5	NA	2.0 E-3
D(c)-SP10-20	20	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	3.3 E-5	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	6.1 E-5	NA	2.0 E-3
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	1.1 E-5	6.7 E-4	NA	5.4 E-7	1.2 E-4	1.9 E-4	NA	7.5 E-6	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	1.3 E-6	NA	2.3 E-6	4.4 E-4	NA	NA	2.9 E-5	1.1 E-4	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	8.2 E-6	NA	NA	NA	NA	NA
52D-SP25-30	30	6.3 E-5	1.4 E-6	1.4 E-4	NA	NA	9.2 E-4	NA	NA	1.5 E-5	NA	NA	2.2 E-5	NA	1.1 E-6	NA	1.8 E-4
52D-SP27-30	30	1.0 E-6	NA	2.6 E-4	NA	NA	4.6 E-3	NA	NA	3.1 E-5	NA	NA	7.4 E-5	NA	1.3 E-6	NA	4.6 E-5
52D-SP28-30	30	3.1 E-6	NA	1.3 E-4	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	4.0 E-5	NA	3.7 E-6	NA	2.5 E-4
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	1.4 E-6	1.1 E-6	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	1.1 E-5	NA	1.5 E-5	6.8 E-6	NA	9.1 E-4
52D-SP36-30	30	2.1 E-6	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	3.1 E-5
52D-SP37-30	30	NA	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-6	3.1 E-5	NA	5.6 E-5	NA	NA
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	1.7 E-5	1.7 E-4	NA	4.0 E-6	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	NA	NA	NA	NA
52D-SP42-30	30	2.6 E-7	2.3 E-5	NA	NA	NA	NA	4.6 E-6	NA	NA	NA	1.1 E-5	7.4 E-5	NA	NA	NA	NA
52D-SP43-30	30	2.5 E-5	1.7 E-6	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	9.0 E-6	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	6.4 E-6	7.3 E-4	NA	8.6 E-6	9.0 E-5	4.2 E-4	NA	5.0 E-6	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-6	NA	NA	3.4 E-6	NA	3.4 E-3
52D-SP44-40	40	NA	9.5 E-7	NA	NA	NA	NA	3.0 E-6	4.9 E-4	NA	NA	4.8 E-5	2.9 E-4	NA	1.2 E-5	NA	NA

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
08D-SP07-10	10	NA	NA	3.8 E-5	NA	NA	NA	8.6 E-6	NA	1.8 E-5	3.5 E-5	NA	2.2 E-6	NA	1.7 E-5	5.1 E-5	NA	NA	1.4 E-3
08D-SP08-10	10	NA	NA	1.4 E-5	3.8 E-6	NA	NA	3.7 E-5	NA	9.2 E-5	5.4 E-5	2.8 E-5	3.6 E-6	8.6 E-4	6.8 E-6	1.2 E-4	NA	NA	2.8 E-3
08D-SP09-10	10	NA	4.6 E-7	NA	NA	NA	NA	3.3 E-5	NA	7.1 E-5	3.3 E-5	NA	NA	NA	NA	5.9 E-5	NA	NA	7.6 E-4
52D-SP24-10	10	1.2 E-3	NA	NA	3.5 E-6	NA	2.8 E-5	1.0 E-5	NA	9.3 E-6	1.4 E-4	5.4 E-5	5.0 E-6	1.4 E-3	2.3 E-5	3.8 E-5	1.2 E-3	NA	7.5 E-3
52D-SP25-10	10	2.5 E-4	NA	NA	4.3 E-6	NA	3.7 E-6	NA	NA	1.9 E-5	1.6 E-4	7.4 E-5	5.0 E-6	6.5 E-4	NA	8.0 E-5	9.1 E-4	NA	1.2 E-2
52D-SP26-10	10	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	NA	7.6 E-5	4.7 E-5	NA	9.5 E-4	NA	1.5 E-5	8.4 E-4	NA	3.0 E-3
52D-SP29-10	10	NA	2.3 E-6	NA	3.7 E-6	NA	3.3 E-6	3.8 E-5	NA	9.7 E-5	1.2 E-4	8.4 E-5	7.8 E-6	7.8 E-4	NA	1.3 E-4	2.0 E-3	NA	4.8 E-3
52D-SP30-10	10	NA	3.3 E-7	NA	NA	NA	5.7 E-7	7.2 E-6	NA	1.4 E-5	3.4 E-5	NA	NA	4.7 E-4	NA	2.1 E-5	3.6 E-4	NA	1.3 E-3
52D-SP31-10	10	NA	1.7 E-6	NA	NA	NA	2.1 E-6	NA	NA	1.5 E-5	NA	NA	NA	1.9 E-4	NA	1.8 E-5	3.1 E-4	NA	8.8 E-4
52D-SP32-10	10	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	5.9 E-4	NA	2.9 E-3
52D-SP33-10	10	1.2 E-4	NA	NA	4.1 E-6	NA	1.5 E-6	1.5 E-5	NA	2.7 E-5	1.6 E-4	5.4 E-5	3.9 E-6	1.1 E-3	3.4 E-5	7.5 E-5	2.1 E-4	NA	7.0 E-3
52D-SP35-10	10	NA	NA	4.6 E-6	NA	NA	5.7 E-6	NA	NA	1.7 E-5	NA	NA	NA	1.2 E-3	NA	NA	6.7 E-6	NA	1.3 E-3
52D-SP36-10	10	NA	NA	1.2 E-5	NA	1.6 E-4	2.2 E-5	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	NA	NA	NA	1.1 E-3
52D-SP37-10	10	NA	NA	2.3 E-5	NA	9.4 E-5	4.8 E-6	NA	NA	2.2 E-5	NA	NA	NA	4.5 E-4	2.5 E-5	7.8 E-6	1.4 E-5	NA	1.5 E-3
52D-SP38-10	10	NA	NA	NA	NA	NA	9.0 E-7	NA	NA	1.2 E-5	NA	NA	NA	7.4 E-4	2.3 E-5	NA	NA	NA	8.2 E-4
52D-SP39-10	10	NA	NA	9.7 E-6	NA	NA	NA	6.9 E-6	NA	NA	4.5 E-5	NA	NA	NA	1.1 E-5	5.2 E-5	NA	NA	3.0 E-4
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	1.9 E-5	NA	NA	NA	3.9 E-4	2.3 E-5	1.6 E-5	9.9 E-6	NA	5.8 E-4
52D-SP41-10	10	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	5.8 E-6	NA	NA	NA	1.1 E-3	7.8 E-6	1.2 E-5	1.8 E-5	NA	1.3 E-3
52D-SP42-10	10	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	8.2 E-4	7.6 E-6	1.2 E-5	9.1 E-6	NA	1.2 E-3
52D-SP43-10	10	8.2 E-5	3.6 E-6	NA	NA	1.9 E-5	9.6 E-6	NA	NA	7.4 E-6	NA	NA	NA	1.4 E-3	NA	1.4 E-5	2.6 E-4	NA	2.4 E-3
AW-08D-SP10-10	10	NA	1.2 E-6	NA	4.7 E-6	NA	NA	9.0 E-5	NA	1.5 E-4	1.6 E-4	6.4 E-5	NA	NA	NA	1.2 E-4	NA	NA	2.3 E-3
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	1.7 E-5	NA	2.9 E-3
D(b)-SP03-10	10	NA	NA	NA	NA	NA	2.8 E-6	9.2 E-6	NA	2.0 E-5	NA	NA	NA	1.6 E-3	NA	1.8 E-5	8.4 E-4	NA	2.7 E-3
D(b)-SP04-10	10	NA	3.4 E-7	NA	NA	NA	2.7 E-6	2.0 E-5	1.1 E-2	4.5 E-5	NA	NA	NA	1.4 E-3	NA	3.3 E-5	3.2 E-5	NA	1.3 E-2
D(b)-SP05-10	10	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	5.8 E-6	NA	NA	NA	1.3 E-4	NA	9.5 E-6	NA	NA	1.7 E-4
D(b)-SP06-10	10	NA	NA	1.2 E-5	NA	NA	1.4 E-6	NA	NA	6.7 E-6	NA	NA	NA	8.2 E-4	9.1 E-6	2.0 E-5	NA	NA	1.8 E-3
D(c)-SP05-10	10	NA	NA	1.1 E-5	NA	NA	NA	3.7 E-5	NA	1.1 E-4	2.5 E-5	NA	NA	NA	NA	5.4 E-5	NA	NA	1.2 E-3
D(c)-SP06-10	10	NA	NA	NA	NA	NA	4.2 E-7	1.1 E-5	NA	2.4 E-5	NA	NA	NA	NA	NA	2.1 E-5	5.2 E-4	NA	8.0 E-3
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	NA	NA	6.5 E-6	NA	3.1 E-5	NA	2.1 E-4
D(c)-SP09-10	10	NA	NA	9.2 E-6	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.4 E-5	9.2 E-6	NA	NA	9.5 E-4
D(c)-SP10-10	10	NA	NA	6.5 E-5	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	8.9 E-6	1.4 E-5	NA	NA	1.1 E-4
D(c)-SP11-10	10	NA	3.9 E-7	NA	3.1 E-6	NA	1.6 E-7	4.2 E-5	NA	8.1 E-5	3.6 E-5	NA	NA	9.5 E-5	1.4 E-5	7.4 E-5	NA	NA	9.5 E-4
D(c)-SP12-10	10	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	9.2 E-6	NA	NA	NA	8.3 E-4	9.1 E-6	2.5 E-5	9.1 E-6	NA	1.1 E-3
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	5.6 E-5	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	4.4 E-4
08D-SP07-20	20	NA	8.3 E-7	1.1 E-5	NA	NA	NA	2.2 E-5	NA	1.7 E-4	1.8 E-5	NA	NA	NA	1.2 E-5	2.5 E-5	NA	NA	7.8 E-4
08D-SP08-20	20	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	7.4 E-6	NA	NA	NA	NA	NA	1.4 E-5	4.7 E-6	NA	1.6 E-4
52D-SP24-20	20	1.0 E-4	NA	3.1 E-6	2.2 E-6	NA	4.8 E-6	7.9 E-6	NA	7.0 E-6	8.1 E-5	2.6 E-5	NA	7.1 E-5	NA	3.6 E-5	1.9 E-4	NA	2.9 E-3
52D-SP25-20	20	5.9 E-5	NA	NA	1.4 E-6	NA	1.9 E-6	NA	NA	1.8 E-5	5.8 E-5	2.2 E-5	1.6 E-6	2.3 E-4	NA	3.2 E-5	4.1 E-4	NA	4.5 E-3
52D-SP27-20	20	3.7 E-5	NA	NA	3.5 E-6	NA	4.8 E-7	4.6 E-6	NA	8.5 E-6	1.4 E-4	3.9 E-5	2.1 E-6	2.2 E-4	NA	6.9 E-5	6.9 E-5	NA	2.7 E-3
52D-SP28-20	20	NA	4.1 E-7	4.5 E-5	NA	NA	1.2 E-7	1.9 E-5	NA	6.9 E-5	NA	NA	NA	NA	NA	1.7 E-5	2.5 E-5	NA	4.2 E-3
52D-SP29-20	20	NA	4.8 E-7	NA	NA	NA	3.7 E-6	4.6 E-6	NA	1.2 E-5	NA	NA	NA	9.1 E-5	NA	1.0 E-5	2.7 E-4	NA	7.3 E-4
52D-SP30-20	20	6.6 E-5	9.2 E-7	NA	NA	NA	4.8 E-6	5.4 E-6	NA	1.5 E-5	NA	NA	NA	1.9 E-4	NA	6.7 E-6	5.2 E-4	NA	1.1 E-3
52D-SP32-20	20	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	2.0 E-3
52D-SP33-20	20	8.3 E-5	NA	NA	3.2 E-6	NA	1.4 E-6	7.4 E-6	NA	1.0 E-5	1.1 E-4	4.2 E-5	2.3 E-6	3.2 E-4	NA	6.2 E-5	1.0 E-4	NA	8.4 E-3
52D-SP35-20	20	NA	NA	2.4 E-6	NA	NA	3.7 E-6	NA	NA	5.0 E-6	NA	NA	NA	7.1 E-4	NA	NA	5.2 E-6	NA	8.2 E-4
52D-SP36-20	20	1.0 E-4	NA	NA	NA	1.3 E-4	2.9 E-5	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	4.7 E-6	8.6 E-5	1.1 E-5	9.3 E-4
52D-SP39-20	20	NA	2.5 E-7	6.0 E-6	NA	NA	3.4 E-7	3.2 E-5	NA	9.2 E-6	2.5 E-5	NA	NA	NA	4.9 E-6	4.7 E-5	1.4 E-5	NA	6.2 E-4
52D-SP40-20	20	NA	NA	NA	2.3 E-6	NA	NA	1.9 E-5	NA	5.1 E-5	4.3 E-5	2.4 E-5	NA	2.9 E-4	4.0 E-5	4.9 E-5	9.9 E-6	NA	8.2 E-4
52D-SP41-20	20	NA	NA	8.0 E-6	NA	NA	NA	7.7 E-6	NA	1.2 E-5	1.3 E-5	NA	NA	8.4 E-5	1.5 E-5	2.5 E-5	3.0 E-6	NA	2.5 E-4
52D-SP42-20	20	NA	NA	8.0 E-6	NA	NA	1.4 E-7	8.8 E-6	NA	1.4 E-5	1.7 E-5	NA	NA	1.3 E-4	1.4 E-5	4.2 E-5	3.3 E-6	NA	4.3 E-4
52D-SP43-20	20	6.1 E-5	2.8 E-6	NA	NA	1.3 E-5	8.5 E-6	4.2 E-6	NA	6.6 E-6	NA	NA	NA	6.4 E-4	NA	4.7 E-6	1.2 E-4	NA	1.3 E-3
52D-SP44-20	20	NA	NA	2.0 E-5	NA	1.3 E-5	7.7 E-7	NA	NA	6.2 E-6	NA	NA	NA	NA	NA	6.6 E-6	NA	NA	9.0 E-5

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
AW-08D-SP10-20	20	NA	2.9 E-7	3.4 E-6	1.2 E-6	NA	NA	3.0 E-5	NA	6.1 E-5	3.0 E-5	NA	NA	NA	NA	5.0 E-5	3.1 E-6	NA	6.4 E-4
D(b)-SP03-20	20	NA	NA	NA	NA	NA	1.8 E-6	4.8 E-6	NA	9.2 E-6	NA	NA	NA	1.6 E-4	NA	8.6 E-6	1.3 E-4	NA	5.9 E-4
D(b)-SP04-20	20	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	8.5 E-6	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	7.1 E-5
D(b)-SP06-20	20	NA	NA	7.4 E-6	NA	NA	NA	NA	NA	5.8 E-6	NA	NA	NA	1.3 E-3	1.1 E-5	7.2 E-6	NA	NA	1.3 E-3
D(c)-SP05-20	20	NA	NA	NA	NA	NA	4.2 E-7	1.9 E-5	NA	5.4 E-5	NA	NA	NA	NA	NA	2.2 E-5	1.4 E-4	NA	1.9 E-3
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	6.6 E-6
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	8.2 E-6	NA	2.6 E-5
D(c)-SP08-20	20	NA	NA	7.7 E-6	NA	NA	NA	1.6 E-5	NA	9.2 E-5	1.6 E-5	NA	NA	NA	2.2 E-5	2.2 E-5	5.2 E-6	NA	5.9 E-4
D(c)-SP09-20	20	NA	NA	8.5 E-6	NA	NA	NA	1.1 E-5	NA	1.3 E-5	NA	NA	NA	NA	7.0 E-6	7.4 E-6	3.0 E-6	NA	2.2 E-3
D(c)-SP10-20	20	NA	NA	NA	NA	NA	2.1 E-6	4.6 E-6	NA	1.3 E-5	NA	NA	NA	2.3 E-4	1.4 E-5	1.7 E-5	2.3 E-5	NA	3.5 E-4
D(c)-SP11-20	20	NA	NA	NA	NA	1.1 E-5	2.0 E-7	5.0 E-6	NA	1.8 E-5	NA	NA	NA	NA	1.8 E-5	1.8 E-5	5.6 E-6	NA	2.2 E-3
D(c)-SP12-20	20	NA	NA	6.5 E-6	1.8 E-6	NA	1.0 E-7	1.4 E-5	NA	2.2 E-5	3.0 E-5	1.9 E-5	NA	6.5 E-4	2.0 E-5	4.3 E-5	1.2 E-5	NA	1.8 E-3
52D-SP40-28	28	NA	NA	6.4 E-6	NA	NA	NA	9.3 E-6	NA	2.6 E-5	1.3 E-5	NA	NA	8.5 E-5	3.6 E-5	2.7 E-5	5.4 E-6	NA	7.9 E-4
52D-SP24-30	30	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-6	NA	NA	2.0 E-5
52D-SP25-30	30	3.7 E-5	NA	NA	NA	NA	3.3 E-6	NA	NA	2.8 E-6	2.8 E-5	NA	NA	4.3 E-4	NA	1.2 E-5	5.1 E-4	NA	2.4 E-3
52D-SP27-30	30	NA	1.5 E-7	2.7 E-6	2.9 E-6	NA	7.8 E-7	5.2 E-6	NA	7.7 E-6	1.1 E-4	3.1 E-5	9.8 E-7	NA	3.2 E-6	6.8 E-5	3.1 E-6	NA	5.3 E-3
52D-SP28-30	30	2.7 E-5	NA	NA	NA	NA	1.7 E-6	4.3 E-6	NA	7.2 E-6	2.0 E-5	NA	NA	1.9 E-4	NA	6.1 E-6	7.3 E-5	NA	7.6 E-4
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	NA	5.2 E-6	NA	NA	6.7 E-6	3.0 E-6	NA	4.7 E-6	9.7 E-6	NA	NA	9.7 E-4	7.0 E-6	4.7 E-6	8.7 E-6	NA	2.0 E-3
52D-SP36-30	30	1.2 E-4	NA	NA	NA	1.0 E-4	1.9 E-5	NA	NA	3.6 E-6	NA	NA	NA	2.7 E-4	5.6 E-6	2.7 E-6	7.0 E-5	1.3 E-5	6.6 E-4
52D-SP37-30	30	2.9 E-5	NA	3.7 E-6	NA	1.3 E-5	1.2 E-6	3.6 E-5	NA	2.6 E-5	NA	NA	NA	1.2 E-4	7.3 E-6	4.4 E-6	7.0 E-6	NA	3.5 E-4
52D-SP39-30	30	NA	1.4 E-7	7.0 E-6	NA	NA	NA	1.5 E-5	NA	3.0 E-5	NA	NA	NA	NA	NA	9.2 E-6	NA	NA	2.5 E-4
52D-SP41-30	30	NA	NA	2.5 E-6	NA	NA	NA	3.5 E-6	NA	6.1 E-6	9.4 E-6	NA	NA	3.7 E-5	9.5 E-6	9.8 E-6	NA	NA	8.5 E-5
52D-SP42-30	30	2.4 E-3	NA	NA	NA	NA	3.6 E-6	2.9 E-6	NA	1.2 E-5	NA	NA	NA	2.5 E-3	6.2 E-5	1.4 E-5	2.3 E-3	8.7 E-6	7.4 E-3
52D-SP43-30	30	NA	3.2 E-7	2.9 E-5	NA	NA	1.1 E-6	NA	NA	NA	9.4 E-6	NA	NA	4.3 E-5	NA	6.1 E-6	1.6 E-5	NA	1.2 E-3
52D-SP44-30	30	NA	3.7 E-7	2.3 E-5	NA	NA	9.4 E-8	4.7 E-5	NA	1.0 E-4	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	1.5 E-3
D(b)-SP05-30	30	NA	NA	2.3 E-6	NA	NA	1.0 E-6	4.5 E-6	NA	5.5 E-6	NA	NA	NA	4.4 E-5	4.0 E-6	7.4 E-6	NA	NA	7.0 E-5
D(c)-SP05-30	30	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	5.8 E-5	3.2 E-6	NA	3.7 E-4	NA	3.8 E-3
52D-SP44-40	40	NA	1.3 E-7	2.1 E-5	NA	1.6 E-5	3.8 E-6	2.7 E-5	NA	7.7 E-5	NA	NA	NA	NA	NA	2.3 E-5	2.6 E-6	5.8 E-6	1.0 E-3

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	2.7 E-7	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA
52D-SP24-10	10	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	2.5 E-7	NA
52D-SP25-10	10	NA	7.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	NA	NA	1.7 E-7	NA
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	NA	NA	NA	NA	NA
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	9.9 E-8	NA
52D-SP31-10	10	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA
52D-SP32-10	10	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-10	10	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	2.0 E-7	NA
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP37-10	10	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	NA	NA	NA	NA
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	7.8 E-8	NA
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	1.6 E-7	NA
52D-SP43-10	10	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	8.5 E-8	NA
AW-08D-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	NA	NA
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	4.0 E-6	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA	NA	NA	NA
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	2.5 E-8	NA
52D-SP24-20	20	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	5.9 E-8	NA
52D-SP25-20	20	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	9.4 E-8	NA
52D-SP27-20	20	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	4.7 E-8	NA
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	2.3 E-7	NA	NA
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	1.2 E-7	3.3 E-8	NA
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	6.7 E-8	NA
52D-SP32-20	20	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	1.3 E-7	NA
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA
52D-SP36-20	20	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-20	20	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	1.2 E-7	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA	NA	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-8	NA	NA	NA	NA	NA
52D-SP43-20	20	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	6.7 E-8	NA
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	9.4 E-8	NA
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA	NA	7.1 E-7	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-8	NA	NA	NA	6.3 E-8	NA
D(c)-SP09-20	20	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	1.1 E-6	NA
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	1.1 E-6	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	NA	NA	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	NA	8.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	1.0 E-7	NA
52D-SP27-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	2.6 E-8	NA
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	1.4 E-7	NA
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	6.6 E-10	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	5.2 E-7	NA
52D-SP36-30	30	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA
52D-SP37-30	30	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA
52D-SP43-30	30	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA
52D-SP44-40	40	NA	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-9	NA	NA	NA	1 E-7
08D-SP08-10	10	NA	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	2.2 E-9	NA	NA	NA	9 E-7
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
52D-SP24-10	10	NA	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	7.2 E-9	NA	7.9 E-7	NA	1 E-6
52D-SP25-10	10	NA	NA	5.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA	5.9 E-7	NA	9 E-7
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	5.4 E-7	NA	7 E-7
52D-SP29-10	10	NA	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	1.3 E-6	NA	2 E-6
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	2.4 E-7	NA	4 E-7
52D-SP31-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	2.0 E-7	NA	3 E-7
52D-SP32-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	3.9 E-7	NA	5 E-7
52D-SP33-10	10	NA	NA	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.1 E-8	NA	1.4 E-7	NA	6 E-7
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	4.4 E-9	NA	1 E-7
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	1 E-7
52D-SP37-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	7.8 E-9	NA	8.9 E-9	NA	1 E-7
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	7.2 E-9	NA	NA	NA	9 E-8
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	3 E-8
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	7.2 E-9	NA	6.4 E-9	NA	1 E-7
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	2.5 E-9	NA	1.2 E-8	NA	2 E-7
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-8	2.4 E-9	NA	5.9 E-9	NA	3 E-7
52D-SP43-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	1.7 E-7	NA	5 E-7
AW-08D-SP10-10	10	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	1.1 E-8	NA	3 E-7
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	5.4 E-7	NA	8 E-7
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA	NA	NA	1.7 E-7	NA	NA	2.1 E-8	NA	8 E-7
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	2 E-8
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-8	2.9 E-9	NA	NA	NA	2 E-7
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	4 E-6
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	2.0 E-8	NA	1 E-7
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	NA	NA	4 E-7
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	3 E-9
D(c)-SP11-10	10	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	4.4 E-9	NA	NA	NA	3 E-7
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	2.9 E-9	NA	5.9 E-9	NA	2 E-7
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	NA	NA	2 E-7
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	5 E-8
52D-SP24-20	20	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	1.2 E-7	NA	2 E-7
52D-SP25-20	20	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	2.7 E-7	NA	4 E-7
52D-SP27-20	20	NA	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	4.5 E-8	NA	2 E-7
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	4 E-7
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	1.7 E-7	NA	4 E-7
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	3.4 E-7	NA	5 E-7
52D-SP32-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	2 E-7
52D-SP33-20	20	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	6.7 E-8	NA	3 E-7
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-8	NA	NA	3.4 E-9	NA	1 E-7
52D-SP36-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	5.6 E-8	4.8 E-8	2 E-7
52D-SP39-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	9.0 E-9	NA	2 E-7
52D-SP40-20	20	NA	NA	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	1.3 E-8	NA	6.5 E-9	NA	2 E-7
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	4.9 E-9	NA	2.0 E-9	NA	4 E-8
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	4.6 E-9	NA	2.1 E-9	NA	9 E-8
52D-SP43-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA	7.9 E-8	NA	2 E-7
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Table 5.2-48
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
AW-08D-SP10-20	20	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	2 E-7
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	8.7 E-8	NA	2 E-7
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	2 E-8
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	3.5 E-9	NA	NA	NA	2 E-7
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	NA	9 E-7
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-9	NA	5 E-9
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-9	NA	3.4 E-9	NA	1 E-7
D(c)-SP09-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	1.9 E-9	NA	1 E-6
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	4.6 E-9	NA	1.5 E-8	NA	5 E-8
D(c)-SP11-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	3.6 E-9	NA	1 E-6
D(c)-SP12-20	20	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	6.3 E-9	NA	7.9 E-9	NA	2 E-7
52D-SP40-28	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	1.1 E-8	NA	3.5 E-9	NA	9 E-8
52D-SP24-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
52D-SP25-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	3.3 E-7	NA	5 E-7
52D-SP27-30	30	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	2.0 E-9	NA	7 E-8
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	4.8 E-8	NA	2 E-7
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
52D-SP35-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	2.2 E-9	NA	5.7 E-9	NA	7 E-7
52D-SP36-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	1.8 E-9	NA	4.6 E-8	5.6 E-8	2 E-7
52D-SP37-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	2.3 E-9	NA	4.6 E-9	NA	4 E-8
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	3.0 E-9	NA	NA	NA	7 E-9
52D-SP42-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	2.0 E-8	NA	1.5 E-6	3.7 E-8	2 E-6
52D-SP43-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	1.1 E-8	NA	2 E-8
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	1.3 E-9	NA	NA	NA	6 E-9
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	1.0 E-9	NA	2.4 E-7	NA	2 E-6
52D-SP44-40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	2.5 E-8	2 E-7

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.2-14) x the unit hazard or unit risk for the chemical).

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+2	2.8 E+0	7.5 E-1	2.2 E+1	4.6 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	4.9 E+1	6.4 E+1
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+2	1.2 E+0	3.2 E-1	9.6 E+0	2.0 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1	2.7 E+1
Unit Risk		NA	8.5 E-4	NA	3.3 E-3	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	1.2 E-2	NA
08D-SP07-10	10							140	13		4.8	840	18		17			
08D-SP08-10	10							260			7.8	830	66		32	26		
08D-SP09-10	10							65				250	26		95			
52D-SP24-10	10	12000	110	10			220			10			6				35	96
52D-SP25-10	10	2500	20	8.3			1700			8.2	41		10		80		24	20
52D-SP26-10	10	1300		18						11								
52D-SP29-10	10	1200											81		88			
52D-SP30-10	10	160										74	7.5		56		14	
52D-SP31-10	10	1100	5.9										14		8.8			
52D-SP32-10	10	12000	53												39			
52D-SP33-10	10	98	9.7	9.5			820	20		10		110	12		14		29	10
52D-SP35-10	10	34										130			20			
52D-SP36-10	10	51										73			7			
52D-SP37-10	10	42				18			15						72			
52D-SP38-10	10	10													60			
52D-SP39-10	10						9.8					320	3.8		3.8			
52D-SP40-10	10												6.2		16			
52D-SP41-10	10	12											4.6		6.7		11	
52D-SP42-10	10	11										140	3.9		5.4		22	
52D-SP43-10	10	3200	8.5					27			12	210	5.4		29		12	6.7
AW-08D-SP10-10	10			8.6				31		9.0		120	57		360			
AW-AFI-SP01-10	10	44													6.4			
D(b)-SP03-10	10	28										98	12		22			
D(b)-SP04-10	10	39						32				150	20		21			
D(b)-SP05-10	10														30			
D(b)-SP06-10	10								15				8.1		9.3			
D(c)-SP05-10	10							120			5.6	620	49		30			
D(c)-SP06-10	10							34				120	22		80		560	
D(c)-SP07-10	10											63			13		11	
D(c)-SP09-10	10						50					150			13		49	
D(c)-SP10-10	10											93						
D(c)-SP11-10	10											53	35		21			
D(c)-SP12-10	10							42				210	7.2					
05D-SP08-20	20	94						45				150	31		74			
08D-SP07-20	20							120			5.7	470	39		220			
08D-SP08-20	20											56	6.1		62		6.3	
52D-SP24-20	20	1900	22	7.2			660			8.8		85	5.8		12		15	15
52D-SP25-20	20	890	5.4	8.3			1100			8.8	16		5.6		7.7		24	8.5
52D-SP27-20	20	75	7.0	12			560			15			9.9		3.6		12	5.3
52D-SP28-20	20	14						340	100		18	2000	35		22	41		
52D-SP29-20	20	510						32				150	11		29	21	8.3	
52D-SP30-20	20	1000											9.1		12		17	9.5
52D-SP32-20	20	33000	170															
52D-SP33-20	20	140		8.3			2500			9.6			7.9		7.4		34	12
52D-SP35-20	20	32										110			53		7.1	
52D-SP36-20	20	53	72												16			15
52D-SP39-20	20	7.8	6.2				50					280	10		12		30	
52D-SP40-20	20							200			12	490	23		17			
52D-SP41-20	20							36				200	6.6					
52D-SP42-20	20							58			5.6	300	17					
52D-SP43-20	20	4800	18									77	4.1		9.6		17	8.8
52D-SP44-20	20							22			5.5	310			6.8			
AW-08D-SP10-20	20							46				230	46		21			
D(b)-SP03-20	20	18											12		12		24	
D(b)-SP04-20	20	14										58	5.3		7.5			
D(b)-SP06-20	20											72						

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+2	2.8 E+0	7.5 E-1	2.2 E+1	4.6 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	4.9 E+1	6.4 E+1
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+2	1.2 E+0	3.2 E-1	9.6 E+0	2.0 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1	2.7 E+1
Unit Risk		NA	8.5 E-4	NA	3.3 E-3	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	1.2 E-2	NA
D(c)-SP05-20	20							130				550	22		230		180	
D(c)-SP06-20	20														4.0			
D(c)-SP07-20	20														8.1			
D(c)-SP08-20	20						9.6					160	18		190		16	
D(c)-SP09-20	20					20	13					97	8.7		81		290	
D(c)-SP10-20	20	28										83			70			
D(c)-SP11-20	20					17							4.4		130		290	
D(c)-SP12-20	20							200	21		6.6	950	21		16			
52D-SP40-28	28					17		61	20			330	16					
52D-SP24-30	30				7.7							100						
52D-SP25-30	30	1900	6.0	7.7			500			8.2			3.6		3.7		38	8.2
52D-SP27-30	30	31		14			2500			17			12		4.3		9.6	
52D-SP28-30	30	93		6.8						6.2			6.4		12		52	5.9
52D-SP30-30	30																	
52D-SP35-30	30	41	4.7			70						130		16	22		190	
52D-SP36-30	30	62	100												8.9		6.4	27
52D-SP37-30	30		11									91	5.0		180			6.4
52D-SP39-30	30							20				210	27		13			
52D-SP41-30	30											87						
52D-SP42-30	30	7.9	100					130				130	12					530
52D-SP43-30	30	750	7.5						51			110						
52D-SP44-30	30							180	35		160	1100	68		16			
D(b)-SP05-30	30														4.9			
D(c)-SP05-30	30											57			11		710	
52D-SP44-40	40		5.5					110	31			770	62		50			

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard Child		3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	6.4 E+2	3.2 E+0	2.2 E+1	2.2 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.4 E+0	3.7 E+0	2.2 E+1
Unit Hazard Adult		1.6 E-1	5.5 E-1	9.4 E-1	4.8 E+0	3.2 E-2	1.4 E+0	2.7 E+2	1.4 E+0	9.6 E+0	9.6 E+0	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.4 E+0
Unit Risk		NA	NA	1.3 E-3	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
08D-SP07-10	10		82				6.8		14	7.8		4.8		8.9	31		
08D-SP08-10	10		31	8.8			29		72	12	5.6	7.9	71	3.6	74		
08D-SP09-10	10	5.9					26		56	7.4					36		
52D-SP24-10	10			8.1		1900	7.9		7.3	31	11	11	120	12	23	1600	
52D-SP25-10	10			10		250			15	36	15	11	54		49	1200	
52D-SP26-10	10					260				17	9.6		79		8.9	1100	
52D-SP29-10	10	30		8.7		220	30		76	28	17	17	65		79	2600	
52D-SP30-10	10	4.3				38	5.7		11	7.6			39		13	480	
52D-SP31-10	10	22				140			12				16		11	410	
52D-SP32-10	10					1500							98			780	
52D-SP33-10	10			9.5		98	12		21	36	11	8.4	92	18	46	280	
52D-SP35-10	10		10			380			13				97			8.8	
52D-SP36-10	10		27		66	1500							76				
52D-SP37-10	10		49		38	320			17				37	13	4.8	18	
52D-SP38-10	10					60			9.2				61	12			
52D-SP39-10	10		21				5.4			10				6	32		
52D-SP40-10	10						5.6		15				32	12	9.7	13	
52D-SP41-10	10					85			4.6				87	4.1	7.4	24	
52D-SP42-10	10					140							68	4	7.3	12	
52D-SP43-10	10	46			7.6	640			5.8				120		8.7	340	
AW-08D-SP10-10	10	15		11			71		120	35	13				76		
AW-AFI-SP01-10	10					280							240			22	
D(b)-SP03-10	10					190	7.2		16				130		11	1100	
D(b)-SP04-10	10	4.4				180	16	110	35				120		20	42	
D(b)-SP05-10	10					17			4.6				11		5.8		
D(b)-SP06-10	10		25			96			5.3				68	4.8	12		
D(c)-SP05-10	10		23				29		85	5.5					33		
D(c)-SP06-10	10					28	8.6		19						13	690	
D(c)-SP07-10	10								6.8					3.4		41	
D(c)-SP09-10	10		20						13					7.5	5.6		
D(c)-SP10-10	10		140						5.3					4.7	8.4		
D(c)-SP11-10	10	5.1		7.1		11	33		64	8.0			7.9	7.3	45		
D(c)-SP12-10	10					14			7.2				69	4.8	15	12	
05D-SP08-20	20						28		73						22		
08D-SP07-20	20	19	40				27		220	7.0				11	27		
08D-SP08-20	20					13			9.6						15	11	
52D-SP24-20	20		11	9.5		570	9.9		9.1	32	9.1		11		38	430	
52D-SP25-20	20			6.0		220			24	23	7.9	6.3	36		34	960	
52D-SP27-20	20			15		57	5.8		11	57	14	8	34		74	160	
52D-SP28-20	20	9.3	160			14	24		90						18	58	
52D-SP29-20	20	11				440	5.7		15				14		11	620	
52D-SP30-20	20	21				560	6.7		20				29		7.2	1200	
52D-SP32-20	20					2900										480	
52D-SP33-20	20			14		160	9.2		13	44	15	8.9	49		66	240	
52D-SP35-20	20		8.6			440			6.5				110			12	
52D-SP36-20	20				89	3400							82		5.0	200	3.4
52D-SP39-20	20	5.8	21			40	40		12	9.9				4.4	50	32	
52D-SP40-20	20			10			24		66	17	8.7		45	36	52	23	
52D-SP41-20	20		28				9.6		15	5.2			13	14	27	7.0	
52D-SP42-20	20		28			17	11		18	6.7			20	13	45	7.6	
52D-SP43-20	20	64			9.3	1000	5.3		8.6				99		5.0	280	
52D-SP44-20	20		72		9.4	91			8.1						7.1		
AW-08D-SP10-20	20	6.7	12	5.1			37		80	12					54	7.3	
D(b)-SP03-20	20					210	6.0		12				24		9.2	310	
D(b)-SP04-20	20					63			11							7.1	
D(b)-SP06-20	20		26						7.6				200	10	7.7		

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard Child		3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	6.4 E+2	3.2 E+0	2.2 E+1	2.2 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.4 E+0	3.7 E+0	2.2 E+1
Unit Hazard Adult		1.6 E-1	5.5 E-1	9.4 E-1	4.8 E+0	3.2 E-2	1.4 E+0	2.7 E+2	1.4 E+0	9.6 E+0	9.6 E+0	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.4 E+0
Unit Risk		NA	NA	1.3 E-3	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
D(c)-SP05-20	20					49	24		70						24	320	
D(c)-SP06-20	20														5.1		
D(c)-SP07-20	20									5.4						19	
D(c)-SP08-20	20		27				20		120	6.5				20	24	12	
D(c)-SP09-20	20		30				14		17					6.3	7.9	6.9	
D(c)-SP10-20	20					250	5.7		17				36	13	18	53	
D(c)-SP11-20	20				7.8	23	6.3		23					16	19	13	
D(c)-SP12-20	20		23	7.7		12	18		29	12	6.7		100	18	46	28	
52D-SP40-28	28		31				16		45	7.4			18	46	41	18	
52D-SP24-30	30		14												12		
52D-SP25-30	30					590			5	17			98		20	1800	
52D-SP27-30	30	5.3	14	18		140	9.5		14	68	17	5.8		4.4	110	11	
52D-SP28-30	30					300	7.8		13	12			42		10	260	
52D-SP30-30	30																
52D-SP35-30	30		27			1200	5.5		8.6	5.9			220	9.5	7.6	31	
52D-SP36-30	30				110	3400			6.6				60	7.6	4.4	250	6.0
52D-SP37-30	30		19		14	220	65		48				28	10	7.2	25	
52D-SP39-30	30	4.7	36				27		54						15		
52D-SP41-30	30		13				6.4		11	5.7			8.3	13	16		
52D-SP42-30	30					640	5.2		21				560	85	23	8300	4.0
52D-SP43-30	30	11	150			200				5.7			9.6		10	58	
52D-SP44-30	30	13	120			17	85		190						32		
D(b)-SP05-30	30		12			180	8.2		9.9				10	5.4	12		
D(c)-SP05-30	30					230							13	4.4		1300	
52D-SP44-40	40	6.1	140		23	890	64		180						50	12	3.5

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	4.1 E-7	2.2 E-5	NA	2.1 E-8	5.9 E-6	9.4 E-6	NA	4.5 E-7	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	3.5 E-8	5.8 E-6	3.4 E-5	NA	8.5 E-7	9.1 E-6	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.8 E-6	1.4 E-5	NA	2.5 E-6	NA	NA	NA
52D-SP24-10	10	3.3 E-5	2.1 E-6	1.5 E-5	NA	NA	3.4 E-5	NA	NA	1.6 E-6	NA	NA	3.1 E-6	NA	NA	NA	1.4 E-5	3.6 E-5
52D-SP25-10	10	7.0 E-6	3.8 E-7	1.3 E-5	NA	NA	2.6 E-4	NA	NA	1.3 E-6	1.8 E-7	NA	5.2 E-6	NA	2.1 E-6	NA	9.8 E-6	7.5 E-6
52D-SP26-10	10	3.6 E-6	NA	2.8 E-5	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	2.3 E-6	NA	NA	NA
52D-SP30-10	10	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	3.9 E-6	NA	1.5 E-6	NA	5.7 E-6	NA
52D-SP31-10	10	3.1 E-6	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	2.3 E-7	NA	NA	NA
52D-SP32-10	10	3.3 E-5	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA
52D-SP33-10	10	2.7 E-7	1.8 E-7	1.5 E-5	NA	NA	1.3 E-4	5.9 E-8	NA	1.6 E-6	NA	7.7 E-7	6.3 E-6	NA	3.7 E-7	NA	1.2 E-5	3.8 E-6
52D-SP35-10	10	9.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-7	NA	NA	5.3 E-7	NA	NA	NA
52D-SP36-10	10	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	1.9 E-7	NA	NA	NA
52D-SP37-10	10	1.2 E-7	NA	NA	NA	1.1 E-7	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA
52D-SP38-10	10	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	2.3 E-6	2.0 E-6	NA	1.0 E-7	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	4.2 E-7	NA	NA	NA
52D-SP41-10	10	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	1.8 E-7	NA	4.5 E-6	NA
52D-SP42-10	10	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-7	2.0 E-6	NA	1.4 E-7	NA	9.0 E-6	NA
52D-SP43-10	10	8.9 E-6	1.6 E-7	NA	NA	NA	NA	8.0 E-8	NA	NA	5.3 E-8	1.5 E-6	2.8 E-6	NA	7.7 E-7	NA	4.9 E-6	2.5 E-6
AW-08D-SP10-10	10	NA	NA	1.3 E-5	NA	NA	NA	9.1 E-8	NA	1.4 E-6	NA	8.4 E-7	3.0 E-5	NA	9.6 E-6	NA	NA	NA
AW-AFI-SP01-10	10	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA
D(b)-SP03-10	10	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-7	6.3 E-6	NA	5.8 E-7	NA	NA	NA
D(b)-SP04-10	10	1.1 E-7	NA	NA	NA	NA	NA	9.4 E-8	NA	NA	NA	1.1 E-6	1.0 E-5	NA	5.6 E-7	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	4.2 E-6	NA	2.5 E-7	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	2.5 E-8	4.4 E-6	2.6 E-5	NA	8.0 E-7	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	8.4 E-7	1.1 E-5	NA	2.1 E-6	NA	2.3 E-4	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	3.5 E-7	NA	4.5 E-6	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	NA	1.1 E-6	NA	NA	3.5 E-7	NA	2.0 E-5	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-7	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	1.8 E-5	NA	5.6 E-7	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	1.5 E-6	3.8 E-6	NA	NA	NA	NA	NA
05D-SP08-20	20	1.3 E-7	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	5.3 E-7	8.1 E-6	NA	9.8 E-7	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	1.3 E-8	1.7 E-6	1.0 E-5	NA	2.9 E-6	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	1.6 E-6	NA	8.2 E-7	NA	1.3 E-6	NA
52D-SP24-20	20	2.6 E-6	2.1 E-7	5.6 E-6	NA	NA	5.1 E-5	NA	NA	6.8 E-7	NA	3.0 E-7	1.5 E-6	NA	1.6 E-7	NA	3.1 E-6	2.8 E-6
52D-SP25-20	20	1.2 E-6	5.1 E-8	6.4 E-6	NA	NA	8.6 E-5	NA	NA	6.8 E-7	3.6 E-8	NA	1.5 E-6	NA	1.0 E-7	NA	4.9 E-6	1.6 E-6
52D-SP27-20	20	1.0 E-7	6.6 E-8	9.3 E-6	NA	NA	4.4 E-5	NA	NA	1.2 E-6	NA	NA	2.6 E-6	NA	4.8 E-8	NA	2.5 E-6	1.0 E-6
52D-SP28-20	20	2.0 E-8	NA	NA	NA	NA	NA	5.0 E-7	8.4 E-5	NA	4.0 E-8	7.0 E-6	9.1 E-6	NA	2.9 E-7	7.1 E-6	NA	NA
52D-SP29-20	20	7.1 E-7	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	5.3 E-7	2.9 E-6	NA	3.8 E-7	3.7 E-6	1.7 E-6	NA
52D-SP30-20	20	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	1.6 E-7	NA	3.5 E-6	1.8 E-6
52D-SP32-20	20	4.6 E-5	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	2.0 E-7	NA	6.4 E-6	NA	NA	1.9 E-4	NA	NA	7.5 E-7	NA	NA	2.1 E-6	NA	9.8 E-8	NA	6.9 E-6	2.3 E-6
52D-SP35-20	20	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	7.0 E-7	NA	1.4 E-6	NA
52D-SP36-20	20	7.4 E-8	6.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	2.8 E-6
52D-SP39-20	20	1.1 E-8	5.9 E-8	NA	NA	NA	3.9 E-6	NA	NA	NA	NA	9.8 E-7	2.6 E-6	NA	1.6 E-7	NA	6.1 E-6	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	2.7 E-8	1.7 E-6	6.0 E-6	NA	2.3 E-7	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	7.0 E-7	1.7 E-6	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	1.2 E-8	1.1 E-6	4.4 E-6	NA	NA	NA	NA	NA
52D-SP43-20	20	6.7 E-6	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	1.1 E-6	NA	1.3 E-7	NA	3.5 E-6	1.7 E-6
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	1.2 E-8	1.1 E-6	NA	NA	9.0 E-8	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	6.8 E-8	NA	NA	NA	8.1 E-7	1.2 E-5	NA	2.8 E-7	NA	NA	NA
D(b)-SP03-20	20	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	1.6 E-7	NA	4.9 E-6	NA
D(b)-SP04-20	20	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	1.4 E-6	NA	1.0 E-7	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.9 E-6	5.7 E-6	NA	3.1 E-6	NA	3.7 E-5	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	7.5 E-7	NA	NA	NA	NA	5.6 E-7	4.7 E-6	NA	2.5 E-6	NA	3.3 E-6	NA
D(c)-SP09-20	20	NA	NA	NA	NA	5.9 E-8	1.0 E-6	NA	NA	NA	NA	3.4 E-7	2.3 E-6	NA	1.1 E-6	NA	5.9 E-5	NA
D(c)-SP10-20	20	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	9.3 E-7	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	1.7 E-6	NA	5.9 E-5	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	2.9 E-7	1.8 E-5	NA	1.5 E-8	3.3 E-6	5.5 E-6	NA	2.1 E-7	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	3.6 E-8	NA	6.4 E-8	1.2 E-5	NA	NA	8.3 E-7	3.0 E-6	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	1.8 E-6	3.8 E-8	4.0 E-6	NA	NA	2.6 E-5	NA	NA	4.2 E-7	NA	NA	6.3 E-7	NA	3.3 E-8	NA	5.2 E-6	1.0 E-6
52D-SP27-30	30	2.9 E-8	NA	7.2 E-6	NA	NA	1.3 E-4	NA	NA	8.8 E-7	NA	NA	2.1 E-6	NA	3.8 E-8	NA	1.3 E-6	NA
52D-SP28-30	30	8.6 E-8	NA	3.5 E-6	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	1.1 E-6	NA	1.1 E-7	NA	7.1 E-6	7.4 E-7
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	3.8 E-8	3.0 E-8	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	3.0 E-7	NA	4.1 E-7	1.9 E-7	NA	2.6 E-5	NA
52D-SP36-30	30	5.8 E-8	6.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-8	NA	8.7 E-7	3.4 E-6
52D-SP37-30	30	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	8.7 E-7	NA	1.6 E-6	NA	NA	8.0 E-7
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	4.9 E-7	4.7 E-6	NA	1.2 E-7	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	7.3 E-9	6.3 E-7	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	3.0 E-7	2.1 E-6	NA	NA	NA	NA	6.6 E-5
52D-SP43-30	30	7.0 E-7	4.7 E-8	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	1.8 E-7	2.0 E-5	NA	2.4 E-7	2.6 E-6	1.2 E-5	NA	1.4 E-7	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	9.7 E-8	NA	9.7 E-5	NA
52D-SP44-40	40	NA	2.6 E-8	NA	NA	NA	NA	8.1 E-8	1.3 E-5	NA	NA	1.4 E-6	8.1 E-6	NA	3.3 E-7	NA	NA	NA

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	1.3 E-6	NA	NA	NA	3.5 E-7	NA	7.1 E-7	1.1 E-6	NA	6.7 E-8	NA	5.5 E-7	1.6 E-6	NA	NA	4.4 E-5
08D-SP08-10	10	NA	5.0 E-7	1.2 E-7	NA	NA	1.5 E-6	NA	3.7 E-6	1.6 E-6	7.7 E-7	1.1 E-7	2.6 E-5	2.2 E-7	3.8 E-6	NA	NA	8.9 E-5
08D-SP09-10	10	1.4 E-8	NA	NA	NA	NA	1.3 E-6	NA	2.9 E-6	1.0 E-6	NA	NA	NA	NA	1.9 E-6	NA	NA	2.5 E-5
52D-SP24-10	10	NA	NA	1.1 E-7	NA	8.8 E-7	4.0 E-7	NA	3.7 E-7	4.3 E-6	1.5 E-6	1.5 E-7	4.4 E-5	7.5 E-7	1.2 E-6	3.8 E-5	NA	2.3 E-4
52D-SP25-10	10	NA	NA	1.3 E-7	NA	1.2 E-7	NA	NA	7.7 E-7	4.9 E-6	2.1 E-6	1.5 E-7	2.0 E-5	NA	2.5 E-6	2.8 E-5	NA	3.7 E-4
52D-SP26-10	10	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	2.3 E-6	1.3 E-6	NA	2.9 E-5	NA	4.6 E-7	2.6 E-5	NA	9.2 E-5
52D-SP29-10	10	7.2 E-8	NA	1.1 E-7	NA	1.0 E-7	1.5 E-6	NA	3.9 E-6	3.8 E-6	2.3 E-6	2.4 E-7	2.4 E-5	NA	4.1 E-6	6.1 E-5	NA	1.5 E-4
52D-SP30-10	10	1.0 E-8	NA	NA	NA	1.8 E-8	2.9 E-7	NA	5.6 E-7	1.0 E-6	NA	NA	1.4 E-5	NA	6.7 E-7	1.1 E-5	NA	4.0 E-5
52D-SP31-10	10	5.3 E-8	NA	NA	NA	6.5 E-8	NA	NA	6.1 E-7	NA	NA	NA	5.9 E-6	NA	5.7 E-7	9.6 E-6	NA	2.8 E-5
52D-SP32-10	10	NA	NA	NA	NA	6.9 E-7	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	1.8 E-5	NA	9.1 E-5
52D-SP33-10	10	NA	NA	1.3 E-7	NA	4.5 E-8	6.1 E-7	NA	1.1 E-6	4.9 E-6	1.5 E-6	1.2 E-7	3.4 E-5	1.1 E-6	2.4 E-6	6.6 E-6	NA	2.2 E-4
52D-SP35-10	10	NA	1.6 E-7	NA	NA	1.8 E-7	NA	NA	6.6 E-7	NA	NA	NA	3.6 E-5	NA	NA	2.1 E-7	NA	3.8 E-5
52D-SP36-10	10	NA	4.3 E-7	NA	3.9 E-6	6.9 E-7	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	NA	3.4 E-5
52D-SP37-10	10	NA	7.9 E-7	NA	2.3 E-6	1.5 E-7	NA	NA	8.7 E-7	NA	NA	NA	1.4 E-5	8.1 E-7	2.5 E-7	4.2 E-7	NA	4.7 E-5
52D-SP38-10	10	NA	NA	NA	NA	2.8 E-8	NA	NA	4.7 E-7	NA	NA	NA	2.2 E-5	7.5 E-7	NA	NA	NA	2.5 E-5
52D-SP39-10	10	NA	3.4 E-7	NA	NA	NA	2.8 E-7	NA	NA	1.4 E-6	NA	NA	NA	3.7 E-7	1.7 E-6	NA	NA	9.9 E-6
52D-SP40-10	10	NA	NA	NA	NA	NA	2.9 E-7	NA	7.7 E-7	NA	NA	NA	1.2 E-5	7.5 E-7	5.0 E-7	3.1 E-7	NA	1.8 E-5
52D-SP41-10	10	NA	NA	NA	NA	3.9 E-8	NA	NA	2.3 E-7	NA	NA	NA	3.2 E-5	2.6 E-7	3.8 E-7	5.6 E-7	NA	4.1 E-5
52D-SP42-10	10	NA	NA	NA	NA	6.5 E-8	NA	NA	NA	NA	NA	NA	2.5 E-5	2.5 E-7	3.8 E-7	2.8 E-7	NA	3.8 E-5
52D-SP43-10	10	1.1 E-7	NA	NA	4.5 E-7	3.0 E-7	NA	NA	3.0 E-7	NA	NA	NA	4.4 E-5	NA	4.5 E-7	8.0 E-6	NA	7.5 E-5
AW-08D-SP10-10	10	3.6 E-8	NA	1.5 E-7	NA	NA	3.6 E-6	NA	6.1 E-6	4.8 E-6	1.8 E-6	NA	NA	NA	3.9 E-6	NA	NA	7.5 E-5
AW-AFI-SP01-10	10	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	5.2 E-7	NA	8.9 E-5
D(b)-SP03-10	10	NA	NA	NA	NA	8.8 E-8	3.7 E-7	NA	8.2 E-7	NA	NA	NA	4.8 E-5	NA	5.7 E-7	2.6 E-5	NA	8.3 E-5
D(b)-SP04-10	10	1.1 E-8	NA	NA	NA	8.3 E-8	8.2 E-7	3.2 E-4	1.8 E-6	NA	NA	NA	4.4 E-5	NA	1.0 E-6	9.9 E-7	NA	3.8 E-4
D(b)-SP05-10	10	NA	NA	NA	NA	7.9 E-9	NA	NA	2.3 E-7	NA	NA	NA	4.0 E-6	NA	3.0 E-7	NA	NA	5.4 E-6
D(b)-SP06-10	10	NA	4.0 E-7	NA	NA	4.4 E-8	NA	NA	2.7 E-7	NA	NA	NA	2.5 E-5	3.0 E-7	6.2 E-7	NA	NA	5.6 E-5
D(c)-SP05-10	10	NA	3.7 E-7	NA	NA	NA	1.5 E-6	NA	4.3 E-6	7.6 E-7	NA	NA	NA	NA	1.7 E-6	NA	NA	4.0 E-5
D(c)-SP06-10	10	NA	NA	NA	NA	1.3 E-8	4.4 E-7	NA	9.7 E-7	NA	NA	NA	NA	NA	6.7 E-7	1.6 E-5	NA	2.6 E-4
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	2.1 E-7	NA	9.6 E-7	NA	6.8 E-6
D(c)-SP09-10	10	NA	3.2 E-7	NA	NA	NA	NA	NA	6.6 E-7	NA	NA	NA	NA	4.7 E-7	2.9 E-7	NA	NA	3.1 E-5
D(c)-SP10-10	10	NA	2.2 E-6	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	2.9 E-7	4.3 E-7	NA	NA	3.9 E-6
D(c)-SP11-10	10	1.2 E-8	NA	9.4 E-8	NA	5.1 E-9	1.7 E-6	NA	3.3 E-6	1.1 E-6	NA	NA	2.9 E-6	4.6 E-7	2.3 E-6	NA	NA	3.1 E-5
D(c)-SP12-10	10	NA	NA	NA	NA	6.5 E-9	NA	NA	3.7 E-7	NA	NA	NA	2.5 E-5	3.0 E-7	7.7 E-7	2.8 E-7	NA	3.2 E-5
05D-SP08-20	20	NA	NA	NA	NA	NA	7.1 E-7	NA	1.9 E-6	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	1.3 E-5
08D-SP07-20	20	2.3 E-8	3.2 E-7	NA	NA	NA	6.9 E-7	NA	5.6 E-6	4.8 E-7	NA	NA	NA	3.4 E-7	7.0 E-7	NA	NA	2.3 E-5
08D-SP08-20	20	NA	NA	NA	NA	3.0 E-9	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	3.9 E-7	1.3 E-7	NA	4.7 E-6
52D-SP24-20	20	NA	8.8 E-8	6.3 E-8	NA	1.3 E-7	2.5 E-7	NA	2.3 E-7	2.2 E-6	6.3 E-7	NA	2.0 E-6	NA	9.8 E-7	5.1 E-6	NA	8.0 E-5
52D-SP25-20	20	NA	NA	4.0 E-8	NA	5.1 E-8	NA	NA	6.1 E-7	1.6 E-6	5.4 E-7	4.4 E-8	6.6 E-6	NA	8.8 E-7	1.1 E-5	NA	1.2 E-4
52D-SP27-20	20	NA	NA	9.9 E-8	NA	1.3 E-8	1.5 E-7	NA	2.8 E-7	3.9 E-6	9.6 E-7	5.6 E-8	6.2 E-6	NA	1.9 E-6	1.9 E-6	NA	7.6 E-5
52D-SP28-20	20	1.1 E-8	1.3 E-6	NA	NA	3.2 E-9	6.1 E-7	NA	2.3 E-6	NA	NA	NA	NA	NA	4.6 E-7	6.8 E-7	NA	1.1 E-4
52D-SP29-20	20	1.3 E-8	NA	NA	NA	1.0 E-7	1.5 E-7	NA	3.8 E-7	NA	NA	NA	2.6 E-6	NA	2.8 E-7	7.3 E-6	NA	2.1 E-5
52D-SP30-20	20	2.5 E-8	NA	NA	NA	1.3 E-7	1.7 E-7	NA	5.1 E-7	NA	NA	NA	5.3 E-6	NA	1.9 E-7	1.4 E-5	NA	3.0 E-5
52D-SP32-20	20	NA	NA	NA	NA	6.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-6	NA	5.4 E-5
52D-SP33-20	20	NA	NA	9.2 E-8	NA	3.7 E-8	2.3 E-7	NA	3.3 E-7	3.0 E-6	1.0 E-6	6.2 E-8	9.0 E-6	NA	1.7 E-6	2.8 E-6	NA	2.3 E-4
52D-SP35-20	20	NA	6.9 E-8	NA	NA	1.0 E-7	NA	NA	1.7 E-7	NA	NA	NA	2.0 E-5	NA	NA	1.4 E-7	NA	2.3 E-5
52D-SP36-20	20	NA	NA	NA	2.7 E-6	7.9 E-7	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	1.3 E-7	2.4 E-6	2.4 E-7	2.5 E-5
52D-SP39-20	20	7.0 E-9	1.7 E-7	NA	NA	9.3 E-9	1.0 E-6	NA	3.1 E-7	6.8 E-7	NA	NA	NA	1.4 E-7	1.3 E-6	3.8 E-7	NA	1.8 E-5
52D-SP40-20	20	NA	NA	6.6 E-8	NA	NA	6.1 E-7	NA	1.7 E-6	1.2 E-6	6.0 E-7	NA	8.3 E-6	1.1 E-6	1.3 E-6	2.7 E-7	NA	2.3 E-5
52D-SP41-20	20	NA	2.2 E-7	NA	NA	NA	2.5 E-7	NA	3.8 E-7	3.6 E-7	NA	NA	2.4 E-6	4.4 E-7	7.0 E-7	8.2 E-8	NA	7.3 E-6
52D-SP42-20	20	NA	2.2 E-7	NA	NA	3.9 E-9	2.8 E-7	NA	4.6 E-7	4.6 E-7	NA	NA	3.7 E-6	4.1 E-7	1.2 E-6	8.9 E-8	NA	1.2 E-5
52D-SP43-20	20	7.7 E-8	NA	NA	2.8 E-7	2.3 E-7	1.4 E-7	NA	2.2 E-7	NA	NA	NA	1.8 E-5	NA	1.3 E-7	3.3 E-6	NA	3.6 E-5
52D-SP44-20	20	NA	5.8 E-7	NA	2.8 E-7	2.1 E-8	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	2.5 E-6
AW-08D-SP10-20	20	8.0 E-9	9.6 E-8	3.4 E-8	NA	NA	9.4 E-7	NA	2.0 E-6	8.2 E-7	NA	NA	NA	NA	1.4 E-6	8.6 E-8	NA	1.9 E-5
D(b)-SP03-20	20	NA	NA	NA	NA	4.9 E-8	1.5 E-7	NA	3.1 E-7	NA	NA	NA	4.4 E-6	NA	2.4 E-7	3.6 E-6	NA	1.7 E-5
D(b)-SP04-20	20	NA	NA	NA	NA	1.5 E-8	NA	NA	2.8 E-7	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	2.1 E-6
D(b)-SP06-20	20	NA	2.1 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	3.7 E-5	3.1 E-7	2.0 E-7	NA	NA	3.8 E-5

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
D(c)-SP05-20	20	NA	NA	NA	NA	1.1 E-8	6.1 E-7	NA	1.8 E-6	NA	NA	NA	NA	NA	6.2 E-7	3.8 E-6	NA	5.4 E-5
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	1.8 E-7
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	2.2 E-7	NA	7.0 E-7
D(c)-SP08-20	20	NA	2.2 E-7	NA	NA	NA	5.1 E-7	NA	3.1 E-6	4.5 E-7	NA	NA	NA	6.2 E-7	6.2 E-7	1.4 E-7	NA	1.7 E-5
D(c)-SP09-20	20	NA	2.4 E-7	NA	NA	NA	3.6 E-7	NA	4.3 E-7	NA	NA	NA	NA	2.0 E-7	2.0 E-7	8.1 E-8	NA	6.5 E-5
D(c)-SP10-20	20	NA	NA	NA	NA	5.8 E-8	1.5 E-7	NA	4.3 E-7	NA	NA	NA	6.6 E-6	4.1 E-7	4.6 E-7	6.2 E-7	NA	1.0 E-5
D(c)-SP11-20	20	NA	NA	NA	2.3 E-7	5.3 E-9	1.6 E-7	NA	5.9 E-7	NA	NA	NA	NA	5.0 E-7	4.9 E-7	1.5 E-7	NA	6.4 E-5
D(c)-SP12-20	20	NA	1.8 E-7	5.1 E-8	NA	2.8 E-9	4.6 E-7	NA	7.4 E-7	8.2 E-7	4.6 E-7	NA	1.8 E-5	5.6 E-7	1.2 E-6	3.3 E-7	NA	5.0 E-5
52D-SP40-28	28	NA	1.8 E-7	NA	NA	NA	2.9 E-7	NA	8.2 E-7	3.6 E-7	NA	NA	2.4 E-6	1.0 E-6	7.6 E-7	1.5 E-7	NA	2.2 E-5
52D-SP24-30	30	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	5.6 E-7
52D-SP25-30	30	NA	NA	NA	NA	9.1 E-8	NA	NA	8.5 E-8	7.8 E-7	NA	NA	1.2 E-5	NA	3.4 E-7	1.4 E-5	NA	6.6 E-5
52D-SP27-30	30	4.2 E-9	7.5 E-8	7.9 E-8	NA	2.2 E-8	1.6 E-7	NA	2.4 E-7	3.1 E-6	7.8 E-7	2.7 E-8	NA	9.1 E-8	1.9 E-6	8.6 E-8	NA	1.5 E-4
52D-SP28-30	30	NA	NA	NA	NA	4.6 E-8	1.3 E-7	NA	2.2 E-7	5.5 E-7	NA	NA	5.1 E-6	NA	1.7 E-7	2.0 E-6	NA	2.1 E-5
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	1.4 E-7	NA	NA	1.9 E-7	9.4 E-8	NA	1.5 E-7	2.7 E-7	NA	NA	2.7 E-5	2.0 E-7	1.3 E-7	2.4 E-7	NA	5.5 E-5
52D-SP36-30	30	NA	NA	NA	2.2 E-6	5.2 E-7	NA	NA	1.1 E-7	NA	NA	NA	7.4 E-6	1.6 E-7	7.6 E-8	2.0 E-6	2.8 E-7	1.8 E-5
52D-SP37-30	30	NA	1.0 E-7	NA	2.8 E-7	3.4 E-8	1.1 E-6	NA	8.2 E-7	NA	NA	NA	3.4 E-6	2.1 E-7	1.2 E-7	2.0 E-7	NA	9.8 E-6
52D-SP39-30	30	3.8 E-9	1.9 E-7	NA	NA	NA	4.6 E-7	NA	9.2 E-7	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	7.2 E-6
52D-SP41-30	30	NA	6.9 E-8	NA	NA	NA	1.1 E-7	NA	1.9 E-7	2.6 E-7	NA	NA	1.0 E-6	2.7 E-7	2.8 E-7	NA	NA	2.4 E-6
52D-SP42-30	30	NA	NA	NA	NA	9.9 E-8	8.8 E-8	NA	3.6 E-7	NA	NA	NA	6.9 E-5	1.8 E-6	4.0 E-7	6.5 E-5	1.9 E-7	2.1 E-4
52D-SP43-30	30	8.8 E-9	8.0 E-7	NA	NA	3.1 E-8	NA	NA	NA	2.6 E-7	NA	NA	1.2 E-6	NA	1.7 E-7	4.5 E-7	NA	3.3 E-5
52D-SP44-30	30	1.0 E-8	6.4 E-7	NA	NA	2.6 E-9	1.4 E-6	NA	3.2 E-6	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	4.1 E-5
D(b)-SP05-30	30	NA	6.4 E-8	NA	NA	2.8 E-8	1.4 E-7	NA	1.7 E-7	NA	NA	NA	1.2 E-6	1.1 E-7	2.1 E-7	NA	NA	2.0 E-6
D(c)-SP05-30	30	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	1.6 E-6	9.1 E-8	NA	1.0 E-5	NA	1.1 E-4
52D-SP44-40	40	3.7 E-9	5.6 E-7	NA	3.4 E-7	1.0 E-7	8.2 E-7	NA	2.3 E-6	NA	NA	NA	NA	NA	6.5 E-7	7.1 E-8	1.2 E-7	2.8 E-5

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	1.8 E-7	9.4 E-6	NA	9.2 E-9	2.5 E-6	4.0 E-6	NA	1.9 E-7	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	1.5 E-8	2.5 E-6	1.5 E-5	NA	3.6 E-7	3.9 E-6	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	8.2 E-8	NA	NA	NA	7.5 E-7	5.8 E-6	NA	1.1 E-6	NA	NA	NA
52D-SP24-10	10	1.4 E-5	8.9 E-7	6.6 E-6	NA	NA	1.5 E-5	NA	NA	6.7 E-7	NA	NA	1.3 E-6	NA	NA	NA	6.1 E-6	1.5 E-5
52D-SP25-10	10	3.0 E-6	1.6 E-7	5.5 E-6	NA	NA	1.1 E-4	NA	NA	5.5 E-7	7.8 E-8	NA	2.2 E-6	NA	9.1 E-7	NA	4.2 E-6	3.2 E-6
52D-SP26-10	10	1.6 E-6	NA	1.2 E-5	NA	NA	NA	NA	NA	7.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	1.0 E-6	NA	NA	NA
52D-SP30-10	10	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	1.7 E-6	NA	6.4 E-7	NA	2.5 E-6	NA
52D-SP31-10	10	1.3 E-6	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	1.0 E-7	NA	NA	NA
52D-SP32-10	10	1.4 E-5	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA
52D-SP33-10	10	1.2 E-7	7.9 E-8	6.3 E-6	NA	NA	5.5 E-5	2.5 E-8	NA	6.7 E-7	NA	3.3 E-7	2.7 E-6	NA	1.6 E-7	NA	5.1 E-6	1.6 E-6
52D-SP35-10	10	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	2.3 E-7	NA	NA	NA
52D-SP36-10	10	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	8.0 E-8	NA	NA	NA
52D-SP37-10	10	5.0 E-8	NA	NA	NA	4.5 E-8	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	8.2 E-7	NA	NA	NA
52D-SP38-10	10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-7	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	6.5 E-7	NA	NA	NA	NA	9.6 E-7	8.5 E-7	NA	4.3 E-8	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	1.8 E-7	NA	NA	NA
52D-SP41-10	10	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	7.6 E-8	NA	1.9 E-6	NA
52D-SP42-10	10	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	8.7 E-7	NA	6.1 E-8	NA	3.9 E-6	NA
52D-SP43-10	10	3.8 E-6	6.9 E-8	NA	NA	NA	NA	3.4 E-8	NA	NA	2.3 E-8	6.3 E-7	1.2 E-6	NA	3.3 E-7	NA	2.1 E-6	1.1 E-6
AW-08D-SP10-10	10	NA	NA	5.7 E-6	NA	NA	NA	3.9 E-8	NA	6.0 E-7	NA	3.6 E-7	1.3 E-5	NA	4.1 E-6	NA	NA	NA
AW-AFI-SP01-10	10	5.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA	NA
D(b)-SP03-10	10	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	2.7 E-6	NA	2.5 E-7	NA	NA	NA
D(b)-SP04-10	10	4.7 E-8	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	4.5 E-7	4.5 E-6	NA	2.4 E-7	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	1.8 E-6	NA	1.1 E-7	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	1.1 E-8	1.9 E-6	1.1 E-5	NA	3.4 E-7	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	3.6 E-7	4.9 E-6	NA	9.1 E-7	NA	9.8 E-5	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	1.5 E-7	NA	1.9 E-6	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	4.5 E-7	NA	NA	1.5 E-7	NA	8.6 E-6	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	7.8 E-6	NA	2.4 E-7	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	6.3 E-7	1.6 E-6	NA	NA	NA	NA	NA
05D-SP08-20	20	5.6 E-8	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	2.3 E-7	3.5 E-6	NA	4.2 E-7	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	7.6 E-8	NA	NA	5.4 E-9	7.1 E-7	4.4 E-6	NA	1.3 E-6	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	6.8 E-7	NA	3.5 E-7	NA	5.5 E-7	NA
52D-SP24-20	20	1.1 E-6	8.9 E-8	2.4 E-6	NA	NA	2.2 E-5	NA	NA	2.9 E-7	NA	1.3 E-7	6.5 E-7	NA	6.8 E-8	NA	1.3 E-6	1.2 E-6
52D-SP25-20	20	5.3 E-7	2.2 E-8	2.8 E-6	NA	NA	3.7 E-5	NA	NA	2.9 E-7	1.5 E-8	NA	6.3 E-7	NA	4.4 E-8	NA	2.1 E-6	6.8 E-7
52D-SP27-20	20	4.5 E-8	2.8 E-8	4.0 E-6	NA	NA	1.9 E-5	NA	NA	5.0 E-7	NA	NA	1.1 E-6	NA	2.0 E-8	NA	1.1 E-6	4.3 E-7
52D-SP28-20	20	8.4 E-9	NA	NA	NA	NA	NA	2.1 E-7	3.6 E-5	NA	1.7 E-8	3.0 E-6	3.9 E-6	NA	1.3 E-7	3.1 E-6	NA	NA
52D-SP29-20	20	3.0 E-7	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	2.3 E-7	1.2 E-6	NA	1.6 E-7	1.6 E-6	7.3 E-7	NA
52D-SP30-20	20	6.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	6.8 E-8	NA	1.5 E-6	7.6 E-7
52D-SP32-20	20	2.0 E-5	6.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	8.4 E-8	NA	2.8 E-6	NA	NA	8.3 E-5	NA	NA	3.2 E-7	NA	NA	8.8 E-7	NA	4.2 E-8	NA	3.0 E-6	9.7 E-7
52D-SP35-20	20	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	3.0 E-7	NA	6.2 E-7	NA
52D-SP36-20	20	3.2 E-8	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	NA	NA	1.2 E-6
52D-SP39-20	20	4.7 E-9	2.5 E-8	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	4.2 E-7	1.1 E-6	NA	6.8 E-8	NA	2.6 E-6	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	1.1 E-8	7.4 E-7	2.6 E-6	NA	9.7 E-8	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	3.0 E-7	7.4 E-7	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	5.3 E-9	4.5 E-7	1.9 E-6	NA	NA	NA	NA	NA
52D-SP43-20	20	2.9 E-6	7.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	4.6 E-7	NA	5.5 E-8	NA	1.5 E-6	7.1 E-7
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	5.2 E-9	4.7 E-7	NA	NA	3.9 E-8	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	3.5 E-7	5.1 E-6	NA	1.2 E-7	NA	NA	NA
D(b)-SP03-20	20	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	6.8 E-8	NA	2.1 E-6	NA
D(b)-SP04-20	20	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	5.9 E-7	NA	4.3 E-8	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	8.2 E-8	NA	NA	NA	8.3 E-7	2.5 E-6	NA	1.3 E-6	NA	1.6 E-5	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	NA	2.4 E-7	2.0 E-6	NA	1.1 E-6	NA	1.4 E-6	NA
D(c)-SP09-20	20	NA	NA	NA	NA	2.5 E-8	4.3 E-7	NA	NA	NA	NA	1.5 E-7	9.7 E-7	NA	4.6 E-7	NA	2.5 E-5	NA
D(c)-SP10-20	20	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	4.0 E-7	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	7.4 E-7	NA	2.5 E-5	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	1.3 E-7	7.6 E-6	NA	6.3 E-9	1.4 E-6	2.4 E-6	NA	9.1 E-8	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	1.5 E-8	NA	2.8 E-8	5.2 E-6	NA	NA	3.6 E-7	1.3 E-6	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	7.6 E-7	1.6 E-8	1.7 E-6	NA	NA	1.1 E-5	NA	NA	1.8 E-7	NA	NA	2.7 E-7	NA	1.4 E-8	NA	2.2 E-6	4.4 E-7
52D-SP27-30	30	1.2 E-8	NA	3.1 E-6	NA	NA	5.6 E-5	NA	NA	3.8 E-7	NA	NA	9.0 E-7	NA	1.6 E-8	NA	5.6 E-7	NA
52D-SP28-30	30	3.7 E-8	NA	1.5 E-6	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	4.8 E-7	NA	4.6 E-8	NA	3.0 E-6	3.2 E-7
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	1.6 E-8	1.3 E-8	NA	NA	5.9 E-8	NA	NA	NA	NA	NA	1.3 E-7	NA	1.7 E-7	8.3 E-8	NA	1.1 E-5	NA
52D-SP36-30	30	2.5 E-8	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	3.7 E-7	1.4 E-6
52D-SP37-30	30	NA	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	3.7 E-7	NA	6.8 E-7	NA	NA	3.4 E-7
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA	2.1 E-7	2.0 E-6	NA	4.9 E-8	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	3.1 E-9	2.7 E-7	NA	NA	NA	NA	5.5 E-8	NA	NA	NA	1.3 E-7	9.0 E-7	NA	NA	NA	NA	2.8 E-5
52D-SP43-30	30	3.0 E-7	2.0 E-8	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	7.6 E-8	8.4 E-6	NA	1.0 E-7	1.1 E-6	5.1 E-6	NA	6.1 E-8	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-8	NA	NA	4.2 E-8	NA	4.1 E-5	NA
52D-SP44-40	40	NA	1.1 E-8	NA	NA	NA	NA	3.5 E-8	5.6 E-6	NA	NA	5.8 E-7	3.5 E-6	NA	1.4 E-7	NA	NA	NA

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	5.6 E-7	NA	NA	NA	1.5 E-7	NA	3.1 E-7	4.6 E-7	NA	2.9 E-8	NA	2.4 E-7	6.9 E-7	NA	NA	1.9 E-5
08D-SP08-10	10	NA	2.1 E-7	5.0 E-8	NA	NA	6.3 E-7	NA	1.6 E-6	7.1 E-7	3.3 E-7	4.7 E-8	1.1 E-5	9.6 E-8	1.6 E-6	NA	NA	3.8 E-5
08D-SP09-10	10	6.1 E-9	NA	NA	NA	NA	5.7 E-7	NA	1.2 E-6	4.4 E-7	NA	NA	NA	NA	8.0 E-7	NA	NA	1.1 E-5
52D-SP24-10	10	NA	NA	4.6 E-8	NA	3.8 E-7	1.7 E-7	NA	1.6 E-7	1.8 E-6	6.5 E-7	6.6 E-8	1.9 E-5	3.2 E-7	5.1 E-7	1.6 E-5	NA	9.9 E-5
52D-SP25-10	10	NA	NA	5.7 E-8	NA	5.0 E-8	NA	NA	3.3 E-7	2.1 E-6	8.8 E-7	6.6 E-8	8.5 E-6	NA	1.1 E-6	1.2 E-5	NA	1.6 E-4
52D-SP26-10	10	NA	NA	NA	NA	5.2 E-8	NA	NA	NA	1.0 E-6	5.7 E-7	NA	1.2 E-5	NA	2.0 E-7	1.1 E-5	NA	4.0 E-5
52D-SP29-10	10	3.1 E-8	NA	4.9 E-8	NA	4.4 E-8	6.6 E-7	NA	1.7 E-6	1.6 E-6	1.0 E-6	1.0 E-7	1.0 E-5	NA	1.7 E-6	2.6 E-5	NA	6.4 E-5
52D-SP30-10	10	4.4 E-9	NA	NA	NA	7.5 E-9	1.2 E-7	NA	2.4 E-7	4.5 E-7	NA	NA	6.1 E-6	NA	2.9 E-7	4.8 E-6	NA	1.7 E-5
52D-SP31-10	10	2.3 E-8	NA	NA	NA	2.8 E-8	NA	NA	2.6 E-7	NA	NA	NA	2.5 E-6	NA	2.4 E-7	4.1 E-6	NA	1.2 E-5
52D-SP32-10	10	NA	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	7.9 E-6	NA	3.9 E-5
52D-SP33-10	10	NA	NA	5.4 E-8	NA	1.9 E-8	2.6 E-7	NA	4.6 E-7	2.1 E-6	6.5 E-7	5.0 E-8	1.4 E-5	4.8 E-7	1.0 E-6	2.8 E-6	NA	9.4 E-5
52D-SP35-10	10	NA	6.9 E-8	NA	NA	7.5 E-8	NA	NA	2.8 E-7	NA	NA	NA	1.5 E-5	NA	NA	8.9 E-8	NA	1.6 E-5
52D-SP36-10	10	NA	1.9 E-7	NA	1.7 E-6	3.0 E-7	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	1.5 E-5
52D-SP37-10	10	NA	3.4 E-7	NA	9.7 E-7	6.4 E-8	NA	NA	3.7 E-7	NA	NA	NA	5.8 E-6	3.5 E-7	1.1 E-7	1.8 E-7	NA	2.0 E-5
52D-SP38-10	10	NA	NA	NA	NA	1.2 E-8	NA	NA	2.0 E-7	NA	NA	NA	9.6 E-6	3.2 E-7	NA	NA	NA	1.1 E-5
52D-SP39-10	10	NA	1.4 E-7	NA	NA	NA	1.2 E-7	NA	NA	5.9 E-7	NA	NA	NA	1.6 E-7	7.1 E-7	NA	NA	4.2 E-6
52D-SP40-10	10	NA	NA	NA	NA	NA	1.2 E-7	NA	3.3 E-7	NA	NA	NA	5.0 E-6	3.2 E-7	2.1 E-7	1.3 E-7	NA	7.7 E-6
52D-SP41-10	10	NA	NA	NA	NA	1.7 E-8	NA	NA	1.0 E-7	NA	NA	NA	1.4 E-5	1.1 E-7	1.6 E-7	2.4 E-7	NA	1.7 E-5
52D-SP42-10	10	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	1.1 E-5	1.1 E-7	1.6 E-7	1.2 E-7	NA	1.6 E-5
52D-SP43-10	10	4.7 E-8	NA	NA	1.9 E-7	1.3 E-7	NA	NA	1.3 E-7	NA	NA	NA	1.9 E-5	NA	1.9 E-7	3.4 E-6	NA	3.2 E-5
AW-08D-SP10-10	10	1.5 E-8	NA	6.2 E-8	NA	NA	1.6 E-6	NA	2.6 E-6	2.1 E-6	7.7 E-7	NA	NA	NA	1.7 E-6	NA	NA	3.2 E-5
AW-AFI-SP01-10	10	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	2.2 E-7	NA	3.8 E-5
D(b)-SP03-10	10	NA	NA	NA	NA	3.8 E-8	1.6 E-7	NA	3.5 E-7	NA	NA	NA	2.0 E-5	NA	2.4 E-7	1.1 E-5	NA	3.6 E-5
D(b)-SP04-10	10	4.5 E-9	NA	NA	NA	3.6 E-8	3.5 E-7	1.4 E-4	7.7 E-7	NA	NA	NA	1.9 E-5	NA	4.4 E-7	4.2 E-7	NA	1.6 E-4
D(b)-SP05-10	10	NA	NA	NA	NA	3.4 E-9	NA	NA	1.0 E-7	NA	NA	NA	1.7 E-6	NA	1.3 E-7	NA	NA	2.3 E-6
D(b)-SP06-10	10	NA	1.7 E-7	NA	NA	1.9 E-8	NA	NA	1.2 E-7	NA	NA	NA	1.1 E-5	1.3 E-7	2.7 E-7	NA	NA	2.4 E-5
D(c)-SP05-10	10	NA	1.6 E-7	NA	NA	NA	6.3 E-7	NA	1.9 E-6	3.2 E-7	NA	NA	NA	NA	7.3 E-7	NA	NA	1.7 E-5
D(c)-SP06-10	10	NA	NA	NA	NA	5.6 E-9	1.9 E-7	NA	4.2 E-7	NA	NA	NA	NA	NA	2.9 E-7	7.0 E-6	NA	1.1 E-4
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	9.1 E-8	NA	4.1 E-7	NA	2.9 E-6
D(c)-SP09-10	10	NA	1.4 E-7	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	NA	NA	2.0 E-7	1.2 E-7	NA	NA	1.3 E-5
D(c)-SP10-10	10	NA	9.6 E-7	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	1.3 E-7	1.9 E-7	NA	NA	1.7 E-6
D(c)-SP11-10	10	5.3 E-9	NA	4.0 E-8	NA	2.2 E-9	7.2 E-7	NA	1.4 E-6	4.7 E-7	NA	NA	1.2 E-6	2.0 E-7	1.0 E-6	NA	NA	1.3 E-5
D(c)-SP12-10	10	NA	NA	NA	NA	2.8 E-9	NA	NA	1.6 E-7	NA	NA	NA	1.1 E-5	1.3 E-7	3.3 E-7	1.2 E-7	NA	1.4 E-5
05D-SP08-20	20	NA	NA	NA	NA	NA	3.1 E-7	NA	8.0 E-7	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	5.6 E-6
08D-SP07-20	20	9.8 E-9	1.4 E-7	NA	NA	NA	3.0 E-7	NA	2.4 E-6	2.1 E-7	NA	NA	NA	1.5 E-7	3.0 E-7	NA	NA	9.9 E-6
08D-SP08-20	20	NA	NA	NA	NA	1.3 E-9	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	1.7 E-7	5.5 E-8	NA	2.0 E-6
52D-SP24-20	20	NA	3.8 E-8	2.7 E-8	NA	5.7 E-8	1.1 E-7	NA	1.0 E-7	9.4 E-7	2.7 E-7	NA	8.7 E-7	NA	4.2 E-7	2.2 E-6	NA	3.4 E-5
52D-SP25-20	20	NA	NA	1.7 E-8	NA	2.2 E-8	NA	NA	2.6 E-7	6.8 E-7	2.3 E-7	1.9 E-8	2.8 E-6	NA	3.8 E-7	4.8 E-6	NA	5.3 E-5
52D-SP27-20	20	NA	NA	4.2 E-8	NA	5.7 E-9	6.3 E-8	NA	1.2 E-7	1.7 E-6	4.1 E-7	2.4 E-8	2.7 E-6	NA	8.2 E-7	8.1 E-7	NA	3.2 E-5
52D-SP28-20	20	4.8 E-9	5.5 E-7	NA	NA	1.4 E-9	2.6 E-7	NA	9.8 E-7	NA	NA	NA	NA	NA	2.0 E-7	2.9 E-7	NA	4.9 E-5
52D-SP29-20	20	5.7 E-9	NA	NA	NA	4.4 E-8	6.2 E-8	NA	1.6 E-7	NA	NA	NA	1.1 E-6	NA	1.2 E-7	3.1 E-6	NA	8.9 E-6
52D-SP30-20	20	1.1 E-8	NA	NA	NA	5.6 E-8	7.3 E-8	NA	2.2 E-7	NA	NA	NA	2.3 E-6	NA	8.0 E-8	6.0 E-6	NA	1.3 E-5
52D-SP32-20	20	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	2.3 E-5
52D-SP33-20	20	NA	NA	4.0 E-8	NA	1.6 E-8	1.0 E-7	NA	1.4 E-7	1.3 E-6	4.4 E-7	2.7 E-8	3.9 E-6	NA	7.3 E-7	1.2 E-6	NA	9.9 E-5
52D-SP35-20	20	NA	3.0 E-8	NA	NA	4.4 E-8	NA	NA	7.1 E-8	NA	NA	NA	8.7 E-6	NA	NA	6.0 E-8	NA	1.0 E-5
52D-SP36-20	20	NA	NA	NA	1.1 E-6	3.4 E-7	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	5.5 E-8	1.0 E-6	1.0 E-7	1.1 E-5
52D-SP39-20	20	3.0 E-9	7.2 E-8	NA	NA	4.0 E-9	4.4 E-7	NA	1.3 E-7	2.9 E-7	NA	NA	NA	5.9 E-8	5.5 E-7	1.6 E-7	NA	7.6 E-6
52D-SP40-20	20	NA	NA	2.8 E-8	NA	NA	2.6 E-7	NA	7.2 E-7	5.0 E-7	2.6 E-7	NA	3.5 E-6	4.8 E-7	5.8 E-7	1.2 E-7	NA	1.0 E-5
52D-SP41-20	20	NA	9.6 E-8	NA	NA	NA	1.1 E-7	NA	1.6 E-7	1.5 E-7	NA	NA	1.0 E-6	1.9 E-7	3.0 E-7	3.5 E-8	NA	3.1 E-6
52D-SP42-20	20	NA	9.6 E-8	NA	NA	1.7 E-9	1.2 E-7	NA	2.0 E-7	2.0 E-7	NA	NA	1.6 E-6	1.7 E-7	5.0 E-7	3.8 E-8	NA	5.3 E-6
52D-SP43-20	20	3.3 E-8	NA	NA	1.2 E-7	9.9 E-8	5.8 E-8	NA	9.4 E-8	NA	NA	NA	7.8 E-6	NA	5.5 E-8	1.4 E-6	NA	1.5 E-5
52D-SP44-20	20	NA	2.5 E-7	NA	1.2 E-7	9.0 E-9	NA	NA	8.9 E-8	NA	NA	NA	NA	NA	7.9 E-8	NA	NA	1.1 E-6
AW-08D-SP10-20	20	3.4 E-9	4.1 E-8	1.4 E-8	NA	NA	4.0 E-7	NA	8.8 E-7	3.5 E-7	NA	NA	NA	NA	6.0 E-7	3.7 E-8	NA	8.0 E-6
D(b)-SP03-20	20	NA	NA	NA	NA	2.1 E-8	6.6 E-8	NA	1.3 E-7	NA	NA	NA	1.9 E-6	NA	1.0 E-7	1.6 E-6	NA	7.3 E-6
D(b)-SP04-20	20	NA	NA	NA	NA	6.3 E-9	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	8.9 E-7
D(b)-SP06-20	20	NA	8.9 E-8	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	NA	1.6 E-5	1.3 E-7	8.5 E-8	NA	NA	1.6 E-5

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
D(c)-SP05-20	20	NA	NA	NA	NA	4.9 E-9	2.6 E-7	NA	7.7 E-7	NA	NA	NA	NA	NA	2.7 E-7	1.6 E-6	NA	2.3 E-5
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	7.9 E-8
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	9.6 E-8	NA	3.0 E-7
D(c)-SP08-20	20	NA	9.3 E-8	NA	NA	NA	2.2 E-7	NA	1.3 E-6	1.9 E-7	NA	NA	NA	2.7 E-7	2.7 E-7	6.0 E-8	NA	7.5 E-6
D(c)-SP09-20	20	NA	1.0 E-7	NA	NA	NA	1.5 E-7	NA	1.9 E-7	NA	NA	NA	NA	8.4 E-8	8.7 E-8	3.5 E-8	NA	2.8 E-5
D(c)-SP10-20	20	NA	NA	NA	NA	2.5 E-8	6.2 E-8	NA	1.9 E-7	NA	NA	NA	2.8 E-6	1.7 E-7	2.0 E-7	2.7 E-7	NA	4.3 E-6
D(c)-SP11-20	20	NA	NA	NA	1.0 E-7	2.3 E-9	6.9 E-8	NA	2.5 E-7	NA	NA	NA	NA	2.1 E-7	2.1 E-7	6.6 E-8	NA	2.8 E-5
D(c)-SP12-20	20	NA	7.9 E-8	2.2 E-8	NA	1.2 E-9	2.0 E-7	NA	3.2 E-7	3.5 E-7	2.0 E-7	NA	7.9 E-6	2.4 E-7	5.1 E-7	1.4 E-7	NA	2.2 E-5
52D-SP40-28	28	NA	7.6 E-8	NA	NA	NA	1.3 E-7	NA	3.5 E-7	1.6 E-7	NA	NA	1.0 E-6	4.4 E-7	3.2 E-7	6.5 E-8	NA	9.4 E-6
52D-SP24-30	30	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	2.4 E-7
52D-SP25-30	30	NA	NA	NA	NA	3.9 E-8	NA	NA	3.6 E-8	3.3 E-7	NA	NA	5.1 E-6	NA	1.5 E-7	6.0 E-6	NA	2.8 E-5
52D-SP27-30	30	1.8 E-9	3.2 E-8	3.4 E-8	NA	9.3 E-9	6.9 E-8	NA	1.0 E-7	1.3 E-6	3.3 E-7	1.2 E-8	NA	3.9 E-8	8.1 E-7	3.7 E-8	NA	6.3 E-5
52D-SP28-30	30	NA	NA	NA	NA	2.0 E-8	5.7 E-8	NA	9.5 E-8	2.4 E-7	NA	NA	2.2 E-6	NA	7.4 E-8	8.7 E-7	NA	9.1 E-6
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	6.2 E-8	NA	NA	7.9 E-8	4.0 E-8	NA	6.3 E-8	1.2 E-7	NA	NA	1.2 E-5	8.5 E-8	5.6 E-8	1.0 E-7	NA	2.4 E-5
52D-SP36-30	30	NA	NA	NA	9.4 E-7	2.2 E-7	NA	NA	4.8 E-8	NA	NA	NA	3.2 E-6	6.8 E-8	3.2 E-8	8.4 E-7	1.2 E-7	7.6 E-6
52D-SP37-30	30	NA	4.3 E-8	NA	1.2 E-7	1.5 E-8	4.7 E-7	NA	3.5 E-7	NA	NA	NA	1.5 E-6	8.9 E-8	5.3 E-8	8.4 E-8	NA	4.2 E-6
52D-SP39-30	30	1.6 E-9	8.2 E-8	NA	NA	NA	2.0 E-7	NA	3.9 E-7	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	3.1 E-6
52D-SP41-30	30	NA	3.0 E-8	NA	NA	NA	4.7 E-8	NA	8.0 E-8	1.1 E-7	NA	NA	4.4 E-7	1.2 E-7	1.2 E-7	NA	NA	1.0 E-6
52D-SP42-30	30	NA	NA	NA	NA	4.2 E-8	3.8 E-8	NA	1.5 E-7	NA	NA	NA	2.9 E-5	7.6 E-7	1.7 E-7	2.8 E-5	7.9 E-8	8.8 E-5
52D-SP43-30	30	3.8 E-9	3.4 E-7	NA	NA	1.3 E-8	NA	NA	NA	1.1 E-7	NA	NA	5.0 E-7	NA	7.4 E-8	1.9 E-7	NA	1.4 E-5
52D-SP44-30	30	4.5 E-9	2.7 E-7	NA	NA	1.1 E-9	6.2 E-7	NA	1.4 E-6	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	1.7 E-5
D(b)-SP05-30	30	NA	2.7 E-8	NA	NA	1.2 E-8	6.0 E-8	NA	7.2 E-8	NA	NA	NA	5.3 E-7	4.8 E-8	8.9 E-8	NA	NA	8.5 E-7
D(c)-SP05-30	30	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	6.8 E-7	3.9 E-8	NA	4.4 E-6	NA	4.7 E-5
52D-SP44-40	40	1.6 E-9	2.4 E-7	NA	1.5 E-7	4.4 E-8	3.5 E-7	NA	9.8 E-7	NA	NA	NA	NA	NA	2.8 E-7	3.0 E-8	5.2 E-8	1.2 E-5

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	3.6 E-9	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA
52D-SP24-10	10	NA	5.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	3.5 E-9	NA
52D-SP25-10	10	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	2.4 E-9	NA
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-9	NA	NA	NA	NA	NA
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	NA	NA	NA	1.4 E-9	NA
52D-SP31-10	10	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA
52D-SP32-10	10	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-10	10	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	2.9 E-9	NA
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP37-10	10	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-10	NA	NA	NA	NA	NA
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	NA	NA	1.1 E-9	NA
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	2.2 E-9	NA
52D-SP43-10	10	NA	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	1.2 E-9	NA
AW-08D-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	NA
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	5.6 E-8	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	3.1 E-10	NA
52D-SP24-20	20	NA	5.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	7.5 E-10	NA
52D-SP25-20	20	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	1.2 E-9	NA
52D-SP27-20	20	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	6.0 E-10	NA
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	2.8 E-9	NA	NA
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	1.5 E-9	4.1 E-10	NA
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	NA	NA	8.5 E-10	NA
52D-SP32-20	20	NA	4.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	1.7 E-9	NA
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA
52D-SP36-20	20	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-20	20	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	1.5 E-9	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-10	NA	NA	NA	NA	NA
52D-SP43-20	20	NA	4.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	8.5 E-10	NA
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	1.2 E-9	NA
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	8.9 E-9	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-10	NA	NA	NA	8.0 E-10	NA
D(c)-SP09-20	20	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	NA	NA	1.4 E-8	NA
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	1.4 E-8	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	6.0 E-10	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	4.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	NA	1.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	1.3 E-9	NA
52D-SP27-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	3.2 E-10	NA
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	1.7 E-9	NA
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	7.9 E-12	NA	NA	7.4 E-10	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	6.3 E-9	NA
52D-SP36-30	30	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA
52D-SP37-30	30	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	NA	NA
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-10	NA	NA	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	NA
52D-SP43-30	30	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA
52D-SP44-40	40	NA	6.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-11	NA	NA	NA	2 E-9
08D-SP08-10	10	NA	NA	6.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	3.1 E-11	NA	NA	NA	1 E-8
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
52D-SP24-10	10	NA	NA	6.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	1.0 E-10	NA	1.1 E-8	NA	2 E-8
52D-SP25-10	10	NA	NA	7.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-10	NA	NA	7.9 E-9	NA	1 E-8
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	7.2 E-9	NA	9 E-9
52D-SP29-10	10	NA	NA	6.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	1.7 E-8	NA	3 E-8
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-10	NA	NA	3.2 E-9	NA	6 E-9
52D-SP31-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	2.7 E-9	NA	4 E-9
52D-SP32-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	5.1 E-9	NA	7 E-9
52D-SP33-10	10	NA	NA	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	1.5 E-10	NA	1.8 E-9	NA	8 E-9
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	5.8 E-11	NA	2 E-9
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	1 E-9
52D-SP37-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-10	1.1 E-10	NA	1.2 E-10	NA	1 E-9
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	1.0 E-10	NA	NA	NA	1 E-9
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	4 E-10
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	1.0 E-10	NA	8.5 E-11	NA	1 E-9
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	3.5 E-11	NA	1.6 E-10	NA	3 E-9
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	3.4 E-11	NA	7.9 E-11	NA	4 E-9
52D-SP43-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	2.2 E-9	NA	6 E-9
AW-08D-SP10-10	10	NA	NA	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	NA	1.4 E-10	NA	4 E-9
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	7.2 E-9	NA	1 E-8
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	NA	NA	NA	2.2 E-9	NA	NA	2.8 E-10	NA	1 E-8
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	2 E-10
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	4.1 E-11	NA	NA	NA	2 E-9
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	6 E-8
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	2.7 E-10	NA	1 E-9
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-11	NA	NA	NA	5 E-9
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-11	NA	NA	NA	4 E-11
D(c)-SP11-10	10	NA	NA	5.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	6.2 E-11	NA	NA	NA	4 E-9
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	4.1 E-11	NA	7.9 E-11	NA	2 E-9
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	NA	2 E-9
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	7 E-10
52D-SP24-20	20	NA	NA	3.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	NA	NA	1.4 E-9	NA	3 E-9
52D-SP25-20	20	NA	NA	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	3.2 E-9	NA	5 E-9
52D-SP27-20	20	NA	NA	5.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	5.3 E-10	NA	2 E-9
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	5 E-9
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	2.0 E-9	NA	5 E-9
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	3.9 E-9	NA	6 E-9
52D-SP32-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	2 E-9
52D-SP33-20	20	NA	NA	5.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	7.9 E-10	NA	3 E-9
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	3.9 E-11	NA	1 E-9
52D-SP36-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	6.6 E-10	4.3 E-10	2 E-9
52D-SP39-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	1.1 E-10	NA	2 E-9
52D-SP40-20	20	NA	NA	3.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	1.5 E-10	NA	7.6 E-11	NA	2 E-9
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	5.9 E-11	NA	2.3 E-11	NA	5 E-10
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	5.5 E-11	NA	2.5 E-11	NA	1 E-9
52D-SP43-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-10	NA	NA	9.2 E-10	NA	3 E-9
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
AW-08D-SP10-20	20	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	2 E-9
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	1.0 E-9	NA	3 E-9
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	3 E-10
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	4.2 E-11	NA	NA	NA	2 E-9

Table 5.2-49
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	1 E-8
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-11	NA	6 E-11
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-11	NA	3.9 E-11	NA	2 E-9
D(c)-SP09-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	2.3 E-11	NA	2 E-8
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	5.5 E-11	NA	1.7 E-10	NA	6 E-10
D(c)-SP11-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	4.3 E-11	NA	2 E-8
D(c)-SP12-20	20	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-10	7.6 E-11	NA	9.2 E-11	NA	2 E-9
52D-SP40-28	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	1.4 E-10	NA	4.2 E-11	NA	1 E-9
52D-SP24-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
52D-SP25-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	3.9 E-9	NA	6 E-9
52D-SP27-30	30	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	2.4 E-11	NA	8 E-10
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	5.7 E-10	NA	3 E-9
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
52D-SP35-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	2.7 E-11	NA	6.8 E-11	NA	9 E-9
52D-SP36-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	2.1 E-11	NA	5.5 E-10	5.1 E-10	2 E-9
52D-SP37-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	2.8 E-11	NA	5.5 E-11	NA	4 E-10
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-11	3.7 E-11	NA	NA	NA	9 E-11
52D-SP42-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	2.4 E-10	NA	1.8 E-8	3.4 E-10	2 E-8
52D-SP43-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-11	NA	NA	1.3 E-10	NA	2 E-10
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	1.5 E-11	NA	NA	NA	8 E-11
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-11	1.2 E-11	NA	2.8 E-9	NA	3 E-8
52D-SP44-40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	2.2 E-10	2 E-9

Notes and Key:

All concentrations reported in micrograms per cubic meter.

HI = Hazard index

ILCR = Incremental lifetime cancer risk

NA = Not applicable.

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.2-16) x the unit hazard or unit risk for the chemical).

Table 5.2-50 ***Unit Hazard and Unit Cancer Risk Results - Construction Worker***
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Antimony	1.0 E+0	8.1 E-3	0.0 E+0	2.4 E-4	8.3 E-3	NA	NA	NA	NA
Cadmium	1.0 E+0	3.2 E-3	3.9 E-4	9.8 E-5	3.7 E-3	NA	NA	2.1 E-8	2.1 E-8
Chromium	1.0 E+0	2.2 E-6	0.0 E+0	6.5 E-8	2.2 E-6	NA	NA	NA	NA
Chromium VI	1.0 E+0	1.1 E-3	0.0 E+0	4.4 E-2	4.6 E-2	NA	NA	7.1 E-7	7.1 E-7
Copper	1.0 E+0	8.7 E-5	0.0 E+0	2.6 E-6	9.0 E-5	NA	NA	NA	NA
Iron	1.0 E+0	4.6 E-6	0.0 E+0	NA	4.6 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	1.1 E-2	0.0 E+0	1.1 E-3	1.2 E-2	NA	NA	NA	NA
Molybdenum	1.0 E+0	6.5 E-4	0.0 E+0	2.0 E-5	6.7 E-4	NA	NA	NA	NA
Nickel	1.0 E+0	1.6 E-4	0.0 E+0	6.8 E-3	7.0 E-3	NA	NA	NA	NA
Perchlorate	1.0 E+0	4.6 E-3	0.0 E+0	NA	4.6 E-3	NA	NA	NA	NA
Silver	1.0 E+0	6.5 E-4	0.0 E+0	2.0 E-5	6.7 E-4	NA	NA	NA	NA
Zinc	1.0 E+0	1.1 E-5	0.0 E+0	3.3 E-7	1.1 E-5	NA	NA	NA	NA
Semivolatile Organic Compounds									
Anthracene	1.0 E+0	1.1 E-5	4.2 E-6	3.3 E-7	1.5 E-5	NA	NA	NA	NA
Benzo (a) anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-8	1.3 E-8	1.0 E-9	4.8 E-8
Benzo (a) pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-7	2.2 E-7	5.5 E-9	7.7 E-7
Benzo (b & k) fluoranthen	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Benzo (b) fluoranthene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Benzo (ghi) perylene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Chrysene	1.0 E+0	NA	NA	NA	NA	5.5 E-9	2.2 E-9	5.5 E-11	7.7 E-9
Dibenz (a,h) anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-7	1.3 E-7	5.7 E-9	4.7 E-7
Di-n-butyl phthalate	1.0 E+0	3.2 E-5	9.7 E-6	9.8 E-7	4.3 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
PCB-1254	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
PCB-1260	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
Phenanthrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	1.0 E+0	5.4 E-5	0.0 E+0	2.3 E-4	2.9 E-4	1.2 E-8	0.0 E+0	4.0 E-8	5.2 E-8

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.2-51 Inhalation Hazard and Unit Cancer Risk Results - Construction Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Outdoor Vapor Concentration (mg/m^3)	Adult Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 E+0	1.4 E-1	NA
1,1-Dichloroethane	1.0 E+0	9.8 E-1	1.6 E-5
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,4-Dichlorobenzene	1.0 E+0	8.5 E-1	6.2 E-5
1,4-Dioxane	1.0 E+0	2.3 E-1	7.5 E-5
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
2-Propanol	1.0 E+0	7.5 E+1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
Bromodichloromethane	1.0 E+0	9.8 E+0	3.6 E-4
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Carbon Tetrachloride	1.0 E+0	1.7 E+1	4.2 E-4
Chloroform	1.0 E+0	1.5 E+1	2.3 E-4
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Cyclohexane	1.0 E+0	1.2 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Ethylbenzene	1.0 E+0	6.7 E-1	2.4 E-5
Freon 11	1.0 E+0	3.4 E+0	NA
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexachlorobutadiene	1.0 E+0	2.0 E+2	2.2 E-4
Hexane	1.0 E+0	9.8 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Styrene	1.0 E+0	7.5 E-1	NA
Tetrachloroethene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
Toluene	1.0 E+0	2.3 E+0	NA
Trichloroethene	1.0 E+0	1.1 E+0	2.0 E-5
Vinyl Chloride	1.0 E+0	6.7 E+0	7.5 E-4

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																												
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.9 E-4	1.5 E-5	8.3 E-3	NA	NA	NA	NA	1.5 E-4	3.7 E-3	2.2 E-6	4.6 E-2	NA	9.0 E-5	NA	4.3 E-5	1.1 E-4	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	7.0 E-3	2.3 E-1	2.3 E-1	4.6 E-3	1.5 E-4	1.6 E-5	1.5 E-4	6.7 E-4	1.1 E-5
Unit Risk		5.2 E-8	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	2.1 E-8	NA	7.1 E-7	7.7 E-9	NA	4.7 E-7	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA	NA
05D-SNS06	0									7.4	408			98					20100	126	0.678		46							21	339
08D-GS02	0										61			27		3.81			22600	12			47								73
D(b)-SD01	0		0.0054	0.66	0.013	0.021	0.075			9.3	36		0.038	32			0.073			29	0.098	3.2	23		0.17		0.052		0.057	9.4	3600
05D-SNS01	0.01									1.4	121			119					17100	106	0.536		28							16	430
05D-SNS02	0.01									9.6	2030			196					13800	210	1.3		55							86	996
05D-SNS03	0.01									6.4	437			165					16300	134	31		82							8.5	655
05D-SNS04	0.01									11.5	2140			365					18100	285	1.6		193							160	1400
05D-SNS05	0.01									4.0	191			100					12700	60	0.369		71							3.9	781
05D-SNS06	0.01									7.4	408			98					20100	98	0.678		46							4.7	339
06D-SNS01	0.01			26						10.8	10100			497					37700	26			1470								6410
06D-SNS02	0.01										279			42					19800	7			75								206
06D-SNS03	0.01										210			32					20400	10			52								143
06D-SNS04	0.01			8.7						4.8	3380			169					26800	17	0.11		577								1530
06D-SNS05	0.01										84			34.5					23300	16			35							1.5	61
08D-GS01	0.01									5.1	31			57					6330	17	0.57		17							76.5	128
08D-GS02	0.01										65			33		3.8			22600	14			53								73
08D-SNS02	0.01									1.1	69			47					45200	16	0.15		78							1.9	63
09D-SNS01	0.01										73			40					37000	15			46								48
09D-SNS02	0.01										50			27					24200	15	0.13		27								49
09D-SNS03	0.01										38			27					18600	39			24								67
09D-SNS04	0.01										34			14					15300	9.1	0.10		19								67
12D-CS01	0.01									1.4	89			44					29200	33			40							2.4	141
12D-CS02	0.01										78			50					14300	23	0.13		22							8.2	119
12D-SNS01	0.01			7.0						1.6	121			41					24100	38	0.15		32							3.8	271
12D-SNS02	0.01			6.0							36			22					24700	9.8			25								38
12D-SNS03	0.01			6.8							81			30					24600	11			32							2.6	83
12D-SNS04	0.01										69			37					24100	25			32							2.5	79
12D-SNS05	0.01			6.1						1.2	85			61					30600	42	0.24		43							4.0	185
12D-SNS06	0.01										28			14					14800	11			16								60
12D-SNS07	0.01										46			26					20300	29			24							1.1	107
D(C)-GS01	0.01										24			14					10900				23							1.8	25
09D-SD01	0.25			0.11						0.55	32	0.088		22						5.1	0.015	0.86	26								64
D(d)-SD01	0.25			2.8						1.0	46			150						120	0.39	1.6	28							0.27	1100
05D-SNS08	0.5			0.33						1.5	64	1.3	0.031	54			0.029			70	0.34	0.55	36				0.012		0.049	8.5	510
05D-SNS09	0.5		0.0068	0.15	0.068	0.089	0.23		0.019	1.6	58		0.088	49	0.0068		0.14	0.020		18	0.33	5.9	40				0.038		0.14	1.2	100
05D-SNS10	0.5			0.96						5.8	170	7.8		32						100	0.15	0.56	37							0.62	190
05D-SNS11	0.5			0.15						3.9	76	0.25		28			0.0050			15	0.035	0.2	25							0.37	220
05D-SNS12	0.5			0.36						42	160	3.6		50						34	0.29	1.0	40							0.65	360
05D-SNS13	0.5		0.0036	1.1	0.019	0.026	0.097		0.016	54	1800	2.1	0.038	230			0.057	0.010		140	1.3	2.4	150				0.020		0.077	49	1400
05D-SNS14	0.5			1.6	0.016	0.032	0.096		0.0076	2.5	130	0.96	0.035	130			0.033	0.0073		50	2.2	9.7	48				0.011		0.024	2.1	480
05D-SNS15	0.5		0.0037	0.62	0.02	0.041	0.16	0.13	0.026	16	2300	0.91	0.074	540			0.089	0.018		260	2.0	15	250				0.028		0.11	42	1400
05D-SNS16	0.5			0.31	0.047		0.26		0.086	4.6	49	0.11	0.17	88			0.15			65	0.69	0.90	29				0.058		0.36	4.4	2100
05D-SNS17	0.5			0.52						5.6	460	0.86		110						130	0.11	0.56	49							18	460
05D-SNS18	0.5			0.89	0.009	0.014	0.038			1.7	61	0.21	0.019	76			0.021			48	0.23	0.87	44		0.10		0.0077		0.028	0.61	250
05D-SNS19	0.5			0.48						1.2	72	0.53		62						41	0.34	0.55	50								290
05D-SNS20	0.5			0.74						1.8	140			94						150	0.45	2.5	47							33	790
06D-SNS06	0.5			7.5						12	19000	0.046		620			0.0021			100	0.45	44	1500							2.2	5000
06D-SNS07	0.5			49						33	43000		0.0049	960			0.0027			640	1.4	70	1600							11	4600
06D-SNS08	0.5									16	27000		0.0096	620			0.0074			300	1.2	43	1300				0.0052			6.1	3600
06D-SNS09	0.5			0.4						0.73	48	0.17		32						4.4	0.082	0.23	25							0.63	44
06D-SNS10	0.5			0.3						0.7	68	0.2		30						6.7	0.34	0.43	33							0.60	45
06D-SNS11	0.5			0.19						0.83	70	0.074		34						6.9	0.051	0.44	28							0.35	49
08D-SB02	0.5		0.011		0.022	0.02	0.031		0.0081	1.2	37	0.065	0.023	23			0.039	0.0084		5.1	0.084	0.73	25	0.27			0.037		0.037	22	56
08D-SB03	0.5			0.16						0.51	61	0.31		30						9.0	0.021	0.56	48			0.099					42
08D-SNS01	0.5			0.18						0.62	65	0.32		40			0.0025			13	0.019	0.41	45							0.37	80
09D-SNS05	0.5			0.46						2.5	170	0.21		60			0.0045			24	0.16	1.0	52							3.8	170
09D-SNS06	0.5			0.31						0.44	33	0.85		27						13		0.18	20								94
12D-SNS08	0.5			0.39						0.52	47	0.64		20						9.9		0.24	24								76
12D-SNS09	0.5									0.15	67	1.8		26						13	0.02		42							0.94	76
52D-SB09	0.5									0.29	27	0.26		9.5						2.0		0.19	37					0.22			27
52D-SB16	0.5									0.75	34			33						6.8			27					0.30			71
52D-SNS01	0.5			1.3						1.4	280	7.3	0.0051	28			0.0024			130	0.16	1.4	26							0.46	96
52D-SNS02	0.5			2.0						3.6	130	2.2	0.0056	45			0.0064			36	0.17	1.0	68				0.0044				230
52D-SNS03	0.5			0.24	0.0051		0.014			0.72	34	0.11	0.036	32			0.0056			5.6	0.012	0.63	27				0.013		0.015		63
52D-SNS04	0.5			0.087						0.96	29	0.18		24			0.0046			6.5	0.010	0.16	16				0.0027				92
52D-SNS05	0.5																			5.7											
D(c)-SNS01	0.5			0.4						0.55	65	0.55		31						8.8		0.57	57								48
05D-SB01	1			0.097						0.53	28	0.13		29						7.7	0.056	0.49	21	0.076				1.4			53
05D-SB02	1			0.76						0.35	37	7.5		26						4.4	1.0	1.0	31								28

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																												
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.9 E-4	1.5 E-5	8.3 E-3	NA	NA	NA	NA	1.5 E-4	3.7 E-3	2.2 E-6	4.6 E-2	NA	9.0 E-5	NA	4.3 E-5	1.1 E-4	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	7.0 E-3	2.3 E-1	2.3 E-1	4.6 E-3	1.5 E-4	1.6 E-5	1.5 E-4	6.7 E-4	1.1 E-5
Unit Risk		5.2 E-8	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	2.1 E-8	NA	7.1 E-7	7.7 E-9	NA	4.7 E-7	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA	NA
05D-SB03	1			3.5						190	5300			260						330	2.2	14	130							200	700
05D-SB04	1									1.7	92			36						8.5	0.51	2.3	38								58
05D-SB05	1									0.4	65			49						17	0.1	0.27	45							0.33	71
05D-SB06	1			0.16						9.6	670	0.61		66						30	0.24	0.98	49	2.5						16	173
05D-SB07	1									2.6	197	0.41		39						15	0.10	0.41	34		0.80					3.5	98
05D-SB08	1									0.15	47	0.091		34						8.5	0.28	0.24	43								40
05D-SB09	1									0.24	48	0.061		26						7.8	0.069	0.33	32	0.61						1.2	46
05D-SB10	1									0.24	88	0.14		71						15	0.3	0.23	79	0.046						1.4	66
06D-SB02	1									0.64	50	0.22		29						7.0	0.091	1.0	32								39
06D-SB06	1			0.19						3.3	290			49						26	0.17	1.5	39							3.8	130
08D-AH01	1										57			25		0.87			20000	12		2.3	42								41
08D-SB01	1									0.65	74	0.56		30						7.3	0.017	0.56	66								45
08D-SB04	1			0.19						0.56	60	0.49		29						9.9	0.021	0.68	45								47
08D-SB05	1			0.2						0.50	54	0.49		22						8.8	0.0099	0.53	31			0.031					41
08D-SB06	1										49	0.49		20						7.9	0.19	0.41	31			0.078					37
52D-AH01	1															0.77															
52D-AH02	1															3.2															
52D-FCS-SB01	1										22			16.1		0.76			22900	6.4			22								44
52D-SB01	1			5.54							40			31.6		1.6			41400	9.0			27							1.09	84
52D-SB02	1									14	3040			152		1.5			42800	45	3.6		2090							2.12	379
52D-SB04	1			0.045						0.39	31	0.15		32						6.2	0.0060		17								48
52D-SB05	1			0.08						0.53	25			24						5.3	0.0096	0.25	19					0.82			50
52D-SB06	1									0.32	30			8.3							0.0039	0.21	37								27
52D-SB07	1																														
52D-SB08	1			0.12						0.46	29	0.21		20						3.7	0.02		29								36
52D-SB10	1			0.16							39	0.49		14						4.7	0.0084	0.43	36					0.25			300
52D-SB11	1			0.43						1.2	110	2.9		34						37	0.094	1.0	25					0.64			120
52D-SB13	1			0.23							57	0.43		55						6.2	0.011	2.1	31								47
52D-SB14	1			0.093						0.51	22	0.081		24						5.2			19					1.9			49
52D-SB15	1			0.14						0.62	52	0.24		37						6.0	0.022	0.55	34					2.0			53
52D-SB17	1			0.2						0.6	61	0.18		38						6.6	0.014	0.30	32								40
AW-AF1-SB01	1									0.5	50	0.094		25						6.2		0.24	21							0.2	75
AW-AF1-SB02	1			0.21							26	0.071		21						4.0	0.02	0.27	17								41
AW-AF1-SB03	1			0.15							39	0.075		28						5.2	0.022	0.95	26								44
AW-AF2-SB01	1			0.22					0.013		52		0.0078	58						6.7	0.059	0.75	46								47
AW-AF2-SB02	1			0.15							51			22						10	0.022	0.45	33								43
D(b)-SB01	1			0.14						0.34	34	0.20		26						3.3	0.066	0.55	27					0.11			31
D(b)-SB02	1			1.6						1.0	60	0.20		40						7.6	0.018	2.4	29					1.1			100
D(b)-SB03	1			0.30						1.1	92	0.42	0.0061	65			0.0019			13	0.14	0.79	70				0.0053	0.36			75
D(b)-SB04	1		0.0052		0.049	0.059	0.12						0.064				0.052	0.0081									0.022		0.061		
D(b)-SB05	1			0.092						0.53	29	0.063		26						6.1	0.021		22				0.004	4.5			55
D(C)-SB01	1										56			26		2.08			22100	12			40								47
D(c)-SB02	1			0.18						0.68	53	0.5		29						19	0.076	0.55	36							6.7	60
D(c)-SB03	1									0.34	42	0.26		32						2.6		0.6	39								31
D(c)-SB04	1			0.19						0.47	60	0.41		30						7.6	0.016	0.78	39			0.011		0.42			39
D(c)-SB05	1			0.085	0.077	0.1	0.2		0.064	0.44	43	0.61	0.11	24	0.018		0.089	0.059		9.3	0.049	0.36	29				0.022		0.097		180
DC-AH01	1										56			26		2.1			22100	12			40								47
06D-SB03	1.5									0.13	41	0.13		45						7.4	0.077	1.1	40							0.075	45
06D-SB04	1.5			0.22						0.18	42	0.13		60						14	0.29	0.82	72							0.15	55
06D-SB05	1.5			0.56						15	210	1.6		69						80	0.72	5.0	83							1.8	79
09D-SD01	1.5			0.23						0.52	64	0.39		24						7.5	0.02	0.21	26								39
52D-SB07	1.5									0.77	31			27						6.8		0.17	27								56
05D-SNS01	2.5									2.6	43			37					16600	12			29							1.73	144
05D-SNS08	2.5			0.32						1.5	72	1.8		67			0.016			67	0.48	0.71	32							24	320
05D-SNS09	2.5			0.067						0.97	36	0.21		33						8.9	0.10	4.6	26							2.0	74
05D-SNS10	2.5			0.13						0.88	43	0.23		30						5.8	0.014	0.61	25								59
05D-SNS11	2.5			0.25						6.4	96	4.9		33						20	0.18	0.61	30							0.5	110
05D-SNS12	2.5			0.17						4.1	960	0.14		110						76	0.009	5.1	30							0.63	230
05D-SNS13	2.5			0.27			0.019			15	380	1.2	0.0082	70			0.012			29	0.34	1.1	53				0.0041		0.015	22	350
05D-SNS14	2.5			1.0						9.4	1800	0.82		600						120	2.8	5.0	58							9.8	690
05D-SNS15	2.5			0.36						6.3	150	0.87		81						110	0.11	2.4	120							8.7	180
05D-SNS16	2.5				0.0049	0.007	0.03		0.0095	3.9	82	0.63	0.02	65			0.015			76	0.15	1.6	39				0.0091		0.03	3.9	2000
05D-SNS17	2.5									2.3	58	0.44		32						10	0.069	0.21	35							1.1	91
05D-SNS18	2.5			0.51						1.0	53	0.43		73			0.0024			62	0.18	0.45	36		0.065						180
05D-SNS19	2.5			0.29						0.72	51	0.46		34						9.9	0.041	0.60	28								90
05D-SNS20	2.5									0.41	36			33						4.3	0.045	0.52	36							0.90	50
06D-SNS01	2.5										480			44					21000	14			70								160
06D-SNS06	2.5			2.3						3.0	4500			95						32	0.58	4.7	170							1.1	460
06D-SNS07	2.5			5.3						3.7	5700			150						57	0.16	7.3	300							1.1	790

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																												
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc
Unit Hazard		2.9 E-4	1.5 E-5	8.3 E-3	NA	NA	NA	NA	1.5 E-4	3.7 E-3	2.2 E-6	4.6 E-2	NA	9.0 E-5	NA	4.3 E-5	1.1 E-4	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	7.0 E-3	2.3 E-1	2.3 E-1	4.6 E-3	1.5 E-4	1.6 E-5	1.5 E-4	6.7 E-4	1.1 E-5
Unit Risk		5.2 E-8	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	2.1 E-8	NA	7.1 E-7	7.7 E-9	NA	4.7 E-7	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA	NA
06D-SNS08	2.5			1.6						1.4	1000			58						12	0.11	2.4	100								270
06D-SNS09	2.5			0.25						0.49	47	0.098		31						4.7	0.041	0.54	32			1.3					35
06D-SNS10	2.5			0.21						0.39	35	0.26		20						4.9	0.027	0.81	23			0.53				0.33	30
06D-SNS11	2.5			0.39						1.0	75	0.05		31						8.4	0.059	0.87	28			1.9				0.45	60
08D-SNS01	2.5			0.18						0.63	77	0.36		42						10		0.41	60							0.4	71
09D-SNS05	2.5			0.72						1.7	98	0.15		41						12	0.096	0.76	40							1.6	84
09D-SNS06	2.5			0.56						0.64	69	0.36		38						9.9		0.55	39								53
12D-SNS08	2.5			0.36						1.7	54	0.24		35			0.004			12	0.042	0.28	31							0.45	94
12D-SNS09	2.5			0.22						0.18	64	0.9		29						14	0.049	0.69	37							2.6	75
52D-SNS01	2.5			0.64						0.72	47	0.35		37						5.5	0.54	8.3	29								56
52D-SNS02	2.5			0.85						0.84	56	1.3	0.0074	40			0.0042			9.0	0.032	0.43	31				0.0028				78
52D-SNS03	2.5			0.23						0.98	32	0.099		29						6.9	0.011		34								74
52D-SNS04	2.5			0.12						0.40	29	0.38		19						2.0	0.017	0.41	18							0.38	27
52D-SNS05	2.5																			6.4											
D(c)-SNS01	2.5			0.29						0.43	78	0.62		24						6.1		0.88	54								34
05D-SNS06	3										34			27					19600	5.1			21								38
09D-SNS01	3										43			19					21100	6.9			20								30
09D-SNS02	3										57			31					27400	9.1			32								44
09D-SNS03	3										59			31					26600	9.5	0.74		52								45
09D-SNS04	3										76			26					30400	9.4			38								51
12D-SNS01	3										39			20					27000	5.7			24							1.1	38
12D-SNS02	3										62			28					26500	5.1			30								52
12D-SNS03	3										77			37					21300	5.8			51							1.1	43
12D-SNS04	3										58			29					28100	7.3			34								51
12D-SNS05	3										42			29					26400	9.6			34								44
12D-SNS06	3										34			21					25700	6.7			25							1.4	50
12D-SNS07	3										24			14					17300	6.6	0.109		22								29
52D-AH03	3															1.02															
52D-SB09	4.5									0.44	40	0.41		20						4.0		0.29	47					0.62			44
05D-AH01	5										26			21		1.1			12800	6.4			21								30.2
05D-SB01	5			0.11						0.38	40	0.43		39						3.9	0.02	5.7	25					0.17			30
05D-SB02	5			0.15						25	1100	1.8		85						74	0.082	3.6	71							22	270
05D-SB03	5										27			24						3.5	0.026		21								29
05D-SB04	5										31			38						3.1	0.02		52								39
05D-SNS12	5			0.14						0.19	33			29						4.0	0.17	0.92	26							0.065	45
05D-SNS13	5			0.14						0.59	39	0.29		32						4.6	0.58	0.35	27							0.24	44
05D-SNS14	5			0.13						1.4	100	2.4		62						5.4	0.26	0.41	44							8.5	190
05D-SNS15	5			0.29						4.0	87	2.7		52						14	0.056	0.82	51							15	120
05D-SNS16	5			0.18						2.0	38	0.46		29						18	0.022	1.3	16							1.7	830
05D-SNS20	5									0.17	43			44						5.0	0.034	0.66	32							0.42	45
06D-SB02	5			0.96						0.94	820	430		51						14	0.043	2.5	87								210
06D-SB03	5									0.33	82	0.12		48						6.9	0.11	0.79	170							0.091	56
06D-SB04	5			0.13						0.11	27	0.11		30						4.6	0.028	0.81	34							0.1	38
06D-SB05	5			0.14						0.084	23	0.098		25						3.9	0.023	0.83	20							0.068	29
06D-SB06	5			0.19						0.15	32			37						3.4	0.019	1.2	25							0.086	34
08D-AH01	5										63			26		2.5			22300	13			54								39
08D-AH02	5										63			28		1.6			19600	11			65								42
08D-SB01	5									0.55	83	0.34		40						7.2	0.019	0.43	79								43
08D-SB02	5		0.0046		0.0099	0.0084	0.013			0.6	63	0.71	0.01	27			0.017			7.5	0.023	0.54	50	0.034			0.016		0.017	0.74	44
08D-SB03	5			0.22						0.61	68	0.37		29						10		0.51	49								48
08D-SB04	5			0.2						0.56	65	0.34		29						11	0.018	0.44	50								49
08D-SB05	5			0.14						0.34	54	0.3		31						4.9		0.52	38								28
08D-SB06	5									0.41	52	0.32		20						8.6		0.45	35			0.018					43
09D-SD01	5			0.31						0.57	72	0.47		33						8.6	0.023	0.47	36								48
52D-AH01	5															1.7															
52D-AH03	5	0.40																													
52D-SA-SB03	5									1.4	85			37		20			18600	8.8			26							1.2	53
52D-SB01	5			5.2							96			66		5.9			47200	12	0.332		81							1.1	61
52D-SB02	5										36			29					17400	6.9			20								33
52D-SB05	5			0.11						0.52	27			32						6.2	0.013	0.37	21								63
52D-SB06	5									0.82	31			34						8.0		0.22	28					0.27			73
52D-SB07	5		0.093		0.33	0.34	0.45		0.093	0.65	28		0.43	130			0.53	0.059		6.4	0.014	0.37	27				0.44		0.74		290
52D-SB08	5									0.29	33	0.18		11						2.3	0.015		39					2.4			29
52D-SB10	5			0.095							44	0.31		22						5.1	0.0094	0.52	37					3.6			100
52D-SB11	5			0.1						0.45	40	0.56		28						5.2	1.4	0.72	21								49
52D-SB13	5			0.1							41	0.23		31						3.4	0.033	1.6	24					0.55			33
52D-SB14	5			0.1							79			38						3.2	0.0082	0.69	70					0.73			32
52D-SB15	5			0.11						0.4	31	0.14		31						2.7	0.23	1.1	23				0.0024	0.61			31
52D-SB17	5			0.47						1.0	94	0.48		70						12	0.086	0.58	90							0.13	72

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																												
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.9 E-4	1.5 E-5	8.3 E-3	NA	NA	NA	NA	1.5 E-4	3.7 E-3	2.2 E-6	4.6 E-2	NA	9.0 E-5	NA	4.3 E-5	1.1 E-4	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	7.0 E-3	2.3 E-1	2.3 E-1	4.6 E-3	1.5 E-4	1.6 E-5	1.5 E-4	6.7 E-4	1.1 E-5
Unit Risk		5.2 E-8	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	2.1 E-8	NA	7.1 E-7	7.7 E-9	NA	4.7 E-7	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA	NA
AW-AF1-SB01	5			0.15						0.27	46	0.37		28						5.7		2.4	20							0.13	34
AW-AF1-SB02	5			0.12							23	0.022		33						3.5	0.075	0.92	17								24
AW-AF1-SB03	5			0.13							17	0.081		19						2.3	0.020	0.61	11								20
AW-AF2-SB01	5			0.16							61			24						11	0.009	0.58	43								48
AW-AF2-SB02	5			0.18							65			27						12	0.0098	0.56	46								51
D(b)-SB01	5			0.093						0.34	26			21						2.4	0.039	0.46	17								30
D(b)-SB02	5			0.14						0.45	33			33						3.5	0.06	0.20	25								35
D(b)-SB03	5			0.19						0.34	34			27						5.6	0.0039	1.5	22								37
D(b)-SB04	5				0.0086	0.0072	0.011						0.011				0.013										0.0048		0.014		
D(b)-SB05	5			0.20							55			40						4.5		0.30	27								40
D(C)-SB01	5										62			27		1.3			23000	13			49								42
D(c)-SB02	5			0.19						0.49	56	0.85		28						8.3	0.0038	0.72	33								43
D(c)-SB03	5									0.32	54	0.14		30						2.9		2.2	28							0.54	25
D(c)-SB04	5			0.20							70	0.63		27						8.0	0.0039	1.0	42								47
D(c)-SB05	5			0.11						0.51	51	0.35		22						8.9		0.4	35								41
DC-AH01	5										62			27		1.3			23000	13			49								42
52D-SB16	5.5									0.46	54			37						11			27					0.90			32
06D-SB01	6										31			26		1.1			14600	7.2			18								28
52D-FCS-SB01	7										42			25		0.67			21200	5.7			29								36
05D-AH01	10										27			37		1.8			15100	7.9			18								39
05D-SNS12	10										31			46						3.8	0.017	1.1	21							0.092	39
05D-SNS13	10									4.7	150	2.2		79						21	0.22	1.3	57							7.6	240
05D-SNS14	10									4.7	160	3.0		58						15	0.36	2.0	54							11	120
05D-SNS15	10			0.28						6.5	110	3.3		42						19	0.073	1.4	39							11	100
05D-SNS16	10			0.20						0.10	45	0.49		32						5.5	0.054	0.74	34							0.16	43
05D-SNS20	10			0.67						0.24	36			36						5.9	0.086		34							0.28	47
06D-SNS07	10			0.21						0.12	88	0.83		36						6.2	0.043	0.77	28							0.10	41
08D-AH02	10	0.40									29			56					22300				18								40
52D-AH02	10															5.0															
52D-SB01	10										40			31		0.72			21200	5.8	0.107		26								39
52D-SB02	10															1.1															
D(C)-SB01	10										52			25		2.0			17400	9.2			54								40
DC-AH01	10										52			25		2.0			17400	9.2			54								40
52D-SB09	10.5									0.53	21	0.27		30						7.1		0.20	17					0.26			62
D(c)-SB05	10.5			0.14							84	0.58		41						6.6	0.0063	0.84	53								36
05D-SB01	11			0.13						0.38	26	0.37		30						4.2	0.02	0.35	29					1.2			29
05D-SB02	11			0.74						0.30	49	0.45		27						3.8	0.028	1.1	28								33
06D-SB02	11									0.72	730	630		42						11	0.052	2.1	67								170
06D-SB03	11									0.14	42	0.16		47						8.2	0.043	0.85	47							0.096	63
06D-SB04	11			0.17						0.12	35	0.10		38						6.1	0.048	0.55	31							0.093	31
06D-SB05	11			0.15						0.11	34	0.10		37						4.7	0.025	0.62	42							0.081	41
06D-SB06	11			0.063						0.099	39			35						3.4	0.026	0.32	39							0.052	32
08D-SB01	11									0.45	69	0.26		41						4.6	0.019	2.0	42			0.058				0.42	35
08D-SB02	11									0.71	85	0.40		48						5.5	0.01	3.1	71							1.4	45
08D-SB05	11			0.22							46	0.37		37						3.4		2.0	32								24
08D-SB06	11											0.40																			
52D-SB05	11			0.096							37			34						5.4		0.43	21								36
52D-SB06	11									0.80	31	0.36		33						5.3	0.0032	0.24	28					0.42			54
52D-SB07	11									0.78	38	0.31		46						8.7			25					0.72			78
52D-SB08	11			0.12						0.35	37	0.3		42						2.9	0.10	0.66	25					0.44			36
52D-SB10	11			0.23							550	720		58						16	0.011	9.2	77					0.53			110
52D-SB11	11			0.14							24	0.14		29						3.1	0.014	0.72	17								30
52D-SB12	11			0.081							42	0.35		26						5.0	0.027	6.3	16								39
52D-SB13	11			0.11							37	0.16		27						4.8	0.0072	0.88	33					0.15			38
52D-SB14	11			0.10						0.33	24			23						2.9	0.021	0.26	20								32
52D-SB15	11			0.19						0.44	33	0.15		25						3.1	0.024	0.19	25								28
52D-SB17	11			0.16						0.55	47	0.28		38						5.5	0.034	0.25	34								41
AW-AF1-SB01	11			0.094						0.12	33	0.15		22						4.9		1.0	20							0.16	45
AW-AF1-SB02	11			0.11							22	0.035		21						2.9	0.015	0.8	14								25
AW-AF1-SB03	11			0.23							51	1.1		39						7.4	0.011	1.3	35								43
AW-AF2-SB01	11										52			20						8.5		0.41	35								36
AW-AF2-SB02	11										51			22						8.2		0.53	43								41
D(b)-SB02	11									0.50	40			35						5.8	0.14		30								46
D(b)-SB03	11			0.17						0.41	40			31						3.5	0.5	0.52	30					0.16			33
D(b)-SB04	11												0.0043				0.0036														
D(b)-SB05	11			0.29						0.48	35			30						3.6	0.064	0.28	31								40
D(c)-SB02	11											0.7																			
D(c)-SB03	11									0.25	57	0.023		28						2.1		5.4	29							0.50	25
D(c)-SB04	11			0.16							60	0.52		32						6.4	0.0077	0.63	43								48

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																												
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.9 E-4	1.5 E-5	8.3 E-3	NA	NA	NA	NA	1.5 E-4	3.7 E-3	2.2 E-6	4.6 E-2	NA	9.0 E-5	NA	4.3 E-5	1.1 E-4	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	7.0 E-3	2.3 E-1	2.3 E-1	4.6 E-3	1.5 E-4	1.6 E-5	1.5 E-4	6.7 E-4	1.1 E-5
Unit Risk		5.2 E-8	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	2.1 E-8	NA	7.1 E-7	7.7 E-9	NA	4.7 E-7	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	NA	NA	NA	NA	NA
08D-SB03	11.5			0.17							76	0.52		42						7.6	0.0098	0.87	73								68
08D-SB04	11.5			0.067							22	0.52		16						5.8		0.86	14								14
08D-SB05	11.5																														
08D-SB06	11.5																									0.027					
52D-SB16	11.5									0.24	21			33						2.8		0.28	18								24

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
05D-SNS06	0	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	9.0 E-4	NA	NA	8.8 E-3	NA	NA	NA	NA	9.3 E-2	NA	8.1 E-3	NA	3.2 E-1	NA	NA	NA	NA	NA	NA	1.4 E-2	3.8 E-3	4.8 E-1
08D-GS02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.4 E-3	NA	1.6 E-4	NA	NA	1.0 E-1	NA	NA	NA	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	4.4 E-1
D(b)-SD01	0	NA	8.3 E-8	5.5 E-3	NA	NA	NA	NA	NA	3.5 E-2	8.0 E-5	NA	NA	2.9 E-3	NA	NA	8.4 E-6	NA	NA	NA	1.2 E-3	2.1 E-3	1.6 E-1	NA	4.0 E-2	NA	7.9 E-6	NA	8.7 E-6	6.3 E-3	4.0 E-2	2.9 E-1
05D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	2.7 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	7.9 E-2	NA	6.4 E-3	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	1.1 E-2	4.8 E-3	3.1 E-1
05D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	4.5 E-3	NA	NA	1.8 E-2	NA	NA	NA	NA	6.4 E-2	NA	1.6 E-2	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	5.7 E-2	1.1 E-2	5.9 E-1
05D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	9.7 E-4	NA	NA	1.5 E-2	NA	NA	NA	NA	7.5 E-2	NA	3.7 E-1	NA	5.7 E-1	NA	NA	NA	NA	NA	NA	5.7 E-3	7.3 E-3	1.1 E+0
05D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2	4.7 E-3	NA	NA	3.3 E-2	NA	NA	NA	NA	8.3 E-2	NA	1.9 E-2	NA	1.4 E+0	NA	NA	NA	NA	NA	NA	1.1 E-1	1.6 E-2	1.7 E+0
05D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	4.2 E-4	NA	NA	9.0 E-3	NA	NA	NA	NA	5.9 E-2	NA	4.4 E-3	NA	5.0 E-1	NA	NA	NA	NA	NA	NA	2.6 E-3	8.7 E-3	6.0 E-1
05D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	9.0 E-4	NA	NA	8.8 E-3	NA	NA	NA	NA	9.3 E-2	NA	8.1 E-3	NA	3.2 E-1	NA	NA	NA	NA	NA	NA	3.1 E-3	3.8 E-3	4.7 E-1
06D-SNS01	0.01	NA	NA	2.2 E-1	NA	NA	NA	NA	NA	4.0 E-2	2.2 E-2	NA	NA	4.5 E-2	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	1.0 E+1	NA	NA	NA	NA	NA	NA	NA	7.1 E-2	1.1 E+1
06D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	3.8 E-3	NA	NA	NA	NA	9.1 E-2	NA	NA	NA	5.2 E-1	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	6.2 E-1
06D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	2.9 E-3	NA	NA	NA	NA	9.4 E-2	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	4.6 E-1
06D-SNS04	0.01	NA	NA	7.2 E-2	NA	NA	NA	NA	NA	1.8 E-2	7.5 E-3	NA	NA	1.5 E-2	NA	NA	NA	NA	1.2 E-1	NA	1.3 E-3	NA	4.0 E+0	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	4.3 E+0
06D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	3.1 E-3	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	2.4 E-1	NA	NA	NA	NA	NA	NA	9.7 E-4	6.7 E-4	3.6 E-1
08D-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	7.0 E-5	NA	NA	5.1 E-3	NA	NA	NA	NA	2.9 E-2	NA	6.8 E-3	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	5.1 E-2	1.4 E-3	2.3 E-1
08D-GS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	3.0 E-3	NA	1.6 E-4	NA	NA	1.0 E-1	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	4.8 E-1
08D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-3	1.5 E-4	NA	NA	4.3 E-3	NA	NA	NA	NA	2.1 E-1	NA	1.8 E-3	NA	5.4 E-1	NA	NA	NA	NA	NA	NA	1.2 E-3	7.0 E-4	7.7 E-1
09D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	3.6 E-3	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	3.2 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	5.0 E-1
09D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.4 E-3	NA	NA	NA	NA	1.1 E-1	NA	1.6 E-3	NA	1.9 E-1	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	3.1 E-1
09D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-5	NA	NA	2.4 E-3	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	2.6 E-1
09D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	7.1 E-2	NA	1.2 E-3	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	2.1 E-1
12D-CS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	2.0 E-4	NA	NA	4.0 E-3	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	1.6 E-3	1.6 E-3	4.2 E-1
12D-CS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	4.5 E-3	NA	NA	NA	NA	6.6 E-2	NA	1.5 E-3	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	5.4 E-3	1.3 E-3	2.3 E-1
12D-SNS01	0.01	NA	NA	5.8 E-2	NA	NA	NA	NA	NA	5.9 E-3	2.7 E-4	NA	NA	3.7 E-3	NA	NA	NA	NA	1.1 E-1	NA	1.8 E-3	NA	2.2 E-1	NA	NA	NA	NA	NA	NA	2.6 E-3	3.0 E-3	4.1 E-1
12D-SNS02	0.01	NA	NA	4.9 E-2	NA	NA	NA	NA	NA	NA	8.0 E-5	NA	NA	2.0 E-3	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	3.4 E-1
12D-SNS03	0.01	NA	NA	5.6 E-2	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	2.7 E-3	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	1.7 E-3	9.2 E-4	4.0 E-1
12D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	3.3 E-3	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	2.2 E-1	NA	NA	NA	NA	NA	NA	1.7 E-3	8.7 E-4	3.4 E-1
12D-SNS05	0.01	NA	NA	5.1 E-2	NA	NA	NA	NA	NA	4.6 E-3	1.9 E-4	NA	NA	5.5 E-3	NA	NA	NA	NA	1.4 E-1	NA	2.8 E-3	NA	3.0 E-1	NA	NA	NA	NA	NA	NA	2.7 E-3	2.1 E-3	5.1 E-1
12D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	6.8 E-2	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	1.8 E-1
12D-SNS07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	2.3 E-3	NA	NA	NA	NA	9.4 E-2	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	7.3 E-4	1.2 E-3	2.7 E-1
D(C)-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	5.0 E-2	NA	NA	NA	1.6 E-1	NA	NA	NA	NA	NA	NA	1.2 E-3	2.8 E-4	2.2 E-1
09D-SD01	0.25	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	2.0 E-3	7.1 E-5	4.0 E-3	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	1.8 E-4	5.7 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	1.9 E-1
D(d)-SD01	0.25	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	3.7 E-3	1.0 E-4	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	4.6 E-3	1.1 E-3	2.0 E-1	NA	NA	NA	NA	NA	NA	1.8 E-4	1.2 E-2	2.5 E-1
05D-SNS08	0.5	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	5.6 E-3	1.4 E-4	5.9 E-2	NA	4.9 E-3	NA	NA	3.3 E-6	NA	NA	NA	4.0 E-3	3.7 E-4	2.5 E-1	NA	NA	NA	1.8 E-6	NA	7.5 E-6	5.7 E-3	5.7 E-3	3.4 E-1
05D-SNS09	0.5	NA	1.0 E-7	1.2 E-3	NA	NA	NA	NA	2.9 E-6	5.9 E-3	1.3 E-4	NA	NA	4.4 E-3	NA	NA	1.6 E-5	NA	NA	NA	3.9 E-3	3.9 E-3	2.8 E-1	NA	NA	NA	5.8 E-6	NA	2.1 E-5	8.0 E-4	1.1 E-3	3.0 E-1
05D-SNS10	0.5	NA	NA	8.0 E-3	NA	NA	NA	NA	NA	2.2 E-2	3.8 E-4	3.6 E-1	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	1.8 E-3	3.7 E-4	2.6 E-1	NA	NA	NA	NA	NA	NA	4.1 E-4	2.1 E-3	6.5 E-1
05D-SNS11	0.5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.4 E-2	1.7 E-4	1.1 E-2	NA	2.5 E-3	NA	NA	5.7 E-7	NA	NA	NA	4.2 E-4	1.3 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	2.5 E-4	2.4 E-3	2.1 E-1
05D-SNS12	0.5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	1.6 E-1	3.5 E-4	1.6 E-1	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	3.5 E-3	6.7 E-4	2.8 E-1	NA	NA	NA	NA	NA	NA	4.3 E-4	4.0 E-3	6.2 E-1
05D-SNS13	0.5	NA	5.5 E-8	9.1 E-3	NA	NA	NA	NA	2.4 E-6	2.0 E-1	4.0 E-3	9.6 E-2	NA	2.1 E-2	NA	NA	6.5 E-6	NA	NA	NA	1.5 E-2	1.6 E-3	1.1 E+0	NA	NA	NA	3.1 E-6	NA	1.2 E-5	3.3 E-2	1.6 E-2	1.4 E+0
05D-SNS14	0.5	NA	NA	1.3 E-2	NA	NA	NA	NA	1.2 E-6	9.3 E-3	2.9 E-4	4.4 E-2	NA	1.2 E-2	NA	NA	3.8 E-6	NA	NA	NA	2.6 E-2	6.5 E-3	3.4 E-1	NA	NA	NA	1.7 E-6	NA	3.7 E-6	1.4 E-3	5.3 E-3	4.5 E-1
05D-SNS15	0.5	NA	5.7 E-8	5.2 E-3	NA	NA	NA	NA	4.0 E-6	5.9 E-2	5.1 E-3	4.1 E-2	NA	4.9 E-2	NA	NA	1.0 E-5	NA	NA	NA	2.4 E-2	1.0 E-2	1.8 E+0	NA	NA	NA	4.3 E-6	NA	1.7 E-5	2.8 E-2	1.6 E-2	2.0 E+0
05D-SNS16	0.5	NA	NA	2.6 E-3	NA	NA	NA	NA	1.3 E-5	1.7 E-2	1.1 E-4	5.0 E-3	NA	7.9 E-3	NA	NA	1.7 E-5	NA	NA	NA	8.2 E-3	6.0 E-4	2.0 E-1	NA	NA	NA	8.9 E-6	NA	5.5 E-5	2.9 E-3	2.3 E-2	2.7 E-1
05D-SNS17	0.5	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	2.1 E-2	1.0 E-3	3.9 E-2	NA	9.9 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	3.7 E-4	3.4 E-1	NA	NA	NA	NA	NA	NA	1.2 E-2	5.1 E-3	4.4 E-1
05D-SNS18	0.5	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	6.3 E-3	1.4 E-4	9.6 E-3	NA	6.8 E-3	NA	NA	2.4 E-6	NA	NA	NA	2.7 E-3	5.8 E-4	3.1 E-1	NA	2.3 E-2	NA	1.2 E-6	NA	4.3 E-6	4.1 E-4	2.8 E-3	3.7 E-1
05D-SNS19	0.5	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	4.5 E-3	1.6 E-4	2.4 E-2	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	4.0 E-3	3.7 E-4	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	4.0 E-1
05D-SNS20	0.5	NA	NA	6.2 E-3	NA	NA	NA	NA	NA	6.7 E-3	3.1 E-4	NA	NA	8.5 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3	1.7 E-3	3.3 E-1	NA	NA	NA	NA	NA	NA	2.2 E-2	8.8 E-3	3.9 E-1
06D-SNS06	0.5	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	4.5 E-2	4.2 E-2	2.1 E-3	NA	5.6 E-2	NA	NA	2.4 E-7	NA	NA	NA	5.4 E-3	2.9 E-2	1.1 E+1	NA	NA	NA	NA	NA	NA	1.5 E-3	5.5 E-2	1.1 E+1
06D-SNS07	0.5	NA	NA	4.1 E-1	NA	NA	NA	NA	NA	1.2 E-1	9.5 E-2	NA	NA	8.6 E-2	NA	NA	3.1 E-7	NA	NA	NA	1.7 E-2	4.7 E-2	1.1 E+1	NA	NA	NA	NA	NA	NA	7.3 E-3	5.1 E-2	1.2 E+1
06D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-2	6.0 E-2	NA	NA	5.6 E-2	NA	NA	8.5 E-7	NA	NA	NA	1.4 E-2	2.9 E-2	9.1 E+0	NA	NA	NA	7.9 E-7	NA	NA	4.1 E-3	4.0 E-2	9.4 E+0
06D-SNS09	0.5	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	2.7 E-3	1.1 E-4	7.7 E-3	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	9.8 E-4	1.5 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	4.2 E-4	4.9 E-4	1.9 E-1
06D-SNS10	0.5	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	2.6 E-3	1.5 E-4	9.1 E-3	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	4.0 E-3	2.9 E-4	2.3 E-1	NA	NA	NA	NA	NA	NA	4.0 E-4	5.0 E-4	2.5 E-1
06D-SNS11	0.5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	3.1 E-3	1.6 E-4	3.4 E-3	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	6.1 E-4	2.9 E-4	2.0 E-1	NA	NA	NA	NA	NA	NA	2.3 E-4	5.4 E-4	2.1 E-1
08D-SB02	0.5	NA	1.7 E-7	NA	NA	NA	NA	NA	1.2 E-6	4.5 E-3	8.2 E-5	3.0 E-3	NA	2.1 E-3	NA	NA	4.5 E-6	NA	NA	NA	1.0 E-3	4.9 E-4	1.8 E-1	6.3 E-2	NA	NA	5.7 E-6	NA	5.7 E-6	1.5 E-2	6.2 E-4	2.6 E-1
08D-SB03	0.5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.4 E-4	1.4 E-2	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	3.7 E-4	3.4 E-1	NA	NA	4.6 E-4	NA	NA	NA	NA	4.7 E-4	3.6 E-1
08D-SNS01	0.5	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	2.3 E-3	1.4 E-4	1.5 E-2	NA	3.6 E-3	NA	NA	2.9 E-7	NA	NA	NA	2.3 E-4	2.7 E-4	3.2 E-1	NA	NA	NA	NA	NA	NA	2.5 E-4	8.9 E-4	3.4 E-1
09D-SNS05	0.5	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	9.3 E-3	3.8 E-4	9.6 E-3	NA	5.4 E-3	NA	NA	5.2 E-7	NA	NA	NA	1.9 E-3	6.7 E-4	3.6 E-1	NA	NA	NA	NA	NA	NA	2.5 E-3	1.9 E-3	4.0 E-1
09D-SNS06	0.5	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	1.6 E-3	7.3 E-5	3.9 E-2	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	1.9 E-1
12D-SNS08	0.5	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.0 E-4	2.9 E-2	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	1.7 E-1	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	2.1 E-1
12D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	1.5 E-4	8.2 E-2	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	2.9 E-1	NA	NA	NA	NA	NA	NA	6.3 E-4	8.4 E-4	3.8 E-1
52D-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	6.0 E-5	1.2 E-2	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.6 E-1	NA	NA	NA	NA	3.5 E-6	NA	NA	3.0 E-4	2.7 E-1
52D-SB16	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	7.5 E-5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	NA	4.7 E-6	NA	NA	7.9 E-4	2.0 E-1
52D-SNS01	0.5	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	5.2 E-3	6.2 E-4	3.3 E-1	NA	2.5 E-3	NA	NA	2.8 E-7	NA	NA	NA	1.9 E-3	9.3 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	3.1 E-4	1.1 E-3	5.4 E-1
52D-SNS02	0.5	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	1.3 E-2	2.9 E-4	1.0 E-1	NA	4.0 E-3	NA	NA	7.3 E-7	NA	NA	NA	2.0 E-3	6.7 E-4	4.8 E-1	NA	NA	NA	6.7 E-7	NA	NA	NA	2.6 E-3	6.2 E-1
52D-SNS03	0.5	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	2.7 E-3	7.5 E-5	5.0 E-3	NA	2.9 E-3	NA	NA	6.4 E-7	NA	NA	NA	1.4 E-4	4.2 E-4	1.9 E-1	NA	NA	NA	2.0 E-6	NA	2.3 E-6	NA	7.0 E-4	2.0 E-1
52D-SNS04	0.5	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	3.6 E-3	6.4 E-5	8.2 E-3	NA	2.2 E-3	NA	NA	5.3 E-7	NA	NA	NA	1.2 E-4	1.1 E-4	1.1 E-1	NA	NA	NA	4.1 E-7	NA	NA	NA	1.0 E-3	1.3 E-1
52D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SNS01	0.5	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	2.0 E-3	1.4 E-4	2.5 E-2	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	4.0 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	4.3 E-1
05D-SB01	1	NA	NA	8.1 E-4	NA	NA	NA	NA	NA	2.0 E-3	6.2 E-5	5.9 E-3	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	6.7 E-4	3.3 E-4	1.5 E-1	1.8 E-2	NA	NA	NA	2.2 E-5	NA	NA	5.9 E-4	1.8 E-1
05D-SB02	1	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	1.3 E-3	8.2 E-5	3.4 E-1	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	1.2 E-2	6.7 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	5.8 E-1

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
05D-SB03	1	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	7.1 E-1	1.2 E-2	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	2.6 E-2	9.3 E-3	9.1 E-1	NA	NA	NA	NA	NA	NA	1.3 E-1	7.8 E-3	1.9 E+0
05D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3	2.0 E-4	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	6.1 E-3	1.5 E-3	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	2.8 E-1
05D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	1.4 E-4	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	1.8 E-4	3.2 E-1	NA	NA	NA	NA	NA	NA	2.2 E-4	7.9 E-4	3.2 E-1
05D-SB06	1	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	3.6 E-2	1.5 E-3	2.8 E-2	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	2.9 E-3	6.5 E-4	3.4 E-1	5.9 E-1	NA	NA	NA	NA	NA	1.0 E-2	1.9 E-3	1.0 E+0
05D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-3	4.4 E-4	1.9 E-2	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	2.7 E-4	2.4 E-1	NA	1.9 E-1	NA	NA	NA	NA	2.3 E-3	1.1 E-3	4.6 E-1
05D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	1.0 E-4	4.1 E-3	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	3.3 E-3	1.6 E-4	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	3.1 E-1
05D-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4	1.1 E-4	2.8 E-3	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	8.2 E-4	2.2 E-4	2.2 E-1	1.4 E-1	NA	NA	NA	NA	NA	8.0 E-4	5.1 E-4	3.7 E-1
05D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4	2.0 E-4	6.4 E-3	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	3.6 E-3	1.5 E-4	5.6 E-1	1.1 E-2	NA	NA	NA	NA	NA	9.3 E-4	7.4 E-4	5.9 E-1
06D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	1.1 E-4	1.0 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	6.7 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	2.4 E-1
06D-SB06	1	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.2 E-2	6.4 E-4	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	2.0 E-3	1.0 E-3	2.7 E-1	NA	NA	NA	NA	NA	NA	2.5 E-3	1.4 E-3	3.0 E-1
08D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	2.2 E-3	NA	3.7 E-5	NA	NA	9.2 E-2	NA	NA	1.5 E-3	2.9 E-1	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	3.9 E-1
08D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	1.6 E-4	2.6 E-2	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	3.7 E-4	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	5.0 E-4	4.9 E-1
08D-SB04	1	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	2.1 E-3	1.3 E-4	2.2 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	4.5 E-4	3.2 E-1	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	3.5 E-1
08D-SB05	1	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.2 E-4	2.2 E-2	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	3.5 E-4	2.2 E-1	NA	NA	1.4 E-4	NA	NA	NA	NA	4.5 E-4	2.5 E-1
08D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.2 E-2	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	2.3 E-3	2.7 E-4	2.2 E-1	NA	NA	3.6 E-4	NA	NA	NA	NA	4.1 E-4	2.4 E-1
52D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5
52D-AH02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
52D-FCS-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-5	NA	NA	1.4 E-3	NA	3.3 E-5	NA	NA	1.1 E-1	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	2.6 E-1
52D-SB01	1	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	2.8 E-3	NA	6.9 E-5	NA	NA	1.9 E-1	NA	NA	NA	1.9 E-1	NA	NA	NA	NA	NA	NA	7.3 E-4	9.3 E-4	4.3 E-1
52D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-2	6.7 E-3	NA	NA	1.4 E-2	NA	6.4 E-5	NA	NA	2.0 E-1	NA	4.3 E-2	NA	1.5 E+1	NA	NA	NA	NA	NA	NA	1.4 E-3	4.2 E-3	1.5 E+1
52D-SB04	1	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	1.4 E-3	6.9 E-5	6.8 E-3	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	7.1 E-5	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	1.3 E-1
52D-SB05	1	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	2.0 E-3	5.5 E-5	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	1.7 E-4	1.3 E-1	NA	NA	NA	NA	1.3 E-5	NA	NA	5.5 E-4	1.4 E-1
52D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	6.7 E-5	NA	NA	7.5 E-4	NA	NA	NA	NA	NA	NA	4.6 E-5	1.4 E-4	2.6 E-1	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	2.6 E-1
52D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB08	1	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	1.7 E-3	6.4 E-5	9.6 E-3	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	2.2 E-1
52D-SB10	1	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	8.6 E-5	2.2 E-2	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	2.9 E-4	2.5 E-1	NA	NA	NA	NA	3.9 E-6	NA	NA	3.3 E-3	2.8 E-1
52D-SB11	1	NA	NA	3.6 E-3	NA	NA	NA	NA	NA	4.5 E-3	2.4 E-4	1.3 E-1	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	6.7 E-4	1.8 E-1	NA	NA	NA	NA	1.0 E-5	NA	NA	1.3 E-3	3.2 E-1
52D-SB13	1	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	2.0 E-2	NA	4.9 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	1.4 E-3	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	2.5 E-1
52D-SB14	1	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	1.9 E-3	4.9 E-5	3.7 E-3	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	3.0 E-5	NA	NA	5.4 E-4	1.4 E-1
52D-SB15	1	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	2.3 E-3	1.2 E-4	1.1 E-2	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	2.6 E-4	3.7 E-4	2.4 E-1	NA	NA	NA	NA	3.1 E-5	NA	NA	5.9 E-4	2.6 E-1
52D-SB17	1	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	2.2 E-3	1.4 E-4	8.2 E-3	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	2.0 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	2.4 E-1
AW-AF1-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	1.1 E-4	4.3 E-3	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	1.5 E-1	NA	NA	NA	NA	NA	NA	1.3 E-4	8.3 E-4	1.6 E-1
AW-AF1-SB02	1	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	5.8 E-5	3.2 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	1.8 E-4	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	1.3 E-1
AW-AF1-SB03	1	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	8.6 E-5	3.4 E-3	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	2.6 E-4	6.3 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	1.9 E-1
AW-AF2-SB01	1	NA	NA	1.8 E-3	NA	NA	NA	NA	2.0 E-6	NA	1.2 E-4	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	7.0 E-4	5.0 E-4	3.2 E-1	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	3.3 E-1
AW-AF2-SB02	1	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	2.6 E-4	3.0 E-4	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	2.4 E-1
D(b)-SB01	1	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.3 E-3	7.5 E-5	9.1 E-3	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	7.9 E-4	3.7 E-4	1.9 E-1	NA	NA	NA	NA	1.7 E-6	NA	NA	3.4 E-4	2.0 E-1
D(b)-SB02	1	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	3.7 E-3	1.3 E-4	9.1 E-3	NA	3.6 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	1.6 E-3	2.0 E-1	NA	NA	NA	NA	1.7 E-5	NA	NA	1.1 E-3	2.4 E-1
D(b)-SB03	1	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	4.1 E-3	2.0 E-4	1.9 E-2	NA	5.8 E-3	NA	NA	2.2 E-7	NA	NA	NA	1.7 E-3	5.3 E-4	4.9 E-1	NA	NA	NA	8.1 E-7	5.7 E-6	NA	NA	8.3 E-4	5.3 E-1
D(b)-SB04	1	NA	7.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	9.3 E-6	NA	NA	1.9 E-5
D(b)-SB05	1	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	2.0 E-3	6.4 E-5	2.9 E-3	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	1.5 E-1	NA	NA	NA	6.1 E-7	7.1 E-5	NA	NA	6.1 E-4	1.6 E-1
D(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	2.4 E-3	NA	8.9 E-5	NA	NA	1.0 E-1	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	3.9 E-1
D(c)-SB02	1	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	2.5 E-3	1.2 E-4	2.3 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	9.0 E-4	3.7 E-4	2.5 E-1	NA	NA	NA	NA	NA	NA	4.5 E-3	6.7 E-4	2.9 E-1
D(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	9.3 E-5	1.2 E-2	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	2.9 E-1
D(c)-SB04	1	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.7 E-3	1.3 E-4	1.9 E-2	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	5.2 E-4	2.7 E-1	NA	NA	5.1 E-5	NA	6.6 E-6	NA	NA	4.3 E-4	3.0 E-1
D(c)-SB05	1	NA	NA	7.1 E-4	NA	NA	NA	NA	9.8 E-6	1.6 E-3	9.5 E-5	2.8 E-2	NA	2.2 E-3	NA	NA	1.0 E-5	NA	NA	NA	5.8 E-4	2.4 E-4	2.0 E-1	NA	NA	NA	3.4 E-6	NA	1.5 E-5	NA	2.0 E-3	2.4 E-1
DC-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	2.4 E-3	NA	9.0 E-5	NA	NA	1.0 E-1	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	3.9 E-1
06D-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	9.1 E-5	5.9 E-3	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	9.2 E-4	7.3 E-4	2.8 E-1	NA	NA	NA	NA	NA	NA	5.0 E-5	5.0 E-4	2.9 E-1
06D-SB04	1.5	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	6.7 E-4	9.3 E-5	5.9 E-3	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	3.5 E-3	5.5 E-4	5.0 E-1	NA	NA	NA	NA	NA	NA	1.0 E-4	6.1 E-4	5.2 E-1
06D-SB05	1.5	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	5.6 E-2	4.7 E-4	7.3 E-2	NA	6.2 E-3	NA	NA	NA	NA	NA	NA	8.6 E-3	3.3 E-3	5.8 E-1	NA	NA	NA	NA	NA	NA	1.2 E-3	8.8 E-4	7.4 E-1
09D-SD01	1.5	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.4 E-4	1.8 E-2	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	1.4 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	2.1 E-1
52D-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	6.9 E-5	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.9 E-1	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	2.0 E-1
05D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-3	9.5 E-5	NA	NA	3.3 E-3	NA	NA	NA	NA	7.7 E-2	NA	NA	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	1.2 E-3	1.6 E-3	3.0 E-1
05D-SNS08	2.5	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	5.6 E-3	1.6 E-4	8.2 E-2	NA	6.0 E-3	NA	NA	1.8 E-6	NA	NA	NA	5.7 E-3	4.7 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	1.6 E-2	3.5 E-3	3.5 E-1
05D-SNS09	2.5	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	3.6 E-3	8.0 E-5	9.6 E-3	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	3.1 E-3	1.8 E-1	NA	NA	NA	NA	NA	NA	1.3 E-3	8.2 E-4	2.1 E-1
05D-SNS10	2.5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	3.3 E-3	9.5 E-5	1.0 E-2	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	4.1 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	1.9 E-1
05D-SNS11	2.5	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	2.4 E-2	2.1 E-4	2.2 E-1	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	2.1 E-3	4.1 E-4	2.1 E-1	NA	NA	NA	NA	NA	NA	3.3 E-4	1.2 E-3	4.7 E-1
05D-SNS12	2.5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	1.5 E-2	2.1 E-3	6.4 E-3	NA	9.9 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	3.4 E-3	2.1 E-1	NA	NA	NA	NA	NA	NA	4.2 E-4	2.6 E-3	2.5 E-1
05D-SNS13	2.5	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	5.6 E-2	8.4 E-4	5.5 E-2	NA	6.3 E-3	NA	NA	1.4 E-6	NA	NA	NA	4.0 E-3	7.3 E-4	3.7 E-1	NA	NA	NA	6.3 E-7	NA	2.3 E-6	1.5 E-2	3.9 E-3	5.1 E-1
05D-SNS14	2.5	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	3.5 E-2	4.0 E-3	3.7 E-2	NA	5.4 E-2	NA	NA	NA	NA	NA	NA	3.3 E-2	3.3 E-3	4.1 E-1	NA	NA	NA	NA	NA	NA	6.5 E-3	7.7 E-3	6.0 E-1
05D-SNS15	2.5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	2.3 E-2	3.3 E-4	4.0 E-2	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	1.6 E-3	8.4 E-1	NA	NA	NA	NA	NA	NA	5.8 E-3	2.0 E-3	9.3 E-1
05D-SNS16	2.5	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	1.4 E-2	1.8 E-4	2.9 E-2	NA	5.8 E-3	NA	NA	1.7 E-6	NA	NA	NA	1.8 E-3	1.1 E-3	2.7 E-1	NA	NA	NA	1.4 E-6	NA	4.6 E-6	2.6 E-3	2.2 E-2	3.5 E-1
05D-SNS17	2.5	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-3	1.3 E-4	2.0 E-2	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	8.2 E-4	1.4 E-4	2.5 E-1	NA	NA	NA	NA	NA	NA	7.3 E-4	1.0 E-3	2.8 E-1
05D-SNS18	2.5	NA	NA	4.2 E-3	NA	NA	NA	NA	NA	3.7 E-3	1.2 E-4	2.0 E-2	NA	6.6 E-3	NA	NA	2.8 E-7	NA	NA	NA	2.1 E-3	3.0 E-4	2.5 E-1	NA	1.5 E-2	NA	NA	NA	NA	NA	2.0 E-3	3.1 E-1
05D-SNS19	2.5	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	2.7 E-3	1.1 E-4	2.1 E-2	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	4.9 E-4	4.0 E-4	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.3 E-1
05D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	8.0 E-5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	5.4 E-4	3.5 E-4	2.5 E-1	NA	NA	NA	NA	NA	NA	6.0 E-4	5.5 E-4	2.6 E-1
06D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	4.0 E-3	NA	NA	NA	NA	9.7 E-2	NA	NA	NA	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	6.0 E-1
06D-SNS06	2.5	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	1.1 E-2	1.0 E-2	NA	NA	8.5 E-3	NA	NA	NA	NA	NA	NA	6.9 E-3	3.1 E-3	1.2 E+0	NA	NA	NA	NA	NA	NA	7.3 E-4	5.1 E-3	1.3 E+0
06D-SNS07	2.5	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	1.4 E-2	1.3 E-2	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	1.9 E-3	4.9 E-3	2.1 E+0	NA	NA	NA	NA	NA	NA	7.3 E-4	8.8 E-3	2.2 E+0

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
06D-SNS08	2.5	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	5.2 E-3	2.2 E-3	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	1.6 E-3	7.0 E-1	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	7.3 E-1
06D-SNS09	2.5	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	1.8 E-3	1.0 E-4	4.5 E-3	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	4.9 E-4	3.6 E-4	2.2 E-1	NA	NA	6.0 E-3	NA	NA	NA	NA	3.9 E-4	2.4 E-1
06D-SNS10	2.5	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	1.4 E-3	7.8 E-5	1.2 E-2	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	3.2 E-4	5.4 E-4	1.6 E-1	NA	NA	2.4 E-3	NA	NA	NA	2.2 E-4	3.3 E-4	1.8 E-1
06D-SNS11	2.5	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	3.7 E-3	1.7 E-4	2.3 E-3	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	7.0 E-4	5.8 E-4	2.0 E-1	NA	NA	8.8 E-3	NA	NA	NA	3.0 E-4	6.7 E-4	2.2 E-1
08D-SNS01	2.5	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	2.3 E-3	1.7 E-4	1.6 E-2	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	4.2 E-1	NA	NA	NA	NA	NA	NA	2.7 E-4	7.9 E-4	4.5 E-1
09D-SNS05	2.5	NA	NA	6.0 E-3	NA	NA	NA	NA	NA	6.3 E-3	2.2 E-4	6.8 E-3	NA	3.7 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	5.1 E-4	2.8 E-1	NA	NA	NA	NA	NA	NA	1.1 E-3	9.3 E-4	3.1 E-1
09D-SNS06	2.5	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	2.4 E-3	1.5 E-4	1.6 E-2	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	3.0 E-1
12D-SNS08	2.5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	6.3 E-3	1.2 E-4	1.1 E-2	NA	3.1 E-3	NA	NA	4.6 E-7	NA	NA	NA	5.0 E-4	1.9 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	3.0 E-4	1.0 E-3	2.4 E-1
12D-SNS09	2.5	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	6.7 E-4	1.4 E-4	4.1 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	5.8 E-4	4.6 E-4	2.6 E-1	NA	NA	NA	NA	NA	NA	1.7 E-3	8.3 E-4	3.1 E-1
52D-SNS01	2.5	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	2.7 E-3	1.0 E-4	1.6 E-2	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	6.4 E-3	5.5 E-3	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	2.4 E-1
52D-SNS02	2.5	NA	NA	7.1 E-3	NA	NA	NA	NA	NA	3.1 E-3	1.2 E-4	5.9 E-2	NA	3.6 E-3	NA	NA	4.8 E-7	NA	NA	NA	3.8 E-4	2.9 E-4	2.2 E-1	NA	NA	NA	4.3 E-7	NA	NA	NA	8.6 E-4	2.9 E-1
52D-SNS03	2.5	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	3.6 E-3	7.1 E-5	4.5 E-3	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	2.5 E-1
52D-SNS04	2.5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	1.5 E-3	6.4 E-5	1.7 E-2	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	2.7 E-4	1.3 E-1	NA	NA	NA	NA	NA	NA	2.5 E-4	3.0 E-4	1.5 E-1
52D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SNS01	2.5	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	1.6 E-3	1.7 E-4	2.8 E-2	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	3.8 E-1	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	4.1 E-1
05D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	NA	2.4 E-3	NA	NA	NA	NA	9.0 E-2	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	2.4 E-1
09D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	1.7 E-3	NA	NA	NA	NA	9.7 E-2	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	2.4 E-1
09D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	2.8 E-3	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	3.6 E-1
09D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	2.8 E-3	NA	NA	NA	NA	1.2 E-1	NA	8.8 E-3	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	5.0 E-1
09D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	2.3 E-3	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	4.1 E-1
12D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	NA	NA	1.8 E-3	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	7.1 E-4	4.2 E-4	2.9 E-1
12D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.5 E-3	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	5.8 E-4	3.4 E-1
12D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	3.3 E-3	NA	NA	NA	NA	9.8 E-2	NA	NA	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	7.3 E-4	4.8 E-4	4.6 E-1
12D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	2.6 E-3	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	3.7 E-1
12D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	NA	2.6 E-3	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	3.7 E-1
12D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	NA	NA	1.9 E-3	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	9.0 E-4	5.6 E-4	3.0 E-1
12D-SNS07	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	8.0 E-2	NA	1.3 E-3	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	2.3 E-1
52D-AH03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5
52D-SB09	4.5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	8.9 E-5	1.9 E-2	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	3.3 E-1	NA	NA	NA	NA	9.7 E-6	NA	NA	4.9 E-4	3.5 E-1
05D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	1.9 E-3	NA	4.7 E-5	NA	NA	5.9 E-2	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	2.1 E-1
05D-SB01	5	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	1.4 E-3	8.9 E-5	2.0 E-2	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	3.8 E-3	1.8 E-1	NA	NA	NA	NA	2.7 E-6	NA	NA	3.3 E-4	2.1 E-1
05D-SB02	5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	9.3 E-2	2.4 E-3	8.2 E-2	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	9.8 E-4	2.4 E-3	5.0 E-1	NA	NA	NA	NA	NA	NA	1.5 E-2	3.0 E-3	7.0 E-1
05D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	1.5 E-1
05D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	3.7 E-1
05D-SNS12	5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	7.1 E-4	7.3 E-5	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	2.0 E-3	6.1 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	4.3 E-5	5.0 E-4	1.9 E-1
05D-SNS13	5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	2.2 E-3	8.6 E-5	1.3 E-2	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	6.9 E-3	2.3 E-4	1.9 E-1	NA	NA	NA	NA	NA	NA	1.6 E-4	4.9 E-4	2.2 E-1
05D-SNS14	5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	5.2 E-3	2.2 E-4	1.1 E-1	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	3.1 E-3	2.7 E-4	3.1 E-1	NA	NA	NA	NA	NA	NA	5.7 E-3	2.1 E-3	4.4 E-1
05D-SNS15	5	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-4	1.2 E-1	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	6.7 E-4	5.5 E-4	3.6 E-1	NA	NA	NA	NA	NA	NA	1.0 E-2	1.3 E-3	5.2 E-1
05D-SNS16	5	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	7.4 E-3	8.4 E-5	2.1 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	2.6 E-4	8.6 E-4	1.1 E-1	NA	NA	NA	NA	NA	NA	1.1 E-3	9.2 E-3	1.6 E-1
05D-SNS20	5	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	9.5 E-5	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	4.0 E-4	4.4 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	2.8 E-4	5.0 E-4	2.3 E-1
06D-SB02	5	NA	NA	8.0 E-3	NA	NA	NA	NA	NA	3.5 E-3	1.8 E-3	2.0 E+1	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	1.7 E-3	6.1 E-1	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	2.0 E+1
06D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.8 E-4	5.5 E-3	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	5.3 E-4	1.2 E+0	NA	NA	NA	NA	NA	NA	6.1 E-5	6.2 E-4	1.2 E+0
06D-SB04	5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	4.1 E-4	6.0 E-5	5.0 E-3	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	5.4 E-4	2.4 E-1	NA	NA	NA	NA	NA	NA	6.7 E-5	4.2 E-4	2.5 E-1
06D-SB05	5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	3.1 E-4	5.1 E-5	4.5 E-3	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	5.5 E-4	1.4 E-1	NA	NA	NA	NA	NA	NA	4.5 E-5	3.2 E-4	1.5 E-1
06D-SB06	5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	5.6 E-4	7.1 E-5	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	2.3 E-4	8.0 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	5.7 E-5	3.8 E-4	1.8 E-1
08D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.3 E-3	NA	1.1 E-4	NA	NA	1.0 E-1	NA	NA	NA	3.8 E-1	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	4.8 E-1
08D-AH02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.5 E-3	NA	6.9 E-5	NA	NA	9.0 E-2	NA	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	5.5 E-1
08D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	1.8 E-4	1.5 E-2	NA	3.6 E-3	NA	NA	NA	NA	NA	NA	2.3 E-4	2.9 E-4	5.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	5.8 E-1
08D-SB02	5	NA	7.0 E-8	NA	NA	NA	NA	NA	NA	2.2 E-3	1.4 E-4	3.2 E-2	NA	2.4 E-3	NA	NA	1.9 E-6	NA	NA	NA	2.7 E-4	3.6 E-4	3.5 E-1	8.0 E-3	NA	NA	2.4 E-6	NA	2.6 E-6	4.9 E-4	4.9 E-4	4.0 E-1
08D-SB03	5	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	2.3 E-3	1.5 E-4	1.7 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	3.4 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	3.7 E-1
08D-SB04	5	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	2.1 E-3	1.4 E-4	1.5 E-2	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	2.9 E-4	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	3.7 E-1
08D-SB05	5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.3 E-3	1.2 E-4	1.4 E-2	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	2.9 E-1
08D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	1.2 E-4	1.5 E-2	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	2.5 E-1	NA	NA	8.3 E-5	NA	NA	NA	NA	4.8 E-4	2.6 E-1
09D-SD01	5	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	2.1 E-3	1.6 E-4	2.1 E-2	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	3.1 E-4	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	2.8 E-1
52D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5
52D-AH03	5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4
52D-SA-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	1.9 E-4	NA	NA	3.3 E-3	NA	8.6 E-4	NA	NA	8.6 E-2	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	7.8 E-4	5.9 E-4	2.8 E-1
52D-SB01	5	NA	NA	4.3 E-2	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	6.0 E-3	NA	2.5 E-4	NA	NA	2.2 E-1	NA	4.0 E-3	NA	5.6 E-1	NA	NA	NA	NA	NA	NA	7.1 E-4	6.8 E-4	8.4 E-1
52D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-5	NA	NA	2.6 E-3	NA	NA	NA	NA	8.0 E-2	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	2.2 E-1
52D-SB05	5	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	1.9 E-3	6.0 E-5	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	1.5 E-4	2.5 E-4	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	7.0 E-4	1.5 E-1
52D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	6.9 E-5	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	2.0 E-1	NA	NA	NA	NA	4.2 E-6	NA	NA	8.1 E-4	2.0 E-1
52D-SB07	5	NA	1.4 E-6	NA	NA	NA	NA	NA	1.4 E-5	2.4 E-3	6.2 E-5	NA	NA	1.2 E-2	NA	NA	6.1 E-5	NA	NA	NA	1.7 E-4	2.5 E-4	1.9 E-1	NA	NA	NA	6.7 E-5	NA	1.1 E-4	NA	3.2 E-3	2.1 E-1
52D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	7.3 E-5	8.2 E-3	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	2.7 E-1	NA	NA	NA	NA	3.8 E-5	NA	NA	3.2 E-4	2.8 E-1
52D-SB10	5	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	9.8 E-5	1.4 E-2	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	3.5 E-4	2.6 E-1	NA	NA	NA	NA	5.7 E-5	NA	NA	1.1 E-3	2.8 E-1
52D-SB11	5	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	1.7 E-3	8.9 E-5	2.6 E-2	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	1.7 E-2	4.8 E-4	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	2.0 E-1
52D-SB13	5	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	1.0 E-2	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	3.9 E-4	1.1 E-3	1.7 E-1	NA	NA	NA	NA	8.6 E-6	NA	NA	3.7 E-4	1.8 E-1
52D-SB14	5	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	9.8 E-5	4.6 E-4	4.9 E-1	NA	NA	NA	NA	1.1 E-5	NA	NA	3.5 E-4	5.0 E-1
52D-SB15	5	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	1.5 E-3	6.9 E-5	6.4 E-3	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	2.7 E-3	7.3 E-4	1.6 E-1	NA	NA	NA	3.7 E-7	9.6 E-6	NA	NA	3.4 E-4	1.8 E-1
52D-SB17	5	NA	NA	3.9 E-3	NA	NA	NA	NA	NA	3.7 E-3	2.1 E-4	2.2 E-2	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	3.9 E-4	6.3 E-1	NA	NA	NA	NA	NA	NA	8.6 E-5	8.0 E-4	6.7 E-1

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
AW-AF1-SB01	5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.0 E-3	1.0 E-4	1.7 E-2	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	8.6 E-5	3.8 E-4	1.6 E-1
AW-AF1-SB02	5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	5.1 E-5	1.0 E-3	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	8.9 E-4	6.1 E-4	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	1.3 E-1
AW-AF1-SB03	5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	3.8 E-5	3.7 E-3	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	4.1 E-4	7.7 E-2	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	8.5 E-2
AW-AF2-SB01	5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	3.9 E-4	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	3.1 E-1
AW-AF2-SB02	5	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	3.7 E-4	3.2 E-1	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	3.3 E-1
D(b)-SB01	5	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	1.3 E-3	5.8 E-5	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	4.6 E-4	3.1 E-4	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	1.2 E-1
D(b)-SB02	5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.7 E-3	7.3 E-5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	7.1 E-4	1.3 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	1.8 E-1
D(b)-SB03	5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.3 E-3	7.5 E-5	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	4.6 E-5	1.0 E-3	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	1.6 E-1
D(b)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	2.1 E-6	NA	NA	4.4 E-6
D(b)-SB05	5	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	1.9 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	2.0 E-1
D(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.4 E-3	NA	5.5 E-5	NA	NA	1.1 E-1	NA	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	4.5 E-1
D(c)-SB02	5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.8 E-3	1.2 E-4	3.9 E-2	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	4.5 E-5	4.8 E-4	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	2.8 E-1
D(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.2 E-4	6.4 E-3	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	2.0 E-1	NA	NA	NA	NA	NA	NA	3.6 E-4	2.8 E-4	2.1 E-1
D(c)-SB04	5	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	1.6 E-4	2.9 E-2	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	4.6 E-5	6.7 E-4	2.9 E-1	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	3.3 E-1
D(c)-SB05	5	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	1.9 E-3	1.1 E-4	1.6 E-2	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	2.7 E-1
DC-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	2.4 E-3	NA	5.6 E-5	NA	NA	1.1 E-1	NA	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	4.5 E-1
52D-SB16	5.5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	1.2 E-4	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	NA	1.4 E-5	NA	NA	3.5 E-4	1.9 E-1
06D-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	NA	NA	2.3 E-3	NA	4.7 E-5	NA	NA	6.7 E-2	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	2.0 E-1
52D-FCS-SB01	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-5	NA	NA	2.3 E-3	NA	2.9 E-5	NA	NA	9.8 E-2	NA	NA	NA	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	3.1 E-1
05D-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	3.3 E-3	NA	7.7 E-5	NA	NA	7.0 E-2	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	2.0 E-1
05D-SNS12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	2.0 E-4	7.3 E-4	1.5 E-1	NA	NA	NA	NA	NA	NA	6.1 E-5	4.3 E-4	1.5 E-1
05D-SNS13	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	3.3 E-4	1.0 E-1	NA	7.1 E-3	NA	NA	NA	NA	NA	NA	2.6 E-3	8.6 E-4	4.0 E-1	NA	NA	NA	NA	NA	NA	5.1 E-3	2.7 E-3	5.4 E-1
05D-SNS14	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	3.5 E-4	1.4 E-1	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	4.3 E-3	1.3 E-3	3.8 E-1	NA	NA	NA	NA	NA	NA	7.3 E-3	1.3 E-3	5.5 E-1
05D-SNS15	10	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	2.4 E-2	2.4 E-4	1.5 E-1	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	8.7 E-4	9.3 E-4	2.7 E-1	NA	NA	NA	NA	NA	NA	7.3 E-3	1.1 E-3	4.6 E-1
05D-SNS16	10	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	3.7 E-4	1.0 E-4	2.2 E-2	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	6.4 E-4	4.9 E-4	2.4 E-1	NA	NA	NA	NA	NA	NA	1.1 E-4	4.8 E-4	2.7 E-1
05D-SNS20	10	NA	NA	5.6 E-3	NA	NA	NA	NA	NA	8.9 E-4	8.0 E-5	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	2.4 E-1	NA	NA	NA	NA	NA	NA	1.9 E-4	5.2 E-4	2.5 E-1
06D-SNS07	10	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	4.5 E-4	2.0 E-4	3.8 E-2	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	5.1 E-4	2.0 E-1	NA	NA	NA	NA	NA	NA	6.7 E-5	4.5 E-4	2.4 E-1
08D-AH02	10	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	5.0 E-3	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	2.4 E-1
52D-AH02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4
52D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-5	NA	NA	2.8 E-3	NA	3.1 E-5	NA	NA	9.8 E-2	NA	1.3 E-3	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	2.9 E-1
52D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5
D(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.2 E-3	NA	8.4 E-5	NA	NA	8.0 E-2	NA	NA	NA	3.8 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	4.6 E-1
DC-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.2 E-3	NA	8.6 E-5	NA	NA	8.0 E-2	NA	NA	NA	3.8 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	4.6 E-1
52D-SB09	10.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	4.7 E-5	1.2 E-2	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	1.2 E-1	NA	NA	NA	NA	4.1 E-6	NA	NA	6.9 E-4	1.4 E-1
D(c)-SB05	10.5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	2.6 E-2	NA	3.7 E-3	NA	NA	NA	NA	NA	NA	7.5 E-5	5.6 E-4	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	4.0 E-1
05D-SB01	11	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	1.4 E-3	5.8 E-5	1.7 E-2	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	2.3 E-4	2.0 E-1	NA	NA	NA	NA	1.9 E-5	NA	NA	3.2 E-4	2.3 E-1
05D-SB02	11	NA	NA	6.2 E-3	NA	NA	NA	NA	NA	1.1 E-3	1.1 E-4	2.0 E-2	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	7.3 E-4	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	2.3 E-1
06D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	1.6 E-3	2.9 E+1	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	6.2 E-4	1.4 E-3	4.7 E-1	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	2.9 E+1
06D-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	9.3 E-5	7.3 E-3	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	5.7 E-4	3.3 E-1	NA	NA	NA	NA	NA	NA	6.4 E-5	7.0 E-4	3.4 E-1
06D-SB04	11	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	4.5 E-4	7.8 E-5	4.6 E-3	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	5.7 E-4	3.7 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	6.2 E-5	3.4 E-4	2.3 E-1
06D-SB05	11	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	4.1 E-4	7.5 E-5	4.6 E-3	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	3.0 E-4	4.1 E-4	2.9 E-1	NA	NA	NA	NA	NA	NA	5.4 E-5	4.5 E-4	3.1 E-1
06D-SB06	11	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	3.7 E-4	8.6 E-5	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	3.1 E-4	2.1 E-4	2.7 E-1	NA	NA	NA	NA	NA	NA	3.5 E-5	3.5 E-4	2.8 E-1
08D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	1.5 E-4	1.2 E-2	NA	3.7 E-3	NA	NA	NA	NA	NA	NA	2.3 E-4	1.3 E-3	2.9 E-1	NA	NA	2.7 E-4	NA	NA	NA	2.8 E-4	3.9 E-4	3.1 E-1
08D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	1.9 E-4	1.8 E-2	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	2.1 E-3	5.0 E-1	NA	NA	NA	NA	NA	NA	9.3 E-4	5.0 E-4	5.3 E-1
08D-SB05	11	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	1.7 E-2	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	2.5 E-1
08D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
52D-SB05	11	NA	NA	8.0 E-4	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	1.5 E-1
52D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	6.9 E-5	1.6 E-2	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	3.8 E-5	1.6 E-4	2.0 E-1	NA	NA	NA	NA	6.6 E-6	NA	NA	6.0 E-4	2.2 E-1
52D-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	8.4 E-5	1.4 E-2	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	1.1 E-5	NA	NA	8.6 E-4	2.0 E-1
52D-SB08	11	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	1.3 E-3	8.2 E-5	1.4 E-2	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	4.4 E-4	1.8 E-1	NA	NA	NA	NA	6.9 E-6	NA	NA	4.0 E-4	2.0 E-1
52D-SB10	11	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	3.3 E+1	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	6.1 E-3	5.4 E-1	NA	NA	NA	NA	8.3 E-6	NA	NA	1.2 E-3	3.3 E+1
52D-SB11	11	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	5.3 E-5	6.4 E-3	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	4.8 E-4	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	1.3 E-1
52D-SB12	11	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	9.3 E-5	1.6 E-2	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	3.2 E-4	4.2 E-3	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	1.4 E-1
52D-SB13	11	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	8.2 E-5	7.3 E-3	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	8.6 E-5	5.9 E-4	2.3 E-1	NA	NA	NA	NA	2.4 E-6	NA	NA	4.2 E-4	2.4 E-1
52D-SB14	11	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	1.2 E-3	5.3 E-5	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	1.7 E-4	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	1.5 E-1
52D-SB15	11	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.6 E-3	7.3 E-5	6.8 E-3	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	2.9 E-4	1.3 E-4	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	1.9 E-1
52D-SB17	11	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	2.0 E-3	1.0 E-4	1.3 E-2	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	4.0 E-4	1.7 E-4	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	2.6 E-1
AW-AF1-SB01	11	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	4.5 E-4	7.3 E-5	6.8 E-3	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	1.4 E-1	NA	NA	NA	NA	NA	NA	1.1 E-4	5.0 E-4	1.5 E-1
AW-AF1-SB02	11	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	4.9 E-5	1.6 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	1.8 E-4	5.3 E-4	9.8 E-2	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	1.0 E-1
AW-AF1-SB03	11	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	5.0 E-2	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	8.6 E-4	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	3.0 E-1
AW-AF2-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	2.5 E-1
AW-AF2-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	3.0 E-1
D(b)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	8.9 E-5	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	2.2 E-1
D(b)-SB03	11	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	1.5 E-3	8.9 E-5	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	6.0 E-3	3.5 E-4	2.1 E-1	NA	NA	NA	NA	2.5 E-6	NA	NA	3.7 E-4	2.2 E-1
D(b)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7
D(b)-SB05	11	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	1.8 E-3	7.8 E-5	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	7.6 E-4	1.9 E-4	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	2.3 E-1
D(c)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
D(c)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	1.3 E-4	1.0 E-3	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	2.0 E-1	NA	NA	NA	NA	NA	NA	3.3 E-4	2.8 E-4	2.1 E-1
D(c)-SB04	11	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	2.4 E-2	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	9.2 E-5	4.2 E-4	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	3.3 E-1

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
08D-SB03	11.5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	2.4 E-2	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	5.8 E-4	5.1 E-1	NA	NA	NA	NA	NA	NA	NA	7.5 E-4	5.4 E-1
08D-SB04	11.5	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	4.9 E-5	2.4 E-2	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	9.8 E-2	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	1.2 E-1
08D-SB05	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-SB06	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	1.2 E-4
52D-SB16	11.5	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4	4.7 E-5	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	1.3 E-1

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																		
Unit Risk																																		
05D-SNS06	0	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	4.9
08D-GS02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
D(b)-SD01	0	NA	NA	NA	6.2 E-10	1.6 E-8	5.8 E-9	NA	NA	1.9 E-7	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	3 E-7	3.7
05D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.6
05D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	6.0
05D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	5.0
05D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	6.9
05D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	4.1
05D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	4.5
06D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.6
06D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
06D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
06D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.5
06D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
08D-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.5
08D-GS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
08D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
09D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
09D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
09D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8
09D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-CS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.7
12D-CS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6
12D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.8
12D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6
12D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.8
12D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7
D(C)-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
09D-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	6.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
D(d)-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.8
05D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	9.3 E-7	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	4.2
05D-SNS09	0.5	NA	NA	NA	3.3 E-9	6.9 E-8	1.8 E-8	NA	NA	3.4 E-8	NA	NA	6.8 E-10	NA	3.2 E-9	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.5
05D-SNS10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	5.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-6	4.6
05D-SNS11	0.5	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-8	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.5
05D-SNS12	0.5	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-7	NA	2.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	3.7
05D-SNS13	0.5	NA	NA	NA	9.1 E-10	2.0 E-8	7.5 E-9	NA	NA	1.1 E-6	NA	1.5 E-6	2.9 E-10	NA	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	5.1
05D-SNS14	0.5	NA	NA	NA	7.7 E-10	2.5 E-8	7.4 E-9	NA	NA	5.2 E-8	NA	6.8 E-7	2.7 E-10	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	3.9
05D-SNS15	0.5	NA	NA	NA	9.6 E-10	3.2 E-8	1.2 E-8	1.0 E-8	NA	3.4 E-7	NA	6.5 E-7	5.7 E-10	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	6.6
05D-SNS16	0.5	NA	NA	NA	2.2 E-9	NA	2.0 E-8	NA	NA	9.6 E-8	NA	7.8 E-8	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	4.1
05D-SNS17	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	6.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	4.9
05D-SNS18	0.5	NA	NA	NA	4.3 E-10	1.1 E-8	2.9 E-9	NA	NA	3.6 E-8	NA	1.5 E-7	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	2 E-7	3.9
05D-SNS19	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.8
05D-SNS20	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.2
06D-SNS06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	4.6
06D-SNS07	0.5	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-7	NA	NA	3.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	11
06D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	7.1
06D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
06D-SNS10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
06D-SNS11	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	5.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
08D-SB02	0.5	NA	NA	NA	1.1 E-9	1.5 E-8	2.4 E-9	NA	NA	2.5 E-8	NA	4.6 E-8	1.8 E-10	NA	NA	NA	NA	6.5 E-10	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
08D-SB03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
08D-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.5
09D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.6
09D-SNS06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	6.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.5
12D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
12D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.5
52D-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
52D-SB16	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
52D-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	5.2 E-6	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	4.9
52D-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	NA	1.6 E-6	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.8
52D-SNS03	0.5	NA	NA	NA	2.4 E-10	NA	1.1 E-9	NA	NA	1.5 E-8	NA	7.8 E-8	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
52D-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
52D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
05D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
05D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	5.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	3.4

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																		
Unit Risk																																		
05D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	7.5
05D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	3.4
05D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.5
05D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.7
05D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	6 E-7	3.5
05D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	6.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
05D-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
05D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.5
06D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
06D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.6
08D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
08D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	4.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
08D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
08D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
08D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-AH02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-FCS-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.9
52D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
52D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
52D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
52D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
52D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.8
52D-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
52D-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
52D-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
AW-AF1-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
AW-AF1-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.4
AW-AF1-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.4
AW-AF2-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11	3.4
AW-AF2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(b)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
D(b)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
D(b)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	3.0 E-7	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.5
D(b)-SB04	1	NA	NA	NA	2.3 E-9	4.6 E-8	9.3 E-9	NA	NA	NA	NA	NA	5.0 E-10	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.3
D(b)-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.4
D(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
D(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	3.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.5
D(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
D(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
D(c)-SB05	1	NA	NA	NA	3.7 E-9	7.7 E-8	1.5 E-8	NA	NA	9.2 E-9	NA	4.3 E-7	8.5 E-10	NA	8.5 E-9	NA	NA	4.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
DC-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
06D-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
06D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.5
06D-SB05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	4.3
09D-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	2.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
05D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.5
05D-SNS08	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	4.2
05D-SNS09	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
05D-SNS10	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
05D-SNS11	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	3.6
05D-SNS12	2.5	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-8	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	4.3
05D-SNS13	2.5	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	3.1 E-7	NA	8.6 E-7	6.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.7
05D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	4.8
05D-SNS15	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	6.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	4.7
05D-SNS16	2.5	NA	NA	NA	2.3 E-10	5.4 E-9	2.3 E-9	NA	NA	8.2 E-8	NA	4.5 E-7	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	4.3
05D-SNS17	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
05D-SNS18	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	3 E-7	4.1
05D-SNS19	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
05D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
06D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
06D-SNS06	2.5	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.7
06D-SNS07	2.5	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	4.0

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																															
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																	
Unit Risk																																	
06D-SNS08	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.5
06D-SNS09	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	7.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
06D-SNS10	2.5	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
06D-SNS11	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.4
08D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
09D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.5
09D-SNS06	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
12D-SNS08	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.5
12D-SNS09	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	6.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.5
52D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	9.3 E-7	5.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7	3.4
52D-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8	3.4
52D-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.3
52D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(c)-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-9	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
05D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
09D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
09D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
09D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
09D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS07	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-AH03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB09	4.5	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
05D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
05D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
05D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	4.2
05D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
05D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
05D-SNS12	5	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.4
05D-SNS13	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
05D-SNS14	5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.4
05D-SNS15	5	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.5
05D-SNS16	5	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.5
05D-SNS20	5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.4
06D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4	3.5
06D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	8.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8	3.4
06D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
06D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	7.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
06D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
08D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
08D-AH02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
08D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
08D-SB02	5	NA	NA	NA	4.7 E-10	6.5 E-9	1.0 E-9	NA	NA	1.3 E-8	NA	5.1 E-7	7.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.4
08D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
08D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
08D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
08D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-9	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
09D-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-AH03	5	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
52D-SA-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.4
52D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
52D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
52D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
52D-SB07	5	NA	NA	NA	1.6 E-8	2.6 E-7	3.5 E-8	NA	NA	1.4 E-8	NA	NA	3.3 E-9	NA	NA	NA	NA	4.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
52D-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
52D-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	4.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
52D-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
52D-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
52D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.5

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																		
Unit Risk																																		
AW-AF1-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
AW-AF1-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
AW-AF1-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.3
AW-AF2-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
AW-AF2-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
D(b)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
D(b)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
D(b)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
D(b)-SB04	5	NA	NA	NA	4.1 E-10	5.6 E-9	8.5 E-10	NA	NA	NA	NA	NA	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
D(b)-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
D(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	6.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
D(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
D(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
D(c)-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
DC-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
52D-SB16	5.5	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
06D-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-FCS-SB01	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
05D-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
05D-SNS12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
05D-SNS13	10	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-8	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.6
05D-SNS14	10	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-8	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.5
05D-SNS15	10	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.5
05D-SNS16	10	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
05D-SNS20	10	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.4
06D-SNS07	10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.4
08D-AH02	10	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
52D-AH02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
D(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
DC-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB09	10.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
D(c)-SB05	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
05D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
05D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
06D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-4	3.4
06D-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
06D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
06D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
06D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
08D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
08D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
08D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.3
08D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.3
52D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.4
52D-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
52D-SB08	11	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
52D-SB10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-4	3.5
52D-SB11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
52D-SB12	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
52D-SB13	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
52D-SB14	11	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
52D-SB15	11	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
52D-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
AW-AF1-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
AW-AF1-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
AW-AF1-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	3.4
AW-AF2-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
AW-AF2-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(b)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
D(b)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
D(b)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11	3.3
D(b)-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
D(c)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	3.3
D(c)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-9	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
D(c)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4

Table 5.2-52
Location-Specific Soil Risk Assessment Results - Construction Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**	**ILCR**	**Blood Lead**
Unit Hazard																																	
Unit Risk																																	
08D-SB03	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
08D-SB04	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.4
08D-SB05	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
08D-SB06	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB16	11.5	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.2-53
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+1	8.5 E-1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1
Unit Risk		NA	4.0 E-4	NA	1.5 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA
08D-SP07-10	10							140	13		4.8	840	18		17			
08D-SP08-10	10							260			7.8	830	66		32	26		
08D-SP09-10	10							65				250	26		95			
52D-SP24-10	10	12000	110	10			220			10			6.0				35	96
52D-SP25-10	10	2500	20	8.3			1700			8.2	41		10		80		24	20
52D-SP26-10	10	1300		18						11								
52D-SP29-10	10	1200											81		88			
52D-SP30-10	10	160										74	7.5		56		14	
52D-SP31-10	10	1100	5.9										14		8.8			
52D-SP32-10	10	12000	53												39			
52D-SP33-10	10	98	9.7	9.5			820	20		10		110	12		14		29	10
52D-SP35-10	10	34										130			20			
52D-SP36-10	10	51										73			7			
52D-SP37-10	10	42				18			15						72			
52D-SP38-10	10	10													60			
52D-SP39-10	10						9.8					320	3.8		3.8			
52D-SP40-10	10												6.2		16			
52D-SP41-10	10	12											4.6		6.7		11	
52D-SP42-10	10	11										140	3.9		5.4		22	
52D-SP43-10	10	3200	8.5					27			12	210	5.4		29		12	6.7
AW-08D-SP10-10	10			8.6				31		9.0		120	57		360			
AW-AFI-SP01-10	10	44													6.4			
D(b)-SP03-10	10	28										98	12		22			
D(b)-SP04-10	10	39						32				150	20		21			
D(b)-SP05-10	10														30			
D(b)-SP06-10	10								15				8.1		9.3			
D(c)-SP05-10	10							120			5.6	620	49		30			
D(c)-SP06-10	10							34				120	22		80		560	
D(c)-SP07-10	10											63			13		11	
D(c)-SP09-10	10						50					150			13		49	
D(c)-SP10-10	10											93						
D(c)-SP11-10	10											53	35		21			
D(c)-SP12-10	10							42				210	7.2					
05D-SP08-20	20	94						45				150	31		74			
08D-SP07-20	20							120			5.7	470	39		220			
08D-SP08-20	20											56	6.1		62		6.3	
52D-SP24-20	20	1900	22	7.2			660			8.8		85	5.8		12		15	15
52D-SP25-20	20	890	5.4	8.3			1100			8.8	16		5.6		7.7		24	8.5
52D-SP27-20	20	75	7.0	12			560			15			9.9		3.6		12	5.3
52D-SP28-20	20	14						340	100		18	2000	35		22	41		
52D-SP29-20	20	510						32				150	11		29	21	8.3	
52D-SP30-20	20	1000											9.1		12		17	9.5
52D-SP32-20	20	33000	170															
52D-SP33-20	20	140		8.3			2500			9.6			7.9		7.4		34	12
52D-SP35-20	20	32										110			53		7.1	
52D-SP36-20	20	53	72												16			15
52D-SP39-20	20	7.8	6.2				50					280	10		12		30	
52D-SP40-20	20							200			12	490	23		17			
52D-SP41-20	20							36				200	6.6					
52D-SP42-20	20							58			5.6	300	17					
52D-SP43-20	20	4800	18									77	4.1		9.6		17	8.8
52D-SP44-20	20							22			5.5	310			6.8			
AW-08D-SP10-20	20							46				230	46		21			
D(b)-SP03-20	20	18											12		12		24	
D(b)-SP04-20	20	14										58	5.3		7.5			
D(b)-SP06-20	20											72						
D(c)-SP05-20	20							130				550	22		230		180	

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+1	8.5 E-1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1
Unit Risk		NA	4.0 E-4	NA	1.5 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA
D(c)-SP06-20	20														4			
D(c)-SP07-20	20														8.1			
D(c)-SP08-20	20						9.6					160	18		190		16	
D(c)-SP09-20	20					20	13					97	8.7		81		290	
D(c)-SP10-20	20	28										83			70			
D(c)-SP11-20	20					17							4.4		130		290	
D(c)-SP12-20	20							200	21		6.6	950	21		16			
52D-SP40-28	28					17		61	20			330	16					
52D-SP24-30	30				7.7							100						
52D-SP25-30	30	1900	6.0	7.7			500			8.2			3.6		3.7		38	8.2
52D-SP27-30	30	31		14			2500			17			12		4.3		9.6	
52D-SP28-30	30	93		6.8						6.2			6.4		12		52	5.9
52D-SP30-30	30																	
52D-SP35-30	30	41	4.7			70						130		16	22		190	
52D-SP36-30	30	62	100												8.9		6.4	27
52D-SP37-30	30		11									91	5.0		180			6.4
52D-SP39-30	30							20				210	27		13			
52D-SP41-30	30											87						
52D-SP42-30	30	7.9	100					130				130	12					530
52D-SP43-30	30	750	7.5						51			110						
52D-SP44-30	30							180	35		160	1100	68		16			
D(b)-SP05-30	30														4.9			
D(c)-SP05-30	30											57			11		710	
52D-SP44-40	40		5.5					110	31			770	62		50			

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard		1.2 E-1	3.9 E-1	6.7 E-1	3.4 E+0	2.3 E-2	9.8 E-1	2.0 E+2	9.8 E-1	6.8 E+0	6.8 E+0	7.5 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.1 E+0	6.7 E+0
Unit Risk		NA	NA	6.1 E-4	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
08D-SP07-10	10		82				6.8		14	7.8		4.8		8.9	31		
08D-SP08-10	10		31	8.8			29		72	12	5.6	7.9	71	3.6	74		
08D-SP09-10	10	5.9					26		56	7.4					36		
52D-SP24-10	10			8.1		1900	7.9		7.3	31	11	11	120	12	23	1600	
52D-SP25-10	10			10		250			15	36	15	11	54		49	1200	
52D-SP26-10	10					260				17	9.6		79		8.9	1100	
52D-SP29-10	10	30		8.7		220	30		76	28	17	17	65		79	2600	
52D-SP30-10	10	4.3				38	5.7		11	7.6			39		13	480	
52D-SP31-10	10	22				140			12				16		11	410	
52D-SP32-10	10					1500							98			780	
52D-SP33-10	10			9.5		98	12		21	36	11	8.4	92	18	46	280	
52D-SP35-10	10		10			380			13				97			8.8	
52D-SP36-10	10		27		66	1500							76				
52D-SP37-10	10		49		38	320			17				37	13	4.8	18	
52D-SP38-10	10					60			9.2				61	12			
52D-SP39-10	10		21				5.4			10				6.0	32		
52D-SP40-10	10						5.6		15				32	12	9.7	13	
52D-SP41-10	10					85			4.6				87	4.1	7.4	24	
52D-SP42-10	10					140							68	4.0	7.3	12	
52D-SP43-10	10	46			7.6	640			5.8				120		8.7	340	
AW-08D-SP10-10	10	15		11			71		120	35	13				76		
AW-AFI-SP01-10	10					280							240			22	
D(b)-SP03-10	10					190	7.2		16				130		11	1100	
D(b)-SP04-10	10	4.4				180	16	110	35				120		20	42	
D(b)-SP05-10	10					17			4.6				11		5.8		
D(b)-SP06-10	10		25			96			5.3				68	4.8	12		
D(c)-SP05-10	10		23				29		85	5.5					33		
D(c)-SP06-10	10					28	8.6		19						13	690	
D(c)-SP07-10	10								6.8					3.4		41	
D(c)-SP09-10	10		20						13					7.5	5.6		
D(c)-SP10-10	10		140						5.3					4.7	8.4		
D(c)-SP11-10	10	5.1		7.1		11	33		64	8.0			7.9	7.3	45		
D(c)-SP12-10	10					14			7.2				69	4.8	15	12	
05D-SP08-20	20						28		73						22		
08D-SP07-20	20	19	40				27		220	7.0				11	27		
08D-SP08-20	20					13			9.6						15	11	
52D-SP24-20	20		11	9.5		570	9.9		9.1	32	9.1		11		38	430	
52D-SP25-20	20			6.0		220			24	23	7.9	6.3	36		34	960	
52D-SP27-20	20			15		57	5.8		11	57	14	8.0	34		74	160	
52D-SP28-20	20	9.3	160			14	24		90						18	58	
52D-SP29-20	20	11				440	5.7		15				14		11	620	
52D-SP30-20	20	21				560	6.7		20				29		7.2	1200	
52D-SP32-20	20					2900										480	
52D-SP33-20	20			14		160	9.2		13	44	15	8.9	49		66	240	
52D-SP35-20	20		8.6			440			6.5				110			12	
52D-SP36-20	20				89	3400							82		5.0	200	3.4
52D-SP39-20	20	5.8	21			40	40		12	9.9				4.4	50	32	
52D-SP40-20	20			10			24		66	17	8.7		45	36	52	23	
52D-SP41-20	20		28				9.6		15	5.2			13	14	27	7.0	
52D-SP42-20	20		28			17	11		18	6.7			20	13	45	7.6	
52D-SP43-20	20	64			9.3	1000	5.3		8.6				99		5.0	280	
52D-SP44-20	20		72		9.4	91			8.1						7.1		
AW-08D-SP10-20	20	6.7	12	5.1			37		80	12					54	7.3	
D(b)-SP03-20	20					210	6.0		12				24		9.2	310	
D(b)-SP04-20	20					63			11							7.1	
D(b)-SP06-20	20		26						7.6				200	10	7.7		
D(c)-SP05-20	20					49	24		70						24	320	

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard		1.2 E-1	3.9 E-1	6.7 E-1	3.4 E+0	2.3 E-2	9.8 E-1	2.0 E+2	9.8 E-1	6.8 E+0	6.8 E+0	7.5 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.1 E+0	6.7 E+0
Unit Risk		NA	NA	6.1 E-4	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
D(c)-SP06-20	20														5.1		
D(c)-SP07-20	20									5.4						19	
D(c)-SP08-20	20		27				20		120	6.5				20	24	12	
D(c)-SP09-20	20		30				14		17					6.3	7.9	6.9	
D(c)-SP10-20	20					250	5.7		17				36	13	18	53	
D(c)-SP11-20	20				7.8	23	6.3		23					16	19	13	
D(c)-SP12-20	20		23	7.7		12	18		29	12	6.7		100	18	46	28	
52D-SP40-28	28		31				16		45	7.4			18	46	41	18	
52D-SP24-30	30		14												12		
52D-SP25-30	30					590			5.0	17			98		20	1800	
52D-SP27-30	30	5.3	14	18		140	9.5		14	68	17	5.8		4.4	110	11	
52D-SP28-30	30					300	7.8		13	12			42		10	260	
52D-SP30-30	30																
52D-SP35-30	30		27			1200	5.5		8.6	5.9			220	9.5	7.6	31	
52D-SP36-30	30				110	3400			6.6				60	7.6	4.4	250	6.0
52D-SP37-30	30		19		14	220	65		48				28	10	7.2	25	
52D-SP39-30	30	4.7	36				27		54						15		
52D-SP41-30	30		13				6.4		11	5.7			8.3	13	16		
52D-SP42-30	30					640	5.2		21				560	85	23	8300	4.0
52D-SP43-30	30	11	150			200				5.7			9.6		10	58	
52D-SP44-30	30	13	120			17	85		190						32		
D(b)-SP05-30	30		12			180	8.2		9.9				10	5.4	12		
D(c)-SP05-30	30					230							13	4.4		1300	
52D-SP44-40	40	6.1	140		23	890	64		180						50	12	3.5

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	1.3 E-7	6.7 E-6	NA	6.5 E-9	1.8 E-6	2.9 E-6	NA	1.4 E-7	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	1.1 E-8	1.8 E-6	1.1 E-5	NA	2.6 E-7	2.8 E-6	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	5.4 E-7	4.2 E-6	NA	7.7 E-7	NA	NA	NA
52D-SP24-10	10	1.0 E-5	6.4 E-7	4.7 E-6	NA	NA	1.0 E-5	NA	NA	4.8 E-7	NA	NA	9.6 E-7	NA	NA	NA	4.4 E-6	1.1 E-5
52D-SP25-10	10	2.1 E-6	1.2 E-7	3.9 E-6	NA	NA	8.1 E-5	NA	NA	3.9 E-7	5.6 E-8	NA	1.6 E-6	NA	6.5 E-7	NA	3.0 E-6	2.3 E-6
52D-SP26-10	10	1.1 E-6	NA	8.5 E-6	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	7.2 E-7	NA	NA	NA
52D-SP30-10	10	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	1.2 E-6	NA	4.6 E-7	NA	1.8 E-6	NA
52D-SP31-10	10	9.4 E-7	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	7.2 E-8	NA	NA	NA
52D-SP32-10	10	1.0 E-5	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	NA
52D-SP33-10	10	8.4 E-8	5.6 E-8	4.5 E-6	NA	NA	3.9 E-5	1.8 E-8	NA	4.8 E-7	NA	2.4 E-7	1.9 E-6	NA	1.1 E-7	NA	3.6 E-6	1.2 E-6
52D-SP35-10	10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	1.6 E-7	NA	NA	NA
52D-SP36-10	10	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	5.7 E-8	NA	NA	NA
52D-SP37-10	10	3.6 E-8	NA	NA	NA	3.2 E-8	NA	NA	7.8 E-6	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA
52D-SP38-10	10	8.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	6.9 E-7	6.1 E-7	NA	3.1 E-8	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-7	NA	1.3 E-7	NA	NA	NA
52D-SP41-10	10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-7	NA	5.4 E-8	NA	1.4 E-6	NA
52D-SP42-10	10	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	6.2 E-7	NA	4.4 E-8	NA	2.8 E-6	NA
52D-SP43-10	10	2.7 E-6	4.9 E-8	NA	NA	NA	NA	2.4 E-8	NA	NA	1.6 E-8	4.5 E-7	8.6 E-7	NA	2.4 E-7	NA	1.5 E-6	7.7 E-7
AW-08D-SP10-10	10	NA	NA	4.1 E-6	NA	NA	NA	2.8 E-8	NA	4.3 E-7	NA	2.6 E-7	9.1 E-6	NA	2.9 E-6	NA	NA	NA
AW-AFI-SP01-10	10	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	NA
D(b)-SP03-10	10	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	1.9 E-6	NA	1.8 E-7	NA	NA	NA
D(b)-SP04-10	10	3.3 E-8	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	3.2 E-7	3.2 E-6	NA	1.7 E-7	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	1.3 E-6	NA	7.6 E-8	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	7.6 E-9	1.3 E-6	7.8 E-6	NA	2.4 E-7	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	2.6 E-7	3.5 E-6	NA	6.5 E-7	NA	7.0 E-5	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	1.1 E-7	NA	1.4 E-6	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	3.2 E-7	NA	NA	1.1 E-7	NA	6.1 E-6	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	5.6 E-6	NA	1.7 E-7	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	4.5 E-7	1.2 E-6	NA	NA	NA	NA	NA
05D-SP08-20	20	4.0 E-8	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	1.6 E-7	2.5 E-6	NA	3.0 E-7	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	3.9 E-9	5.1 E-7	3.1 E-6	NA	8.9 E-7	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	4.9 E-7	NA	2.5 E-7	NA	3.9 E-7	NA
52D-SP24-20	20	8.1 E-7	6.4 E-8	1.7 E-6	NA	NA	1.6 E-5	NA	NA	2.1 E-7	NA	9.2 E-8	4.6 E-7	NA	4.9 E-8	NA	9.4 E-7	8.6 E-7
52D-SP25-20	20	3.8 E-7	1.6 E-8	2.0 E-6	NA	NA	2.6 E-5	NA	NA	2.1 E-7	1.1 E-8	NA	4.5 E-7	NA	3.1 E-8	NA	1.5 E-6	4.9 E-7
52D-SP27-20	20	3.2 E-8	2.0 E-8	2.8 E-6	NA	NA	1.3 E-5	NA	NA	3.6 E-7	NA	NA	7.9 E-7	NA	1.5 E-8	NA	7.5 E-7	3.0 E-7
52D-SP28-20	20	6.0 E-9	NA	NA	NA	NA	NA	1.5 E-7	2.6 E-5	NA	1.2 E-8	2.2 E-6	2.8 E-6	NA	8.9 E-8	2.2 E-6	NA	NA
52D-SP29-20	20	2.2 E-7	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	1.6 E-7	8.8 E-7	NA	1.2 E-7	1.1 E-6	5.2 E-7	NA
52D-SP30-20	20	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	4.9 E-8	NA	1.1 E-6	5.5 E-7
52D-SP32-20	20	1.4 E-5	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	6.0 E-8	NA	2.0 E-6	NA	NA	5.9 E-5	NA	NA	2.3 E-7	NA	NA	6.3 E-7	NA	3.0 E-8	NA	2.1 E-6	6.9 E-7
52D-SP35-20	20	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	2.2 E-7	NA	4.4 E-7	NA
52D-SP36-20	20	2.3 E-8	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	8.6 E-7
52D-SP39-20	20	3.3 E-9	1.8 E-8	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	3.0 E-7	8.0 E-7	NA	4.9 E-8	NA	1.9 E-6	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	9.0 E-8	NA	NA	8.2 E-9	5.3 E-7	1.8 E-6	NA	6.9 E-8	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	2.2 E-7	5.3 E-7	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	3.8 E-9	3.2 E-7	1.4 E-6	NA	NA	NA	NA	NA
52D-SP43-20	20	2.0 E-6	5.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	3.3 E-7	NA	3.9 E-8	NA	1.1 E-6	5.1 E-7
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	3.7 E-9	3.3 E-7	NA	NA	2.8 E-8	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	2.5 E-7	3.7 E-6	NA	8.5 E-8	NA	NA	NA
D(b)-SP03-20	20	7.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	4.9 E-8	NA	1.5 E-6	NA
D(b)-SP04-20	20	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	4.2 E-7	NA	3.0 E-8	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	5.9 E-7	1.8 E-6	NA	9.3 E-7	NA	1.1 E-5	NA

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard																		
Unit Risk																		
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	1.7 E-7	1.4 E-6	NA	7.7 E-7	NA	1.0 E-6	NA
D(c)-SP09-20	20	NA	NA	NA	NA	1.8 E-8	3.1 E-7	NA	NA	NA	NA	1.0 E-7	7.0 E-7	NA	3.3 E-7	NA	1.8 E-5	NA
D(c)-SP10-20	20	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	2.8 E-7	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	5.3 E-7	NA	1.8 E-5	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	9.0 E-8	5.4 E-6	NA	4.5 E-9	1.0 E-6	1.7 E-6	NA	6.5 E-8	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	1.1 E-8	NA	2.0 E-8	3.7 E-6	NA	NA	2.5 E-7	9.1 E-7	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	7.2 E-8	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	5.4 E-7	1.2 E-8	1.2 E-6	NA	NA	7.9 E-6	NA	NA	1.3 E-7	NA	NA	1.9 E-7	NA	1.0 E-8	NA	1.6 E-6	3.1 E-7
52D-SP27-30	30	8.8 E-9	NA	2.2 E-6	NA	NA	4.0 E-5	NA	NA	2.7 E-7	NA	NA	6.4 E-7	NA	1.2 E-8	NA	4.0 E-7	NA
52D-SP28-30	30	2.6 E-8	NA	1.1 E-6	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	3.4 E-7	NA	3.3 E-8	NA	2.2 E-6	2.3 E-7
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	1.2 E-8	9.1 E-9	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	9.3 E-8	NA	1.2 E-7	6.0 E-8	NA	7.9 E-6	NA
52D-SP36-30	30	1.8 E-8	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	2.7 E-7	1.0 E-6
52D-SP37-30	30	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	2.7 E-7	NA	4.9 E-7	NA	NA	2.5 E-7
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	1.5 E-7	1.4 E-6	NA	3.5 E-8	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	2.2 E-9	1.9 E-7	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	9.3 E-8	6.4 E-7	NA	NA	NA	NA	2.0 E-5
52D-SP43-30	30	2.1 E-7	1.4 E-8	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	7.9 E-8	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	5.4 E-8	6.0 E-6	NA	7.3 E-8	7.9 E-7	3.6 E-6	NA	4.3 E-8	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	3.0 E-8	NA	3.0 E-5	NA
52D-SP44-40	40	NA	8.0 E-9	NA	NA	NA	NA	2.5 E-8	4.0 E-6	NA	NA	4.1 E-7	2.5 E-6	NA	1.0 E-7	NA	NA	NA

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	4.0 E-7	NA	NA	NA	1.1 E-7	NA	2.2 E-7	3.3 E-7	NA	2.0 E-8	NA	1.7 E-7	4.9 E-7	NA	NA	1.3 E-5
08D-SP08-10	10	NA	1.5 E-7	3.6 E-8	NA	NA	4.5 E-7	NA	1.1 E-6	5.0 E-7	2.4 E-7	3.4 E-8	8.0 E-6	6.9 E-8	1.2 E-6	NA	NA	2.7 E-5
08D-SP09-10	10	4.3 E-9	NA	NA	NA	NA	4.1 E-7	NA	8.8 E-7	3.1 E-7	NA	NA	NA	NA	5.7 E-7	NA	NA	7.7 E-6
52D-SP24-10	10	NA	NA	3.3 E-8	NA	2.7 E-7	1.2 E-7	NA	1.1 E-7	1.3 E-6	4.6 E-7	4.7 E-8	1.4 E-5	2.3 E-7	3.6 E-7	1.2 E-5	NA	7.1 E-5
52D-SP25-10	10	NA	NA	4.0 E-8	NA	3.5 E-8	NA	NA	2.3 E-7	1.5 E-6	6.3 E-7	4.7 E-8	6.1 E-6	NA	7.7 E-7	8.6 E-6	NA	1.1 E-4
52D-SP26-10	10	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	7.2 E-7	4.0 E-7	NA	8.9 E-6	NA	1.4 E-7	7.9 E-6	NA	2.8 E-5
52D-SP29-10	10	2.2 E-8	NA	3.5 E-8	NA	3.1 E-8	4.7 E-7	NA	1.2 E-6	1.2 E-6	7.2 E-7	7.3 E-8	7.3 E-6	NA	1.2 E-6	1.9 E-5	NA	4.6 E-5
52D-SP30-10	10	3.2 E-9	NA	NA	NA	5.4 E-9	8.9 E-8	NA	1.7 E-7	3.2 E-7	NA	NA	4.4 E-6	NA	2.1 E-7	3.5 E-6	NA	1.2 E-5
52D-SP31-10	10	1.6 E-8	NA	NA	NA	2.0 E-8	NA	NA	1.9 E-7	NA	NA	NA	1.8 E-6	NA	1.7 E-7	3.0 E-6	NA	8.4 E-6
52D-SP32-10	10	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	5.6 E-6	NA	2.8 E-5
52D-SP33-10	10	NA	NA	3.8 E-8	NA	1.4 E-8	1.9 E-7	NA	3.3 E-7	1.5 E-6	4.6 E-7	3.6 E-8	1.0 E-5	3.4 E-7	7.3 E-7	2.0 E-6	NA	6.7 E-5
52D-SP35-10	10	NA	4.9 E-8	NA	NA	5.4 E-8	NA	NA	2.0 E-7	NA	NA	NA	1.1 E-5	NA	NA	6.3 E-8	NA	1.2 E-5
52D-SP36-10	10	NA	1.3 E-7	NA	1.2 E-6	2.1 E-7	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	NA	NA	1.0 E-5
52D-SP37-10	10	NA	2.4 E-7	NA	6.9 E-7	4.5 E-8	NA	NA	2.7 E-7	NA	NA	NA	4.2 E-6	2.5 E-7	7.6 E-8	1.3 E-7	NA	1.4 E-5
52D-SP38-10	10	NA	NA	NA	NA	8.5 E-9	NA	NA	1.4 E-7	NA	NA	NA	6.9 E-6	2.3 E-7	NA	NA	NA	7.7 E-6
52D-SP39-10	10	NA	1.0 E-7	NA	NA	NA	8.4 E-8	NA	NA	4.2 E-7	NA	NA	NA	1.1 E-7	5.1 E-7	NA	NA	3.0 E-6
52D-SP40-10	10	NA	NA	NA	NA	NA	8.8 E-8	NA	2.3 E-7	NA	NA	NA	3.6 E-6	2.3 E-7	1.5 E-7	9.4 E-8	NA	5.5 E-6
52D-SP41-10	10	NA	NA	NA	NA	1.2 E-8	NA	NA	7.2 E-8	NA	NA	NA	9.8 E-6	7.8 E-8	1.2 E-7	1.7 E-7	NA	1.2 E-5
52D-SP42-10	10	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	7.7 E-6	7.6 E-8	1.2 E-7	8.6 E-8	NA	1.2 E-5
52D-SP43-10	10	3.4 E-8	NA	NA	1.4 E-7	9.1 E-8	NA	NA	9.1 E-8	NA	NA	NA	1.4 E-5	NA	1.4 E-7	2.4 E-6	NA	2.3 E-5
AW-08D-SP10-10	10	1.1 E-8	NA	4.4 E-8	NA	NA	1.1 E-6	NA	1.9 E-6	1.5 E-6	5.5 E-7	NA	NA	NA	1.2 E-6	NA	NA	2.3 E-5
AW-AFI-SP01-10	10	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	1.6 E-7	NA	2.7 E-5
D(b)-SP03-10	10	NA	NA	NA	NA	2.7 E-8	1.1 E-7	NA	2.5 E-7	NA	NA	NA	1.5 E-5	NA	1.7 E-7	7.9 E-6	NA	2.5 E-5
D(b)-SP04-10	10	3.2 E-9	NA	NA	NA	2.6 E-8	2.5 E-7	9.6 E-5	5.5 E-7	NA	NA	NA	1.4 E-5	NA	3.2 E-7	3.0 E-7	NA	1.2 E-4
D(b)-SP05-10	10	NA	NA	NA	NA	2.4 E-9	NA	NA	7.2 E-8	NA	NA	NA	1.2 E-6	NA	9.2 E-8	NA	NA	1.6 E-6
D(b)-SP06-10	10	NA	1.2 E-7	NA	NA	1.4 E-8	NA	NA	8.3 E-8	NA	NA	NA	7.7 E-6	9.2 E-8	1.9 E-7	NA	NA	1.7 E-5
D(c)-SP05-10	10	NA	1.1 E-7	NA	NA	NA	4.5 E-7	NA	1.3 E-6	2.3 E-7	NA	NA	NA	NA	5.2 E-7	NA	NA	1.2 E-5
D(c)-SP06-10	10	NA	NA	NA	NA	4.0 E-9	1.3 E-7	NA	3.0 E-7	NA	NA	NA	NA	NA	2.1 E-7	5.0 E-6	NA	8.0 E-5
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	6.5 E-8	NA	3.0 E-7	NA	2.1 E-6
D(c)-SP09-10	10	NA	9.8 E-8	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	1.4 E-7	8.9 E-8	NA	NA	9.5 E-6
D(c)-SP10-10	10	NA	6.9 E-7	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	NA	NA	9.0 E-8	1.3 E-7	NA	NA	1.2 E-6
D(c)-SP11-10	10	3.8 E-9	NA	2.9 E-8	NA	1.6 E-9	5.2 E-7	NA	1.0 E-6	3.4 E-7	NA	NA	8.9 E-7	1.4 E-7	7.1 E-7	NA	NA	9.5 E-6
D(c)-SP12-10	10	NA	NA	NA	NA	2.0 E-9	NA	NA	1.1 E-7	NA	NA	NA	7.8 E-6	9.2 E-8	2.4 E-7	8.6 E-8	NA	9.9 E-6
05D-SP08-20	20	NA	NA	NA	NA	NA	2.2 E-7	NA	5.7 E-7	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	4.0 E-6
08D-SP07-20	20	7.0 E-9	9.8 E-8	NA	NA	NA	2.1 E-7	NA	1.7 E-6	1.5 E-7	NA	NA	NA	1.0 E-7	2.1 E-7	NA	NA	7.1 E-6
08D-SP08-20	20	NA	NA	NA	NA	9.2 E-10	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	1.2 E-7	4.0 E-8	NA	1.4 E-6
52D-SP24-20	20	NA	2.7 E-8	1.9 E-8	NA	4.0 E-8	7.7 E-8	NA	7.1 E-8	6.7 E-7	1.9 E-7	NA	6.2 E-7	NA	3.0 E-7	1.5 E-6	NA	2.4 E-5
52D-SP25-20	20	NA	NA	1.2 E-8	NA	1.6 E-8	NA	NA	1.9 E-7	4.8 E-7	1.7 E-7	1.3 E-8	2.0 E-6	NA	2.7 E-7	3.5 E-6	NA	3.8 E-5
52D-SP27-20	20	NA	NA	3.0 E-8	NA	4.0 E-9	4.5 E-8	NA	8.6 E-8	1.2 E-6	2.9 E-7	1.7 E-8	1.9 E-6	NA	5.8 E-7	5.8 E-7	NA	2.3 E-5
52D-SP28-20	20	3.4 E-9	3.9 E-7	NA	NA	9.9 E-10	1.9 E-7	NA	7.0 E-7	NA	NA	NA	NA	NA	1.4 E-7	2.1 E-7	NA	3.5 E-5
52D-SP29-20	20	4.0 E-9	NA	NA	NA	3.1 E-8	4.5 E-8	NA	1.2 E-7	NA	NA	NA	7.9 E-7	NA	8.7 E-8	2.2 E-6	NA	6.3 E-6
52D-SP30-20	20	7.7 E-9	NA	NA	NA	4.0 E-8	5.2 E-8	NA	1.6 E-7	NA	NA	NA	1.6 E-6	NA	5.7 E-8	4.3 E-6	NA	9.1 E-6
52D-SP32-20	20	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	1.7 E-5
52D-SP33-20	20	NA	NA	2.8 E-8	NA	1.1 E-8	7.2 E-8	NA	1.0 E-7	9.3 E-7	3.2 E-7	1.9 E-8	2.8 E-6	NA	5.2 E-7	8.6 E-7	NA	7.1 E-5
52D-SP35-20	20	NA	2.1 E-8	NA	NA	3.1 E-8	NA	NA	5.1 E-8	NA	NA	NA	6.2 E-6	NA	NA	4.3 E-8	NA	7.1 E-6
52D-SP36-20	20	NA	NA	NA	8.1 E-7	2.4 E-7	NA	NA	NA	NA	NA	NA	4.6 E-6	NA	4.0 E-8	7.2 E-7	7.2 E-8	7.7 E-6
52D-SP39-20	20	2.1 E-9	5.1 E-8	NA	NA	2.8 E-9	3.1 E-7	NA	9.4 E-8	2.1 E-7	NA	NA	NA	4.2 E-8	4.0 E-7	1.2 E-7	NA	5.5 E-6
52D-SP40-20	20	NA	NA	2.0 E-8	NA	NA	1.9 E-7	NA	5.2 E-7	3.6 E-7	1.8 E-7	NA	2.5 E-6	3.4 E-7	4.1 E-7	8.3 E-8	NA	7.2 E-6
52D-SP41-20	20	NA	6.9 E-8	NA	NA	NA	7.5 E-8	NA	1.2 E-7	1.1 E-7	NA	NA	7.3 E-7	1.3 E-7	2.1 E-7	2.5 E-8	NA	2.2 E-6
52D-SP42-20	20	NA	6.9 E-8	NA	NA	1.2 E-9	8.6 E-8	NA	1.4 E-7	1.4 E-7	NA	NA	1.1 E-6	1.2 E-7	3.6 E-7	2.7 E-8	NA	3.8 E-6
52D-SP43-20	20	2.4 E-8	NA	NA	8.5 E-8	7.1 E-8	4.1 E-8	NA	6.7 E-8	NA	NA	NA	5.6 E-6	NA	4.0 E-8	1.0 E-6	NA	1.1 E-5
52D-SP44-20	20	NA	1.8 E-7	NA	8.6 E-8	6.4 E-9	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	7.6 E-7
AW-08D-SP10-20	20	2.5 E-9	2.9 E-8	1.0 E-8	NA	NA	2.9 E-7	NA	6.3 E-7	2.5 E-7	NA	NA	NA	NA	4.3 E-7	2.6 E-8	NA	5.7 E-6
D(b)-SP03-20	20	NA	NA	NA	NA	1.5 E-8	4.7 E-8	NA	9.4 E-8	NA	NA	NA	1.4 E-6	NA	7.3 E-8	1.1 E-6	NA	5.2 E-6
D(b)-SP04-20	20	NA	NA	NA	NA	4.5 E-9	NA	NA	8.6 E-8	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	6.4 E-7
D(b)-SP06-20	20	NA	6.4 E-8	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	1.1 E-5	9.5 E-8	6.1 E-8	NA	NA	1.2 E-5
D(c)-SP05-20	20	NA	NA	NA	NA	3.5 E-9	1.9 E-7	NA	5.5 E-7	NA	NA	NA	NA	NA	1.9 E-7	1.2 E-6	NA	1.7 E-5

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard																		
Unit Risk																		
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	5.7 E-8
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	6.8 E-8	NA	2.1 E-7
D(c)-SP08-20	20	NA	6.6 E-8	NA	NA	NA	1.6 E-7	NA	9.4 E-7	1.4 E-7	NA	NA	NA	1.9 E-7	1.9 E-7	4.3 E-8	NA	5.3 E-6
D(c)-SP09-20	20	NA	7.4 E-8	NA	NA	NA	1.1 E-7	NA	1.3 E-7	NA	NA	NA	NA	6.0 E-8	6.2 E-8	2.5 E-8	NA	2.0 E-5
D(c)-SP10-20	20	NA	NA	NA	NA	1.8 E-8	4.5 E-8	NA	1.3 E-7	NA	NA	NA	2.0 E-6	1.2 E-7	1.4 E-7	1.9 E-7	NA	3.1 E-6
D(c)-SP11-20	20	NA	NA	NA	7.1 E-8	1.6 E-9	4.9 E-8	NA	1.8 E-7	NA	NA	NA	NA	1.5 E-7	1.5 E-7	4.7 E-8	NA	2.0 E-5
D(c)-SP12-20	20	NA	5.6 E-8	1.6 E-8	NA	8.5 E-10	1.4 E-7	NA	2.3 E-7	2.5 E-7	1.4 E-7	NA	5.6 E-6	1.7 E-7	3.6 E-7	1.0 E-7	NA	1.5 E-5
52D-SP40-28	28	NA	5.4 E-8	NA	NA	NA	8.9 E-8	NA	2.5 E-7	1.1 E-7	NA	NA	7.2 E-7	3.1 E-7	2.3 E-7	4.6 E-8	NA	6.7 E-6
52D-SP24-30	30	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	1.7 E-7
52D-SP25-30	30	NA	NA	NA	NA	2.8 E-8	NA	NA	2.6 E-8	2.4 E-7	NA	NA	3.7 E-6	NA	1.1 E-7	4.3 E-6	NA	2.0 E-5
52D-SP27-30	30	1.3 E-9	2.3 E-8	2.4 E-8	NA	6.6 E-9	4.9 E-8	NA	7.3 E-8	9.5 E-7	2.4 E-7	8.3 E-9	NA	2.8 E-8	5.8 E-7	2.6 E-8	NA	4.5 E-5
52D-SP28-30	30	NA	NA	NA	NA	1.4 E-8	4.1 E-8	NA	6.8 E-8	1.7 E-7	NA	NA	1.6 E-6	NA	5.3 E-8	6.2 E-7	NA	6.5 E-6
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	4.4 E-8	NA	NA	5.7 E-8	2.9 E-8	NA	4.5 E-8	8.3 E-8	NA	NA	8.3 E-6	6.0 E-8	4.0 E-8	7.4 E-8	NA	1.7 E-5
52D-SP36-30	30	NA	NA	NA	6.7 E-7	1.6 E-7	NA	NA	3.4 E-8	NA	NA	NA	2.3 E-6	4.8 E-8	2.3 E-8	6.0 E-7	8.5 E-8	5.4 E-6
52D-SP37-30	30	NA	3.1 E-8	NA	8.5 E-8	1.0 E-8	3.4 E-7	NA	2.5 E-7	NA	NA	NA	1.1 E-6	6.4 E-8	3.8 E-8	6.0 E-8	NA	3.0 E-6
52D-SP39-30	30	1.2 E-9	5.9 E-8	NA	NA	NA	1.4 E-7	NA	2.8 E-7	NA	NA	NA	NA	NA	7.9 E-8	NA	NA	2.2 E-6
52D-SP41-30	30	NA	2.1 E-8	NA	NA	NA	3.3 E-8	NA	5.7 E-8	8.0 E-8	NA	NA	3.1 E-7	8.3 E-8	8.4 E-8	NA	NA	7.3 E-7
52D-SP42-30	30	NA	NA	NA	NA	3.0 E-8	2.7 E-8	NA	1.1 E-7	NA	NA	NA	2.1 E-5	5.4 E-7	1.2 E-7	2.0 E-5	5.7 E-8	6.3 E-5
52D-SP43-30	30	2.7 E-9	2.5 E-7	NA	NA	9.4 E-9	NA	NA	NA	8.0 E-8	NA	NA	3.6 E-7	NA	5.3 E-8	1.4 E-7	NA	1.0 E-5
52D-SP44-30	30	3.2 E-9	2.0 E-7	NA	NA	8.0 E-10	4.4 E-7	NA	9.9 E-7	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	1.2 E-5
D(b)-SP05-30	30	NA	2.0 E-8	NA	NA	8.5 E-9	4.3 E-8	NA	5.2 E-8	NA	NA	NA	3.8 E-7	3.4 E-8	6.3 E-8	NA	NA	6.1 E-7
D(c)-SP05-30	30	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	4.9 E-7	2.8 E-8	NA	3.1 E-6	NA	3.3 E-5
52D-SP44-40	40	1.1 E-9	1.7 E-7	NA	1.0 E-7	3.2 E-8	2.5 E-7	NA	7.0 E-7	NA	NA	NA	NA	NA	2.0 E-7	2.2 E-8	3.7 E-8	8.6 E-6

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk															
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform
Unit Hazard																	
Unit Risk																	
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-10	NA	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA	1.7 E-9	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA
52D-SP24-10	10	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	1.6 E-9
52D-SP25-10	10	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	1.1 E-9
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA	NA
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	6.5 E-10
52D-SP31-10	10	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA
52D-SP32-10	10	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-10	10	NA	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	1.4 E-9
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP37-10	10	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	5.1 E-10
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	1.0 E-9
52D-SP43-10	10	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	5.6 E-10
AW-08D-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	2.6 E-8
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	NA	NA
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-10	NA	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-10	NA	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	1.5 E-10
52D-SP24-20	20	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	3.5 E-10
52D-SP25-20	20	NA	6.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	5.6 E-10
52D-SP27-20	20	NA	8.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	2.8 E-10
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	1.3 E-9	NA
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	6.9 E-10	1.9 E-10
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	4.0 E-10
52D-SP32-20	20	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	7.9 E-10
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10
52D-SP36-20	20	NA	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-20	20	NA	7.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	7.0 E-10
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA
52D-SP43-20	20	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	4.0 E-10
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	5.6 E-10
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	4.2 E-9

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk															
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**
Unit Hazard																	
Unit Risk																	
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	3.7 E-10
D(c)-SP09-20	20	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	6.8 E-9
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	6.8 E-9
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	9.1 E-11	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	NA	4.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-11	NA	NA	NA	5.9 E-10
52D-SP27-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	1.5 E-10
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	8.1 E-10
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	3.7 E-12	NA	NA	3.5 E-10	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	3.0 E-9
52D-SP36-30	30	NA	7.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10
52D-SP37-30	30	NA	8.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-11	NA	NA	NA	NA
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	NA	7.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA
52D-SP43-30	30	NA	5.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8
52D-SP44-40	40	NA	3.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-10	NA	NA	NA	NA

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	Depth	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Heptane	Hexachlorobutadiene	Hexane	m,p-Xylene	o-Xylene	Styrene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Vinyl Chloride	ILCR
Unit Hazard																			
Unit Risk																			
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA	NA	9 E-10
08D-SP08-10	10	NA	NA	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-10	1.4 E-11	NA	NA	NA	6 E-9
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
52D-SP24-10	10	NA	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	4.8 E-11	NA	4.9 E-9	NA	8 E-9
52D-SP25-10	10	NA	NA	NA	3.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	3.7 E-9	NA	6 E-9
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	3.4 E-9	NA	4 E-9
52D-SP29-10	10	NA	NA	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-10	NA	NA	8.0 E-9	NA	1 E-8
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	1.5 E-9	NA	3 E-9
52D-SP31-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	1.3 E-9	NA	2 E-9
52D-SP32-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-10	NA	NA	2.4 E-9	NA	3 E-9
52D-SP33-10	10	NA	NA	NA	3.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	7.2 E-11	NA	8.6 E-10	NA	4 E-9
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	2.7 E-11	NA	8 E-10
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	NA	NA	NA	6 E-10
52D-SP37-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	5.2 E-11	NA	5.6 E-11	NA	7 E-10
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	4.8 E-11	NA	NA	NA	6 E-10
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	NA	2 E-10
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	4.8 E-11	NA	4.0 E-11	NA	7 E-10
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-10	1.6 E-11	NA	7.4 E-11	NA	2 E-9
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	1.6 E-11	NA	3.7 E-11	NA	2 E-9
52D-SP43-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	1.0 E-9	NA	3 E-9
AW-08D-SP10-10	10	NA	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	6.8 E-11	NA	2 E-9
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	3.4 E-9	NA	5 E-9
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	1.0 E-9	NA	NA	1.3 E-10	NA	5 E-9
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	9 E-11
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	1.9 E-11	NA	NA	NA	1 E-9
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	3 E-8
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	1.3 E-10	NA	7 E-10
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-11	NA	NA	NA	2 E-9
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	2 E-11
D(c)-SP11-10	10	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-11	2.9 E-11	NA	NA	NA	2 E-9
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-10	1.9 E-11	NA	3.7 E-11	NA	1 E-9
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	1 E-9
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	3 E-10
52D-SP24-20	20	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	NA	NA	6.6 E-10	NA	1 E-9
52D-SP25-20	20	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	1.5 E-9	NA	2 E-9
52D-SP27-20	20	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	2.5 E-10	NA	9 E-10
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-11	NA	2 E-9
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-11	NA	NA	9.6 E-10	NA	2 E-9
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	1.9 E-9	NA	3 E-9
52D-SP32-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	9 E-10
52D-SP33-20	20	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	3.7 E-10	NA	2 E-9
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	1.9 E-11	NA	6 E-10
52D-SP36-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	3.1 E-10	2.0 E-10	9 E-10
52D-SP39-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-12	NA	4.9 E-11	NA	1 E-9
52D-SP40-20	20	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	7.2 E-11	NA	3.5 E-11	NA	9 E-10
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	2.8 E-11	NA	1.1 E-11	NA	3 E-10
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-11	2.6 E-11	NA	1.2 E-11	NA	5 E-10
52D-SP43-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	4.3 E-10	NA	1 E-9
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
AW-08D-SP10-20	20	NA	NA	NA	9.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	1 E-9
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	4.8 E-10	NA	1 E-9
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	1 E-10
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	2.0 E-11	NA	NA	NA	9 E-10
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	5 E-9

Table 5.2-53
Location-Specific Risk Soil Vapor to Outdoor Air Assessment Results - Outdoor Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	**Depth**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																			
Unit Risk																			
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	3 E-11
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-11	NA	1.9 E-11	NA	9 E-10
D(c)-SP09-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	1.1 E-11	NA	7 E-9
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	2.6 E-11	NA	8.2 E-11	NA	3 E-10
D(c)-SP11-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	2.0 E-11	NA	7 E-9
D(c)-SP12-20	20	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	3.6 E-11	NA	4.3 E-11	NA	1 E-9
52D-SP40-28	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-11	6.5 E-11	NA	2.0 E-11	NA	5 E-10
52D-SP24-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
52D-SP25-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	1.9 E-9	NA	3 E-9
52D-SP27-30	30	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-12	NA	1.1 E-11	NA	4 E-10
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	2.7 E-10	NA	1 E-9
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
52D-SP35-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	1.3 E-11	NA	3.2 E-11	NA	4 E-9
52D-SP36-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	1.0 E-11	NA	2.6 E-10	2.4 E-10	9 E-10
52D-SP37-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-11	1.3 E-11	NA	2.6 E-11	NA	2 E-10
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	1.7 E-11	NA	NA	NA	4 E-11
52D-SP42-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	1.1 E-10	NA	8.5 E-9	1.6 E-10	1 E-8
52D-SP43-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	6.0 E-11	NA	9 E-11
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	7.2 E-12	NA	NA	NA	4 E-11
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-11	5.8 E-12	NA	1.3 E-9	NA	1 E-8
52D-SP44-40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-12	1.0 E-10	9 E-10

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.2-16) x the unit hazard or unit risk for the chemical).

Table 5.2-54 *Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker*
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Antimony	1.0 E+0	2.4 E-3	0.0 E+0	3.6 E-7	2.4 E-3	NA	NA	NA	NA
Cadmium	1.0 E+0	9.8 E-4	2.6 E-4	1.4 E-7	1.2 E-3	NA	NA	7.7 E-10	7.7 E-10
Chromium	1.0 E+0	6.5 E-7	NA	9.6 E-11	6.5 E-7	NA	NA	NA	NA
Chromium VI	1.0 E+0	3.3 E-4	0.0 E+0	6.5 E-5	3.9 E-4	NA	NA	2.6 E-8	2.6 E-8
Copper	1.0 E+0	2.6 E-5	0.0 E+0	3.9 E-9	2.6 E-5	NA	NA	NA	NA
Iron	1.0 E+0	1.4 E-6	0.0 E+0	NA	1.4 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	3.3 E-3	0.0 E+0	1.7 E-6	3.3 E-3	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.0 E-4	0.0 E+0	2.9 E-8	2.0 E-4	NA	NA	NA	NA
Nickel	1.0 E+0	4.9 E-5	0.0 E+0	1.0 E-5	5.9 E-5	NA	NA	NA	NA
Perchlorate	1.0 E+0	1.4 E-3	0.0 E+0	NA	1.4 E-3	NA	NA	NA	NA
Silver	1.0 E+0	2.0 E-4	0.0 E+0	2.9 E-8	2.0 E-4	NA	NA	NA	NA
Zinc	1.0 E+0	3.3 E-6	0.0 E+0	4.8 E-10	3.3 E-6	NA	NA	NA	NA
Semivolatile Organic Compounds									
Anthracene	1.0 E+0	3.3 E-6	2.8 E-6	4.8 E-10	6.1 E-6	NA	NA	NA	NA
Benzo (a) anthracene	1.0 E+0	NA	NA	NA	NA	2.6 E-7	2.2 E-7	3.8 E-11	4.7 E-7
Benzo (a) pyrene	1.0 E+0	NA	NA	NA	NA	4.2 E-6	3.6 E-6	2.0 E-10	7.8 E-6
Benzo (b & k) fluoranthene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Benzo (b) fluoranthene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Benzo (ghi) perylene	1.0 E+0	3.3 E-5	2.8 E-5	4.8 E-9	6.1 E-5	NA	NA	NA	NA
Chrysene	1.0 E+0	NA	NA	NA	NA	4.2 E-8	3.6 E-8	2.0 E-12	7.8 E-8
Dibenz (a,h) anthracene	1.0 E+0	NA	NA	NA	NA	2.6 E-6	2.2 E-6	2.1 E-10	4.7 E-6
Di-n-butyl phthalate	1.0 E+0	9.8 E-6	6.5 E-6	1.4 E-9	1.6 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	3.6 E-9	4.5 E-5	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
PCB-1254	1.0 E+0	4.9 E-2	4.5 E-2	7.2 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
PCB-1260	1.0 E+0	4.9 E-2	4.5 E-2	7.2 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
Phenanthrene	1.0 E+0	3.3 E-5	2.8 E-5	4.8 E-9	6.1 E-5	NA	NA	NA	NA
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	2.5 E-9	5.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	3.3 E-5	2.8 E-5	4.8 E-9	6.1 E-5	NA	NA	NA	NA
Volatile Organic Compounds									
1,1,2,2-Tetrachloroethane	1.0 E+0	1.6 E-5	0.0 E+0	2.3 E-4	2.5 E-4	9.4 E-8	0.0 E+0	9.9 E-7	1.1 E-6

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.2-55 Inhalation Hazard and Unit Cancer Risk Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Outdoor Vapor Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 E+0	1.4 E-1	NA
1,1-Dichloroethane	1.0 E+0	9.8 E-1	4.0 E-4
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,4-Dichlorobenzene	1.0 E+0	8.5 E-1	1.5 E-3
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
2-Propanol	1.0 E+0	7.5 E+1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Bromodichloromethane	1.0 E+0	9.8 E+0	9.1 E-3
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Carbon Tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Cyclohexane	1.0 E+0	1.2 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Ethylbenzene	1.0 E+0	6.7 E-1	6.1 E-4
Freon 11	1.0 E+0	3.4 E+0	NA
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexachlorobutadiene	1.0 E+0	2.0 E+2	5.5 E-3
Hexane	1.0 E+0	9.8 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Styrene	1.0 E+0	7.5 E-1	NA
Tetrachloroethene	1.0 E+0	2.0 E+1	1.5 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	4.8 E-4
Toluene	1.0 E+0	2.3 E+0	NA
Trichloroethene	1.0 E+0	1.1 E+0	4.9 E-4
Vinyl Chloride	1.0 E+0	6.7 E+0	1.9 E-2

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (mg/kg)																													
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.5 E-4	6.1 E-6	2.4 E-3	NA	NA	NA	NA	6.1 E-5	1.2 E-3	6.5 E-7	3.9 E-4	NA	2.6 E-5	NA	1.6 E-5	4.5 E-5	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.9 E-5	9.4 E-2	9.4 E-2	1.4 E-3	6.1 E-5	5.4 E-6	6.1 E-5	2.0 E-4	3.3 E-6
Unit Risk		1.1 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.7 E-10	NA	2.6 E-8	7.8 E-8	NA	4.7 E-6	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA	NA
05D-SNS06	0									7.4	408			98					20100	126	0.678		46							21	339
08D-GS02	0										61			27		3.8			22600	12			47								72.6
D(b)-SD01	0		0.0054	0.66	0.013	0.021	0.075			9.3	36		0.038	32			0.073			29	0.098	3.2	23		0.17		0.052		0.057	9.4	3600
05D-SNS01	0.01									1.4	121			119					17100	106	0.536		28							16	430
05D-SNS02	0.01									9.6	2030			196					13800	210	1.32		55							86	996
05D-SNS03	0.01									6.4	437			165					16300	134	31.1		82							8.5	655
05D-SNS04	0.01									12	2140			365					18100	285	1.62		193							160	1400
05D-SNS05	0.01									4.0	191			100					12700	60	0.369		71							3.9	781
05D-SNS06	0.01									7.4	408			98					20100	98	0.678		46							4.7	339
06D-SNS01	0.01			26.2						11	10100			497					37700	26			1470								6410
06D-SNS02	0.01										279			42					19800	7.3			75								206
06D-SNS03	0.01										210			32					20400	10			52								143
06D-SNS04	0.01			8.7						4.8	3380			169					26800	17	0.106		577								1530
06D-SNS05	0.01										84			35					23300	16			35							1.5	60.8
08D-GS01	0.01									5.1	31			57					6330	17	0.57		17							77	128
08D-GS02	0.01										65			33		3.8			22600	14			53								72.6
08D-SNS02	0.01									1.1	69			47					45200	16	0.151		78							1.86	63.4
09D-SNS01	0.01										73			40					37000	15			46								47.7
09D-SNS02	0.01										50			27					24200	15	0.133		27								49.4
09D-SNS03	0.01										38			27					18600	39			24								66.8
09D-SNS04	0.01										34			14					15300	9.1	0.102		19								66.8
12D-CS01	0.01									1.4	89			44					29200	33			40							2.4	141
12D-CS02	0.01										78			50					14300	23	0.125		22							8.2	119
12D-SNS01	0.01			6.95						1.6	121			41					24100	38	0.154		32							3.8	271
12D-SNS02	0.01			5.95							36			22					24700	10			25								37.9
12D-SNS03	0.01			6.76							81			30					24600	11			32							2.6	82.8
12D-SNS04	0.01										69			37					24100	25			32							2.5	78.8
12D-SNS05	0.01			6.09						1.2	85			61					30600	42	0.236		43							4.0	185
12D-SNS06	0.01										28			14					14800	11			16								59.9
12D-SNS07	0.01										46			26					20300	29			24							1.1	107
D(C)-GS01	0.01										24			14					10900				23							1.8	25.2
09D-SD01	0.25			0.11						0.55	32	0.088		22						5.1	0.015	0.86	26								64
D(d)-SD01	0.25			2.8						1.0	46			150						120	0.39	1.6	28							0.27	1100
05D-SNS08	0.5			0.33						1.5	64	1.3	0.031	54			0.029			70	0.34	0.55	36				0.012		0.049	8.5	510
05D-SNS09	0.5		0.0068	0.15	0.068	0.089	0.23		0.019	1.6	58		0.088	49	0.0068		0.14	0.02		18	0.33	5.9	40				0.038		0.14	1.2	100
05D-SNS10	0.5			0.96						5.8	170	7.8		32						100	0.15	0.56	37							0.62	190
05D-SNS11	0.5			0.15						3.9	76	0.25		28			0.005			15	0.035	0.2	25							0.37	220
05D-SNS12	0.5			0.36						42	160	3.6		50						34	0.29	1.0	40							0.65	360
05D-SNS13	0.5		0.0036	1.1	0.019	0.026	0.097		0.016	54	1800	2.1	0.038	230			0.057	0.01		140	1.3	2.4	150				0.02		0.077	49	1400
05D-SNS14	0.5			1.6	0.016	0.032	0.096		0.0076	2.5	130	0.96	0.035	130			0.033	0.0073		50	2.2	9.7	48				0.011		0.024	2.1	480
05D-SNS15	0.5		0.0037	0.62	0.020	0.041	0.16	0.13	0.026	16	2300	0.91	0.074	540			0.089	0.018		260	2.0	15	250				0.028		0.11	42	1400
05D-SNS16	0.5			0.31	0.047		0.26		0.086	4.6	49	0.11	0.17	88			0.15			65	0.69	0.9	29				0.058		0.36	4.4	2100
05D-SNS17	0.5			0.52						5.6	460	0.86		110						130	0.11	0.56	49							18	460
05D-SNS18	0.5			0.89	0.009	0.014	0.038			1.7	61	0.21	0.019	76			0.021			48	0.23	0.87	44		0.1		0.0077		0.028	0.61	250
05D-SNS19	0.5			0.48						1.2	72	0.53		62						41	0.34	0.55	50								290
05D-SNS20	0.5			0.74						1.8	140			94						150	0.45	2.5	47							33	790
06D-SNS06	0.5			7.5						12	19000	0.046		620			0.0021			100	0.45	44	1500							2.2	5000
06D-SNS07	0.5			49						33	43000		0.0049	960			0.0027			640	1.4	70	1600							11	4600
06D-SNS08	0.5									16	27000		0.0096	620			0.0074			300	1.2	43	1300				0.0052			6.1	3600
06D-SNS09	0.5			0.4						0.73	48	0.17		32						4.4	0.082	0.23	25							0.63	44
06D-SNS10	0.5			0.3						0.70	68	0.20		30						6.7	0.34	0.43	33							0.60	45
06D-SNS11	0.5			0.19						0.83	70	0.074		34						6.9	0.051	0.44	28							0.35	49
08D-SB02	0.5		0.011		0.022	0.02	0.031		0.0081	1.2	37	0.065	0.023	23			0.039	0.0084		5.1	0.084	0.73	25	0.27			0.037		0.037	22	56
08D-SB03	0.5			0.16						0.51	61	0.31		30						9.0	0.021	0.56	48			0.099					42
08D-SNS01	0.5			0.18						0.62	65	0.32		40			0.0025			13	0.019	0.41	45							0.37	80
09D-SNS05	0.5			0.46						2.5	170	0.21		60			0.0045			24	0.16	1.0	52							3.8	170
09D-SNS06	0.5			0.31						0.44	33	0.85		27						13		0.18	20								94
12D-SNS08	0.5			0.39						0.52	47	0.64		20						9.9		0.24	24								76
12D-SNS09	0.5									0.15	67	1.8		26						13	0.02		42							0.94	76
52D-SB09	0.5									0.29	27	0.26		9.5						2.0		0.19	37					0.22			27
52D-SB16	0.5									0.75	34			33						6.8			27					0.3			71
52D-SNS01	0.5			1.3						1.4	280	7.3	0.0051	28			0.0024			130	0.16	1.4	26							0.46	96
52D-SNS02	0.5			2.0						3.6	130	2.2	0.0056	45			0.0064			36	0.17	1.0	68				0.0044				230
52D-SNS03	0.5			0.24	0.0051		0.014			0.72	34	0.11	0.036	32			0.0056			5.6	0.012	0.63	27				0.013		0.015		63
52D-SNS04	0.5			0.087						0.96	29	0.18		24			0.0046			6.5	0.01	0.16	16				0.0027				92
52D-SNS05	0.5																			5.7											
D(c)-SNS01	0.5			0.40						0.55	65	0.55		31						8.8		0.57	57								48
05D-SB01	1			0.097						0.53	28	0.13		29						7.7	0.056	0.49	21	0.076				1.4			53
05D-SB02	1			0.76						0.35	37	7.5		26						4.4	1.0	1.0	31								28

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (mg/kg)																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc
Unit Hazard		2.5 E-4	6.1 E-6	2.4 E-3	NA	NA	NA	NA	6.1 E-5	1.2 E-3	6.5 E-7	3.9 E-4	NA	2.6 E-5	NA	1.6 E-5	4.5 E-5	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.9 E-5	9.4 E-2	9.4 E-2	1.4 E-3	6.1 E-5	5.4 E-6	6.1 E-5	2.0 E-4	3.3 E-6
Unit Risk		1.1 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.7 E-10	NA	2.6 E-8	7.8 E-8	NA	4.7 E-6	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA	NA
05D-SB03	1			3.5						190	5300			260						330	2.2	14	130							200	700
05D-SB04	1									1.7	92			36						8.5	0.51	2.3	38								58
05D-SB05	1									0.4	65			49						16.8	0.1	0.27	45							0.33	71
05D-SB06	1			0.16						9.6	670	0.61		66						30.1	0.24	0.98	49	2.5						16	173
05D-SB07	1									2.6	197	0.41		39						14.6	0.1	0.41	34		0.8					3.5	98
05D-SB08	1									0.15	47	0.091		34						8.5	0.28	0.24	43								40
05D-SB09	1									0.24	48	0.061		26						7.8	0.069	0.33	32	0.61						1.2	46
05D-SB10	1									0.24	88	0.14		71						14.8	0.3	0.23	79	0.046						1.4	66
06D-SB02	1									0.64	50	0.22		29						7	0.091	1.0	32								39
06D-SB06	1			0.19						3.3	290			49						26	0.17	1.5	39							3.8	130
08D-AH01	1										57			25		0.865			20000	11.6		2.25	41.7								41
08D-SB01	1									0.65	74	0.56		30						7.3	0.017	0.56	66								45
08D-SB04	1			0.19						0.56	60	0.49		29						9.9	0.021	0.68	45								47
08D-SB05	1			0.20						0.5	54	0.49		22						8.8	0.0099	0.53	31			0.031					41
08D-SB06	1										49	0.49		20						7.9	0.19	0.41	31			0.078					37
52D-AH01	1															0.771															
52D-AH02	1															3.2															
52D-FCS-SB01	1										22			16.1		0.758			22900	6.4			22								44
52D-SB01	1			5.5							40			31.6		1.61			41400	9.0			27							1.1	84
52D-SB02	1									14	3040			152		1.48			42800	45	3.6		2090							2.1	379
52D-SB04	1			0.045						0.39	31	0.15		32						6.2	0.006		17								48
52D-SB05	1			0.08						0.53	25			24						5.3	0.0096	0.25	19					0.82			50
52D-SB06	1									0.32	30			8.3							0.0039	0.21	37								27
52D-SB07	1																														
52D-SB08	1			0.12						0.46	29	0.21		20						3.7	0.02		29								36
52D-SB10	1			0.16							39	0.49		14						4.7	0.0084	0.43	36					0.25			300
52D-SB11	1			0.43						1.2	110	2.9		34						37	0.094	1.0	25					0.64			120
52D-SB13	1			0.23							57	0.43		55						6.2	0.011	2.1	31								47
52D-SB14	1			0.093						0.51	22	0.081		24						5.2			19					1.9			49
52D-SB15	1			0.14						0.62	52	0.24		37						6.0	0.022	0.55	34					2.0			53
52D-SB17	1			0.2						0.60	61	0.18		38						6.6	0.014	0.3	32								40
AW-AF1-SB01	1									0.50	50	0.094		25						6.2		0.24	21							0.20	75
AW-AF1-SB02	1			0.21							26	0.071		21						4.0	0.02	0.27	17								41
AW-AF1-SB03	1			0.15							39	0.075		28						5.2	0.022	0.95	26								44
AW-AF2-SB01	1			0.22					0.013		52		0.0078	58						6.7	0.059	0.75	46								47
AW-AF2-SB02	1			0.15							51			22						10	0.022	0.45	33								43
D(b)-SB01	1			0.14						0.34	34	0.20		26						3.3	0.066	0.55	27					0.11			31
D(b)-SB02	1			1.6						1.0	60	0.20		40						7.6	0.018	2.4	29					1.1			100
D(b)-SB03	1			0.30						1.1	92	0.42	0.0061	65			0.0019			13	0.14	0.79	70				0.0053	0.36			75
D(b)-SB04	1		0.0052		0.049	0.059	0.12						0.064				0.052	0.0081									0.022		0.061		
D(b)-SB05	1			0.092						0.53	29	0.063		26						6.1	0.021		22				0.004	4.5			55
D(C)-SB01	1										56			26		2.08			22100	12			40								46.5
D(c)-SB02	1			0.18						0.68	53	0.50		29						19	0.076	0.55	36							6.7	60
D(c)-SB03	1									0.34	42	0.26		32						2.6		0.6	39								31
D(c)-SB04	1			0.19						0.47	60	0.41		30						7.6	0.016	0.78	39			0.011		0.42			39
D(c)-SB05	1			0.085	0.077	0.1	0.2		0.064	0.44	43	0.61	0.11	24	0.018		0.089	0.059		9.3	0.049	0.36	29				0.022		0.097		180
DC-AH01	1										56			26		2.1			22100	12			40								47
06D-SB03	1.5									0.13	41	0.13		45						7.4	0.077	1.1	40							0.075	45
06D-SB04	1.5			0.22						0.18	42	0.13		60						14	0.29	0.82	72							0.15	55
06D-SB05	1.5			0.56						15	210	1.6		69						80	0.72	5	83							1.8	79
09D-SD01	1.5			0.23						0.52	64	0.39		24						7.5	0.02	0.21	26								39
52D-SB07	1.5									0.77	31			27						6.8		0.17	27								56
05D-SNS01	2.5									2.63	43			37					16600	12.4			29							1.73	144
05D-SNS08	2.5			0.32						1.5	72	1.8		67			0.016			67	0.48	0.71	32							24	320
05D-SNS09	2.5			0.067						0.97	36	0.21		33						8.9	0.1	4.6	26							2.0	74
05D-SNS10	2.5			0.13						0.88	43	0.23		30						5.8	0.014	0.61	25								59
05D-SNS11	2.5			0.25						6.4	96	4.9		33						20	0.18	0.61	30							0.5	110
05D-SNS12	2.5			0.17						4.1	960	0.14		110						76	0.009	5.1	30							0.63	230
05D-SNS13	2.5			0.27			0.019			15	380	1.2	0.0082	70			0.012			29	0.34	1.1	53				0.0041		0.015	22	350
05D-SNS14	2.5			1.0						9.4	1800	0.82		600						120	2.8	5.0	58							9.8	690
05D-SNS15	2.5			0.36						6.3	150	0.87		81						110	0.11	2.4	120							8.7	180
05D-SNS16	2.5				0.0049	0.007	0.03		0.0095	3.9	82	0.63	0.02	65			0.015			76	0.15	1.6	39				0.0091		0.03	3.9	2000
05D-SNS17	2.5									2.3	58	0.44		32						10	0.069	0.21	35							1.1	91
05D-SNS18	2.5			0.51						1.0	53	0.43		73			0.0024			62	0.18	0.45	36		0.065						180
05D-SNS19	2.5			0.29						0.72	51	0.46		34						9.9	0.041	0.6	28								90
05D-SNS20	2.5									0.41	36			33						4.3	0.045	0.52	36							0.9	50
06D-SNS01	2.5										480			44					21000	14.2			70								160
06D-SNS06	2.5			2.3						3.0	4500			95						32	0.58	4.7	170							1.1	460
06D-SNS07	2.5			5.3						3.7	5700			150						57	0.16	7.3	300							1.1	790

		Concentration (mg/kg)																													
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.5 E-4	6.1 E-6	2.4 E-3	NA	NA	NA	NA	6.1 E-5	1.2 E-3	6.5 E-7	3.9 E-4	NA	2.6 E-5	NA	1.6 E-5	4.5 E-5	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.9 E-5	9.4 E-2	9.4 E-2	1.4 E-3	6.1 E-5	5.4 E-6	6.1 E-5	2.0 E-4	3.3 E-6
Unit Risk		1.1 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.7 E-10	NA	2.6 E-8	7.8 E-8	NA	4.7 E-6	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA	NA
06D-SNS08	2.5			1.6						1.4	1000			58						12	0.11	2.4	100								270
06D-SNS09	2.5			0.25						0.49	47	0.098		31						4.7	0.041	0.54	32			1.3					35
06D-SNS10	2.5			0.21						0.39	35	0.26		20						4.9	0.027	0.81	23			0.53				0.33	30
06D-SNS11	2.5			0.39						1.0	75	0.05		31						8.4	0.059	0.87	28			1.9				0.45	60
08D-SNS01	2.5			0.18						0.63	77	0.36		42						10		0.41	60							0.40	71
09D-SNS05	2.5			0.72						1.7	98	0.15		41						12	0.096	0.76	40							1.6	84
09D-SNS06	2.5			0.56						0.64	69	0.36		38						9.9		0.55	39								53
12D-SNS08	2.5			0.36						1.7	54	0.24		35			0.004			12	0.042	0.28	31							0.45	94
12D-SNS09	2.5			0.22						0.18	64	0.9		29						14	0.049	0.69	37							2.6	75
52D-SNS01	2.5			0.64						0.72	47	0.35		37						5.5	0.54	8.3	29								56
52D-SNS02	2.5			0.85						0.84	56	1.3	0.0074	40			0.0042			9.0	0.032	0.43	31				0.0028				78
52D-SNS03	2.5			0.23						0.98	32	0.099		29						6.9	0.011		34								74
52D-SNS04	2.5			0.12						0.40	29	0.38		19						2.0	0.017	0.41	18							0.38	27
52D-SNS05	2.5																			6.4											
D(c)-SNS01	2.5			0.29						0.43	78	0.62		24						6.1		0.88	54								34
05D-SNS06	3										34			27					19600	5.1			21								38
09D-SNS01	3										43			19					21100	6.9			20								30
09D-SNS02	3										57			31					27400	9.1			32								44
09D-SNS03	3										59			31					26600	9.5	0.74		52								45
09D-SNS04	3										76			26					30400	9.4			38								51
12D-SNS01	3										39			20					27000	5.7			24							1.06	38
12D-SNS02	3										62			28					26500	5.1			30								52
12D-SNS03	3										77			37					21300	5.8			51							1.1	43
12D-SNS04	3										58			29					28100	7.3			34								51
12D-SNS05	3										42			29					26400	9.6			34								44
12D-SNS06	3										34			21					25700	6.7			25							1.36	50
12D-SNS07	3										24			14					17300	6.6	0.109		22								29
52D-AH03	3															1.02															
52D-SB09	4.5									0.44	40	0.41		20						4.0		0.29	47					0.62			44
05D-AH01	5										26			21		1.1			12800	6.42			21								30
05D-SB01	5			0.11						0.38	40	0.43		39						3.9	0.02	5.7	25					0.17			30
05D-SB02	5			0.15						25	1100	1.8		85						74	0.082	3.6	71							22	270
05D-SB03	5										27			24						3.5	0.026		21								29
05D-SB04	5										31			38						3.1	0.02		52								39
05D-SNS12	5			0.14						0.19	33			29						4.0	0.17	0.92	26							0.065	45
05D-SNS13	5			0.14						0.59	39	0.29		32						4.6	0.58	0.35	27							0.24	44
05D-SNS14	5			0.13						1.4	100	2.4		62						5.4	0.26	0.41	44							8.5	190
05D-SNS15	5			0.29						4.0	87	2.7		52						14	0.056	0.82	51							15	120
05D-SNS16	5			0.18						2.0	38	0.46		29						18	0.022	1.3	16							1.7	830
05D-SNS20	5									0.17	43			44						5.0	0.034	0.66	32							0.42	45
06D-SB02	5			0.96						0.94	820	430		51						14	0.043	2.5	87								210
06D-SB03	5									0.33	82	0.12		48						6.9	0.11	0.79	170							0.091	56
06D-SB04	5			0.13						0.11	27	0.11		30						4.6	0.028	0.81	34							0.10	38
06D-SB05	5			0.14						0.084	23	0.098		25						3.9	0.023	0.83	20							0.068	29
06D-SB06	5			0.19						0.15	32			37						3.4	0.019	1.2	25							0.086	34
08D-AH01	5										63			26		2.5			22300	13			54								39
08D-AH02	5										63			28		1.6			19600	11			65								42
08D-SB01	5									0.55	83	0.34		40						7.2	0.019	0.43	79								43
08D-SB02	5		0.0046		0.0099	0.0084	0.013			0.6	63	0.71	0.010	27			0.017			7.5	0.023	0.54	50	0.034			0.016		0.017	0.74	44
08D-SB03	5			0.22						0.61	68	0.37		29						10		0.51	49								48
08D-SB04	5			0.20						0.56	65	0.34		29						11	0.018	0.44	50								49
08D-SB05	5			0.14						0.34	54	0.3		31						4.9		0.52	38								28
08D-SB06	5									0.41	52	0.32		20						8.6		0.45	35			0.018					43
09D-SD01	5			0.31						0.57	72	0.47		33						8.6	0.023	0.47	36								48
52D-AH01	5															1.7															
52D-AH03	5	0.40																													
52D-SA-SB03	5									1.4	85			37		20			18600	8.8			26							1.17	53.3
52D-SB01	5			5.2							96			66		5.91			47200	12	0.332		81							1.07	61.1
52D-SB02	5										36			29					17400	6.9			20								33.4
52D-SB05	5			0.11						0.52	27			32						6.2	0.013	0.37	21								63
52D-SB06	5									0.82	31			34						8		0.22	28					0.27			73
52D-SB07	5		0.093		0.33	0.34	0.45		0.093	0.65	28		0.43	130			0.53	0.059		6.4	0.014	0.37	27				0.44		0.74		290
52D-SB08	5									0.29	33	0.18		11						2.3	0.015		39					2.4			29
52D-SB10	5			0.095							44	0.31		22						5.1	0.0094	0.52	37					3.6			100
52D-SB11	5			0.10						0.45	40	0.56		28						5.2	1.4	0.72	21								49
52D-SB13	5			0.10							41	0.23		31						3.4	0.033	1.6	24					0.55			33
52D-SB14	5			0.10							79			38						3.2	0.0082	0.69	70					0.73			32
52D-SB15	5			0.11						0.40	31	0.14		31						2.7	0.23	1.1	23				0.0024	0.61			31
52D-SB17	5			0.47						1.0	94	0.48		70						12	0.086	0.58	90							0.13	72

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (mg/kg)																													
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.5 E-4	6.1 E-6	2.4 E-3	NA	NA	NA	NA	6.1 E-5	1.2 E-3	6.5 E-7	3.9 E-4	NA	2.6 E-5	NA	1.6 E-5	4.5 E-5	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.9 E-5	9.4 E-2	9.4 E-2	1.4 E-3	6.1 E-5	5.4 E-6	6.1 E-5	2.0 E-4	3.3 E-6
Unit Risk		1.1 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.7 E-10	NA	2.6 E-8	7.8 E-8	NA	4.7 E-6	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA	NA
AW-AF1-SB01	5			0.15						0.27	46	0.37		28						5.7		2.4	20							0.13	34
AW-AF1-SB02	5			0.12							23	0.022		33						3.5	0.075	0.92	17								24
AW-AF1-SB03	5			0.13							17	0.081		19						2.3	0.02	0.61	11								20
AW-AF2-SB01	5			0.16							61			24						11	0.0090	0.58	43								48
AW-AF2-SB02	5			0.18							65			27						12	0.0098	0.56	46								51
D(b)-SB01	5			0.093						0.34	26			21						2.4	0.039	0.46	17								30
D(b)-SB02	5			0.14						0.45	33			33						3.5	0.06	0.2	25								35
D(b)-SB03	5			0.19						0.34	34			27						5.6	0.0039	1.5	22								37
D(b)-SB04	5				0.0086	0.0072	0.011						0.011				0.013										0.0048		0.014		
D(b)-SB05	5			0.20							55			40						4.5		0.3	27								40
D(C)-SB01	5										62			27		1.28			23000	13			49								42.1
D(c)-SB02	5			0.19						0.49	56	0.85		28						8.3	0.0038	0.72	33								43
D(c)-SB03	5									0.32	54	0.14		30						2.9		2.2	28							0.54	25
D(c)-SB04	5			0.20							70	0.63		27						8	0.0039	1.0	42								47
D(c)-SB05	5			0.11						0.51	51	0.35		22						8.9		0.4	35								41
DC-AH01	5										62			27		1.3			23000	13			49								42.1
52D-SB16	5.5									0.46	54			37						11			27					0.90			32
06D-SB01	6										31			26		1.1			14600	7.2			18								28.3
52D-FCS-SB01	7										42			25		0.67			21200	5.7			29								35.8
05D-AH01	10										27			37		1.8			15100	7.9			18								39.4
05D-SNS12	10										31			46						3.8	0.017	1.1	21							0.092	39
05D-SNS13	10									4.7	150	2.2		79						21	0.22	1.3	57							7.6	240
05D-SNS14	10									4.7	160	3.0		58						15	0.36	2.0	54							11	120
05D-SNS15	10			0.28						6.5	110	3.3		42						19	0.073	1.4	39							11	100
05D-SNS16	10			0.20						0.10	45	0.49		32						5.5	0.054	0.74	34							0.16	43
05D-SNS20	10			0.67						0.24	36			36						5.9	0.086		34							0.28	47
06D-SNS07	10			0.21						0.12	88	0.83		36						6.2	0.043	0.77	28							0.10	41
08D-AH02	10	0.40									29			56					22300				18								40.2
52D-AH02	10															5.0															
52D-SB01	10										40			31		0.715			21200	5.8	0.107		26								39.4
52D-SB02	10															1.11															
D(C)-SB01	10										52			25		1.95			17400	9.2			54								40.1
DC-AH01	10										52			25		2.0			17400	9.2			54								40.1
52D-SB09	10.5									0.53	21	0.27		30						7.1		0.20	17					0.26			62
D(c)-SB05	10.5			0.14							84	0.58		41						6.6	0.0063	0.84	53								36
05D-SB01	11			0.13						0.38	26	0.37		30						4.2	0.02	0.35	29					1.2			29
05D-SB02	11			0.74						0.30	49	0.45		27						3.8	0.028	1.1	28								33
06D-SB02	11									0.72	730	630		42						11	0.052	2.1	67								170
06D-SB03	11									0.14	42	0.16		47						8.2	0.043	0.85	47							0.096	63
06D-SB04	11			0.17						0.12	35	0.10		38						6.1	0.048	0.55	31							0.093	31
06D-SB05	11			0.15						0.11	34	0.10		37						4.7	0.025	0.62	42							0.081	41
06D-SB06	11			0.063						0.099	39			35						3.4	0.026	0.32	39							0.052	32
08D-SB01	11									0.45	69	0.26		41						4.6	0.019	2.0	42			0.058				0.42	35
08D-SB02	11									0.71	85	0.40		48						5.5	0.01	3.1	71							1.4	45
08D-SB05	11			0.22							46	0.37		37						3.4		2.0	32								24
08D-SB06	11											0.40																			
52D-SB05	11			0.096							37			34						5.4		0.43	21								36
52D-SB06	11									0.8	31	0.36		33						5.3	0.0032	0.24	28					0.42			54
52D-SB07	11									0.78	38	0.31		46						8.7			25					0.72			78
52D-SB08	11			0.12						0.35	37	0.30		42						2.9	0.10	0.66	25					0.44			36
52D-SB10	11			0.23							550	720		58						16	0.011	9.2	77					0.53			110
52D-SB11	11			0.14							24	0.14		29						3.1	0.014	0.72	17								30
52D-SB12	11			0.081							42	0.35		26						5.0	0.027	6.3	16								39
52D-SB13	11			0.11							37	0.16		27						4.8	0.0072	0.88	33					0.15			38
52D-SB14	11			0.10						0.33	24			23						2.9	0.021	0.26	20								32
52D-SB15	11			0.19						0.44	33	0.15		25						3.1	0.024	0.19	25								28
52D-SB17	11			0.16						0.55	47	0.28		38						5.5	0.034	0.25	34								41
AW-AF1-SB01	11			0.094						0.12	33	0.15		22						4.9		1.0	20							0.16	45
AW-AF1-SB02	11			0.11							22	0.035		21						2.9	0.015	0.8	14								25
AW-AF1-SB03	11			0.23							51	1.1		39						7.4	0.011	1.3	35								43
AW-AF2-SB01	11										52			20						8.5		0.41	35								36
AW-AF2-SB02	11										51			22						8.2		0.53	43								41
D(b)-SB02	11									0.5	40			35						5.8	0.14		30								46
D(b)-SB03	11			0.17						0.41	40			31						3.5	0.50	0.52	30					0.16			33
D(b)-SB04	11												0.0043				0.0036														
D(b)-SB05	11			0.29						0.48	35			30						3.6	0.064	0.28	31								40
D(c)-SB02	11											0.70																			
D(c)-SB03	11									0.25	57	0.023		28						2.1		5.4	29							0.5	25
D(c)-SB04	11			0.16							60	0.52		32						6.4	0.0077	0.63	43								48

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (mg/kg)																												
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**
Unit Hazard		2.5 E-4	6.1 E-6	2.4 E-3	NA	NA	NA	NA	6.1 E-5	1.2 E-3	6.5 E-7	3.9 E-4	NA	2.6 E-5	NA	1.6 E-5	4.5 E-5	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	5.9 E-5	9.4 E-2	9.4 E-2	1.4 E-3	6.1 E-5	5.4 E-6	6.1 E-5	2.0 E-4	3.3 E-6
Unit Risk		1.1 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.7 E-10	NA	2.6 E-8	7.8 E-8	NA	4.7 E-6	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	NA	NA	NA	NA	NA
08D-SB03	11.5			0.17							76	0.52		42						7.6	0.0098	0.87	73								68
08D-SB04	11.5			0.067							22	0.52		16						5.8		0.86	14								14
08D-SB05	11.5																														
08D-SB06	11.5																									0.027					
52D-SB16	11.5									0.24	21			33						2.8		0.28	18								24

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
05D-SNS06	0	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-3	2.7 E-4	NA	NA	2.6 E-3	NA	NA	NA	NA	2.8 E-2	NA	2.2 E-3	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	4.1 E-3	1.1 E-3	5.0 E-2
08D-GS02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	7.1 E-4	NA	6.2 E-5	NA	NA	3.2 E-2	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	3.5 E-2
D(b)-SD01	0	NA	3.3 E-8	1.6 E-3	NA	NA	NA	NA	NA	1.2 E-2	2.3 E-5	NA	NA	8.5 E-4	NA	NA	3.3 E-6	NA	NA	NA	3.2 E-4	6.3 E-4	1.4 E-3	NA	1.6 E-2	NA	3.2 E-6	NA	3.5 E-6	1.8 E-3	1.2 E-2	4.6 E-2
05D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	7.9 E-5	NA	NA	3.1 E-3	NA	NA	NA	NA	2.4 E-2	NA	1.7 E-3	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	3.2 E-3	1.4 E-3	3.7 E-2
05D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	1.3 E-3	NA	NA	5.2 E-3	NA	NA	NA	NA	1.9 E-2	NA	4.3 E-3	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	1.7 E-2	3.2 E-3	6.5 E-2
05D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-3	2.9 E-4	NA	NA	4.4 E-3	NA	NA	NA	NA	2.3 E-2	NA	1.0 E-1	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	1.7 E-3	2.1 E-3	1.5 E-1
05D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	1.4 E-3	NA	NA	9.7 E-3	NA	NA	NA	NA	2.5 E-2	NA	5.3 E-3	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	3.1 E-2	4.6 E-3	1.0 E-1
05D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-3	1.2 E-4	NA	NA	2.6 E-3	NA	NA	NA	NA	1.8 E-2	NA	1.2 E-3	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	7.6 E-4	2.5 E-3	3.4 E-2
05D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-3	2.7 E-4	NA	NA	2.6 E-3	NA	NA	NA	NA	2.8 E-2	NA	2.2 E-3	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	9.2 E-4	1.1 E-3	4.7 E-2
06D-SNS01	0.01	NA	NA	6.4 E-2	NA	NA	NA	NA	NA	1.3 E-2	6.6 E-3	NA	NA	1.3 E-2	NA	NA	NA	NA	5.3 E-2	NA	NA	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	2.6 E-1
06D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	1.1 E-3	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	3.4 E-2
06D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	8.5 E-4	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	3.3 E-2
06D-SNS04	0.01	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	5.9 E-3	2.2 E-3	NA	NA	4.5 E-3	NA	NA	NA	NA	3.7 E-2	NA	3.5 E-4	NA	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	5.0 E-3	1.1 E-1
06D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	9.1 E-4	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	2.9 E-4	2.0 E-4	3.6 E-2
08D-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3	2.0 E-5	NA	NA	1.5 E-3	NA	NA	NA	NA	8.8 E-3	NA	1.9 E-3	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	1.5 E-2	4.2 E-4	3.5 E-2
08D-GS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	8.8 E-4	NA	6.2 E-5	NA	NA	3.2 E-2	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	3.6 E-2
08D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	4.5 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	6.3 E-2	NA	4.9 E-4	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	2.1 E-4	7.1 E-2
09D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	5.2 E-2	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	5.6 E-2
09D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	7.1 E-4	NA	NA	NA	NA	3.4 E-2	NA	4.3 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	3.7 E-2
09D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	7.1 E-4	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	2.8 E-2
09D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	3.7 E-4	NA	NA	NA	NA	2.1 E-2	NA	3.3 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	2.3 E-2
12D-CS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.8 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	4.1 E-2	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	4.7 E-4	4.6 E-4	4.7 E-2
12D-CS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	2.0 E-2	NA	4.1 E-4	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.6 E-3	3.9 E-4	2.5 E-2
12D-SNS01	0.01	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	2.0 E-3	7.9 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	3.4 E-2	NA	5.0 E-4	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.5 E-4	8.8 E-4	5.8 E-2
12D-SNS02	0.01	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	5.8 E-4	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	5.1 E-2
12D-SNS03	0.01	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	7.8 E-4	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	5.0 E-4	2.7 E-4	5.4 E-2
12D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	9.7 E-4	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	4.9 E-4	2.6 E-4	3.7 E-2
12D-SNS05	0.01	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	1.5 E-3	5.6 E-5	NA	NA	1.6 E-3	NA	NA	NA	NA	4.3 E-2	NA	7.7 E-4	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	7.9 E-4	6.0 E-4	6.6 E-2
12D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	3.7 E-4	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	2.2 E-2
12D-SNS07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	6.9 E-4	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	2.2 E-4	3.5 E-4	3.1 E-2
D(C)-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	3.7 E-4	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	3.4 E-4	8.2 E-5	1.7 E-2
09D-SD01	0.25	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	6.8 E-4	2.1 E-5	3.4 E-5	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	4.9 E-5	1.7 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	3.5 E-3
D(d)-SD01	0.25	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	1.2 E-3	3.0 E-5	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	3.1 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	5.3 E-5	3.6 E-3	1.9 E-2
05D-SNS08	0.5	NA	NA	8.1 E-4	NA	NA	NA	NA	NA	1.9 E-3	4.2 E-5	5.1 E-4	NA	1.4 E-3	NA	NA	1.3 E-6	NA	NA	NA	1.1 E-3	1.1 E-4	2.1 E-3	NA	NA	NA	7.3 E-7	NA	3.0 E-6	1.7 E-3	1.7 E-3	1.1 E-2
05D-SNS09	0.5	NA	4.1 E-8	3.7 E-4	NA	NA	NA	NA	1.2 E-6	2.0 E-3	3.8 E-5	NA	NA	1.3 E-3	NA	NA	6.4 E-6	NA	NA	NA	1.1 E-3	1.2 E-3	2.4 E-3	NA	NA	NA	2.3 E-6	NA	8.5 E-6	2.3 E-4	3.3 E-4	8.9 E-3
05D-SNS10	0.5	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	7.2 E-3	1.1 E-4	3.1 E-3	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	1.1 E-4	2.2 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	6.2 E-4	1.7 E-2
05D-SNS11	0.5	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	4.8 E-3	5.0 E-5	9.8 E-5	NA	7.4 E-4	NA	NA	2.3 E-7	NA	NA	NA	1.1 E-4	3.9 E-5	1.5 E-3	NA	NA	NA	NA	NA	NA	7.2 E-5	7.2 E-4	8.5 E-3
05D-SNS12	0.5	NA	NA	8.8 E-4	NA	NA	NA	NA	NA	5.2 E-2	1.0 E-4	1.4 E-3	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	9.5 E-4	2.0 E-4	2.4 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	1.2 E-3	6.0 E-2
05D-SNS13	0.5	NA	2.2 E-8	2.7 E-3	NA	NA	NA	NA	9.7 E-7	6.7 E-2	1.2 E-3	8.2 E-4	NA	6.1 E-3	NA	NA	2.6 E-6	NA	NA	NA	4.2 E-3	4.7 E-4	8.8 E-3	NA	NA	NA	1.2 E-6	NA	4.7 E-6	9.6 E-3	4.6 E-3	1.1 E-1
05D-SNS14	0.5	NA	NA	3.9 E-3	NA	NA	NA	NA	4.6 E-7	3.1 E-3	8.5 E-5	3.8 E-4	NA	3.4 E-3	NA	NA	1.5 E-6	NA	NA	NA	7.2 E-3	1.9 E-3	2.8 E-3	NA	NA	NA	6.7 E-7	NA	1.5 E-6	4.1 E-4	1.6 E-3	2.5 E-2
05D-SNS15	0.5	NA	2.2 E-8	1.5 E-3	NA	NA	NA	NA	1.6 E-6	2.0 E-2	1.5 E-3	3.6 E-4	NA	1.4 E-2	NA	NA	4.0 E-6	NA	NA	NA	6.5 E-3	2.9 E-3	1.5 E-2	NA	NA	NA	1.7 E-6	NA	6.7 E-6	8.2 E-3	4.6 E-3	7.4 E-2
05D-SNS16	0.5	NA	NA	7.6 E-4	NA	NA	NA	NA	5.2 E-6	5.7 E-3	3.2 E-5	4.3 E-5	NA	2.3 E-3	NA	NA	6.8 E-6	NA	NA	NA	2.3 E-3	1.8 E-4	1.7 E-3	NA	NA	NA	3.5 E-6	NA	2.2 E-5	8.6 E-4	6.9 E-3	2.1 E-2
05D-SNS17	0.5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	6.9 E-3	3.0 E-4	3.4 E-4	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	1.1 E-4	2.9 E-3	NA	NA	NA	NA	NA	NA	3.5 E-3	1.5 E-3	2.0 E-2
05D-SNS18	0.5	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	2.1 E-3	4.0 E-5	8.2 E-5	NA	2.0 E-3	NA	NA	9.5 E-7	NA	NA	NA	7.5 E-4	1.7 E-4	2.6 E-3	NA	9.4 E-3	NA	4.7 E-7	NA	1.7 E-6	1.2 E-4	8.2 E-4	2.0 E-2
05D-SNS19	0.5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.5 E-3	4.7 E-5	2.1 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	1.1 E-4	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	9.5 E-4	9.7 E-3
05D-SNS20	0.5	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	2.2 E-3	9.1 E-5	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	1.5 E-3	4.9 E-4	2.8 E-3	NA	NA	NA	NA	NA	NA	6.5 E-3	2.6 E-3	2.0 E-2
06D-SNS06	0.5	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	1.5 E-2	1.2 E-2	1.8 E-5	NA	1.6 E-2	NA	NA	9.5 E-8	NA	NA	NA	1.5 E-3	8.6 E-3	8.8 E-2	NA	NA	NA	NA	NA	NA	4.3 E-4	1.6 E-2	1.8 E-1
06D-SNS07	0.5	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	4.1 E-2	2.8 E-2	NA	NA	2.5 E-2	NA	NA	1.2 E-7	NA	NA	NA	4.6 E-3	1.4 E-2	9.4 E-2	NA	NA	NA	NA	NA	NA	2.2 E-3	1.5 E-2	3.4 E-1
06D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	1.8 E-2	NA	NA	1.6 E-2	NA	NA	3.4 E-7	NA	NA	NA	3.9 E-3	8.4 E-3	7.7 E-2	NA	NA	NA	3.2 E-7	NA	NA	1.2 E-3	1.2 E-2	1.6 E-1
06D-SNS09	0.5	NA	NA	9.8 E-4	NA	NA	NA	NA	NA	9.0 E-4	3.1 E-5	6.7 E-5	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	2.7 E-4	4.5 E-5	1.5 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	1.4 E-4	4.9 E-3
06D-SNS10	0.5	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	8.7 E-4	4.4 E-5	7.8 E-5	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	1.1 E-3	8.4 E-5	1.9 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	1.5 E-4	5.9 E-3
06D-SNS11	0.5	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	1.0 E-3	4.6 E-5	2.9 E-5	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	1.7 E-4	8.6 E-5	1.7 E-3	NA	NA	NA	NA	NA	NA	6.9 E-5	1.6 E-4	4.6 E-3
08D-SB02	0.5	NA	6.7 E-8	NA	NA	NA	NA	NA	4.9 E-7	1.5 E-3	2.4 E-5	2.5 E-5	NA	6.1 E-4	NA	NA	1.8 E-6	NA	NA	NA	2.7 E-4	1.4 E-4	1.5 E-3	2.5 E-2	NA	NA	2.2 E-6	NA	2.2 E-6	4.3 E-3	1.8 E-4	3.4 E-2
08D-SB03	0.5	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	6.3 E-4	4.0 E-5	1.2 E-4	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	1.1 E-4	2.8 E-3	NA	NA	1.4 E-4	NA	NA	NA	NA	1.4 E-4	5.3 E-3
08D-SNS01	0.5	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	7.7 E-4	4.2 E-5	1.3 E-4	NA	1.1 E-3	NA	NA	1.1 E-7	NA	NA	NA	6.2 E-5	8.0 E-5	2.7 E-3	NA	NA	NA	NA	NA	NA	7.2 E-5	2.6 E-4	5.6 E-3
09D-SNS05	0.5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	3.1 E-3	1.1 E-4	8.2 E-5	NA	1.6 E-3	NA	NA	2.0 E-7	NA	NA	NA	5.2 E-4	2.0 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	7.4 E-4	5.5 E-4	1.1 E-2
09D-SNS06	0.5	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	5.4 E-4	2.2 E-5	3.3 E-4	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	3.9 E-3
12D-SNS08	0.5	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	6.4 E-4	3.1 E-5	2.5 E-4	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	4.1 E-3
12D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.4 E-5	7.0 E-4	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	1.8 E-4	2.5 E-4	4.6 E-3
52D-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	1.8 E-5	1.0 E-4	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	2.2 E-3	NA	NA	NA	NA	1.2 E-6	NA	NA	8.8 E-5	3.0 E-3
52D-SB16	0.5	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	2.2 E-5	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	1.6 E-6	NA	NA	2.3 E-4	3.6 E-3
52D-SNS01	0.5	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	1.7 E-3	1.8 E-4	2.9 E-3	NA	7.4 E-4	NA	NA	1.1 E-7	NA	NA	NA	5.2 E-4	2.7 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	9.0 E-5	3.1 E-4	1.1 E-2
52D-SNS02	0.5	NA	NA	4.9 E-3	NA	NA	NA	NA	NA	4.5 E-3	8.5 E-5	8.6 E-4	NA	1.2 E-3	NA	NA	2.9 E-7	NA	NA	NA	5.5 E-4	2.0 E-4	4.0 E-3	NA	NA	NA	2.7 E-7	NA	NA	NA	7.5 E-4	1.7 E-2
52D-SNS03	0.5	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	8.9 E-4	2.2 E-5	4.3 E-5	NA	8.5 E-4	NA	NA	2.5 E-7	NA	NA	NA	3.9 E-5	1.2 E-4	1.6 E-3	NA	NA	NA	7.9 E-7	NA	9.1 E-7	NA	2.1 E-4	4.4 E-3
52D-SNS04	0.5	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	1.2 E-3	1.9 E-5	7.0 E-5	NA	6.3 E-4	NA	NA	2.1 E-7	NA	NA	NA	3.3 E-5	3.1 E-5	9.4 E-4	NA	NA	NA	1.6 E-7	NA	NA	NA	3.0 E-4	3.4 E-3
52D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SNS01	0.5	NA	NA	9.8 E-4	NA	NA	NA	NA	NA	6.8 E-4	4.2 E-5	2.2 E-4	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	6.4 E-3
05D-SB01	1	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	6.6 E-4	1.8 E-5	5.1 E-5	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	1.8 E-4	9.6 E-5	1.2 E-3	7.2 E-3	NA	NA	NA	7.6 E-6	NA	NA	1.7 E-4	1.1 E-2
05D-SB02	1	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	4.3 E-4	2.4 E-5	2.9 E-3	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	3.3 E-3	2.0 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	1.1 E-2

		Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
05D-SB03	1	NA	NA	8.6 E-3	NA	NA	NA	NA	NA	2.4 E-1	3.5 E-3	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	7.2 E-3	2.7 E-3	7.7 E-3	NA	NA	NA	NA	NA	NA	3.9 E-2	2.3 E-3	3.1 E-1
05D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	6.0 E-5	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	1.7 E-3	4.5 E-4	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	7.7 E-3
05D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	4.2 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	5.3 E-5	2.7 E-3	NA	NA	NA	NA	NA	NA	6.5 E-5	2.3 E-4	5.2 E-3
05D-SB06	1	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	1.2 E-2	4.4 E-4	2.4 E-4	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	7.8 E-4	1.9 E-4	2.9 E-3	2.4 E-1	NA	NA	NA	NA	NA	3.1 E-3	5.6 E-4	2.6 E-1
05D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	1.3 E-4	1.6 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	8.0 E-5	2.0 E-3	NA	7.5 E-2	NA	NA	NA	NA	6.9 E-4	3.2 E-4	8.3 E-2
05D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	3.0 E-5	3.6 E-5	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	9.1 E-4	4.7 E-5	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.8 E-3
05D-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	3.1 E-5	2.4 E-5	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	2.3 E-4	6.5 E-5	1.9 E-3	5.7 E-2	NA	NA	NA	NA	NA	2.3 E-4	1.5 E-4	6.1 E-2
05D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	5.7 E-5	5.5 E-5	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	9.8 E-4	4.5 E-5	4.7 E-3	4.3 E-3	NA	NA	NA	NA	NA	2.7 E-4	2.2 E-4	1.3 E-2
06D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-4	3.3 E-5	8.6 E-5	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	3.0 E-4	2.0 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.2 E-3
06D-SB06	1	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	4.1 E-3	1.9 E-4	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	5.5 E-4	2.9 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	7.4 E-4	4.2 E-4	1.0 E-2
08D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	6.5 E-4	NA	1.4 E-5	NA	NA	2.8 E-2	NA	NA	4.4 E-4	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.2 E-2
08D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-4	4.8 E-5	2.2 E-4	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	5.5 E-5	1.1 E-4	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	6.1 E-3
08D-SB04	1	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	6.9 E-4	3.9 E-5	1.9 E-4	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	1.3 E-4	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	5.2 E-3
08D-SB05	1	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	6.2 E-4	3.5 E-5	1.9 E-4	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	3.2 E-5	1.0 E-4	1.8 E-3	NA	NA	4.3 E-5	NA	NA	NA	NA	1.3 E-4	4.1 E-3
08D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	1.9 E-4	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	6.2 E-4	8.0 E-5	1.8 E-3	NA	NA	1.1 E-4	NA	NA	NA	NA	1.2 E-4	3.5 E-3
52D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5
52D-AH02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5
52D-FCS-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	4.3 E-4	NA	1.2 E-5	NA	NA	3.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.4 E-2
52D-SB01	1	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	8.4 E-4	NA	2.6 E-5	NA	NA	5.8 E-2	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	2.7 E-4	7.4 E-2
52D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	2.0 E-3	NA	NA	4.0 E-3	NA	2.4 E-5	NA	NA	6.0 E-2	NA	1.2 E-2	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	4.1 E-4	1.2 E-3	2.2 E-1
52D-SB04	1	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	4.8 E-4	2.0 E-5	5.9 E-5	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.7 E-3
52D-SB05	1	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	6.6 E-4	1.6 E-5	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	3.1 E-5	4.9 E-5	1.1 E-3	NA	NA	NA	NA	4.4 E-6	NA	NA	1.6 E-4	2.9 E-3
52D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	2.0 E-5	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA	1.3 E-5	4.1 E-5	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	3.0 E-3
52D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SB08	1	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	5.7 E-4	1.9 E-5	8.2 E-5	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	3.4 E-3
52D-SB10	1	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	2.5 E-5	1.9 E-4	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	2.7 E-5	8.4 E-5	2.1 E-3	NA	NA	NA	NA	1.4 E-6	NA	NA	9.8 E-4	4.2 E-3
52D-SB11	1	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	1.5 E-3	7.2 E-5	1.1 E-3	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	3.1 E-4	2.0 E-4	1.5 E-3	NA	NA	NA	NA	3.5 E-6	NA	NA	3.9 E-4	7.0 E-3
52D-SB13	1	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	3.7 E-5	1.7 E-4	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	3.6 E-5	4.1 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	4.7 E-3
52D-SB14	1	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	6.3 E-4	1.4 E-5	3.2 E-5	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	1.0 E-5	NA	NA	1.6 E-4	2.8 E-3
52D-SB15	1	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	7.7 E-4	3.4 E-5	9.4 E-5	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	7.2 E-5	1.1 E-4	2.0 E-3	NA	NA	NA	NA	1.1 E-5	NA	NA	1.7 E-4	4.6 E-3
52D-SB17	1	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	7.4 E-4	4.0 E-5	7.0 E-5	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	4.6 E-5	5.9 E-5	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.5 E-3
AW-AF1-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	3.3 E-5	3.7 E-5	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	1.2 E-3	NA	NA	NA	NA	NA	NA	3.9 E-5	2.4 E-4	2.9 E-3
AW-AF1-SB02	1	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	1.7 E-5	2.8 E-5	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	6.5 E-5	5.3 E-5	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.4 E-3
AW-AF1-SB03	1	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	2.5 E-5	2.9 E-5	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	7.2 E-5	1.9 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.1 E-3
AW-AF2-SB01	1	NA	NA	5.4 E-4	NA	NA	NA	NA	7.9 E-7	NA	3.4 E-5	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	1.5 E-4	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	5.3 E-3
AW-AF2-SB02	1	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	7.2 E-5	8.8 E-5	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.2 E-3
D(b)-SB01	1	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	4.2 E-4	2.2 E-5	7.8 E-5	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	2.2 E-4	1.1 E-4	1.6 E-3	NA	NA	NA	NA	6.0 E-7	NA	NA	1.0 E-4	3.6 E-3
D(b)-SB02	1	NA	NA	3.9 E-3	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-5	7.8 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	5.9 E-5	4.7 E-4	1.7 E-3	NA	NA	NA	NA	6.0 E-6	NA	NA	3.3 E-4	8.9 E-3
D(b)-SB03	1	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	1.4 E-3	6.0 E-5	1.6 E-4	NA	1.7 E-3	NA	NA	8.6 E-8	NA	NA	NA	4.6 E-4	1.5 E-4	4.1 E-3	NA	NA	NA	3.2 E-7	2.0 E-6	NA	NA	2.4 E-4	9.0 E-3
D(b)-SB04	1	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	3.7 E-6	NA	NA	7.4 E-6
D(b)-SB05	1	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	6.6 E-4	1.9 E-5	2.5 E-5	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	1.3 E-3	NA	NA	NA	2.4 E-7	2.4 E-5	NA	NA	1.8 E-4	3.2 E-3
D(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	7.0 E-4	NA	3.4 E-5	NA	NA	3.1 E-2	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.4 E-2
D(c)-SB02	1	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	8.4 E-4	3.5 E-5	2.0 E-4	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	2.5 E-4	1.1 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	2.0 E-4	6.3 E-3
D(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	2.7 E-5	1.0 E-4	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	3.9 E-3
D(c)-SB04	1	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	5.8 E-4	3.9 E-5	1.6 E-4	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	5.2 E-5	1.5 E-4	2.3 E-3	NA	NA	1.5 E-5	NA	2.3 E-6	NA	NA	1.3 E-4	4.7 E-3
D(c)-SB05	1	NA	NA	2.1 E-4	NA	NA	NA	NA	3.9 E-6	5.4 E-4	2.8 E-5	2.4 E-4	NA	6.3 E-4	NA	NA	4.0 E-6	NA	NA	NA	1.6 E-4	7.0 E-5	1.7 E-3	NA	NA	NA	1.3 E-6	NA	5.9 E-6	NA	5.9 E-4	4.2 E-3
DC-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	7.0 E-4	NA	3.4 E-5	NA	NA	3.1 E-2	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.4 E-2
06D-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.7 E-5	5.1 E-5	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	2.2 E-4	2.4 E-3	NA	NA	NA	NA	NA	NA	1.5 E-5	1.5 E-4	4.4 E-3
06D-SB04	1.5	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	2.2 E-4	2.7 E-5	5.1 E-5	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	9.5 E-4	1.6 E-4	4.2 E-3	NA	NA	NA	NA	NA	NA	2.9 E-5	1.8 E-4	8.0 E-3
06D-SB05	1.5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	1.9 E-2	1.4 E-4	6.3 E-4	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	2.3 E-3	9.8 E-4	4.9 E-3	NA	NA	NA	NA	NA	NA	3.5 E-4	2.6 E-4	3.1 E-2
09D-SD01	1.5	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	6.4 E-4	4.2 E-5	1.5 E-4	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	6.5 E-5	4.1 E-5	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.8 E-3
52D-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-4	2.0 E-5	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	3.5 E-3
05D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	2.8 E-5	NA	NA	9.8 E-4	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	3.4 E-4	4.7 E-4	3.0 E-2
05D-SNS08	2.5	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	1.9 E-3	4.7 E-5	7.0 E-4	NA	1.8 E-3	NA	NA	7.3 E-7	NA	NA	NA	1.6 E-3	1.4 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	4.7 E-3	1.0 E-3	1.4 E-2
05D-SNS09	2.5	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	1.2 E-3	2.3 E-5	8.2 E-5	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	3.3 E-4	9.0 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	3.9 E-4	2.4 E-4	5.7 E-3
05D-SNS10	2.5	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	1.1 E-3	2.8 E-5	9.0 E-5	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	4.6 E-5	1.2 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.2 E-3
05D-SNS11	2.5	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	7.9 E-3	6.3 E-5	1.9 E-3	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	5.9 E-4	1.2 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	9.8 E-5	3.6 E-4	1.4 E-2
05D-SNS12	2.5	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	5.1 E-3	6.3 E-4	5.5 E-5	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	2.9 E-5	1.0 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	7.5 E-4	1.3 E-2
05D-SNS13	2.5	NA	NA	6.6 E-4	NA	NA	NA	NA	NA	1.9 E-2	2.5 E-4	4.7 E-4	NA	1.9 E-3	NA	NA	5.5 E-7	NA	NA	NA	1.1 E-3	2.2 E-4	3.1 E-3	NA	NA	NA	2.5 E-7	NA	9.1 E-7	4.3 E-3	1.1 E-3	3.2 E-2
05D-SNS14	2.5	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	1.2 E-2	1.2 E-3	3.2 E-4	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	9.1 E-3	9.8 E-4	3.4 E-3	NA	NA	NA	NA	NA	NA	1.9 E-3	2.3 E-3	4.9 E-2
05D-SNS15	2.5	NA	NA	8.8 E-4	NA	NA	NA	NA	NA	7.8 E-3	9.8 E-5	3.4 E-4	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	4.7 E-4	7.1 E-3	NA	NA	NA	NA	NA	NA	1.7 E-3	5.9 E-4	2.1 E-2
05D-SNS16	2.5	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	4.8 E-3	5.3 E-5	2.5 E-4	NA	1.7 E-3	NA	NA	6.8 E-7	NA	NA	NA	4.9 E-4	3.1 E-4	2.3 E-3	NA	NA	NA	5.5 E-7	NA	1.8 E-6	7.6 E-4	6.5 E-3	1.7 E-2
05D-SNS17	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	3.8 E-5	1.7 E-4	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	2.3 E-4	4.1 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	2.2 E-4	3.0 E-4	6.7 E-3
05D-SNS18	2.5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	1.2 E-3	3.5 E-5	1.7 E-4	NA	1.9 E-3	NA	NA	1.1 E-7	NA	NA	NA	5.9 E-4	8.8 E-5	2.1 E-3	NA	6.1 E-3	NA	NA	NA	NA	NA	5.9 E-4	1.4 E-2
05D-SNS19	2.5	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	8.9 E-4	3.3 E-5	1.8 E-4	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	1.3 E-4	1.2 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	4.9 E-3
05D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	2.3 E-5	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	1.5 E-4	1.0 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	1.8 E-4	1.6 E-4	4.1 E-3
06D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	1.2 E-3	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	3.5 E-2
06D-SNS06	2.5	NA	NA	5.6 E-3	NA	NA	NA	NA	NA	3.7 E-3	2.9 E-3	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	1.9 E-3	9.2 E-4	1.0 E-2	NA	NA	NA	NA	NA	NA	2.2 E-4	1.5 E-3	2.9 E-2
06D-SNS07	2.5	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	4.6 E-3	3.7 E-3	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	5.2 E-4	1.4 E-3	1.8 E-2	NA	NA	NA	NA	NA	NA	2.2 E-4	2.6 E-3	4.8 E-2

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
06D-SNS08	2.5	NA	NA	3.9 E-3	NA	NA	NA	NA	NA	1.7 E-3	6.5 E-4	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	4.7 E-4	5.9 E-3	NA	NA	NA	NA	NA	NA	NA	8.8 E-4	1.5 E-2
06D-SNS09	2.5	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	6.1 E-4	3.1 E-5	3.8 E-5	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	1.3 E-4	1.1 E-4	1.9 E-3	NA	NA	1.8 E-3	NA	NA	NA	NA	1.1 E-4	6.2 E-3
06D-SNS10	2.5	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	4.8 E-4	2.3 E-5	1.0 E-4	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	8.8 E-5	1.6 E-4	1.4 E-3	NA	NA	7.4 E-4	NA	NA	NA	6.5 E-5	9.8 E-5	4.2 E-3
06D-SNS11	2.5	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	1.2 E-3	4.9 E-5	2.0 E-5	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	1.9 E-4	1.7 E-4	1.7 E-3	NA	NA	2.7 E-3	NA	NA	NA	8.8 E-5	2.0 E-4	8.0 E-3
08D-SNS01	2.5	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	7.8 E-4	5.0 E-5	1.4 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	8.0 E-5	3.5 E-3	NA	NA	NA	NA	NA	NA	7.8 E-5	2.3 E-4	6.5 E-3
09D-SNS05	2.5	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	2.1 E-3	6.4 E-5	5.9 E-5	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	3.1 E-4	1.5 E-4	2.4 E-3	NA	NA	NA	NA	NA	NA	3.1 E-4	2.7 E-4	8.5 E-3
09D-SNS06	2.5	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	7.9 E-4	4.5 E-5	1.4 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	5.9 E-3
12D-SNS08	2.5	NA	NA	8.8 E-4	NA	NA	NA	NA	NA	2.1 E-3	3.5 E-5	9.4 E-5	NA	9.3 E-4	NA	NA	1.8 E-7	NA	NA	NA	1.4 E-4	5.5 E-5	1.8 E-3	NA	NA	NA	NA	NA	NA	8.8 E-5	3.1 E-4	6.5 E-3
12D-SNS09	2.5	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	2.2 E-4	4.2 E-5	3.5 E-4	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	1.6 E-4	1.4 E-4	2.2 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	2.4 E-4	5.2 E-3
52D-SNS01	2.5	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	8.9 E-4	3.1 E-5	1.4 E-4	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	1.8 E-3	1.6 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	8.9 E-3
52D-SNS02	2.5	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	1.0 E-3	3.7 E-5	5.1 E-4	NA	1.1 E-3	NA	NA	1.9 E-7	NA	NA	NA	1.0 E-4	8.4 E-5	1.8 E-3	NA	NA	NA	1.7 E-7	NA	NA	NA	2.5 E-4	7.0 E-3
52D-SNS03	2.5	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	1.2 E-3	2.1 E-5	3.9 E-5	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	4.9 E-3
52D-SNS04	2.5	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	4.9 E-4	1.9 E-5	1.5 E-4	NA	5.0 E-4	NA	NA	NA	NA	NA	NA	5.5 E-5	8.0 E-5	1.1 E-3	NA	NA	NA	NA	NA	NA	7.4 E-5	8.8 E-5	2.8 E-3
52D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SNS01	2.5	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	5.3 E-4	5.1 E-5	2.4 E-4	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	5.6 E-3
05D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	7.0 E-4	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.9 E-2
09D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	5.1 E-4	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	9.7 E-5	3.1 E-2
09D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	8.3 E-4	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	4.1 E-2
09D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	8.1 E-4	NA	NA	NA	NA	3.7 E-2	NA	2.4 E-3	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	4.4 E-2
09D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-5	NA	NA	6.8 E-4	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	4.6 E-2
12D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	5.3 E-4	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	1.2 E-4	4.0 E-2
12D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	7.4 E-4	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	4.0 E-2
12D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-5	NA	NA	9.8 E-4	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	2.2 E-4	1.4 E-4	3.4 E-2
12D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	7.7 E-4	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	4.2 E-2
12D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	7.6 E-4	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	4.0 E-2
12D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	5.5 E-4	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	1.6 E-4	3.8 E-2
12D-SNS07	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	3.7 E-4	NA	NA	NA	NA	2.4 E-2	NA	3.6 E-4	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	2.6 E-2
52D-AH03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5
52D-SB09	4.5	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	2.6 E-5	1.6 E-4	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	2.8 E-3	NA	NA	NA	NA	3.4 E-6	NA	NA	1.4 E-4	4.2 E-3
05D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	5.6 E-4	NA	1.8 E-5	NA	NA	1.8 E-2	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	2.0 E-2
05D-SB01	5	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	4.7 E-4	2.6 E-5	1.7 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	6.5 E-5	1.1 E-3	1.5 E-3	NA	NA	NA	NA	9.2 E-7	NA	NA	9.8 E-5	4.7 E-3
05D-SB02	5	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	3.1 E-2	7.2 E-4	7.0 E-4	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	7.0 E-4	4.2 E-3	NA	NA	NA	NA	NA	NA	4.3 E-3	8.8 E-4	4.5 E-2
05D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	8.5 E-5	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	9.5 E-5	2.1 E-3
05D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.3 E-3
05D-SNS12	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	2.4 E-4	2.2 E-5	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	5.5 E-4	1.8 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	1.3 E-5	1.5 E-4	3.8 E-3
05D-SNS13	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	7.3 E-4	2.5 E-5	1.1 E-4	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	1.9 E-3	6.9 E-5	1.6 E-3	NA	NA	NA	NA	NA	NA	4.7 E-5	1.4 E-4	5.8 E-3
05D-SNS14	5	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	1.7 E-3	6.5 E-5	9.4 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	8.0 E-5	2.6 E-3	NA	NA	NA	NA	NA	NA	1.7 E-3	6.2 E-4	1.1 E-2
05D-SNS15	5	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	4.9 E-3	5.7 E-5	1.1 E-3	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	1.8 E-4	1.6 E-4	3.0 E-3	NA	NA	NA	NA	NA	NA	2.9 E-3	3.9 E-4	1.5 E-2
05D-SNS16	5	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	2.5 E-3	2.5 E-5	1.8 E-4	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	7.2 E-5	2.5 E-4	9.4 E-4	NA	NA	NA	NA	NA	NA	3.3 E-4	2.7 E-3	8.2 E-3
05D-SNS20	5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	2.8 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	1.3 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	8.2 E-5	1.5 E-4	3.8 E-3
06D-SB02	5	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	1.2 E-3	5.3 E-4	1.7 E-1	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	1.4 E-4	4.9 E-4	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	6.9 E-4	1.8 E-1
06D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	5.3 E-5	4.7 E-5	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	3.6 E-4	1.5 E-4	1.0 E-2	NA	NA	NA	NA	NA	NA	1.8 E-5	1.8 E-4	1.3 E-2
06D-SB04	5	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	1.4 E-4	1.8 E-5	4.3 E-5	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	1.6 E-4	2.0 E-3	NA	NA	NA	NA	NA	NA	2.0 E-5	1.2 E-4	3.7 E-3
06D-SB05	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	1.0 E-4	1.5 E-5	3.8 E-5	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	7.5 E-5	1.6 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	1.3 E-5	9.5 E-5	2.7 E-3
06D-SB06	5	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	1.9 E-4	2.1 E-5	NA	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	6.2 E-5	2.3 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	1.7 E-5	1.1 E-4	3.5 E-3
08D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	6.8 E-4	NA	4.1 E-5	NA	NA	3.1 E-2	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.5 E-2
08D-AH02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	7.4 E-4	NA	2.6 E-5	NA	NA	2.7 E-2	NA	NA	NA	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.2 E-2
08D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-4	5.4 E-5	1.3 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	6.2 E-5	8.4 E-5	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	6.9 E-3
08D-SB02	5	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	7.4 E-4	4.1 E-5	2.8 E-4	NA	7.1 E-4	NA	NA	7.7 E-7	NA	NA	NA	7.5 E-5	1.1 E-4	2.9 E-3	3.2 E-3	NA	NA	9.7 E-7	NA	1.0 E-6	1.4 E-4	1.4 E-4	8.4 E-3
08D-SB03	5	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	7.5 E-4	4.4 E-5	1.4 E-4	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	5.4 E-3
08D-SB04	5	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	6.9 E-4	4.2 E-5	1.3 E-4	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	5.9 E-5	8.6 E-5	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	5.4 E-3
08D-SB05	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	4.2 E-4	3.5 E-5	1.2 E-4	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	4.2 E-3
08D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	3.4 E-5	1.3 E-4	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	2.1 E-3	NA	NA	2.5 E-5	NA	NA	NA	NA	1.4 E-4	3.5 E-3
09D-SD01	5	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	7.1 E-4	4.7 E-5	1.8 E-4	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	7.5 E-5	9.2 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	5.0 E-3
52D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5
52D-AH03	5	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-5
52D-SA-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	5.5 E-5	NA	NA	9.7 E-4	NA	3.2 E-4	NA	NA	2.6 E-2	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	2.3 E-4	1.7 E-4	3.1 E-2
52D-SB01	5	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	NA	1.8 E-3	NA	9.6 E-5	NA	NA	6.6 E-2	NA	1.1 E-3	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	2.0 E-4	8.7 E-2
52D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	7.5 E-4	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.6 E-2
52D-SB05	5	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	6.4 E-4	1.8 E-5	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	4.2 E-5	7.2 E-5	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	3.3 E-3
52D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.0 E-5	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	1.7 E-3	NA	NA	NA	NA	1.5 E-6	NA	NA	2.4 E-4	3.9 E-3
52D-SB07	5	NA	5.6 E-7	NA	NA	NA	NA	NA	5.6 E-6	8.0 E-4	1.8 E-5	NA	NA	3.4 E-3	NA	NA	2.4 E-5	NA	NA	NA	4.6 E-5	7.2 E-5	1.6 E-3	NA	NA	NA	2.7 E-5	NA	4.5 E-5	NA	9.5 E-4	7.0 E-3
52D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	2.2 E-5	7.0 E-5	NA	2.9 E-4	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	2.3 E-3	NA	NA	NA	NA	1.3 E-5	NA	NA	9.5 E-5	3.2 E-3
52D-SB10	5	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	2.9 E-5	1.2 E-4	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	3.1 E-5	1.0 E-4	2.2 E-3	NA	NA	NA	NA	2.0 E-5	NA	NA	3.3 E-4	3.6 E-3
52D-SB11	5	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	5.6 E-4	2.6 E-5	2.2 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	4.6 E-3	1.4 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	7.9 E-3
52D-SB13	5	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	2.7 E-5	9.0 E-5	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	3.1 E-4	1.4 E-3	NA	NA	NA	NA	3.0 E-6	NA	NA	1.1 E-4	3.1 E-3
52D-SB14	5	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	2.7 E-5	1.4 E-4	4.1 E-3	NA	NA	NA	NA	4.0 E-6	NA	NA	1.0 E-4	5.7 E-3
52D-SB15	5	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	4.9 E-4	2.0 E-5	5.5 E-5	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	7.5 E-4	2.2 E-4	1.4 E-3	NA	NA	NA	1.5 E-7	3.3 E-6	NA	NA	1.0 E-4	4.1 E-3
52D-SB17	5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	1.2 E-3	6.1 E-5	1.9 E-4	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	2.8 E-4	1.1 E-4	5.3 E-3	NA	NA	NA	NA	NA	NA	2.5 E-5	2.3 E-4	1.0 E-2

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																																
Unit Risk																																
AW-AF1-SB01	5	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	3.3 E-4	3.0 E-5	1.4 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	2.5 E-5	1.1 E-4	3.4 E-3
AW-AF1-SB02	5	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	NA	1.5 E-5	8.6 E-6	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	2.4 E-4	1.8 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	2.7 E-3
AW-AF1-SB03	5	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	1.1 E-5	3.2 E-5	NA	5.0 E-4	NA	NA	NA	NA	NA	NA	6.5 E-5	1.2 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	1.8 E-3
AW-AF2-SB01	5	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	2.9 E-5	1.1 E-4	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	3.9 E-3
AW-AF2-SB02	5	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	3.2 E-5	1.1 E-4	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	4.2 E-3
D(b)-SB01	5	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	4.2 E-4	1.7 E-5	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	1.3 E-4	9.0 E-5	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	2.5 E-3
D(b)-SB02	5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	5.6 E-4	2.2 E-5	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	2.0 E-4	3.9 E-5	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	3.6 E-3
D(b)-SB03	5	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	4.2 E-4	2.2 E-5	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	1.3 E-5	2.9 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	3.3 E-3
D(b)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	8.5 E-7	NA	NA	1.7 E-6
D(b)-SB05	5	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.4 E-3
D(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	7.1 E-4	NA	2.1 E-5	NA	NA	3.2 E-2	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.6 E-2
D(c)-SB02	5	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	6.1 E-4	3.7 E-5	3.3 E-4	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	1.2 E-5	1.4 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	4.4 E-3
D(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	3.5 E-5	5.5 E-5	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	8.2 E-5	3.5 E-3
D(c)-SB04	5	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	4.6 E-5	2.5 E-4	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	1.3 E-5	2.0 E-4	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	4.3 E-3
D(c)-SB05	5	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	6.3 E-4	3.3 E-5	1.4 E-4	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.9 E-3
DC-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	7.1 E-4	NA	2.1 E-5	NA	NA	3.2 E-2	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.6 E-2
52D-SB16	5.5	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	3.5 E-5	NA	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	4.9 E-6	NA	NA	1.0 E-4	3.3 E-3
06D-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	6.9 E-4	NA	1.8 E-5	NA	NA	2.0 E-2	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	2.2 E-2
52D-FCS-SB01	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	6.7 E-4	NA	1.1 E-5	NA	NA	3.0 E-2	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	3.2 E-2
05D-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	9.8 E-4	NA	2.9 E-5	NA	NA	2.1 E-2	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.3 E-2
05D-SNS12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	5.5 E-5	2.2 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	1.8 E-5	1.3 E-4	2.9 E-3
05D-SNS13	10	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-3	9.8 E-5	8.6 E-4	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	7.2 E-4	2.5 E-4	3.4 E-3	NA	NA	NA	NA	NA	NA	1.5 E-3	7.8 E-4	1.5 E-2
05D-SNS14	10	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-3	1.0 E-4	1.2 E-3	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	3.9 E-4	3.2 E-3	NA	NA	NA	NA	NA	NA	2.2 E-3	3.9 E-4	1.6 E-2
05D-SNS15	10	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	8.0 E-3	7.2 E-5	1.3 E-3	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.4 E-4	2.7 E-4	2.3 E-3	NA	NA	NA	NA	NA	NA	2.2 E-3	3.3 E-4	1.6 E-2
05D-SNS16	10	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	1.2 E-4	2.9 E-5	1.9 E-4	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	1.8 E-4	1.4 E-4	2.0 E-3	NA	NA	NA	NA	NA	NA	3.1 E-5	1.4 E-4	4.2 E-3
05D-SNS20	10	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	3.0 E-4	2.3 E-5	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	5.5 E-5	1.5 E-4	5.4 E-3
06D-SNS07	10	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	1.5 E-4	5.7 E-5	3.2 E-4	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	1.4 E-4	1.5 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	2.0 E-5	1.3 E-4	4.1 E-3
08D-AH02	10	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	1.5 E-3	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.4 E-2
52D-AH02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-5
52D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	8.2 E-4	NA	1.2 E-5	NA	NA	3.0 E-2	NA	3.5 E-4	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.3 E-2
52D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5
D(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	6.5 E-4	NA	3.2 E-5	NA	NA	2.4 E-2	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.8 E-2
DC-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	6.5 E-4	NA	3.2 E-5	NA	NA	2.4 E-2	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.8 E-2
52D-SB09	10.5	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	1.4 E-5	1.1 E-4	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	1.0 E-3	NA	NA	NA	NA	1.4 E-6	NA	NA	2.0 E-4	2.8 E-3
D(c)-SB05	10.5	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	5.5 E-5	2.3 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.1 E-5	1.6 E-4	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	5.1 E-3
05D-SB01	11	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	4.7 E-4	1.7 E-5	1.4 E-4	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	6.5 E-5	6.9 E-5	1.7 E-3	NA	NA	NA	NA	6.5 E-6	NA	NA	9.5 E-5	3.7 E-3
05D-SB02	11	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	3.7 E-4	3.2 E-5	1.8 E-4	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	9.1 E-5	2.2 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	5.2 E-3
06D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4	4.8 E-4	2.5 E-1	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.7 E-4	4.1 E-4	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	2.5 E-1
06D-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.7 E-5	6.3 E-5	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.4 E-4	1.7 E-4	2.8 E-3	NA	NA	NA	NA	NA	NA	1.9 E-5	2.1 E-4	4.8 E-3
06D-SB04	11	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	1.5 E-4	2.3 E-5	3.9 E-5	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.6 E-4	1.1 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	1.8 E-5	1.0 E-4	3.8 E-3
06D-SB05	11	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	1.4 E-4	2.2 E-5	3.9 E-5	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	8.2 E-5	1.2 E-4	2.5 E-3	NA	NA	NA	NA	NA	NA	1.6 E-5	1.3 E-4	4.4 E-3
06D-SB06	11	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	1.2 E-4	2.5 E-5	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	8.5 E-5	6.3 E-5	2.3 E-3	NA	NA	NA	NA	NA	NA	1.0 E-5	1.0 E-4	3.8 E-3
08D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	4.5 E-5	1.0 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	6.2 E-5	3.9 E-4	2.5 E-3	NA	NA	8.1 E-5	NA	NA	NA	8.2 E-5	1.1 E-4	5.0 E-3
08D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4	5.5 E-5	1.6 E-4	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	3.3 E-5	6.1 E-4	4.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	1.5 E-4	7.6 E-3
08D-SB05	11	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	3.0 E-5	1.4 E-4	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	4.0 E-3
08D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4
52D-SB05	11	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	8.4 E-5	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.6 E-3
52D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-4	2.0 E-5	1.4 E-4	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	1.0 E-5	4.7 E-5	1.7 E-3	NA	NA	NA	NA	2.3 E-6	NA	NA	1.8 E-4	3.9 E-3
52D-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-4	2.5 E-5	1.2 E-4	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	3.9 E-6	NA	NA	2.5 E-4	4.1 E-3
52D-SB08	11	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	4.3 E-4	2.4 E-5	1.2 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	3.3 E-4	1.3 E-4	1.5 E-3	NA	NA	NA	NA	2.4 E-6	NA	NA	1.2 E-4	4.0 E-3
52D-SB10	11	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	3.6 E-4	2.8 E-1	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	3.6 E-5	1.8 E-3	4.5 E-3	NA	NA	NA	NA	2.9 E-6	NA	NA	3.6 E-4	2.9 E-1
52D-SB11	11	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	1.6 E-5	5.5 E-5	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	4.6 E-5	1.4 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	2.5 E-3
52D-SB12	11	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	2.7 E-5	1.4 E-4	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	8.8 E-5	1.2 E-3	9.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.4 E-3
52D-SB13	11	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	2.4 E-5	6.3 E-5	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	2.3 E-5	1.7 E-4	1.9 E-3	NA	NA	NA	NA	8.1 E-7	NA	NA	1.2 E-4	3.3 E-3
52D-SB14	11	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	4.1 E-4	1.6 E-5	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	6.9 E-5	5.1 E-5	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.7 E-3
52D-SB15	11	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	5.4 E-4	2.2 E-5	5.9 E-5	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	7.8 E-5	3.7 E-5	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	3.4 E-3
52D-SB17	11	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	6.8 E-4	3.1 E-5	1.1 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	1.1 E-4	4.9 E-5	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.5 E-3
AW-AF1-SB01	11	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	1.5 E-4	2.2 E-5	5.9 E-5	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	3.1 E-5	1.5 E-4	2.6 E-3
AW-AF1-SB02	11	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	1.4 E-5	1.4 E-5	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	4.9 E-5	1.6 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	2.0 E-3
AW-AF1-SB03	11	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	3.3 E-5	4.3 E-4	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	3.6 E-5	2.5 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	4.6 E-3
AW-AF2-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	8.0 E-5	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.8 E-3
AW-AF2-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.4 E-3
D(b)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	2.6 E-5	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.9 E-3
D(b)-SB03	11	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	5.1 E-4	2.6 E-5	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	1.6 E-3	1.0 E-4	1.8 E-3	NA	NA	NA	NA	8.7 E-7	NA	NA	1.1 E-4	5.4 E-3
D(b)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7
D(b)-SB05	11	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	5.9 E-4	2.3 E-5	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	2.1 E-4	5.5 E-5	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.3 E-3
D(c)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4
D(c)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	3.7 E-5	9.0 E-6	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	9.8 E-5	8.2 E-5	4.0 E-3
D(c)-SB04	11	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	3.9 E-5	2.0 E-4	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	2.5 E-5	1.2 E-4	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	4.3 E-3

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																													
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	HI
Unit Hazard																															
Unit Risk																															
08D-SB03	11.5	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	5.0 E-5	2.0 E-4	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	3.2 E-5	1.7 E-4	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	6.5 E-3
08D-SB04	11.5	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	1.4 E-5	2.0 E-4	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	1.8 E-3
08D-SB05	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08D-SB06	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	3.8 E-5
52D-SB16	11.5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	1.4 E-5	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	2.4 E-3

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																		
Unit Risk																																		
05D-SNS06	0	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.8
08D-GS02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(b)-SD01	0	NA	NA	NA	6.2 E-9	1.6 E-7	5.8 E-8	NA	NA	7.2 E-9	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	NA	NA	NA	8 E-7	3.4
05D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.7
05D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	4.1
05D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.8
05D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	4.4
05D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.5
05D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.7
06D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
06D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
06D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
06D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.4
06D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
08D-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.4
08D-GS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
08D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	3.4
09D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
09D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
09D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
09D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-CS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.4
12D-CS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.5
12D-SNS02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS04	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
12D-SNS05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.5
12D-SNS06	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS07	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(C)-GS01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
09D-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
D(d)-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	3.8
05D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	3.4 E-8	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	3.6
05D-SNS09	0.5	NA	NA	NA	3.2 E-8	6.9 E-7	1.8 E-7	NA	NA	1.2 E-9	NA	NA	6.9 E-9	NA	3.2 E-8	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.4
05D-SNS10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.7
05D-SNS11	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
05D-SNS12	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	9.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
05D-SNS13	0.5	NA	NA	NA	9.0 E-9	2.0 E-7	7.6 E-8	NA	NA	4.2 E-8	NA	5.5 E-8	3.0 E-9	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.9
05D-SNS14	0.5	NA	NA	NA	7.6 E-9	2.5 E-7	7.5 E-8	NA	NA	1.9 E-9	NA	2.5 E-8	2.7 E-9	NA	NA	NA	NA	5.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.5
05D-SNS15	0.5	NA	NA	NA	9.5 E-9	3.2 E-7	1.2 E-7	1.0 E-7	NA	1.2 E-8	NA	2.4 E-8	5.8 E-9	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	4.3
05D-SNS16	0.5	NA	NA	NA	2.2 E-8	NA	2.0 E-7	NA	NA	3.5 E-9	NA	2.9 E-9	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.6
05D-SNS17	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.8
05D-SNS18	0.5	NA	NA	NA	4.3 E-9	1.1 E-7	3.0 E-8	NA	NA	1.3 E-9	NA	5.5 E-9	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	NA	5 E-7	3.5
05D-SNS19	0.5	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.5
05D-SNS20	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.9
06D-SNS06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-9	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.7
06D-SNS07	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.8
06D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.5
06D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
06D-SNS10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
06D-SNS11	0.5	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
08D-SB02	0.5	NA	NA	NA	1.0 E-8	1.6 E-7	2.4 E-8	NA	NA	9.3 E-10	NA	1.7 E-9	1.8 E-9	NA	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	9.1 E-7	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.3
08D-SB03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
08D-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
09D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
09D-SNS06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
12D-SNS08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
12D-SNS09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.4
52D-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
52D-SB16	0.5	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
52D-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	1.9 E-7	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.8
52D-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	5.8 E-8	4.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.4
52D-SNS03	0.5	NA	NA	NA	2.4 E-9	NA	1.1 E-8	NA	NA	5.6 E-10	NA	2.9 E-9	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
52D-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
52D-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
D(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
05D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	3 E-7	3.3
05D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3

		Incremental Lifetime Cancer Risk																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																		
Unit Risk																																		
05D-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	4.6
05D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.3
05D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.4
05D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	NA	NA	NA	NA	8 E-6	3.4
05D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	3 E-6	3.4
05D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
05D-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	2 E-6	3.3
05D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
06D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
06D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.4
08D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
08D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-10	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
08D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
08D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
08D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-AH02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-FCS-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.5
52D-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
52D-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
52D-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
52D-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
52D-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	7.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.5
52D-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
52D-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
52D-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
AW-AF1-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
AW-AF1-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
AW-AF1-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
AW-AF2-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
AW-AF2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
D(b)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
D(b)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
D(b)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	1.1 E-8	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
D(b)-SB04	1	NA	NA	NA	2.3 E-8	4.6 E-7	9.3 E-8	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	3.3
D(b)-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
D(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
D(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
D(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
D(c)-SB05	1	NA	NA	NA	3.6 E-8	7.8 E-7	1.6 E-7	NA	NA	3.4 E-10	NA	1.6 E-8	8.6 E-9	NA	8.5 E-8	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.3
DC-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
06D-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
06D-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.4
06D-SB05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.6
09D-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
05D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
05D-SNS08	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	3.6
05D-SNS09	2.5	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-10	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
05D-SNS10	2.5	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-10	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
05D-SNS11	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
05D-SNS12	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.6
05D-SNS13	2.5	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	1.2 E-8	NA	3.1 E-8	6.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.4
05D-SNS14	2.5	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-9	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.8
05D-SNS15	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.7
05D-SNS16	2.5	NA	NA	NA	2.3 E-9	5.5 E-8	2.3 E-8	NA	NA	3.0 E-9	NA	1.7 E-8	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.6
05D-SNS17	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
05D-SNS18	2.5	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	2 E-7	3.5
05D-SNS19	2.5	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
05D-SNS20	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
06D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
06D-SNS06	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
06D-SNS07	2.5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.5

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																		
Unit Risk																																		
06D-SNS08	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.4
06D-SNS09	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-10	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
06D-SNS10	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
06D-SNS11	2.5	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
08D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
09D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.4
09D-SNS06	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
12D-SNS08	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
12D-SNS09	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
52D-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-10	NA	3.4 E-8	5.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	3.3
52D-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-10	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
52D-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
D(c)-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
05D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
09D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
09D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
09D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
09D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
12D-SNS07	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-AH03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB09	4.5	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
05D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
05D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
05D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.6
05D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
05D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
05D-SNS12	5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	3.3
05D-SNS13	5	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	7.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
05D-SNS14	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	6.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.3
05D-SNS15	5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.4
05D-SNS16	5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
05D-SNS20	5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	3.3
06D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	3.4
06D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
06D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-11	NA	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
06D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-11	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
06D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	3.3
08D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
08D-AH02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
08D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
08D-SB02	5	NA	NA	NA	4.7 E-9	6.5 E-8	1.0 E-8	NA	NA	4.6 E-10	NA	1.9 E-8	7.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
08D-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
08D-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
08D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
08D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
09D-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-AH03	5	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.3
52D-SA-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.3
52D-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
52D-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
52D-SB07	5	NA	NA	NA	1.6 E-7	2.6 E-6	3.5 E-7	NA	NA	5.0 E-10	NA	NA	3.4 E-8	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	3.3
52D-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
52D-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
52D-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
52D-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
52D-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
52D-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																														
Sample Name	Depth	1,1,2,2-Tetrachloroethane	Anthracene	Antimony	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (b) fluoranthene	Benzo (ghi) perylene	Cadmium	Chromium	Chromium VI	Chrysene	Copper	Dibenz (a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno (1,2,3-cd) pyrene	Iron	Lead	Mercury	Molybdenum	Nickel	PCB-1254	PCB-1260	Perchlorate	Phenanthrene	Phenol	Pyrene	Silver	Zinc	ILCR	Blood Lead
Unit Hazard																																		
Unit Risk																																		
AW-AF1-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
AW-AF1-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
AW-AF1-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
AW-AF2-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
AW-AF2-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(b)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
D(b)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
D(b)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
D(b)-SB04	5	NA	NA	NA	4.1 E-9	5.6 E-8	8.6 E-9	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.3
D(b)-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
D(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
D(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-10	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
D(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
D(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
D(c)-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
DC-AH01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
52D-SB16	5.5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
06D-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-FCS-SB01	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
05D-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
05D-SNS12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
05D-SNS13	10	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	3.4
05D-SNS14	10	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	7.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
05D-SNS15	10	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	8.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8	3.4
05D-SNS16	10	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-11	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
05D-SNS20	10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
06D-SNS07	10	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
08D-AH02	10	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	3.3
52D-AH02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
D(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
DC-AH01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB09	10.5	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
D(c)-SB05	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
05D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
05D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
06D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	3.3
06D-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
06D-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
06D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-11	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
06D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-11	3.3
08D-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
08D-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-10	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
08D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
08D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
52D-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-10	NA	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
52D-SB08	11	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
52D-SB10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	3.4
52D-SB11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
52D-SB12	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
52D-SB13	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
52D-SB14	11	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
52D-SB15	11	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
52D-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
AW-AF1-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.3
AW-AF1-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	3.3
AW-AF1-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
AW-AF2-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
AW-AF2-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
D(b)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
D(b)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
D(b)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
D(b)-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
D(c)-SB02	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
D(c)-SB03	11	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	3.3
D(c)-SB04	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3

Table 5.2-56
Location-Specific Soil Risk Assessment Results - Commercial Workers
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																													
Sample Name	**Depth**	**1,1,2,2-Tetrachloroethane**	**Anthracene**	**Antimony**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (b) fluoranthene**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium**	**Chromium VI**	**Chrysene**	**Copper**	**Dibenz (a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno (1,2,3-cd) pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**Nickel**	**PCB-1254**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Silver**	**Zinc**	**ILCR**	**Blood Lead**
Unit Hazard																																	
Unit Risk																																	
08D-SB03	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
08D-SB04	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
08D-SB05	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
08D-SB06	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
52D-SB16	11.5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+1	8.5 E-1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1
Unit Risk		NA	4.0 E-4	NA	1.5 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA
08D-SP07-10	10							140	13		4.8	840	18		17			
08D-SP08-10	10							260			7.8	830	66		32	26		
08D-SP09-10	10							65				250	26		95			
52D-SP24-10	10	12000	110	10			220			10			6.0				35	96
52D-SP25-10	10	2500	20	8.3			1700			8.2	41		10		80		24	20
52D-SP26-10	10	1300		18						11								
52D-SP29-10	10	1200											81		88			
52D-SP30-10	10	160										74	7.5		56		14	
52D-SP31-10	10	1100	5.9										14		8.8			
52D-SP32-10	10	12000	53												39			
52D-SP33-10	10	98	9.7	9.5			820	20		10		110	12		14		29	10
52D-SP35-10	10	34										130			20			
52D-SP36-10	10	51										73			7.0			
52D-SP37-10	10	42				18			15						72			
52D-SP38-10	10	10													60			
52D-SP39-10	10						9.8					320	3.8		3.8			
52D-SP40-10	10												6.2		16			
52D-SP41-10	10	12											4.6		6.7		11	
52D-SP42-10	10	11										140	3.9		5.4		22	
52D-SP43-10	10	3200	8.5					27			12	210	5.4		29		12	6.7
AW-08D-SP10-10	10			8.6				31		9.0		120	57		360			
AW-AFI-SP01-10	10	44													6.4			
D(b)-SP03-10	10	28										98	12		22			
D(b)-SP04-10	10	39						32				150	20		21			
D(b)-SP05-10	10														30			
D(b)-SP06-10	10								15				8.1		9.3			
D(c)-SP05-10	10							120			5.6	620	49		30			
D(c)-SP06-10	10							34				120	22		80		560	
D(c)-SP07-10	10											63			13		11	
D(c)-SP09-10	10						50					150			13		49	
D(c)-SP10-10	10											93						
D(c)-SP11-10	10											53	35		21			
D(c)-SP12-10	10							42				210	7.2					
05D-SP08-20	20	94						45				150	31		74			
08D-SP07-20	20							120			5.7	470	39		220			
08D-SP08-20	20											56	6.1		62		6.3	
52D-SP24-20	20	1900	22	7.2			660			8.8		85	5.8		12		15	15
52D-SP25-20	20	890	5.4	8.3			1100			8.8	16		5.6		7.7		24	8.5
52D-SP27-20	20	75	7.0	12			560			15			9.9		3.6		12	5.3
52D-SP28-20	20	14						340	100		18	2000	35		22	41		
52D-SP29-20	20	510						32				150	11		29	21	8.3	
52D-SP30-20	20	1000											9.1		12		17	9.5
52D-SP32-20	20	33000	170															
52D-SP33-20	20	140		8.3			2500			9.6			7.9		7.4		34	12
52D-SP35-20	20	32										110			53		7.1	
52D-SP36-20	20	53	72												16			15
52D-SP39-20	20	7.8	6.2				50					280	10		12		30	
52D-SP40-20	20							200			12	490	23		17			
52D-SP41-20	20							36				200	6.6					
52D-SP42-20	20							58			5.6	300	17					
52D-SP43-20	20	4800	18									77	4.1		9.6		17	8.8
52D-SP44-20	20							22			5.5	310			6.8			
AW-08D-SP10-20	20							46				230	46		21			
D(b)-SP03-20	20	18											12		12		24	
D(b)-SP04-20	20	14										58	5.3		7.5			
D(b)-SP06-20	20											72						
D(c)-SP05-20	20							130				550	22		230		180	
D(c)-SP06-20	20														4			

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+1	8.5 E-1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1
Unit Risk		NA	4.0 E-4	NA	1.5 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA
D(c)-SP07-20	20														8.1			
D(c)-SP08-20	20						9.6					160	18		190		16	
D(c)-SP09-20	20					20	13					97	8.7		81		290	
D(c)-SP10-20	20	28										83			70			
D(c)-SP11-20	20					17							4.4		130		290	
D(c)-SP12-20	20							200	21		6.6	950	21		16			
52D-SP40-28	28					17		61	20			330	16					
52D-SP24-30	30				7.7							100						
52D-SP25-30	30	1900	6.0	7.7			500			8.2			3.6		3.7		38	8.2
52D-SP27-30	30	31		14			2500			17			12		4.3		9.6	
52D-SP28-30	30	93		6.8						6.2			6.4		12		52	5.9
52D-SP30-30	30																	
52D-SP35-30	30	41	4.7			70						130		16	22		190	
52D-SP36-30	30	62	100												8.9		6.4	27
52D-SP37-30	30		11									91	5		180			6.4
52D-SP39-30	30							20				210	27		13			
52D-SP41-30	30											87						
52D-SP42-30	30	7.9	100					130				130	12					530
52D-SP43-30	30	750	7.5						51			110						
52D-SP44-30	30							180	35		160	1100	68		16			
D(b)-SP05-30	30														4.9			
D(c)-SP05-30	30											57			11		710	
52D-SP44-40	40		5.5					110	31			770	62		50			

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard		1.2 E-1	3.9 E-1	6.7 E-1	3.4 E+0	2.3 E-2	9.8 E-1	2.0 E+2	9.8 E-1	6.8 E+0	6.8 E+0	7.5 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.1 E+0	6.7 E+0
Unit Risk		NA	NA	6.1 E-4	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
08D-SP07-10	10		82				6.8		14	7.8		4.8		8.9	31		
08D-SP08-10	10		31	8.8			29		72	12	5.6	7.9	71	3.6	74		
08D-SP09-10	10	5.9					26		56	7.4					36		
52D-SP24-10	10			8.1		1900	7.9		7.3	31	11	11	120	12	23	1600	
52D-SP25-10	10			10		250			15	36	15	11	54		49	1200	
52D-SP26-10	10					260				17	9.6		79		8.9	1100	
52D-SP29-10	10	30		8.7		220	30		76	28	17	17	65		79	2600	
52D-SP30-10	10	4.3				38	5.7		11	7.6			39		13	480	
52D-SP31-10	10	22				140			12				16		11	410	
52D-SP32-10	10					1500							98			780	
52D-SP33-10	10			9.5		98	12		21	36	11	8.4	92	18	46	280	
52D-SP35-10	10		10			380			13				97			8.8	
52D-SP36-10	10		27		66	1500							76				
52D-SP37-10	10		49		38	320			17				37	13	4.8	18	
52D-SP38-10	10					60			9.2				61	12			
52D-SP39-10	10		21				5.4			10				6.0	32		
52D-SP40-10	10						5.6		15				32	12	9.7	13	
52D-SP41-10	10					85			4.6				87	4.1	7.4	24	
52D-SP42-10	10					140							68	4.0	7.3	12	
52D-SP43-10	10	46			7.6	640			5.8				120		8.7	340	
AW-08D-SP10-10	10	15		11			71		120	35	13				76		
AW-AFI-SP01-10	10					280							240			22	
D(b)-SP03-10	10					190	7.2		16				130		11	1100	
D(b)-SP04-10	10	4.4				180	16	110	35				120		20	42	
D(b)-SP05-10	10					17			4.6				11		5.8		
D(b)-SP06-10	10		25			96			5.3				68	4.8	12		
D(c)-SP05-10	10		23				29		85	5.5					33		
D(c)-SP06-10	10					28	8.6		19						13	690	
D(c)-SP07-10	10								6.8					3.4		41	
D(c)-SP09-10	10		20						13					7.5	5.6		
D(c)-SP10-10	10		140						5.3					4.7	8.4		
D(c)-SP11-10	10	5.1		7.1		11	33		64	8.0			7.9	7.3	45		
D(c)-SP12-10	10					14			7.2				69	4.8	15	12	
05D-SP08-20	20						28		73						22		
08D-SP07-20	20	19	40				27		220	7.0				11	27		
08D-SP08-20	20					13			9.6						15	11	
52D-SP24-20	20		11	9.5		570	9.9		9.1	32	9.1		11		38	430	
52D-SP25-20	20			6.0		220			24	23	7.9	6.3	36		34	960	
52D-SP27-20	20			15		57	5.8		11	57	14	8.0	34		74	160	
52D-SP28-20	20	9.3	160			14	24		90						18	58	
52D-SP29-20	20	11				440	5.7		15				14		11	620	
52D-SP30-20	20	21				560	6.7		20				29		7.2	1200	
52D-SP32-20	20					2900										480	
52D-SP33-20	20			14		160	9.2		13	44	15	8.9	49		66	240	
52D-SP35-20	20		8.6			440			6.5				110			12	
52D-SP36-20	20				89	3400							82		5.0	200	3.4
52D-SP39-20	20	5.8	21			40	40		12	9.9				4.4	50	32	
52D-SP40-20	20			10			24		66	17	8.7		45	36	52	23	
52D-SP41-20	20		28				9.6		15	5.2			13	14	27	7.0	
52D-SP42-20	20		28			17	11		18	6.7			20	13	45	7.6	
52D-SP43-20	20	64			9.3	1000	5.3		8.6				99		5.0	280	
52D-SP44-20	20		72		9.4	91			8.1						7.1		
AW-08D-SP10-20	20	6.7	12	5.1			37		80	12					54	7.3	
D(b)-SP03-20	20					210	6.0		12				24		9.2	310	
D(b)-SP04-20	20					63			11							7.1	
D(b)-SP06-20	20		26						7.6				200	10	7.7		
D(c)-SP05-20	20					49	24		70						24	320	
D(c)-SP06-20	20														5.1		

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard		1.2 E-1	3.9 E-1	6.7 E-1	3.4 E+0	2.3 E-2	9.8 E-1	2.0 E+2	9.8 E-1	6.8 E+0	6.8 E+0	7.5 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.1 E+0	6.7 E+0
Unit Risk		NA	NA	6.1 E-4	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
D(c)-SP07-20	20									5.4						19	
D(c)-SP08-20	20		27				20		120	6.5				20	24	12	
D(c)-SP09-20	20		30				14		17					6.3	7.9	6.9	
D(c)-SP10-20	20					250	5.7		17				36	13	18	53	
D(c)-SP11-20	20				7.8	23	6.3		23					16	19	13	
D(c)-SP12-20	20		23	7.7		12	18		29	12	6.7		100	18	46	28	
52D-SP40-28	28		31				16		45	7.4			18	46	41	18	
52D-SP24-30	30		14												12		
52D-SP25-30	30					590			5	17			98		20	1800	
52D-SP27-30	30	5.3	14	18		140	9.5		14	68	17	5.8		4.4	110	11	
52D-SP28-30	30					300	7.8		13	12			42		10	260	
52D-SP30-30	30																
52D-SP35-30	30		27			1200	5.5		8.6	5.9			220	9.5	7.6	31	
52D-SP36-30	30				110	3400			6.6				60	7.6	4.4	250	6.0
52D-SP37-30	30		19		14	220	65		48				28	10	7.2	25	
52D-SP39-30	30	4.7	36				27		54						15		
52D-SP41-30	30		13				6.4		11	5.7			8.3	13	16		
52D-SP42-30	30					640	5.2		21				560	85	23	8300	4.0
52D-SP43-30	30	11	150			200				5.7			9.6		10	58	
52D-SP44-30	30	13	120			17	85		190						32		
D(b)-SP05-30	30		12			180	8.2		9.9				10	5.4	12		
D(c)-SP05-30	30					230							13	4.4		1300	
52D-SP44-40	40	6.1	140		23	890	64		180						50	12	3.5

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	4.8 E-6	2.6 E-4	NA	2.5 E-7	6.2 E-5	1.1 E-4	NA	4.9 E-6	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	8.9 E-6	NA	NA	4.1 E-7	6.1 E-5	3.9 E-4	NA	9.2 E-6	1.0 E-4	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	1.8 E-5	1.5 E-4	NA	2.7 E-5	NA	NA	NA
52D-SP24-10	10	3.9 E-4	2.4 E-5	1.9 E-4	NA	NA	3.9 E-4	NA	NA	1.8 E-5	NA	NA	3.5 E-5	NA	NA	NA	1.6 E-4	4.2 E-4
52D-SP25-10	10	8.1 E-5	4.4 E-6	1.6 E-4	NA	NA	3.0 E-3	NA	NA	1.4 E-5	2.1 E-6	NA	5.9 E-5	NA	2.3 E-5	NA	1.1 E-4	8.8 E-5
52D-SP26-10	10	4.2 E-5	NA	3.4 E-4	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	3.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	2.5 E-5	NA	NA	NA
52D-SP30-10	10	5.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	4.4 E-5	NA	1.6 E-5	NA	6.2 E-5	NA
52D-SP31-10	10	3.5 E-5	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-5	NA	2.5 E-6	NA	NA	NA
52D-SP32-10	10	3.9 E-4	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA
52D-SP33-10	10	3.2 E-6	2.1 E-6	1.8 E-4	NA	NA	1.4 E-3	6.8 E-7	NA	1.8 E-5	NA	8.1 E-6	7.1 E-5	NA	4.0 E-6	NA	1.3 E-4	4.4 E-5
52D-SP35-10	10	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-6	NA	NA	5.8 E-6	NA	NA	NA
52D-SP36-10	10	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	2.0 E-6	NA	NA	NA
52D-SP37-10	10	1.4 E-6	NA	NA	NA	1.2 E-6	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA
52D-SP38-10	10	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	2.4 E-5	2.2 E-5	NA	1.1 E-6	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	4.6 E-6	NA	NA	NA
52D-SP41-10	10	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	1.9 E-6	NA	4.9 E-5	NA
52D-SP42-10	10	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	2.3 E-5	NA	1.6 E-6	NA	9.8 E-5	NA
52D-SP43-10	10	1.0 E-4	1.9 E-6	NA	NA	NA	NA	9.2 E-7	NA	NA	6.2 E-7	1.5 E-5	3.2 E-5	NA	8.4 E-6	NA	5.3 E-5	2.9 E-5
AW-08D-SP10-10	10	NA	NA	1.6 E-4	NA	NA	NA	1.1 E-6	NA	1.6 E-5	NA	8.8 E-6	3.4 E-4	NA	1.0 E-4	NA	NA	NA
AW-AFI-SP01-10	10	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA
D(b)-SP03-10	10	9.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-6	7.1 E-5	NA	6.3 E-6	NA	NA	NA
D(b)-SP04-10	10	1.3 E-6	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	1.1 E-5	1.2 E-4	NA	6.1 E-6	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-6	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	4.8 E-5	NA	2.7 E-6	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	2.9 E-7	4.6 E-5	2.9 E-4	NA	8.7 E-6	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	8.8 E-6	1.3 E-4	NA	2.3 E-5	NA	2.5 E-3	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-6	NA	NA	3.7 E-6	NA	4.9 E-5	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	1.1 E-5	NA	NA	3.7 E-6	NA	2.2 E-4	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	2.1 E-4	NA	6.1 E-6	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	1.5 E-5	4.2 E-5	NA	NA	NA	NA	NA
05D-SP08-20	20	1.7 E-6	NA	NA	NA	NA	NA	8.7 E-7	NA	NA	NA	6.5 E-6	1.0 E-4	NA	1.2 E-5	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	1.7 E-7	2.1 E-5	1.3 E-4	NA	3.7 E-5	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	2.0 E-5	NA	1.0 E-5	NA	1.6 E-5	NA
52D-SP24-20	20	3.5 E-5	2.6 E-6	7.5 E-5	NA	NA	6.6 E-4	NA	NA	8.8 E-6	NA	3.7 E-6	1.9 E-5	NA	2.0 E-6	NA	3.7 E-5	3.7 E-5
52D-SP25-20	20	1.6 E-5	6.4 E-7	8.6 E-5	NA	NA	1.1 E-3	NA	NA	8.8 E-6	4.7 E-7	NA	1.8 E-5	NA	1.3 E-6	NA	5.9 E-5	2.1 E-5
52D-SP27-20	20	1.4 E-6	8.3 E-7	1.2 E-4	NA	NA	5.6 E-4	NA	NA	1.5 E-5	NA	NA	3.2 E-5	NA	6.0 E-7	NA	3.0 E-5	1.3 E-5
52D-SP28-20	20	2.6 E-7	NA	NA	NA	NA	NA	6.6 E-6	1.1 E-3	NA	5.3 E-7	8.7 E-5	1.1 E-4	NA	3.7 E-6	8.9 E-5	NA	NA
52D-SP29-20	20	9.3 E-6	NA	NA	NA	NA	NA	6.2 E-7	NA	NA	NA	6.5 E-6	3.5 E-5	NA	4.9 E-6	4.6 E-5	2.0 E-5	NA
52D-SP30-20	20	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	2.0 E-6	NA	4.2 E-5	2.4 E-5
52D-SP32-20	20	6.0 E-4	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	2.6 E-6	NA	8.6 E-5	NA	NA	2.5 E-3	NA	NA	9.6 E-6	NA	NA	2.5 E-5	NA	1.2 E-6	NA	8.4 E-5	3.0 E-5
52D-SP35-20	20	5.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	8.9 E-6	NA	1.8 E-5	NA
52D-SP36-20	20	9.7 E-7	8.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	3.7 E-5
52D-SP39-20	20	1.4 E-7	7.4 E-7	NA	NA	NA	5.0 E-5	NA	NA	NA	NA	1.2 E-5	3.2 E-5	NA	2.0 E-6	NA	7.4 E-5	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	3.5 E-7	2.1 E-5	7.4 E-5	NA	2.9 E-6	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	7.0 E-7	NA	NA	NA	8.7 E-6	2.1 E-5	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	1.6 E-7	1.3 E-5	5.5 E-5	NA	NA	NA	NA	NA
52D-SP43-20	20	8.8 E-5	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	1.3 E-5	NA	1.6 E-6	NA	4.2 E-5	2.2 E-5
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	1.6 E-7	1.4 E-5	NA	NA	1.1 E-6	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	8.9 E-7	NA	NA	NA	1.0 E-5	1.5 E-4	NA	3.5 E-6	NA	NA	NA
D(b)-SP03-20	20	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	2.0 E-6	NA	5.9 E-5	NA
D(b)-SP04-20	20	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	1.7 E-5	NA	1.3 E-6	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	2.4 E-5	7.1 E-5	NA	3.9 E-5	NA	4.4 E-4	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	NA

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard																		
Unit Risk																		
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	9.6 E-6	NA	NA	NA	NA	7.0 E-6	5.8 E-5	NA	3.2 E-5	NA	3.9 E-5	NA
D(c)-SP09-20	20	NA	NA	NA	NA	7.9 E-7	1.3 E-5	NA	NA	NA	NA	4.2 E-6	2.8 E-5	NA	1.4 E-5	NA	7.2 E-4	NA
D(c)-SP10-20	20	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	1.2 E-5	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	6.7 E-7	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	2.2 E-5	NA	7.2 E-4	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	3.9 E-6	2.4 E-4	NA	1.9 E-7	4.1 E-5	6.8 E-5	NA	2.7 E-6	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	4.7 E-7	NA	8.3 E-7	1.6 E-4	NA	NA	1.0 E-5	3.8 E-5	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	2.3 E-5	4.9 E-7	5.2 E-5	NA	NA	3.3 E-4	NA	NA	5.4 E-6	NA	NA	8.0 E-6	NA	4.1 E-7	NA	6.5 E-5	1.3 E-5
52D-SP27-30	30	3.7 E-7	NA	9.4 E-5	NA	NA	1.6 E-3	NA	NA	1.1 E-5	NA	NA	2.7 E-5	NA	4.8 E-7	NA	1.6 E-5	NA
52D-SP28-30	30	1.1 E-6	NA	4.6 E-5	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	1.4 E-5	NA	1.3 E-6	NA	8.9 E-5	9.5 E-6
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	4.9 E-7	3.8 E-7	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	3.8 E-6	NA	5.5 E-6	2.4 E-6	NA	3.2 E-4	NA
52D-SP36-30	30	7.4 E-7	8.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-7	NA	1.1 E-5	4.4 E-5
52D-SP37-30	30	NA	8.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	1.1 E-5	NA	2.0 E-5	NA	NA	1.0 E-5
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	6.1 E-6	6.0 E-5	NA	1.4 E-6	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	9.4 E-8	8.1 E-6	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	3.8 E-6	2.7 E-5	NA	NA	NA	NA	8.6 E-4
52D-SP43-30	30	8.9 E-6	6.1 E-7	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	2.3 E-6	2.6 E-4	NA	3.1 E-6	3.2 E-5	1.5 E-4	NA	1.8 E-6	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	1.2 E-6	NA	1.2 E-3	NA
52D-SP44-40	40	NA	3.4 E-7	NA	NA	NA	NA	1.1 E-6	1.8 E-4	NA	NA	1.7 E-5	1.0 E-4	NA	4.2 E-6	NA	NA	NA

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Heptane	Hexachlorobutadiene	Hexane	m,p-Xylene	o-Xylene	Styrene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Vinyl Chloride	HI
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	1.4 E-5	NA	NA	NA	3.1 E-6	NA	6.4 E-6	1.2 E-5	NA	7.9 E-7	NA	6.0 E-6	1.8 E-5	NA	NA	4.9 E-4
08D-SP08-10	10	NA	5.1 E-6	1.4 E-6	NA	NA	1.3 E-5	NA	3.3 E-5	1.9 E-5	9.8 E-6	1.3 E-6	3.1 E-4	2.4 E-6	4.3 E-5	NA	NA	1.0 E-3
08D-SP09-10	10	1.6 E-7	NA	NA	NA	NA	1.2 E-5	NA	2.5 E-5	1.2 E-5	NA	NA	NA	NA	2.1 E-5	NA	NA	2.7 E-4
52D-SP24-10	10	NA	NA	1.2 E-6	NA	1.0 E-5	3.6 E-6	NA	3.3 E-6	4.9 E-5	1.9 E-5	1.8 E-6	5.2 E-4	8.1 E-6	1.3 E-5	4.3 E-4	NA	2.7 E-3
52D-SP25-10	10	NA	NA	1.5 E-6	NA	1.3 E-6	NA	NA	6.8 E-6	5.7 E-5	2.6 E-5	1.8 E-6	2.3 E-4	NA	2.9 E-5	3.3 E-4	NA	4.2 E-3
52D-SP26-10	10	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	2.7 E-5	1.7 E-5	NA	3.4 E-4	NA	5.2 E-6	3.0 E-4	NA	1.1 E-3
52D-SP29-10	10	8.3 E-7	NA	1.3 E-6	NA	1.2 E-6	1.4 E-5	NA	3.5 E-5	4.5 E-5	3.0 E-5	2.8 E-6	2.8 E-4	NA	4.6 E-5	7.1 E-4	NA	1.7 E-3
52D-SP30-10	10	1.2 E-7	NA	NA	NA	2.0 E-7	2.6 E-6	NA	5.0 E-6	1.2 E-5	NA	NA	1.7 E-4	NA	7.6 E-6	1.3 E-4	NA	4.6 E-4
52D-SP31-10	10	6.1 E-7	NA	NA	NA	7.5 E-7	NA	NA	5.4 E-6	NA	NA	NA	6.9 E-5	NA	6.4 E-6	1.1 E-4	NA	3.2 E-4
52D-SP32-10	10	NA	NA	NA	NA	8.0 E-6	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	2.1 E-4	NA	1.1 E-3
52D-SP33-10	10	NA	NA	1.5 E-6	NA	5.2 E-7	5.4 E-6	NA	9.5 E-6	5.7 E-5	1.9 E-5	1.4 E-6	4.0 E-4	1.2 E-5	2.7 E-5	7.6 E-5	NA	2.5 E-3
52D-SP35-10	10	NA	1.6 E-6	NA	NA	2.0 E-6	NA	NA	5.9 E-6	NA	NA	NA	4.2 E-4	NA	NA	2.4 E-6	NA	4.5 E-4
52D-SP36-10	10	NA	4.4 E-6	NA	5.8 E-5	8.0 E-6	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	4.1 E-4
52D-SP37-10	10	NA	8.1 E-6	NA	3.3 E-5	1.7 E-6	NA	NA	7.7 E-6	NA	NA	NA	1.6 E-4	8.8 E-6	2.8 E-6	4.9 E-6	NA	5.5 E-4
52D-SP38-10	10	NA	NA	NA	NA	3.2 E-7	NA	NA	4.2 E-6	NA	NA	NA	2.6 E-4	8.1 E-6	NA	NA	NA	2.9 E-4
52D-SP39-10	10	NA	3.5 E-6	NA	NA	NA	2.5 E-6	NA	NA	1.6 E-5	NA	NA	NA	4.1 E-6	1.9 E-5	NA	NA	1.1 E-4
52D-SP40-10	10	NA	NA	NA	NA	NA	2.5 E-6	NA	6.8 E-6	NA	NA	NA	1.4 E-4	8.1 E-6	5.7 E-6	3.5 E-6	NA	2.1 E-4
52D-SP41-10	10	NA	NA	NA	NA	4.5 E-7	NA	NA	2.1 E-6	NA	NA	NA	3.8 E-4	2.8 E-6	4.3 E-6	6.5 E-6	NA	4.7 E-4
52D-SP42-10	10	NA	NA	NA	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	2.9 E-4	2.7 E-6	4.3 E-6	3.3 E-6	NA	4.4 E-4
52D-SP43-10	10	1.3 E-6	NA	NA	6.7 E-6	3.4 E-6	NA	NA	2.6 E-6	NA	NA	NA	5.2 E-4	NA	5.1 E-6	9.2 E-5	NA	8.7 E-4
AW-08D-SP10-10	10	4.1 E-7	NA	1.7 E-6	NA	NA	3.2 E-5	NA	5.4 E-5	5.6 E-5	2.3 E-5	NA	NA	NA	4.4 E-5	NA	NA	8.4 E-4
AW-AFI-SP01-10	10	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	6.0 E-6	NA	1.0 E-3
D(b)-SP03-10	10	NA	NA	NA	NA	1.0 E-6	3.3 E-6	NA	7.3 E-6	NA	NA	NA	5.6 E-4	NA	6.4 E-6	3.0 E-4	NA	9.6 E-4
D(b)-SP04-10	10	1.2 E-7	NA	NA	NA	9.6 E-7	7.3 E-6	3.8 E-3	1.6 E-5	NA	NA	NA	5.2 E-4	NA	1.2 E-5	1.1 E-5	NA	4.5 E-3
D(b)-SP05-10	10	NA	NA	NA	NA	9.1 E-8	NA	NA	2.1 E-6	NA	NA	NA	4.7 E-5	NA	3.4 E-6	NA	NA	6.2 E-5
D(b)-SP06-10	10	NA	4.1 E-6	NA	NA	5.1 E-7	NA	NA	2.4 E-6	NA	NA	NA	2.9 E-4	3.3 E-6	7.0 E-6	NA	NA	6.6 E-4
D(c)-SP05-10	10	NA	3.8 E-6	NA	NA	NA	1.3 E-5	NA	3.9 E-5	8.8 E-6	NA	NA	NA	NA	1.9 E-5	NA	NA	4.3 E-4
D(c)-SP06-10	10	NA	NA	NA	NA	1.5 E-7	3.9 E-6	NA	8.6 E-6	NA	NA	NA	NA	NA	7.6 E-6	1.9 E-4	NA	2.9 E-3
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	2.3 E-6	NA	1.1 E-5	NA	7.4 E-5
D(c)-SP09-10	10	NA	3.3 E-6	NA	NA	NA	NA	NA	5.9 E-6	NA	NA	NA	NA	5.1 E-6	3.3 E-6	NA	NA	3.4 E-4
D(c)-SP10-10	10	NA	2.3 E-5	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	3.2 E-6	4.9 E-6	NA	NA	4.0 E-5
D(c)-SP11-10	10	1.4 E-7	NA	1.1 E-6	NA	5.9 E-8	1.5 E-5	NA	2.9 E-5	1.3 E-5	NA	NA	3.4 E-5	5.0 E-6	2.6 E-5	NA	NA	3.4 E-4
D(c)-SP12-10	10	NA	NA	NA	NA	7.5 E-8	NA	NA	3.3 E-6	NA	NA	NA	3.0 E-4	3.3 E-6	8.8 E-6	3.3 E-6	NA	3.8 E-4
05D-SP08-20	20	NA	NA	NA	NA	NA	8.0 E-6	NA	2.0 E-5	NA	NA	NA	NA	NA	7.3 E-6	NA	NA	1.6 E-4
08D-SP07-20	20	3.0 E-7	4.1 E-6	NA	NA	NA	7.7 E-6	NA	6.0 E-5	6.3 E-6	NA	NA	NA	4.3 E-6	9.0 E-6	NA	NA	2.8 E-4
08D-SP08-20	20	NA	NA	NA	NA	3.9 E-8	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	5.0 E-6	1.7 E-6	NA	5.7 E-5
52D-SP24-20	20	NA	1.1 E-6	7.9 E-7	NA	1.7 E-6	2.8 E-6	NA	2.5 E-6	2.9 E-5	9.1 E-6	NA	2.5 E-5	NA	1.3 E-5	6.6 E-5	NA	1.0 E-3
52D-SP25-20	20	NA	NA	5.0 E-7	NA	6.7 E-7	NA	NA	6.6 E-6	2.1 E-5	7.9 E-6	5.8 E-7	8.3 E-5	NA	1.1 E-5	1.5 E-4	NA	1.6 E-3
52D-SP27-20	20	NA	NA	1.2 E-6	NA	1.7 E-7	1.7 E-6	NA	3.0 E-6	5.1 E-5	1.4 E-5	7.4 E-7	7.9 E-5	NA	2.5 E-5	2.5 E-5	NA	9.8 E-4
52D-SP28-20	20	1.5 E-7	1.6 E-5	NA	NA	4.2 E-8	6.9 E-6	NA	2.5 E-5	NA	NA	NA	NA	NA	6.0 E-6	8.9 E-6	NA	1.5 E-3
52D-SP29-20	20	1.7 E-7	NA	NA	NA	1.3 E-6	1.6 E-6	NA	4.1 E-6	NA	NA	NA	3.2 E-5	NA	3.7 E-6	9.5 E-5	NA	2.6 E-4
52D-SP30-20	20	3.3 E-7	NA	NA	NA	1.7 E-6	1.9 E-6	NA	5.5 E-6	NA	NA	NA	6.7 E-5	NA	2.4 E-6	1.8 E-4	NA	3.8 E-4
52D-SP32-20	20	NA	NA	NA	NA	8.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	7.0 E-4
52D-SP33-20	20	NA	NA	1.2 E-6	NA	4.8 E-7	2.6 E-6	NA	3.6 E-6	4.0 E-5	1.5 E-5	8.2 E-7	1.1 E-4	NA	2.2 E-5	3.7 E-5	NA	3.0 E-3
52D-SP35-20	20	NA	8.7 E-7	NA	NA	1.3 E-6	NA	NA	1.8 E-6	NA	NA	NA	2.5 E-4	NA	NA	1.8 E-6	NA	2.9 E-4
52D-SP36-20	20	NA	NA	NA	4.5 E-5	1.0 E-5	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	1.7 E-6	3.1 E-5	4.0 E-6	3.3 E-4
52D-SP39-20	20	9.1 E-8	2.1 E-6	NA	NA	1.2 E-7	1.1 E-5	NA	3.3 E-6	8.9 E-6	NA	NA	NA	1.7 E-6	1.7 E-5	4.9 E-6	NA	2.2 E-4
52D-SP40-20	20	NA	NA	8.3 E-7	NA	NA	6.9 E-6	NA	1.8 E-5	1.5 E-5	8.7 E-6	NA	1.0 E-4	1.4 E-5	1.7 E-5	3.5 E-6	NA	2.9 E-4
52D-SP41-20	20	NA	2.8 E-6	NA	NA	NA	2.7 E-6	NA	4.1 E-6	4.7 E-6	NA	NA	3.0 E-5	5.5 E-6	9.0 E-6	1.1 E-6	NA	9.1 E-5
52D-SP42-20	20	NA	2.8 E-6	NA	NA	5.2 E-8	3.1 E-6	NA	4.9 E-6	6.0 E-6	NA	NA	4.6 E-5	5.1 E-6	1.5 E-5	1.2 E-6	NA	1.5 E-4
52D-SP43-20	20	1.0 E-6	NA	NA	4.7 E-6	3.0 E-6	1.5 E-6	NA	2.4 E-6	NA	NA	NA	2.3 E-4	NA	1.7 E-6	4.3 E-5	NA	4.6 E-4
52D-SP44-20	20	NA	7.3 E-6	NA	4.7 E-6	2.8 E-7	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	3.2 E-5
AW-08D-SP10-20	20	1.1 E-7	1.2 E-6	4.2 E-7	NA	NA	1.1 E-5	NA	2.2 E-5	1.1 E-5	NA	NA	NA	NA	1.8 E-5	1.1 E-6	NA	2.3 E-4
D(b)-SP03-20	20	NA	NA	NA	NA	6.4 E-7	1.7 E-6	NA	3.3 E-6	NA	NA	NA	5.6 E-5	NA	3.1 E-6	4.8 E-5	NA	2.1 E-4
D(b)-SP04-20	20	NA	NA	NA	NA	1.9 E-7	NA	NA	3.0 E-6	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	2.5 E-5
D(b)-SP06-20	20	NA	2.6 E-6	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	4.6 E-4	4.0 E-6	2.6 E-6	NA	NA	4.8 E-4
D(c)-SP05-20	20	NA	NA	NA	NA	1.5 E-7	6.9 E-6	NA	1.9 E-5	NA	NA	NA	NA	NA	8.0 E-6	4.9 E-5	NA	6.6 E-4
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	2.4 E-6

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard																		
Unit Risk																		
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	2.9 E-6	NA	9.1 E-6
D(c)-SP08-20	20	NA	2.7 E-6	NA	NA	NA	5.7 E-6	NA	3.3 E-5	5.9 E-6	NA	NA	NA	7.9 E-6	8.0 E-6	1.8 E-6	NA	2.1 E-4
D(c)-SP09-20	20	NA	3.0 E-6	NA	NA	NA	4.0 E-6	NA	4.7 E-6	NA	NA	NA	NA	2.5 E-6	2.6 E-6	1.1 E-6	NA	7.9 E-4
D(c)-SP10-20	20	NA	NA	NA	NA	7.6 E-7	1.6 E-6	NA	4.7 E-6	NA	NA	NA	8.3 E-5	5.1 E-6	6.0 E-6	8.2 E-6	NA	1.3 E-4
D(c)-SP11-20	20	NA	NA	NA	3.9 E-6	7.0 E-8	1.8 E-6	NA	6.3 E-6	NA	NA	NA	NA	6.3 E-6	6.3 E-6	2.0 E-6	NA	7.8 E-4
D(c)-SP12-20	20	NA	2.3 E-6	6.4 E-7	NA	3.6 E-8	5.1 E-6	NA	8.0 E-6	1.1 E-5	6.7 E-6	NA	2.3 E-4	7.1 E-6	1.5 E-5	4.3 E-6	NA	6.5 E-4
52D-SP40-28	28	NA	2.3 E-6	NA	NA	NA	3.3 E-6	NA	9.4 E-6	4.6 E-6	NA	NA	3.0 E-5	1.3 E-5	9.6 E-6	1.9 E-6	NA	2.8 E-4
52D-SP24-30	30	NA	9.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	NA	7.0 E-6
52D-SP25-30	30	NA	NA	NA	NA	1.2 E-6	NA	NA	9.8 E-7	1.0 E-5	NA	NA	1.5 E-4	NA	4.4 E-6	1.8 E-4	NA	8.5 E-4
52D-SP27-30	30	5.4 E-8	9.7 E-7	1.0 E-6	NA	2.8 E-7	1.9 E-6	NA	2.8 E-6	4.0 E-5	1.1 E-5	3.5 E-7	NA	1.2 E-6	2.4 E-5	1.1 E-6	NA	1.9 E-3
52D-SP28-30	30	NA	NA	NA	NA	5.9 E-7	1.5 E-6	NA	2.6 E-6	7.1 E-6	NA	NA	6.6 E-5	NA	2.2 E-6	2.6 E-5	NA	2.7 E-4
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	1.9 E-6	NA	NA	2.4 E-6	1.1 E-6	NA	1.7 E-6	3.5 E-6	NA	NA	3.5 E-4	2.5 E-6	1.7 E-6	3.1 E-6	NA	7.0 E-4
52D-SP36-30	30	NA	NA	NA	3.6 E-5	6.7 E-6	NA	NA	1.3 E-6	NA	NA	NA	9.5 E-5	2.0 E-6	9.6 E-7	2.5 E-5	4.7 E-6	2.4 E-4
52D-SP37-30	30	NA	1.3 E-6	NA	4.6 E-6	4.4 E-7	1.3 E-5	NA	9.4 E-6	NA	NA	NA	4.4 E-5	2.6 E-6	1.6 E-6	2.5 E-6	NA	1.2 E-4
52D-SP39-30	30	4.8 E-8	2.5 E-6	NA	NA	NA	5.3 E-6	NA	1.1 E-5	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	8.9 E-5
52D-SP41-30	30	NA	9.0 E-7	NA	NA	NA	1.3 E-6	NA	2.2 E-6	3.4 E-6	NA	NA	1.3 E-5	3.4 E-6	3.5 E-6	NA	NA	3.0 E-5
52D-SP42-30	30	NA	NA	NA	NA	1.3 E-6	1.0 E-6	NA	4.1 E-6	NA	NA	NA	8.9 E-4	2.2 E-5	5.0 E-6	8.3 E-4	3.1 E-6	2.7 E-3
52D-SP43-30	30	1.1 E-7	1.0 E-5	NA	NA	4.0 E-7	NA	NA	NA	3.4 E-6	NA	NA	1.5 E-5	NA	2.2 E-6	5.8 E-6	NA	4.3 E-4
52D-SP44-30	30	1.3 E-7	8.3 E-6	NA	NA	3.4 E-8	1.7 E-5	NA	3.7 E-5	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	5.2 E-4
D(b)-SP05-30	30	NA	8.3 E-7	NA	NA	3.6 E-7	1.6 E-6	NA	1.9 E-6	NA	NA	NA	1.6 E-5	1.4 E-6	2.6 E-6	NA	NA	2.5 E-5
D(c)-SP05-30	30	NA	NA	NA	NA	4.6 E-7	NA	NA	NA	NA	NA	NA	2.1 E-5	1.2 E-6	NA	1.3 E-4	NA	1.4 E-3
52D-SP44-40	40	4.8 E-8	7.5 E-6	NA	5.8 E-6	1.3 E-6	9.8 E-6	NA	2.8 E-5	NA	NA	NA	NA	NA	8.4 E-6	9.2 E-7	2.1 E-6	3.7 E-4

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	6.4 E-8	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA
52D-SP24-10	10	NA	9.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	5.8 E-8	NA
52D-SP25-10	10	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	4.0 E-8	NA
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	2.3 E-8	NA
52D-SP31-10	10	NA	5.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA
52D-SP32-10	10	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-10	10	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	4.8 E-8	NA
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP37-10	10	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-9	NA	NA	NA	1.8 E-8	NA
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA	NA	3.6 E-8	NA
52D-SP43-10	10	NA	7.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-9	NA	NA	NA	2.0 E-8	NA
AW-08D-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	9.3 E-7	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-8	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	5.8 E-9	NA
52D-SP24-20	20	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	NA	NA	1.4 E-8	NA
52D-SP25-20	20	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	NA	NA	2.2 E-8	NA
52D-SP27-20	20	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-9	NA	NA	NA	1.1 E-8	NA
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	5.5 E-8	NA	NA
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	2.8 E-8	7.6 E-9	NA
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-9	NA	NA	NA	1.6 E-8	NA
52D-SP32-20	20	NA	8.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA	3.1 E-8	NA
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA
52D-SP36-20	20	NA	3.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-20	20	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA	2.8 E-8	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA
52D-SP43-20	20	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-9	NA	NA	NA	1.6 E-8	NA
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	NA
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	2.2 E-8	NA
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	1.7 E-7	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard																		
Unit Risk																		
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	1.5 E-8	NA
D(c)-SP09-20	20	NA	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	8.6 E-9	NA	NA	NA	2.7 E-7	NA
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	2.7 E-7	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	9.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	2.4 E-8	NA
52D-SP27-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	NA	NA	6.1 E-9	NA
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	3.3 E-8	NA
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	1.6 E-10	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	1.2 E-7	NA
52D-SP36-30	30	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-9	NA
52D-SP37-30	30	NA	3.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	NA	NA
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	NA	NA	NA	NA
52D-SP43-30	30	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA
52D-SP44-40	40	NA	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Heptane	Hexachlorobutadiene	Hexane	m,p-Xylene	o-Xylene	Styrene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Vinyl Chloride	ILCR
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	3 E-8
08D-SP08-10	10	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	5.1 E-10	NA	NA	NA	2 E-7
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
52D-SP24-10	10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	1.7 E-9	NA	1.9 E-7	NA	3 E-7
52D-SP25-10	10	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	1.4 E-7	NA	2 E-7
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	1.3 E-7	NA	2 E-7
52D-SP29-10	10	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	3.0 E-7	NA	5 E-7
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	5.6 E-8	NA	1 E-7
52D-SP31-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	4.8 E-8	NA	8 E-8
52D-SP32-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	9.1 E-8	NA	1 E-7
52D-SP33-10	10	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	2.6 E-9	NA	3.3 E-8	NA	1 E-7
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	1.0 E-9	NA	3 E-8
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	2 E-8
52D-SP37-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	1.8 E-9	NA	2.1 E-9	NA	3 E-8
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	1.7 E-9	NA	NA	NA	2 E-8
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	8 E-9
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	1.7 E-9	NA	1.5 E-9	NA	2 E-8
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	5.8 E-10	NA	2.8 E-9	NA	6 E-8
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	5.7 E-10	NA	1.4 E-9	NA	7 E-8
52D-SP43-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	4.0 E-8	NA	1 E-7
AW-08D-SP10-10	10	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	2.6 E-9	NA	8 E-8
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	1.3 E-7	NA	2 E-7
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	3.9 E-8	NA	NA	4.9 E-9	NA	2 E-7
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	4 E-9
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	6.8 E-10	NA	NA	NA	4 E-8
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	1 E-6
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	4.8 E-9	NA	2 E-8
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	8 E-8
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	NA	7 E-10
D(c)-SP11-10	10	NA	NA	9.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	1.0 E-9	NA	NA	NA	7 E-8
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	6.8 E-10	NA	1.4 E-9	NA	4 E-8
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-10	NA	NA	NA	4 E-8
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-10	NA	1 E-8
52D-SP24-20	20	NA	NA	7.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	2.8 E-8	NA	5 E-8
52D-SP25-20	20	NA	NA	4.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-9	NA	NA	6.3 E-8	NA	1 E-7
52D-SP27-20	20	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-9	NA	NA	1.1 E-8	NA	4 E-8
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	9 E-8
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	4.1 E-8	NA	9 E-8
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	7.9 E-8	NA	1 E-7
52D-SP32-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	4 E-8
52D-SP33-20	20	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-9	NA	NA	1.6 E-8	NA	6 E-8
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	7.9 E-10	NA	3 E-8
52D-SP36-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	1.3 E-8	1.1 E-8	4 E-8
52D-SP39-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	2.1 E-9	NA	4 E-8
52D-SP40-20	20	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	3.0 E-9	NA	1.5 E-9	NA	4 E-8
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	1.2 E-9	NA	4.6 E-10	NA	1 E-8
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-9	1.1 E-9	NA	5.0 E-10	NA	2 E-8
52D-SP43-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	1.8 E-8	NA	6 E-8
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
AW-08D-SP10-20	20	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	5 E-8
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	2.0 E-8	NA	6 E-8
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	6 E-9
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	8.3 E-10	NA	NA	NA	4 E-8
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	2 E-7
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Table 5.2-57
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																		
Unit Risk																		
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	1 E-9
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	7.9 E-10	NA	3 E-8
D(c)-SP09-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	4.5 E-10	NA	3 E-7
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-9	1.1 E-9	NA	3.5 E-9	NA	1 E-8
D(c)-SP11-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	8.6 E-10	NA	3 E-7
D(c)-SP12-20	20	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	1.5 E-9	NA	1.8 E-9	NA	4 E-8
52D-SP40-28	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	2.7 E-9	NA	8.3 E-10	NA	2 E-8
52D-SP24-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
52D-SP25-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	7.8 E-8	NA	1 E-7
52D-SP27-30	30	NA	NA	9.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	4.7 E-10	NA	2 E-8
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	1.1 E-8	NA	5 E-8
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
52D-SP35-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	5.2 E-10	NA	1.3 E-9	NA	2 E-7
52D-SP36-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	4.2 E-10	NA	1.1 E-8	1.3 E-8	4 E-8
52D-SP37-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	5.5 E-10	NA	1.1 E-9	NA	9 E-9
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	7.1 E-10	NA	NA	NA	2 E-9
52D-SP42-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	4.6 E-9	NA	3.6 E-7	8.7 E-9	4 E-7
52D-SP43-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	2.5 E-9	NA	4 E-9
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	3.0 E-10	NA	NA	NA	1 E-9
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	2.4 E-10	NA	5.6 E-8	NA	5 E-7
52D-SP44-40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	5.8 E-9	4 E-8

Notes and Key:

All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.2-15) x the unit hazard or unit risk for the chemical).

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+1	8.5 E-1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1
Unit Risk		NA	4.0 E-4	NA	1.5 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA
08D-SP07-10	10							140	13		4.8	840	18		17			
08D-SP08-10	10							260			7.8	830	66		32	26		
08D-SP09-10	10							65				250	26		95			
52D-SP24-10	10	12000	110	10			220			10			6.0				35	96
52D-SP25-10	10	2500	20	8.3			1700			8.2	41		10		80		24	20
52D-SP26-10	10	1300		18						11								
52D-SP29-10	10	1200											81		88			
52D-SP30-10	10	160										74	7.5		56		14	
52D-SP31-10	10	1100	5.9										14		8.8			
52D-SP32-10	10	12000	53												39			
52D-SP33-10	10	98	9.7	9.5			820	20		10		110	12		14		29	10
52D-SP35-10	10	34										130			20			
52D-SP36-10	10	51										73			7			
52D-SP37-10	10	42				18			15						72			
52D-SP38-10	10	10													60			
52D-SP39-10	10						9.8					320	3.8		3.8			
52D-SP40-10	10												6.2		16			
52D-SP41-10	10	12											4.6		6.7		11	
52D-SP42-10	10	11										140	3.9		5.4		22	
52D-SP43-10	10	3200	8.5					27			12	210	5.4		29		12	6.7
AW-08D-SP10-10	10			8.6				31		9.0		120	57		360			
AW-AFI-SP01-10	10	44													6.4			
D(b)-SP03-10	10	28										98	12		22			
D(b)-SP04-10	10	39						32				150	20		21			
D(b)-SP05-10	10														30			
D(b)-SP06-10	10								15				8.1		9.3			
D(c)-SP05-10	10							120			5.6	620	49		30			
D(c)-SP06-10	10							34				120	22		80		560	
D(c)-SP07-10	10											63			13		11	
D(c)-SP09-10	10						50					150			13		49	
D(c)-SP10-10	10											93						
D(c)-SP11-10	10											53	35		21			
D(c)-SP12-10	10							42				210	7.2					
05D-SP08-20	20	94						45				150	31		74			
08D-SP07-20	20							120			5.7	470	39		220			
08D-SP08-20	20											56	6.1		62		6.3	
52D-SP24-20	20	1900	22	7.2			660			8.8		85	5.8		12		15	15
52D-SP25-20	20	890	5.4	8.3			1100			8.8	16		5.6		7.7		24	8.5
52D-SP27-20	20	75	7.0	12			560			15			9.9		3.6		12	5.3
52D-SP28-20	20	14						340	100		18	2000	35		22	41		
52D-SP29-20	20	510						32				150	11		29	21	8.3	
52D-SP30-20	20	1000											9.1		12		17	9.5
52D-SP32-20	20	33000	170															
52D-SP33-20	20	140		8.3			2500			9.6			7.9		7.4		34	12
52D-SP35-20	20	32										110			53		7.1	
52D-SP36-20	20	53	72												16			15
52D-SP39-20	20	7.8	6.2				50					280	10		12		30	
52D-SP40-20	20							200			12	490	23		17			
52D-SP41-20	20							36				200	6.6					
52D-SP42-20	20							58			5.6	300	17					
52D-SP43-20	20	4800	18									77	4.1		9.6		17	8.8
52D-SP44-20	20							22			5.5	310			6.8			
AW-08D-SP10-20	20							46				230	46		21			
D(b)-SP03-20	20	18											12		12		24	
D(b)-SP04-20	20	14										58	5.3		7.5			
D(b)-SP06-20	20											72						
D(c)-SP05-20	20							130				550	22		230		180	
D(c)-SP06-20	20														4.0			
D(c)-SP07-20	20														8.1			

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+1	8.5 E-1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1
Unit Risk		NA	4.0 E-4	NA	1.5 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA
D(c)-SP08-20	20						9.6					160	18		190		16	
D(c)-SP09-20	20					20	13					97	8.7		81		290	
D(c)-SP10-20	20	28										83			70			
D(c)-SP11-20	20					17							4.4		130		290	
D(c)-SP12-20	20							200	21		6.6	950	21		16			
52D-SP40-28	28					17		61	20			330	16					
52D-SP24-30	30				7.7							100						
52D-SP25-30	30	1900	6.0	7.7			500			8.2			3.6		3.7		38	8.2
52D-SP27-30	30	31		14			2500			17			12		4.3		9.6	
52D-SP28-30	30	93		6.8						6.2			6.4		12		52	5.9
52D-SP30-30	30																	
52D-SP35-30	30	41	4.7			70						130		16	22		190	
52D-SP36-30	30	62	100												8.9		6.4	27
52D-SP37-30	30		11									91	5.0		180			6.4
52D-SP39-30	30							20				210	27		13			
52D-SP41-30	30											87						
52D-SP42-30	30	7.9	100					130				130	12					530
52D-SP43-30	30	750	7.5						51			110						
52D-SP44-30	30							180	35		160	1100	68		16			
D(b)-SP05-30	30														4.9			
D(c)-SP05-30	30											57			11		710	
52D-SP44-40	40		5.5					110	31			770	62		50			

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard		1.2 E-1	3.9 E-1	6.7 E-1	3.4 E+0	2.3 E-2	9.8 E-1	2.0 E+2	9.8 E-1	6.8 E+0	6.8 E+0	7.5 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.1 E+0	6.7 E+0
Unit Risk		NA	NA	6.1 E-4	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
08D-SP07-10	10		82				6.8		14	7.8		4.8		8.9	31		
08D-SP08-10	10		31	8.8			29		72	12	5.6	7.9	71	3.6	74		
08D-SP09-10	10	5.9					26		56	7.4					36		
52D-SP24-10	10			8.1		1900	7.9		7.3	31	11	11	120	12	23	1600	
52D-SP25-10	10			10		250			15	36	15	11	54		49	1200	
52D-SP26-10	10					260				17	9.6		79		8.9	1100	
52D-SP29-10	10	30		8.7		220	30		76	28	17	17	65		79	2600	
52D-SP30-10	10	4.3				38	5.7		11	7.6			39		13	480	
52D-SP31-10	10	22				140			12				16		11	410	
52D-SP32-10	10					1500							98			780	
52D-SP33-10	10			9.5		98	12		21	36	11	8.4	92	18	46	280	
52D-SP35-10	10		10			380			13				97			8.8	
52D-SP36-10	10		27		66	1500							76				
52D-SP37-10	10		49		38	320			17				37	13	4.8	18	
52D-SP38-10	10					60			9.2				61	12			
52D-SP39-10	10		21				5.4			10				6.0	32		
52D-SP40-10	10						5.6		15				32	12	9.7	13	
52D-SP41-10	10					85			4.6				87	4.1	7.4	24	
52D-SP42-10	10					140							68	4.0	7.3	12	
52D-SP43-10	10	46			7.6	640			5.8				120		8.7	340	
AW-08D-SP10-10	10	15		11			71		120	35	13				76		
AW-AFI-SP01-10	10					280							240			22	
D(b)-SP03-10	10					190	7.2		16				130		11	1100	
D(b)-SP04-10	10	4.4				180	16	110	35				120		20	42	
D(b)-SP05-10	10					17			4.6				11		5.8		
D(b)-SP06-10	10		25			96			5.3				68	4.8	12		
D(c)-SP05-10	10		23				29		85	5.5					33		
D(c)-SP06-10	10					28	8.6		19						13	690	
D(c)-SP07-10	10								6.8					3.4		41	
D(c)-SP09-10	10		20						13					7.5	5.6		
D(c)-SP10-10	10		140						5.3					4.7	8.4		
D(c)-SP11-10	10	5.1		7.1		11	33		64	8.0			7.9	7.3	45		
D(c)-SP12-10	10					14			7.2				69	4.8	15	12	
05D-SP08-20	20						28		73						22		
08D-SP07-20	20	19	40				27		220	7.0				11	27		
08D-SP08-20	20					13			9.6						15	11	
52D-SP24-20	20		11	9.5		570	9.9		9.1	32	9.1		11		38	430	
52D-SP25-20	20			6.0		220			24	23	7.9	6.3	36		34	960	
52D-SP27-20	20			15		57	5.8		11	57	14	8.0	34		74	160	
52D-SP28-20	20	9.3	160			14	24		90						18	58	
52D-SP29-20	20	11				440	5.7		15				14		11	620	
52D-SP30-20	20	21				560	6.7		20				29		7.2	1200	
52D-SP32-20	20					2900										480	
52D-SP33-20	20			14		160	9.2		13	44	15	8.9	49		66	240	
52D-SP35-20	20		8.6			440			6.5				110			12	
52D-SP36-20	20				89	3400							82		5.0	200	3.4
52D-SP39-20	20	5.8	21			40	40		12	9.9				4.4	50	32	
52D-SP40-20	20			10			24		66	17	8.7		45	36	52	23	
52D-SP41-20	20		28				9.6		15	5.2			13	14	27	7.0	
52D-SP42-20	20		28			17	11		18	6.7			20	13	45	7.6	
52D-SP43-20	20	64			9.3	1000	5.3		8.6				99		5.0	280	
52D-SP44-20	20		72		9.4	91			8.1						7.1		
AW-08D-SP10-20	20	6.7	12	5.1			37		80	12					54	7.3	
D(b)-SP03-20	20					210	6.0		12				24		9.2	310	
D(b)-SP04-20	20					63			11							7.1	
D(b)-SP06-20	20		26						7.6				200	10	7.7		
D(c)-SP05-20	20					49	24		70						24	320	
D(c)-SP06-20	20														5.1		
D(c)-SP07-20	20									5.4						19	

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**
Unit Hazard		1.2 E-1	3.9 E-1	6.7 E-1	3.4 E+0	2.3 E-2	9.8 E-1	2.0 E+2	9.8 E-1	6.8 E+0	6.8 E+0	7.5 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.1 E+0	6.7 E+0
Unit Risk		NA	NA	6.1 E-4	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
D(c)-SP08-20	20		27				20		120	6.5				20	24	12	
D(c)-SP09-20	20		30				14		17					6.3	7.9	6.9	
D(c)-SP10-20	20					250	5.7		17				36	13	18	53	
D(c)-SP11-20	20				7.8	23	6.3		23					16	19	13	
D(c)-SP12-20	20		23	7.7		12	18		29	12	6.7		100	18	46	28	
52D-SP40-28	28		31				16		45	7.4			18	46	41	18	
52D-SP24-30	30		14												12		
52D-SP25-30	30					590			5	17			98		20	1800	
52D-SP27-30	30	5.3	14	18		140	9.5		14	68	17	5.8		4.4	110	11	
52D-SP28-30	30					300	7.8		13	12			42		10	260	
52D-SP30-30	30																
52D-SP35-30	30		27			1200	5.5		8.6	5.9			220	9.5	7.6	31	
52D-SP36-30	30				110	3400			6.6				60	7.6	4.4	250	6.0
52D-SP37-30	30		19		14	220	65		48				28	10	7.2	25	
52D-SP39-30	30	4.7	36				27		54						15		
52D-SP41-30	30		13				6.4		11	5.7			8.3	13	16		
52D-SP42-30	30					640	5.2		21				560	85	23	8300	4.0
52D-SP43-30	30	11	150			200				5.7			9.6		10	58	
52D-SP44-30	30	13	120			17	85		190						32		
D(b)-SP05-30	30		12			180	8.2		9.9				10	5.4	12		
D(c)-SP05-30	30					230							13	4.4		1300	
52D-SP44-40	40	6.1	140		23	890	64		180						50	12	3.5

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	1.3 E-7	6.7 E-6	NA	6.5 E-9	1.8 E-6	2.9 E-6	NA	1.4 E-7	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	1.1 E-8	1.8 E-6	1.1 E-5	NA	2.6 E-7	2.8 E-6	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	5.4 E-7	4.2 E-6	NA	7.7 E-7	NA	NA	NA
52D-SP24-10	10	1.0 E-5	6.4 E-7	4.7 E-6	NA	NA	1.0 E-5	NA	NA	4.8 E-7	NA	NA	9.6 E-7	NA	NA	NA	4.4 E-6	1.1 E-5
52D-SP25-10	10	2.1 E-6	1.2 E-7	3.9 E-6	NA	NA	8.1 E-5	NA	NA	3.9 E-7	5.6 E-8	NA	1.6 E-6	NA	6.5 E-7	NA	3.0 E-6	2.3 E-6
52D-SP26-10	10	1.1 E-6	NA	8.5 E-6	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	7.2 E-7	NA	NA	NA
52D-SP30-10	10	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	1.2 E-6	NA	4.6 E-7	NA	1.8 E-6	NA
52D-SP31-10	10	9.4 E-7	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	7.2 E-8	NA	NA	NA
52D-SP32-10	10	1.0 E-5	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	NA
52D-SP33-10	10	8.4 E-8	5.6 E-8	4.5 E-6	NA	NA	3.9 E-5	1.8 E-8	NA	4.8 E-7	NA	2.4 E-7	1.9 E-6	NA	1.1 E-7	NA	3.6 E-6	1.2 E-6
52D-SP35-10	10	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	1.6 E-7	NA	NA	NA
52D-SP36-10	10	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	5.7 E-8	NA	NA	NA
52D-SP37-10	10	3.6 E-8	NA	NA	NA	3.2 E-8	NA	NA	7.8 E-6	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA
52D-SP38-10	10	8.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	6.9 E-7	6.1 E-7	NA	3.1 E-8	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-7	NA	1.3 E-7	NA	NA	NA
52D-SP41-10	10	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-7	NA	5.4 E-8	NA	1.4 E-6	NA
52D-SP42-10	10	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	6.2 E-7	NA	4.4 E-8	NA	2.8 E-6	NA
52D-SP43-10	10	2.7 E-6	4.9 E-8	NA	NA	NA	NA	2.4 E-8	NA	NA	1.6 E-8	4.5 E-7	8.6 E-7	NA	2.4 E-7	NA	1.5 E-6	7.7 E-7
AW-08D-SP10-10	10	NA	NA	4.1 E-6	NA	NA	NA	2.8 E-8	NA	4.3 E-7	NA	2.6 E-7	9.1 E-6	NA	2.9 E-6	NA	NA	NA
AW-AFI-SP01-10	10	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	NA
D(b)-SP03-10	10	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	1.9 E-6	NA	1.8 E-7	NA	NA	NA
D(b)-SP04-10	10	3.3 E-8	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	3.2 E-7	3.2 E-6	NA	1.7 E-7	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	1.3 E-6	NA	7.6 E-8	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	7.6 E-9	1.3 E-6	7.8 E-6	NA	2.4 E-7	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	2.6 E-7	3.5 E-6	NA	6.5 E-7	NA	7.0 E-5	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	1.1 E-7	NA	1.4 E-6	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	3.2 E-7	NA	NA	1.1 E-7	NA	6.1 E-6	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	5.6 E-6	NA	1.7 E-7	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	4.5 E-7	1.2 E-6	NA	NA	NA	NA	NA
05D-SP08-20	20	4.0 E-8	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	1.6 E-7	2.5 E-6	NA	3.0 E-7	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	3.9 E-9	5.1 E-7	3.1 E-6	NA	8.9 E-7	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	4.9 E-7	NA	2.5 E-7	NA	3.9 E-7	NA
52D-SP24-20	20	8.1 E-7	6.4 E-8	1.7 E-6	NA	NA	1.6 E-5	NA	NA	2.1 E-7	NA	9.2 E-8	4.6 E-7	NA	4.9 E-8	NA	9.4 E-7	8.6 E-7
52D-SP25-20	20	3.8 E-7	1.6 E-8	2.0 E-6	NA	NA	2.6 E-5	NA	NA	2.1 E-7	1.1 E-8	NA	4.5 E-7	NA	3.1 E-8	NA	1.5 E-6	4.9 E-7
52D-SP27-20	20	3.2 E-8	2.0 E-8	2.8 E-6	NA	NA	1.3 E-5	NA	NA	3.6 E-7	NA	NA	7.9 E-7	NA	1.5 E-8	NA	7.5 E-7	3.0 E-7
52D-SP28-20	20	6.0 E-9	NA	NA	NA	NA	NA	1.5 E-7	2.6 E-5	NA	1.2 E-8	2.2 E-6	2.8 E-6	NA	8.9 E-8	2.2 E-6	NA	NA
52D-SP29-20	20	2.2 E-7	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	1.6 E-7	8.8 E-7	NA	1.2 E-7	1.1 E-6	5.2 E-7	NA
52D-SP30-20	20	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	4.9 E-8	NA	1.1 E-6	5.5 E-7
52D-SP32-20	20	1.4 E-5	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	6.0 E-8	NA	2.0 E-6	NA	NA	5.9 E-5	NA	NA	2.3 E-7	NA	NA	6.3 E-7	NA	3.0 E-8	NA	2.1 E-6	6.9 E-7
52D-SP35-20	20	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	2.2 E-7	NA	4.4 E-7	NA
52D-SP36-20	20	2.3 E-8	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	8.6 E-7
52D-SP39-20	20	3.3 E-9	1.8 E-8	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	3.0 E-7	8.0 E-7	NA	4.9 E-8	NA	1.9 E-6	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	9.0 E-8	NA	NA	8.2 E-9	5.3 E-7	1.8 E-6	NA	6.9 E-8	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	2.2 E-7	5.3 E-7	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	3.8 E-9	3.2 E-7	1.4 E-6	NA	NA	NA	NA	NA
52D-SP43-20	20	2.0 E-6	5.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	3.3 E-7	NA	3.9 E-8	NA	1.1 E-6	5.1 E-7
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	3.7 E-9	3.3 E-7	NA	NA	2.8 E-8	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	2.5 E-7	3.7 E-6	NA	8.5 E-8	NA	NA	NA
D(b)-SP03-20	20	7.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	4.9 E-8	NA	1.5 E-6	NA
D(b)-SP04-20	20	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	4.2 E-7	NA	3.0 E-8	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	5.9 E-7	1.8 E-6	NA	9.3 E-7	NA	1.1 E-5	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard																		
Unit Risk																		
D(c)-SP08-20	20	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	1.7 E-7	1.4 E-6	NA	7.7 E-7	NA	1.0 E-6	NA
D(c)-SP09-20	20	NA	NA	NA	NA	1.8 E-8	3.1 E-7	NA	NA	NA	NA	1.0 E-7	7.0 E-7	NA	3.3 E-7	NA	1.8 E-5	NA
D(c)-SP10-20	20	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	2.8 E-7	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	5.3 E-7	NA	1.8 E-5	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	9.0 E-8	5.4 E-6	NA	4.5 E-9	1.0 E-6	1.7 E-6	NA	6.5 E-8	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	1.1 E-8	NA	2.0 E-8	3.7 E-6	NA	NA	2.5 E-7	9.1 E-7	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	7.2 E-8	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	5.4 E-7	1.2 E-8	1.2 E-6	NA	NA	7.9 E-6	NA	NA	1.3 E-7	NA	NA	1.9 E-7	NA	1.0 E-8	NA	1.6 E-6	3.1 E-7
52D-SP27-30	30	8.8 E-9	NA	2.2 E-6	NA	NA	4.0 E-5	NA	NA	2.7 E-7	NA	NA	6.4 E-7	NA	1.2 E-8	NA	4.0 E-7	NA
52D-SP28-30	30	2.6 E-8	NA	1.1 E-6	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	3.4 E-7	NA	3.3 E-8	NA	2.2 E-6	2.3 E-7
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	1.2 E-8	9.1 E-9	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	9.3 E-8	NA	1.2 E-7	6.0 E-8	NA	7.9 E-6	NA
52D-SP36-30	30	1.8 E-8	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	2.7 E-7	1.0 E-6
52D-SP37-30	30	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	2.7 E-7	NA	4.9 E-7	NA	NA	2.5 E-7
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	1.5 E-7	1.4 E-6	NA	3.5 E-8	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	2.2 E-9	1.9 E-7	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	9.3 E-8	6.4 E-7	NA	NA	NA	NA	2.0 E-5
52D-SP43-30	30	2.1 E-7	1.4 E-8	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	7.9 E-8	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	5.4 E-8	6.0 E-6	NA	7.3 E-8	7.9 E-7	3.6 E-6	NA	4.3 E-8	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	3.0 E-8	NA	3.0 E-5	NA
52D-SP44-40	40	NA	8.0 E-9	NA	NA	NA	NA	2.5 E-8	4.0 E-6	NA	NA	4.1 E-7	2.5 E-6	NA	1.0 E-7	NA	NA	NA

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	4.0 E-7	NA	NA	NA	1.1 E-7	NA	2.2 E-7	3.3 E-7	NA	2.0 E-8	NA	1.7 E-7	4.9 E-7	NA	NA	1.3 E-5
08D-SP08-10	10	NA	1.5 E-7	3.6 E-8	NA	NA	4.5 E-7	NA	1.1 E-6	5.0 E-7	2.4 E-7	3.4 E-8	8.0 E-6	6.9 E-8	1.2 E-6	NA	NA	2.7 E-5
08D-SP09-10	10	4.3 E-9	NA	NA	NA	NA	4.1 E-7	NA	8.8 E-7	3.1 E-7	NA	NA	NA	NA	5.7 E-7	NA	NA	7.7 E-6
52D-SP24-10	10	NA	NA	3.3 E-8	NA	2.7 E-7	1.2 E-7	NA	1.1 E-7	1.3 E-6	4.6 E-7	4.7 E-8	1.4 E-5	2.3 E-7	3.6 E-7	1.2 E-5	NA	7.1 E-5
52D-SP25-10	10	NA	NA	4.0 E-8	NA	3.5 E-8	NA	NA	2.3 E-7	1.5 E-6	6.3 E-7	4.7 E-8	6.1 E-6	NA	7.7 E-7	8.6 E-6	NA	1.1 E-4
52D-SP26-10	10	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	7.2 E-7	4.0 E-7	NA	8.9 E-6	NA	1.4 E-7	7.9 E-6	NA	2.8 E-5
52D-SP29-10	10	2.2 E-8	NA	3.5 E-8	NA	3.1 E-8	4.7 E-7	NA	1.2 E-6	1.2 E-6	7.2 E-7	7.3 E-8	7.3 E-6	NA	1.2 E-6	1.9 E-5	NA	4.6 E-5
52D-SP30-10	10	3.2 E-9	NA	NA	NA	5.4 E-9	8.9 E-8	NA	1.7 E-7	3.2 E-7	NA	NA	4.4 E-6	NA	2.1 E-7	3.5 E-6	NA	1.2 E-5
52D-SP31-10	10	1.6 E-8	NA	NA	NA	2.0 E-8	NA	NA	1.9 E-7	NA	NA	NA	1.8 E-6	NA	1.7 E-7	3.0 E-6	NA	8.4 E-6
52D-SP32-10	10	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	5.6 E-6	NA	2.8 E-5
52D-SP33-10	10	NA	NA	3.8 E-8	NA	1.4 E-8	1.9 E-7	NA	3.3 E-7	1.5 E-6	4.6 E-7	3.6 E-8	1.0 E-5	3.4 E-7	7.3 E-7	2.0 E-6	NA	6.7 E-5
52D-SP35-10	10	NA	4.9 E-8	NA	NA	5.4 E-8	NA	NA	2.0 E-7	NA	NA	NA	1.1 E-5	NA	NA	6.3 E-8	NA	1.2 E-5
52D-SP36-10	10	NA	1.3 E-7	NA	1.2 E-6	2.1 E-7	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	NA	NA	1.0 E-5
52D-SP37-10	10	NA	2.4 E-7	NA	6.9 E-7	4.5 E-8	NA	NA	2.7 E-7	NA	NA	NA	4.2 E-6	2.5 E-7	7.6 E-8	1.3 E-7	NA	1.4 E-5
52D-SP38-10	10	NA	NA	NA	NA	8.5 E-9	NA	NA	1.4 E-7	NA	NA	NA	6.9 E-6	2.3 E-7	NA	NA	NA	7.7 E-6
52D-SP39-10	10	NA	1.0 E-7	NA	NA	NA	8.4 E-8	NA	NA	4.2 E-7	NA	NA	NA	1.1 E-7	5.1 E-7	NA	NA	3.0 E-6
52D-SP40-10	10	NA	NA	NA	NA	NA	8.8 E-8	NA	2.3 E-7	NA	NA	NA	3.6 E-6	2.3 E-7	1.5 E-7	9.4 E-8	NA	5.5 E-6
52D-SP41-10	10	NA	NA	NA	NA	1.2 E-8	NA	NA	7.2 E-8	NA	NA	NA	9.8 E-6	7.8 E-8	1.2 E-7	1.7 E-7	NA	1.2 E-5
52D-SP42-10	10	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	7.7 E-6	7.6 E-8	1.2 E-7	8.6 E-8	NA	1.2 E-5
52D-SP43-10	10	3.4 E-8	NA	NA	1.4 E-7	9.1 E-8	NA	NA	9.1 E-8	NA	NA	NA	1.4 E-5	NA	1.4 E-7	2.4 E-6	NA	2.3 E-5
AW-08D-SP10-10	10	1.1 E-8	NA	4.4 E-8	NA	NA	1.1 E-6	NA	1.9 E-6	1.5 E-6	5.5 E-7	NA	NA	NA	1.2 E-6	NA	NA	2.3 E-5
AW-AFI-SP01-10	10	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	1.6 E-7	NA	2.7 E-5
D(b)-SP03-10	10	NA	NA	NA	NA	2.7 E-8	1.1 E-7	NA	2.5 E-7	NA	NA	NA	1.5 E-5	NA	1.7 E-7	7.9 E-6	NA	2.5 E-5
D(b)-SP04-10	10	3.2 E-9	NA	NA	NA	2.6 E-8	2.5 E-7	9.6 E-5	5.5 E-7	NA	NA	NA	1.4 E-5	NA	3.2 E-7	3.0 E-7	NA	1.2 E-4
D(b)-SP05-10	10	NA	NA	NA	NA	2.4 E-9	NA	NA	7.2 E-8	NA	NA	NA	1.2 E-6	NA	9.2 E-8	NA	NA	1.6 E-6
D(b)-SP06-10	10	NA	1.2 E-7	NA	NA	1.4 E-8	NA	NA	8.3 E-8	NA	NA	NA	7.7 E-6	9.2 E-8	1.9 E-7	NA	NA	1.7 E-5
D(c)-SP05-10	10	NA	1.1 E-7	NA	NA	NA	4.5 E-7	NA	1.3 E-6	2.3 E-7	NA	NA	NA	NA	5.2 E-7	NA	NA	1.2 E-5
D(c)-SP06-10	10	NA	NA	NA	NA	4.0 E-9	1.3 E-7	NA	3.0 E-7	NA	NA	NA	NA	NA	2.1 E-7	5.0 E-6	NA	8.0 E-5
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	6.5 E-8	NA	3.0 E-7	NA	2.1 E-6
D(c)-SP09-10	10	NA	9.8 E-8	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	1.4 E-7	8.9 E-8	NA	NA	9.5 E-6
D(c)-SP10-10	10	NA	6.9 E-7	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	NA	NA	9.0 E-8	1.3 E-7	NA	NA	1.2 E-6
D(c)-SP11-10	10	3.8 E-9	NA	2.9 E-8	NA	1.6 E-9	5.2 E-7	NA	1.0 E-6	3.4 E-7	NA	NA	8.9 E-7	1.4 E-7	7.1 E-7	NA	NA	9.5 E-6
D(c)-SP12-10	10	NA	NA	NA	NA	2.0 E-9	NA	NA	1.1 E-7	NA	NA	NA	7.8 E-6	9.2 E-8	2.4 E-7	8.6 E-8	NA	9.9 E-6
05D-SP08-20	20	NA	NA	NA	NA	NA	2.2 E-7	NA	5.7 E-7	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	4.0 E-6
08D-SP07-20	20	7.0 E-9	9.8 E-8	NA	NA	NA	2.1 E-7	NA	1.7 E-6	1.5 E-7	NA	NA	NA	1.0 E-7	2.1 E-7	NA	NA	7.1 E-6
08D-SP08-20	20	NA	NA	NA	NA	9.2 E-10	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	1.2 E-7	4.0 E-8	NA	1.4 E-6
52D-SP24-20	20	NA	2.7 E-8	1.9 E-8	NA	4.0 E-8	7.7 E-8	NA	7.1 E-8	6.7 E-7	1.9 E-7	NA	6.2 E-7	NA	3.0 E-7	1.5 E-6	NA	2.4 E-5
52D-SP25-20	20	NA	NA	1.2 E-8	NA	1.6 E-8	NA	NA	1.9 E-7	4.8 E-7	1.7 E-7	1.3 E-8	2.0 E-6	NA	2.7 E-7	3.5 E-6	NA	3.8 E-5
52D-SP27-20	20	NA	NA	3.0 E-8	NA	4.0 E-9	4.5 E-8	NA	8.6 E-8	1.2 E-6	2.9 E-7	1.7 E-8	1.9 E-6	NA	5.8 E-7	5.8 E-7	NA	2.3 E-5
52D-SP28-20	20	3.4 E-9	3.9 E-7	NA	NA	9.9 E-10	1.9 E-7	NA	7.0 E-7	NA	NA	NA	NA	NA	1.4 E-7	2.1 E-7	NA	3.5 E-5
52D-SP29-20	20	4.0 E-9	NA	NA	NA	3.1 E-8	4.5 E-8	NA	1.2 E-7	NA	NA	NA	7.9 E-7	NA	8.7 E-8	2.2 E-6	NA	6.3 E-6
52D-SP30-20	20	7.7 E-9	NA	NA	NA	4.0 E-8	5.2 E-8	NA	1.6 E-7	NA	NA	NA	1.6 E-6	NA	5.7 E-8	4.3 E-6	NA	9.1 E-6
52D-SP32-20	20	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	1.7 E-5
52D-SP33-20	20	NA	NA	2.8 E-8	NA	1.1 E-8	7.2 E-8	NA	1.0 E-7	9.3 E-7	3.2 E-7	1.9 E-8	2.8 E-6	NA	5.2 E-7	8.6 E-7	NA	7.1 E-5
52D-SP35-20	20	NA	2.1 E-8	NA	NA	3.1 E-8	NA	NA	5.1 E-8	NA	NA	NA	6.2 E-6	NA	NA	4.3 E-8	NA	7.1 E-6
52D-SP36-20	20	NA	NA	NA	8.1 E-7	2.4 E-7	NA	NA	NA	NA	NA	NA	4.6 E-6	NA	4.0 E-8	7.2 E-7	7.2 E-8	7.7 E-6
52D-SP39-20	20	2.1 E-9	5.1 E-8	NA	NA	2.8 E-9	3.1 E-7	NA	9.4 E-8	2.1 E-7	NA	NA	NA	4.2 E-8	4.0 E-7	1.2 E-7	NA	5.5 E-6
52D-SP40-20	20	NA	NA	2.0 E-8	NA	NA	1.9 E-7	NA	5.2 E-7	3.6 E-7	1.8 E-7	NA	2.5 E-6	3.4 E-7	4.1 E-7	8.3 E-8	NA	7.2 E-6
52D-SP41-20	20	NA	6.9 E-8	NA	NA	NA	7.5 E-8	NA	1.2 E-7	1.1 E-7	NA	NA	7.3 E-7	1.3 E-7	2.1 E-7	2.5 E-8	NA	2.2 E-6
52D-SP42-20	20	NA	6.9 E-8	NA	NA	1.2 E-9	8.6 E-8	NA	1.4 E-7	1.4 E-7	NA	NA	1.1 E-6	1.2 E-7	3.6 E-7	2.7 E-8	NA	3.8 E-6
52D-SP43-20	20	2.4 E-8	NA	NA	8.5 E-8	7.1 E-8	4.1 E-8	NA	6.7 E-8	NA	NA	NA	5.6 E-6	NA	4.0 E-8	1.0 E-6	NA	1.1 E-5
52D-SP44-20	20	NA	1.8 E-7	NA	8.6 E-8	6.4 E-9	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	7.6 E-7
AW-08D-SP10-20	20	2.5 E-9	2.9 E-8	1.0 E-8	NA	NA	2.9 E-7	NA	6.3 E-7	2.5 E-7	NA	NA	NA	NA	4.3 E-7	2.6 E-8	NA	5.7 E-6
D(b)-SP03-20	20	NA	NA	NA	NA	1.5 E-8	4.7 E-8	NA	9.4 E-8	NA	NA	NA	1.4 E-6	NA	7.3 E-8	1.1 E-6	NA	5.2 E-6
D(b)-SP04-20	20	NA	NA	NA	NA	4.5 E-9	NA	NA	8.6 E-8	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	6.4 E-7
D(b)-SP06-20	20	NA	6.4 E-8	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	1.1 E-5	9.5 E-8	6.1 E-8	NA	NA	1.2 E-5
D(c)-SP05-20	20	NA	NA	NA	NA	3.5 E-9	1.9 E-7	NA	5.5 E-7	NA	NA	NA	NA	NA	1.9 E-7	1.2 E-6	NA	1.7 E-5
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	5.7 E-8
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	6.8 E-8	NA	2.1 E-7

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**HI**
Unit Hazard																		
Unit Risk																		
D(c)-SP08-20	20	NA	6.6 E-8	NA	NA	NA	1.6 E-7	NA	9.4 E-7	1.4 E-7	NA	NA	NA	1.9 E-7	1.9 E-7	4.3 E-8	NA	5.3 E-6
D(c)-SP09-20	20	NA	7.4 E-8	NA	NA	NA	1.1 E-7	NA	1.3 E-7	NA	NA	NA	NA	6.0 E-8	6.2 E-8	2.5 E-8	NA	2.0 E-5
D(c)-SP10-20	20	NA	NA	NA	NA	1.8 E-8	4.5 E-8	NA	1.3 E-7	NA	NA	NA	2.0 E-6	1.2 E-7	1.4 E-7	1.9 E-7	NA	3.1 E-6
D(c)-SP11-20	20	NA	NA	NA	7.1 E-8	1.6 E-9	4.9 E-8	NA	1.8 E-7	NA	NA	NA	NA	1.5 E-7	1.5 E-7	4.7 E-8	NA	2.0 E-5
D(c)-SP12-20	20	NA	5.6 E-8	1.6 E-8	NA	8.5 E-10	1.4 E-7	NA	2.3 E-7	2.5 E-7	1.4 E-7	NA	5.6 E-6	1.7 E-7	3.6 E-7	1.0 E-7	NA	1.5 E-5
52D-SP40-28	28	NA	5.4 E-8	NA	NA	NA	8.9 E-8	NA	2.5 E-7	1.1 E-7	NA	NA	7.2 E-7	3.1 E-7	2.3 E-7	4.6 E-8	NA	6.7 E-6
52D-SP24-30	30	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	1.7 E-7
52D-SP25-30	30	NA	NA	NA	NA	2.8 E-8	NA	NA	2.6 E-8	2.4 E-7	NA	NA	3.7 E-6	NA	1.1 E-7	4.3 E-6	NA	2.0 E-5
52D-SP27-30	30	1.3 E-9	2.3 E-8	2.4 E-8	NA	6.6 E-9	4.9 E-8	NA	7.3 E-8	9.5 E-7	2.4 E-7	8.3 E-9	NA	2.8 E-8	5.8 E-7	2.6 E-8	NA	4.5 E-5
52D-SP28-30	30	NA	NA	NA	NA	1.4 E-8	4.1 E-8	NA	6.8 E-8	1.7 E-7	NA	NA	1.6 E-6	NA	5.3 E-8	6.2 E-7	NA	6.5 E-6
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	4.4 E-8	NA	NA	5.7 E-8	2.9 E-8	NA	4.5 E-8	8.3 E-8	NA	NA	8.3 E-6	6.0 E-8	4.0 E-8	7.4 E-8	NA	1.7 E-5
52D-SP36-30	30	NA	NA	NA	6.7 E-7	1.6 E-7	NA	NA	3.4 E-8	NA	NA	NA	2.3 E-6	4.8 E-8	2.3 E-8	6.0 E-7	8.5 E-8	5.4 E-6
52D-SP37-30	30	NA	3.1 E-8	NA	8.5 E-8	1.0 E-8	3.4 E-7	NA	2.5 E-7	NA	NA	NA	1.1 E-6	6.4 E-8	3.8 E-8	6.0 E-8	NA	3.0 E-6
52D-SP39-30	30	1.2 E-9	5.9 E-8	NA	NA	NA	1.4 E-7	NA	2.8 E-7	NA	NA	NA	NA	NA	7.9 E-8	NA	NA	2.2 E-6
52D-SP41-30	30	NA	2.1 E-8	NA	NA	NA	3.3 E-8	NA	5.7 E-8	8.0 E-8	NA	NA	3.1 E-7	8.3 E-8	8.4 E-8	NA	NA	7.3 E-7
52D-SP42-30	30	NA	NA	NA	NA	3.0 E-8	2.7 E-8	NA	1.1 E-7	NA	NA	NA	2.1 E-5	5.4 E-7	1.2 E-7	2.0 E-5	5.7 E-8	6.3 E-5
52D-SP43-30	30	2.7 E-9	2.5 E-7	NA	NA	9.4 E-9	NA	NA	NA	8.0 E-8	NA	NA	3.6 E-7	NA	5.3 E-8	1.4 E-7	NA	1.0 E-5
52D-SP44-30	30	3.2 E-9	2.0 E-7	NA	NA	8.0 E-10	4.4 E-7	NA	9.9 E-7	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	1.2 E-5
D(b)-SP05-30	30	NA	2.0 E-8	NA	NA	8.5 E-9	4.3 E-8	NA	5.2 E-8	NA	NA	NA	3.8 E-7	3.4 E-8	6.3 E-8	NA	NA	6.1 E-7
D(c)-SP05-30	30	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	4.9 E-7	2.8 E-8	NA	3.1 E-6	NA	3.3 E-5
52D-SP44-40	40	1.1 E-9	1.7 E-7	NA	1.0 E-7	3.2 E-8	2.5 E-7	NA	7.0 E-7	NA	NA	NA	NA	NA	2.0 E-7	2.2 E-8	3.7 E-8	8.6 E-6

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,2,4-Trimethylbenzene	1,4-Dichlorobenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-10	NA	NA	NA	NA	NA
08D-SP08-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA	1.7 E-9	NA	NA
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA
52D-SP24-10	10	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	1.6 E-9	NA
52D-SP25-10	10	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	1.1 E-9	NA
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP29-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA	NA	NA
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	6.5 E-10	NA
52D-SP31-10	10	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	NA
52D-SP32-10	10	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-10	10	NA	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	1.4 E-9	NA
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP37-10	10	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	NA
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	5.1 E-10	NA
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	1.0 E-9	NA
52D-SP43-10	10	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	5.6 E-10	NA
AW-08D-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA	NA
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA	NA	NA	NA
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	2.6 E-8	NA
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	NA
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	NA	NA	NA
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-10	NA	NA	NA	NA	NA
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-10	NA	NA	NA	NA	NA
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	1.5 E-10	NA
52D-SP24-20	20	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	3.5 E-10	NA
52D-SP25-20	20	NA	6.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	5.6 E-10	NA
52D-SP27-20	20	NA	8.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	2.8 E-10	NA
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	1.3 E-9	NA	NA
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	6.9 E-10	1.9 E-10	NA
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	4.0 E-10	NA
52D-SP32-20	20	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP33-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	7.9 E-10	NA
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA
52D-SP36-20	20	NA	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP39-20	20	NA	7.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	7.0 E-10	NA
52D-SP40-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	NA
52D-SP43-20	20	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	4.0 E-10	NA
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AW-08D-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	5.6 E-10	NA
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	4.2 E-9	NA
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,2,4-Trimethylbenzene**	**1,4-Dichlorobenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**
Unit Hazard																		
Unit Risk																		
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	3.7 E-10	NA
D(c)-SP09-20	20	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	6.8 E-9	NA
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP11-20	20	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	6.8 E-9	NA
D(c)-SP12-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA
52D-SP40-28	28	NA	NA	NA	NA	9.1 E-11	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA
52D-SP24-30	30	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP25-30	30	NA	4.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-11	NA	NA	NA	5.9 E-10	NA
52D-SP27-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	1.5 E-10	NA
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	8.1 E-10	NA
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP35-30	30	NA	3.7 E-12	NA	NA	3.5 E-10	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	3.0 E-9	NA
52D-SP36-30	30	NA	7.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA
52D-SP37-30	30	NA	8.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-11	NA	NA	NA	NA	NA
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	NA	NA
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP42-30	30	NA	7.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	NA
52D-SP43-30	30	NA	5.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA
52D-SP44-40	40	NA	3.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-10	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																		
Unit Risk																		
08D-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA	NA	9E-10
08D-SP08-10	10	NA	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-10	1.4 E-11	NA	NA	NA	6E-9
08D-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-9
52D-SP24-10	10	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	4.8 E-11	NA	4.9 E-9	NA	8E-9
52D-SP25-10	10	NA	NA	3.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	3.7 E-9	NA	6E-9
52D-SP26-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	3.4 E-9	NA	4E-9
52D-SP29-10	10	NA	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-10	NA	NA	8.0 E-9	NA	1E-8
52D-SP30-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	1.5 E-9	NA	3E-9
52D-SP31-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	1.3 E-9	NA	2E-9
52D-SP32-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-10	NA	NA	2.4 E-9	NA	3E-9
52D-SP33-10	10	NA	NA	3.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	7.2 E-11	NA	8.6 E-10	NA	4E-9
52D-SP35-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	2.7 E-11	NA	8E-10
52D-SP36-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	NA	NA	NA	6E-10
52D-SP37-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	5.2 E-11	NA	5.6 E-11	NA	7E-10
52D-SP38-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	4.8 E-11	NA	NA	NA	6E-10
52D-SP39-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	NA	2E-10
52D-SP40-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	4.8 E-11	NA	4.0 E-11	NA	7E-10
52D-SP41-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-10	1.6 E-11	NA	7.4 E-11	NA	2E-9
52D-SP42-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	1.6 E-11	NA	3.7 E-11	NA	2E-9
52D-SP43-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	1.0 E-9	NA	3E-9
AW-08D-SP10-10	10	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-9
AW-AFI-SP01-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	6.8 E-11	NA	2E-9
D(b)-SP03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	3.4 E-9	NA	5E-9
D(b)-SP04-10	10	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	1.0 E-9	NA	NA	1.3 E-10	NA	5E-9
D(b)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	9E-11
D(b)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	1.9 E-11	NA	NA	NA	1E-9
D(c)-SP05-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-9
D(c)-SP06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	3E-8
D(c)-SP07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	1.3 E-10	NA	7E-10
D(c)-SP09-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-11	NA	NA	NA	2E-9
D(c)-SP10-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	2E-11
D(c)-SP11-10	10	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-11	2.9 E-11	NA	NA	NA	2E-9
D(c)-SP12-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-10	1.9 E-11	NA	3.7 E-11	NA	1E-9
05D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8E-10
08D-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	1E-9
08D-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	3E-10
52D-SP24-20	20	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	NA	NA	6.6 E-10	NA	1E-9
52D-SP25-20	20	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	1.5 E-9	NA	2E-9
52D-SP27-20	20	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	2.5 E-10	NA	9E-10
52D-SP28-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-11	NA	2E-9
52D-SP29-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-11	NA	NA	9.6 E-10	NA	2E-9
52D-SP30-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	1.9 E-9	NA	3E-9
52D-SP32-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	9E-10
52D-SP33-20	20	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	3.7 E-10	NA	2E-9
52D-SP35-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	1.9 E-11	NA	6E-10
52D-SP36-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	3.1 E-10	2.0 E-10	9E-10
52D-SP39-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-12	NA	4.9 E-11	NA	1E-9
52D-SP40-20	20	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	7.2 E-11	NA	3.5 E-11	NA	9E-10
52D-SP41-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	2.8 E-11	NA	1.1 E-11	NA	3E-10
52D-SP42-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-11	2.6 E-11	NA	1.2 E-11	NA	5E-10
52D-SP43-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	4.3 E-10	NA	1E-9
52D-SP44-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+0
AW-08D-SP10-20	20	NA	NA	9.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	1E-9
D(b)-SP03-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	4.8 E-10	NA	1E-9
D(b)-SP04-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	1E-10
D(b)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	2.0 E-11	NA	NA	NA	9E-10
D(c)-SP05-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	5E-9
D(c)-SP06-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+0
D(c)-SP07-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	3E-11

Table 5.2-58
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexachlorobutadiene**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Styrene**	**Tetrachloroethene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																		
Unit Risk																		
D(c)-SP08-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-11	NA	1.9 E-11	NA	9E-10
D(c)-SP09-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	1.1 E-11	NA	7E-9
D(c)-SP10-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	2.6 E-11	NA	8.2 E-11	NA	3E-10
D(c)-SP11-20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	2.0 E-11	NA	7E-9
D(c)-SP12-20	20	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	3.6 E-11	NA	4.3 E-11	NA	1E-9
52D-SP40-28	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-11	6.5 E-11	NA	2.0 E-11	NA	5E-10
52D-SP24-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-11
52D-SP25-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	1.9 E-9	NA	3E-9
52D-SP27-30	30	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-12	NA	1.1 E-11	NA	4E-10
52D-SP28-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	2.7 E-10	NA	1E-9
52D-SP30-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+0
52D-SP35-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	1.3 E-11	NA	3.2 E-11	NA	4E-9
52D-SP36-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	1.0 E-11	NA	2.6 E-10	2.4 E-10	9E-10
52D-SP37-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-11	1.3 E-11	NA	2.6 E-11	NA	2E-10
52D-SP39-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-10
52D-SP41-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	1.7 E-11	NA	NA	NA	4E-11
52D-SP42-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	1.1 E-10	NA	8.5 E-9	1.6 E-10	1E-8
52D-SP43-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	6.0 E-11	NA	9E-11
52D-SP44-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-9
D(b)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	7.2 E-12	NA	NA	NA	4E-11
D(c)-SP05-30	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-11	5.8 E-12	NA	1.3 E-9	NA	1E-8
52D-SP44-40	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-12	1.0 E-10	9E-10

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.2-16) x the unit hazard or unit risk for the chemical).

Table 5.2-59 All Receptors Hazard Index and Cancer Risk Results - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index				Incremental Lifetime Cancer Risk			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident		Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
05D-SNS06	0	6.4 E-1	6.9 E-2	4.8 E-1	5.0 E-2	1 E-8	2 E-7	6 E-9	1.0 E+1	4.0 E+0	4.9 E+0	3.8 E+0
08D-GS02	0	4.6 E-1	5.0 E-2	4.4 E-1	3.5 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
D(b)-SD01	0	5.2 E-1	5.9 E-2	2.9 E-1	4.6 E-2	**3 E-6**	3 E-7	8 E-7	5.9 E+0	3.5 E+0	3.7 E+0	3.4 E+0
05D-SNS01	0.01	4.8 E-1	5.1 E-2	3.1 E-1	3.7 E-2	2 E-9	3 E-8	1 E-9	9.1 E+0	3.9 E+0	4.6 E+0	3.7 E+0
05D-SNS02	0.01	8.3 E-1	9.0 E-2	5.9 E-1	6.5 E-2	2 E-8	2 E-7	7 E-9	**1.4 E+1**	4.5 E+0	6.0 E+0	4.1 E+0
05D-SNS03	0.01	**1.9 E+0**	2.0 E-1	**1.1 E+0**	1.5 E-1	1 E-8	1 E-7	5 E-9	**1.0 E+1**	4.1 E+0	5.0 E+0	3.8 E+0
05D-SNS04	0.01	**1.3 E+0**	1.4 E-1	**1.7 E+0**	1.0 E-1	2 E-8	2 E-7	9 E-9	**1.7 E+1**	4.9 E+0	6.9 E+0	4.4 E+0
05D-SNS05	0.01	4.3 E-1	4.7 E-2	6.0 E-1	3.4 E-2	7 E-9	8 E-8	3 E-9	7.2 E+0	3.7 E+0	4.1 E+0	3.5 E+0
05D-SNS06	0.01	6.0 E-1	6.5 E-2	4.7 E-1	4.7 E-2	1 E-8	2 E-7	6 E-9	8.8 E+0	3.9 E+0	4.5 E+0	3.7 E+0
06D-SNS01	0.01	**3.2 E+0**	3.6 E-1	**1.1 E+1**	2.6 E-1	2 E-8	2 E-7	8 E-9	5.8 E+0	3.5 E+0	3.6 E+0	3.4 E+0
06D-SNS02	0.01	4.4 E-1	4.8 E-2	6.2 E-1	3.4 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS03	0.01	4.3 E-1	4.6 E-2	4.6 E-1	3.3 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS04	0.01	**1.4 E+0**	1.5 E-1	**4.3 E+0**	1.1 E-1	8 E-9	1 E-7	4 E-9	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
06D-SNS05	0.01	4.7 E-1	5.0 E-2	3.6 E-1	3.6 E-2	**NA**	**NA**	**NA**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
08D-GS01	0.01	4.4 E-1	4.8 E-2	2.3 E-1	3.5 E-2	8 E-9	1 E-7	4 E-9	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
08D-GS02	0.01	4.6 E-1	5.0 E-2	4.8 E-1	3.6 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
08D-SNS02	0.01	9.2 E-1	1.0 E-1	7.7 E-1	7.1 E-2	2 E-9	2 E-8	8 E-10	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
09D-SNS01	0.01	7.2 E-1	7.8 E-2	5.0 E-1	5.6 E-2	**NA**	**NA**	**NA**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
09D-SNS02	0.01	4.8 E-1	5.1 E-2	3.1 E-1	3.7 E-2	**NA**	**NA**	**NA**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
09D-SNS03	0.01	3.7 E-1	4.0 E-2	2.6 E-1	2.8 E-2	**NA**	**NA**	**NA**	6.3 E+0	3.6 E+0	3.8 E+0	3.5 E+0
09D-SNS04	0.01	3.0 E-1	3.3 E-2	2.1 E-1	2.3 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-CS01	0.01	6.1 E-1	6.6 E-2	4.2 E-1	4.7 E-2	2 E-9	3 E-8	1 E-9	6.0 E+0	3.5 E+0	3.7 E+0	3.4 E+0
12D-CS02	0.01	3.3 E-1	3.5 E-2	2.3 E-1	2.5 E-2	**NA**	**NA**	**NA**	5.6 E+0	3.5 E+0	3.6 E+0	3.4 E+0
12D-SNS01	0.01	7.5 E-1	8.1 E-2	4.1 E-1	5.8 E-2	3 E-9	3 E-8	1 E-9	6.2 E+0	3.6 E+0	3.8 E+0	3.5 E+0
12D-SNS02	0.01	6.7 E-1	7.2 E-2	3.4 E-1	5.1 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS03	0.01	7.1 E-1	7.6 E-2	4.0 E-1	5.4 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS04	0.01	4.8 E-1	5.2 E-2	3.4 E-1	3.7 E-2	**NA**	**NA**	**NA**	5.7 E+0	3.5 E+0	3.6 E+0	3.4 E+0
12D-SNS05	0.01	8.5 E-1	9.2 E-2	5.1 E-1	6.6 E-2	2 E-9	3 E-8	1 E-9	6.4 E+0	3.6 E+0	3.8 E+0	3.5 E+0
12D-SNS06	0.01	2.9 E-1	3.1 E-2	1.8 E-1	2.2 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS07	0.01	4.0 E-1	4.4 E-2	2.7 E-1	3.1 E-2	**NA**	**NA**	**NA**	5.9 E+0	3.5 E+0	3.7 E+0	3.4 E+0
D(C)-GS01	0.01	2.3 E-1	2.4 E-2	2.2 E-1	1.7 E-2	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
09D-SD01	0.25	4.3 E-2	4.9 E-3	1.9 E-1	3.5 E-3	6 E-9	7 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(d)-SD01	0.25	2.4 E-1	2.6 E-2	2.5 E-1	1.9 E-2	2 E-9	2 E-8	8 E-10	9.7 E+0	4.0 E+0	4.8 E+0	3.8 E+0
05D-SNS08	0.5	1.4 E-1	1.6 E-2	3.4 E-1	1.1 E-2	8 E-8	1 E-6	4 E-8	7.6 E+0	3.7 E+0	4.2 E+0	3.6 E+0
05D-SNS09	0.5	1.1 E-1	1.2 E-2	3.0 E-1	8.9 E-3	**3 E-6**	1 E-7	1 E-6	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SNS10	0.5	2.0 E-1	2.3 E-2	6.5 E-1	1.7 E-2	4 E-7	**6 E-6**	2 E-7	8.9 E+0	3.9 E+0	4.6 E+0	3.7 E+0
05D-SNS11	0.5	1.0 E-1	1.1 E-2	2.1 E-1	8.5 E-3	2 E-8	3 E-7	1 E-8	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SNS12	0.5	7.0 E-1	7.9 E-2	6.2 E-1	6.0 E-2	3 E-7	**3 E-6**	1 E-7	6.1 E+0	3.5 E+0	3.7 E+0	3.4 E+0
05D-SNS13	0.5	**1.3 E+0**	1.4 E-1	**1.4 E+0**	1.1 E-1	1 E-6	**3 E-6**	4 E-7	**1.1 E+1**	4.1 E+0	5.1 E+0	3.9 E+0
05D-SNS14	0.5	3.1 E-1	3.4 E-2	4.5 E-1	2.5 E-2	1 E-6	8 E-7	4 E-7	6.8 E+0	3.6 E+0	3.9 E+0	3.5 E+0
05D-SNS15	0.5	9.2 E-1	1.0 E-1	**2.0 E+0**	7.4 E-2	**2 E-6**	1 E-6	6 E-7	**1.6 E+1**	4.7 E+0	6.6 E+0	4.3 E+0
05D-SNS16	0.5	2.6 E-1	2.8 E-2	2.7 E-1	2.1 E-2	8 E-7	2 E-7	2 E-7	7.4 E+0	3.7 E+0	4.1 E+0	3.6 E+0
05D-SNS17	0.5	2.5 E-1	2.7 E-2	4.4 E-1	2.0 E-2	6 E-8	7 E-7	3 E-8	**1.0 E+1**	4.0 E+0	4.9 E+0	3.8 E+0
05D-SNS18	0.5	2.2 E-1	2.6 E-2	3.7 E-1	2.0 E-2	**2 E-6**	2 E-7	5 E-7	6.7 E+0	3.6 E+0	3.9 E+0	3.5 E+0
05D-SNS19	0.5	1.2 E-1	1.3 E-2	4.0 E-1	9.7 E-3	3 E-8	4 E-7	1 E-8	6.4 E+0	3.6 E+0	3.8 E+0	3.5 E+0
05D-SNS20	0.5	2.6 E-1	2.8 E-2	3.9 E-1	2.0 E-2	3 E-9	4 E-8	1 E-9	**1.1 E+1**	4.2 E+0	5.2 E+0	3.9 E+0
06D-SNS06	0.5	**2.1 E+0**	2.5 E-1	**1.1 E+1**	1.8 E-1	2 E-8	3 E-7	1 E-8	8.9 E+0	3.9 E+0	4.6 E+0	3.7 E+0
06D-SNS07	0.5	**4.3 E+0**	4.8 E-1	**1.2 E+1**	3.4 E-1	6 E-8	7 E-7	3 E-8	**3.2 E+1**	6.8 E+0	**1.1 E+1**	5.8 E+0
06D-SNS08	0.5	**1.9 E+0**	2.2 E-1	**9.4 E+0**	1.6 E-1	3 E-8	3 E-7	1 E-8	**1.7 E+1**	5.0 E+0	7.1 E+0	4.5 E+0
06D-SNS09	0.5	6.0 E-2	6.7 E-3	1.9 E-1	4.9 E-3	1 E-8	1 E-7	5 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS10	0.5	7.3 E-2	8.2 E-3	2.5 E-1	5.9 E-3	1 E-8	2 E-7	6 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS11	0.5	5.6 E-2	6.3 E-3	2.1 E-1	4.6 E-3	5 E-9	7 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB02	0.5	3.5 E-1	4.1 E-2	2.6 E-1	3.4 E-2	**4 E-6**	2 E-7	1 E-6	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB03	0.5	6.3 E-2	7.3 E-3	3.6 E-1	5.3 E-3	2 E-8	2 E-7	9 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SNS01	0.5	6.7 E-2	7.7 E-3	3.4 E-1	5.6 E-3	2 E-8	2 E-7	9 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
09D-SNS05	0.5	1.3 E-1	1.5 E-2	4.0 E-1	1.1 E-2	2 E-8	2 E-7	7 E-9	5.7 E+0	3.5 E+0	3.6 E+0	3.4 E+0
09D-SNS06	0.5	4.7 E-2	5.4 E-3	1.9 E-1	3.9 E-3	5 E-8	6 E-7	2 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
12D-SNS08	0.5	5.0 E-2	5.7 E-3	2.1 E-1	4.1 E-3	4 E-8	5 E-7	2 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS09	0.5	5.4 E-2	6.4 E-3	3.8 E-1	4.6 E-3	1 E-7	1 E-6	5 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
52D-SB09	0.5	3.5 E-2	4.2 E-3	2.7 E-1	3.0 E-3	1 E-8	2 E-7	7 E-9	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB16	0.5	4.4 E-2	5.0 E-3	2.0 E-1	3.6 E-3	1 E-9	2 E-8	6 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SNS01	0.5	1.4 E-1	1.6 E-2	5.4 E-1	1.1 E-2	4 E-7	**5 E-6**	2 E-7	**1.0 E+1**	4.0 E+0	4.9 E+0	3.8 E+0
52D-SNS02	0.5	2.1 E-1	2.3 E-2	6.2 E-1	1.7 E-2	1 E-7	**2 E-6**	6 E-8	6.2 E+0	3.5 E+0	3.8 E+0	3.4 E+0
52D-SNS03	0.5	5.3 E-2	6.0 E-3	2.0 E-1	4.4 E-3	6 E-8	1 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SNS04	0.5	4.1 E-2	4.7 E-3	1.3 E-1	3.4 E-3	1 E-8	1 E-7	5 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SNS05	0.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(c)-SNS01	0.5	7.6 E-2	8.8 E-3	4.3 E-1	6.4 E-3	3 E-8	4 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB01	1	1.1 E-1	1.3 E-2	1.8 E-1	1.1 E-2	9 E-7	1 E-7	3 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB02	1	1.4 E-1	1.6 E-2	5.8 E-1	1.1 E-2	4 E-7	**5 E-6**	2 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB03	1	**3.7 E+0**	4.1 E-1	**1.9 E+0**	3.1 E-1	3 E-7	**4 E-6**	1 E-7	**1.9 E+1**	5.1 E+0	7.5 E+0	4.6 E+0
05D-SB04	1	9.3 E-2	1.0 E-2	2.8 E-1	7.7 E-3	3 E-9	4 E-8	1 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB05	1	6.2 E-2	7.2 E-3	3.2 E-1	5.2 E-3	7 E-10	8 E-9	3 E-10	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SB06	1	**2.5 E+0**	3.0 E-1	**1.0 E+0**	2.6 E-1	**3 E-5**	1 E-6	**8 E-6**	5.9 E+0	3.5 E+0	3.7 E+0	3.4 E+0

Table 5.2-59 All Receptors Hazard Index and Cancer Risk Results - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index				Incremental Lifetime Cancer Risk			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident		Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
05D-SB07	1	8.1 E-1	9.6 E-2	4.6 E-1	8.3 E-2	**9 E-6**	6 E-7	**3 E-6**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SB08	1	5.8 E-2	6.7 E-3	3.1 E-1	4.8 E-3	5 E-9	7 E-8	3 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB09	1	5.9 E-1	7.0 E-2	3.7 E-1	6.1 E-2	**7 E-6**	3 E-7	**2 E-6**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB10	1	1.4 E-1	1.7 E-2	5.9 E-1	1.3 E-2	5 E-7	1 E-7	2 E-7	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
06D-SB02	1	5.0 E-2	5.8 E-3	2.4 E-1	4.2 E-3	1 E-8	2 E-7	6 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB06	1	1.2 E-1	1.4 E-2	3.0 E-1	1.0 E-2	5 E-9	7 E-8	3 E-9	5.7 E+0	3.5 E+0	3.6 E+0	3.4 E+0
08D-AH01	1	4.1 E-1	4.4 E-2	3.9 E-1	3.2 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.5 E+0	3.4 E+0
08D-SB01	1	7.1 E-2	8.4 E-3	4.9 E-1	6.1 E-3	3 E-8	4 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB04	1	6.2 E-2	7.2 E-3	3.5 E-1	5.2 E-3	3 E-8	4 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB05	1	4.9 E-2	5.6 E-3	2.5 E-1	4.1 E-3	3 E-8	4 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB06	1	4.3 E-2	4.9 E-3	2.4 E-1	3.5 E-3	3 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-AH01	1	1.3 E-4	1.5 E-5	3.3 E-5	1.3 E-5	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-AH02	1	5.2 E-4	6.1 E-5	1.4 E-4	5.2 E-5	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-FCS-SB01	1	4.4 E-1	4.7 E-2	2.6 E-1	3.4 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB01	1	9.7 E-1	1.0 E-1	4.3 E-1	7.4 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB02	1	**2.6 E+0**	3.1 E-1	**1.5 E+1**	2.2 E-1	2 E-8	3 E-7	1 E-8	6.6 E+0	3.6 E+0	3.9 E+0	3.5 E+0
52D-SB04	1	3.3 E-2	3.7 E-3	1.3 E-1	2.7 E-3	9 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB05	1	3.5 E-2	3.9 E-3	1.4 E-1	2.9 E-3	9 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB06	1	3.4 E-2	4.1 E-3	2.6 E-1	3.0 E-3	5 E-10	7 E-9	2 E-10	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-SB07	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-SB08	1	4.0 E-2	4.7 E-3	2.2 E-1	3.4 E-3	1 E-8	2 E-7	6 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB10	1	5.1 E-2	5.9 E-3	2.8 E-1	4.2 E-3	3 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB11	1	8.5 E-2	9.6 E-3	3.2 E-1	7.0 E-3	2 E-7	**2 E-6**	8 E-8	6.2 E+0	3.5 E+0	3.8 E+0	3.5 E+0
52D-SB13	1	5.7 E-2	6.5 E-3	2.5 E-1	4.7 E-3	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB14	1	3.4 E-2	3.9 E-3	1.4 E-1	2.8 E-3	5 E-9	7 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB15	1	5.5 E-2	6.3 E-3	2.6 E-1	4.6 E-3	1 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB17	1	5.4 E-2	6.2 E-3	2.4 E-1	4.5 E-3	1 E-8	1 E-7	5 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF1-SB01	1	3.5 E-2	4.0 E-3	1.6 E-1	2.9 E-3	6 E-9	8 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF1-SB02	1	2.9 E-2	3.3 E-3	1.3 E-1	2.4 E-3	4 E-9	5 E-8	2 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF1-SB03	1	3.8 E-2	4.3 E-3	1.9 E-1	3.1 E-3	4 E-9	5 E-8	2 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF2-SB01	1	6.5 E-2	7.4 E-3	3.3 E-1	5.3 E-3	2 E-9	6 E-11	6 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF2-SB02	1	3.9 E-2	4.5 E-3	2.4 E-1	3.2 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(b)-SB01	1	4.3 E-2	4.9 E-3	2.0 E-1	3.6 E-3	1 E-8	1 E-7	6 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
D(b)-SB02	1	1.1 E-1	1.2 E-2	2.4 E-1	8.9 E-3	1 E-8	2 E-7	6 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(b)-SB03	1	1.1 E-1	1.2 E-2	5.3 E-1	9.0 E-3	3 E-8	3 E-7	1 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
D(b)-SB04	1	7.1 E-5	8.5 E-6	1.9 E-5	7.4 E-6	**2 E-6**	6 E-8	6 E-7	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
D(b)-SB05	1	3.8 E-2	4.4 E-3	1.6 E-1	3.2 E-3	4 E-9	6 E-8	2 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(C)-SB01	1	4.4 E-1	4.8 E-2	3.9 E-1	3.4 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
D(c)-SB02	1	7.7 E-2	8.7 E-3	2.9 E-1	6.3 E-3	3 E-8	4 E-7	1 E-8	5.5 E+0	3.4 E+0	3.5 E+0	3.4 E+0
D(c)-SB03	1	4.6 E-2	5.4 E-3	2.9 E-1	3.9 E-3	2 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
D(c)-SB04	1	5.6 E-2	6.5 E-3	3.0 E-1	4.7 E-3	2 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(c)-SB05	1	5.1 E-2	5.8 E-3	2.4 E-1	4.2 E-3	**4 E-6**	6 E-7	1 E-6	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
DC-AH01	1	4.4 E-1	4.8 E-2	3.9 E-1	3.4 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
06D-SB03	1.5	5.3 E-2	6.2 E-3	2.9 E-1	4.4 E-3	7 E-9	1 E-7	4 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB04	1.5	9.7 E-2	1.1 E-2	5.2 E-1	8.0 E-3	8 E-9	1 E-7	4 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
06D-SB05	1.5	3.7 E-1	4.2 E-2	7.4 E-1	3.1 E-2	1 E-7	1 E-6	5 E-8	8.0 E+0	3.8 E+0	4.3 E+0	3.6 E+0
09D-SD01	1.5	4.6 E-2	5.2 E-3	2.1 E-1	3.8 E-3	2 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB07	1.5	4.2 E-2	4.8 E-3	2.0 E-1	3.5 E-3	1 E-9	2 E-8	6 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS01	2.5	3.8 E-1	4.2 E-2	3.0 E-1	3.0 E-2	4 E-9	6 E-8	2 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SNS08	2.5	1.8 E-1	2.0 E-2	3.5 E-1	1.4 E-2	1 E-7	1 E-6	5 E-8	7.5 E+0	3.7 E+0	4.2 E+0	3.6 E+0
05D-SNS09	2.5	7.0 E-2	7.9 E-3	2.1 E-1	5.7 E-3	1 E-8	2 E-7	6 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS10	2.5	5.0 E-2	5.7 E-3	1.9 E-1	4.2 E-3	1 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS11	2.5	1.7 E-1	1.9 E-2	4.7 E-1	1.4 E-2	3 E-7	**4 E-6**	1 E-7	5.5 E+0	3.5 E+0	3.6 E+0	3.4 E+0
05D-SNS12	2.5	1.6 E-1	1.7 E-2	2.5 E-1	1.3 E-2	1 E-8	2 E-7	7 E-9	7.9 E+0	3.8 E+0	4.3 E+0	3.6 E+0
05D-SNS13	2.5	3.8 E-1	4.2 E-2	5.1 E-1	3.2 E-2	1 E-7	1 E-6	6 E-8	5.9 E+0	3.5 E+0	3.7 E+0	3.4 E+0
05D-SNS14	2.5	6.2 E-1	6.7 E-2	6.0 E-1	4.9 E-2	6 E-8	8 E-7	3 E-8	9.7 E+0	4.0 E+0	4.8 E+0	3.8 E+0
05D-SNS15	2.5	2.6 E-1	2.9 E-2	9.3 E-1	2.1 E-2	6 E-8	8 E-7	3 E-8	9.3 E+0	3.9 E+0	4.7 E+0	3.7 E+0
05D-SNS16	2.5	2.1 E-1	2.4 E-2	3.5 E-1	1.7 E-2	3 E-7	5 E-7	1 E-7	7.9 E+0	3.8 E+0	4.3 E+0	3.6 E+0
05D-SNS17	2.5	8.0 E-2	9.1 E-3	2.8 E-1	6.7 E-3	3 E-8	4 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS18	2.5	1.6 E-1	1.8 E-2	3.1 E-1	1.4 E-2	8 E-7	3 E-7	2 E-7	7.3 E+0	3.7 E+0	4.1 E+0	3.5 E+0
05D-SNS19	2.5	6.0 E-2	6.8 E-3	2.3 E-1	4.9 E-3	3 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS20	2.5	4.9 E-2	5.7 E-3	2.6 E-1	4.1 E-3	7 E-10	9 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS01	2.5	4.6 E-1	5.0 E-2	6.0 E-1	3.5 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
06D-SNS06	2.5	3.6 E-1	4.1 E-2	**1.3 E+0**	2.9 E-2	5 E-9	6 E-8	2 E-9	6.0 E+0	3.5 E+0	3.7 E+0	3.4 E+0
06D-SNS07	2.5	5.9 E-1	6.6 E-2	**2.2 E+0**	4.8 E-2	6 E-9	8 E-8	3 E-9	7.1 E+0	3.7 E+0	4.0 E+0	3.5 E+0
06D-SNS08	2.5	1.9 E-1	2.1 E-2	7.3 E-1	1.5 E-2	2 E-9	3 E-8	1 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
06D-SNS09	2.5	7.6 E-2	8.6 E-3	2.4 E-1	6.2 E-3	6 E-9	8 E-8	3 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS10	2.5	5.1 E-2	5.8 E-3	1.8 E-1	4.2 E-3	2 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS11	2.5	1.0 E-1	1.1 E-2	2.2 E-1	8.0 E-3	4 E-9	6 E-8	2 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SNS01	2.5	7.7 E-2	8.9 E-3	4.5 E-1	6.5 E-3	2 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
09D-SNS05	2.5	1.0 E-1	1.2 E-2	3.1 E-1	8.5 E-3	1 E-8	1 E-7	5 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
09D-SNS06	2.5	7.2 E-2	8.2 E-3	3.0 E-1	5.9 E-3	2 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS08	2.5	7.8 E-2	8.8 E-3	2.4 E-1	6.5 E-3	2 E-8	2 E-7	8 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0

Table 5.2-59 All Receptors Hazard Index and Cancer Risk Results - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index				Incremental Lifetime Cancer Risk			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident		Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
12D-SNS09	2.5	6.3 E-2	7.2 E-3	3.1 E-1	5.2 E-3	5 E-8	6 E-7	2 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
52D-SNS01	2.5	1.1 E-1	1.2 E-2	2.4 E-1	8.9 E-3	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SNS02	2.5	8.6 E-2	9.7 E-3	2.9 E-1	7.0 E-3	8 E-8	9 E-7	4 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SNS03	2.5	5.8 E-2	6.7 E-3	2.5 E-1	4.9 E-3	7 E-9	9 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SNS04	2.5	3.4 E-2	3.9 E-3	1.5 E-1	2.8 E-3	2 E-8	3 E-7	1 E-8	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SNS05	2.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(c)-SNS01	2.5	6.7 E-2	7.8 E-3	4.1 E-1	5.6 E-3	4 E-8	5 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS06	3	3.8 E-1	4.1 E-2	2.4 E-1	2.9 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
09D-SNS01	3	4.1 E-1	4.4 E-2	2.4 E-1	3.1 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
09D-SNS02	3	5.4 E-1	5.8 E-2	3.6 E-1	4.1 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
09D-SNS03	3	5.7 E-1	6.1 E-2	5.0 E-1	4.4 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
09D-SNS04	3	5.9 E-1	6.4 E-2	4.1 E-1	4.6 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS01	3	5.2 E-1	5.6 E-2	2.9 E-1	4.0 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS02	3	5.2 E-1	5.6 E-2	3.4 E-1	4.0 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS03	3	4.4 E-1	4.8 E-2	4.6 E-1	3.4 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS04	3	5.5 E-1	5.9 E-2	3.7 E-1	4.2 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS05	3	5.2 E-1	5.6 E-2	3.7 E-1	4.0 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS06	3	5.0 E-1	5.4 E-2	3.0 E-1	3.8 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
12D-SNS07	3	3.4 E-1	3.7 E-2	2.3 E-1	2.6 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-AH03	3	1.7 E-4	2.0 E-5	4.4 E-5	1.7 E-5	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-SB09	4.5	5.0 E-2	5.9 E-3	3.5 E-1	4.2 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-AH01	5	2.6 E-1	2.8 E-2	2.1 E-1	2.0 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB01	5	5.8 E-2	6.6 E-3	2.1 E-1	4.7 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB02	5	5.4 E-1	6.0 E-2	7.0 E-1	4.5 E-2	1 E-7	**2 E-6**	7 E-8	7.8 E+0	3.7 E+0	4.2 E+0	3.6 E+0
05D-SB03	5	2.5 E-2	2.9 E-3	1.5 E-1	2.1 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB04	5	5.1 E-2	6.0 E-3	3.7 E-1	4.3 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
05D-SNS12	5	4.7 E-2	5.3 E-3	1.9 E-1	3.8 E-3	3 E-10	4 E-9	1 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS13	5	7.2 E-2	8.0 E-3	2.2 E-1	5.8 E-3	2 E-8	2 E-7	8 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS14	5	1.3 E-1	1.5 E-2	4.4 E-1	1.1 E-2	1 E-7	**2 E-6**	6 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS15	5	1.8 E-1	2.0 E-2	5.2 E-1	1.5 E-2	2 E-7	**2 E-6**	7 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SNS16	5	1.0 E-1	1.1 E-2	1.6 E-1	8.2 E-3	3 E-8	4 E-7	1 E-8	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SNS20	5	4.6 E-2	5.2 E-3	2.3 E-1	3.8 E-3	3 E-10	4 E-9	1 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB02	5	**2.1 E+0**	2.5 E-1	**2.0 E+1**	1.8 E-1	**2 E-5**	**3 E-4**	**1 E-5**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
06D-SB03	5	1.5 E-1	1.7 E-2	**1.2 E+0**	1.3 E-2	7 E-9	9 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB04	5	4.5 E-2	5.2 E-3	2.5 E-1	3.7 E-3	6 E-9	8 E-8	3 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB05	5	3.3 E-2	3.7 E-3	1.5 E-1	2.7 E-3	6 E-9	7 E-8	3 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB06	5	4.4 E-2	4.9 E-3	1.8 E-1	3.5 E-3	2 E-10	3 E-9	1 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
08D-AH01	5	4.5 E-1	4.9 E-2	4.8 E-1	3.5 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
08D-AH02	5	4.1 E-1	4.5 E-2	5.5 E-1	3.2 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB01	5	8.1 E-2	9.5 E-3	5.8 E-1	6.9 E-3	2 E-8	3 E-7	9 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB02	5	9.2 E-2	1.1 E-2	4.0 E-1	8.4 E-3	7 E-7	5 E-7	2 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB03	5	6.4 E-2	7.5 E-3	3.7 E-1	5.4 E-3	2 E-8	3 E-7	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB04	5	6.4 E-2	7.5 E-3	3.7 E-1	5.4 E-3	2 E-8	3 E-7	9 E-9	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB05	5	5.0 E-2	5.8 E-3	2.9 E-1	4.2 E-3	2 E-8	2 E-7	8 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB06	5	4.1 E-2	4.9 E-3	2.6 E-1	3.5 E-3	2 E-8	2 E-7	9 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
09D-SD01	5	6.1 E-2	6.9 E-3	2.8 E-1	5.0 E-3	3 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-AH01	5	2.8 E-4	3.3 E-5	7.3 E-5	2.8 E-5	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-AH03	5	3.9 E-4	1.4 E-4	1.1 E-4	9.9 E-5	1 E-6	2 E-8	4 E-7	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-SA-SB03	5	4.0 E-1	4.3 E-2	2.8 E-1	3.1 E-2	2 E-9	3 E-8	1 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB01	5	**1.1 E+0**	1.2 E-1	8.4 E-1	8.7 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.5 E+0	3.4 E+0
52D-SB02	5	3.4 E-1	3.7 E-2	2.2 E-1	2.6 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB05	5	4.0 E-2	4.6 E-3	1.5 E-1	3.3 E-3	9 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB06	5	4.6 E-2	5.3 E-3	2.0 E-1	3.9 E-3	1 E-9	2 E-8	6 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB07	5	8.7 E-2	9.7 E-3	2.1 E-1	7.0 E-3	**1 E-5**	3 E-7	**3 E-6**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB08	5	3.7 E-2	4.4 E-3	2.8 E-1	3.2 E-3	1 E-8	1 E-7	5 E-9	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB10	5	4.3 E-2	5.1 E-3	2.8 E-1	3.6 E-3	2 E-8	2 E-7	8 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB11	5	1.0 E-1	1.1 E-2	2.0 E-1	7.9 E-3	3 E-8	4 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB13	5	3.8 E-2	4.4 E-3	1.8 E-1	3.1 E-3	1 E-8	2 E-7	6 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB14	5	6.8 E-2	8.0 E-3	5.0 E-1	5.7 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB15	5	5.0 E-2	5.7 E-3	1.8 E-1	4.1 E-3	8 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB17	5	1.3 E-1	1.4 E-2	6.7 E-1	1.0 E-2	3 E-8	4 E-7	1 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
AW-AF1-SB01	5	4.2 E-2	4.7 E-3	1.6 E-1	3.4 E-3	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF1-SB02	5	3.4 E-2	3.8 E-3	1.3 E-1	2.7 E-3	1 E-9	2 E-8	6 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF1-SB03	5	2.2 E-2	2.5 E-3	8.5 E-2	1.8 E-3	5 E-9	6 E-8	2 E-9	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
AW-AF2-SB01	5	4.7 E-2	5.5 E-3	3.1 E-1	3.9 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF2-SB02	5	5.1 E-2	5.9 E-3	3.3 E-1	4.2 E-3	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
D(b)-SB01	5	3.1 E-2	3.5 E-3	1.2 E-1	2.5 E-3	6 E-10	7 E-9	3 E-10	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
D(b)-SB02	5	4.4 E-2	5.0 E-3	1.8 E-1	3.6 E-3	7 E-10	9 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(b)-SB03	5	4.1 E-2	4.6 E-3	1.6 E-1	3.3 E-3	6 E-10	7 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(b)-SB04	5	1.7 E-5	2.0 E-6	4.4 E-6	1.7 E-6	2 E-7	7 E-9	7 E-8	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
D(b)-SB05	5	4.1 E-2	4.7 E-3	2.0 E-1	3.4 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(C)-SB01	5	4.7 E-1	5.0 E-2	4.5 E-1	3.6 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
D(c)-SB02	5	5.3 E-2	6.1 E-3	2.8 E-1	4.4 E-3	5 E-8	6 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0

Table 5.2-59 All Receptors Hazard Index and Cancer Risk Results - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index				Incremental Lifetime Cancer Risk			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident		Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
D(c)-SB03	5	4.3 E-2	4.9 E-3	2.1 E-1	3.5 E-3	8 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
D(c)-SB04	5	5.2 E-2	6.1 E-3	3.3 E-1	4.3 E-3	4 E-8	4 E-7	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(c)-SB05	5	4.7 E-2	5.4 E-3	2.7 E-1	3.9 E-3	2 E-8	3 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
DC-AH01	5	4.7 E-1	5.0 E-2	4.5 E-1	3.6 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
52D-SB16	5.5	3.9 E-2	4.5 E-3	1.9 E-1	3.3 E-3	8 E-10	1 E-8	4 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB01	6	2.9 E-1	3.1 E-2	2.0 E-1	2.2 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-FCS-SB01	7	4.2 E-1	4.5 E-2	3.1 E-1	3.2 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-AH01	10	3.0 E-1	3.3 E-2	2.0 E-1	2.3 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS12	10	3.6 E-2	4.0 E-3	1.5 E-1	2.9 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS13	10	1.9 E-1	2.1 E-2	5.4 E-1	1.5 E-2	1 E-7	**2 E-6**	6 E-8	5.5 E+0	3.5 E+0	3.6 E+0	3.4 E+0
05D-SNS14	10	1.9 E-1	2.2 E-2	5.5 E-1	1.6 E-2	2 E-7	**2 E-6**	8 E-8	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SNS15	10	2.0 E-1	2.2 E-2	4.6 E-1	1.6 E-2	2 E-7	**2 E-6**	9 E-8	5.5 E+0	3.4 E+0	3.5 E+0	3.4 E+0
05D-SNS16	10	5.1 E-2	5.8 E-3	2.7 E-1	4.2 E-3	3 E-8	4 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SNS20	10	6.7 E-2	7.5 E-3	2.5 E-1	5.4 E-3	4 E-10	5 E-9	2 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SNS07	10	5.0 E-2	5.7 E-3	2.4 E-1	4.1 E-3	5 E-8	6 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-AH02	10	4.4 E-1	4.8 E-2	2.4 E-1	3.4 E-2	1 E-6	2 E-8	4 E-7	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-AH02	10	8.2 E-4	9.6 E-5	2.1 E-4	8.1 E-5	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-SB01	10	4.2 E-1	4.6 E-2	2.9 E-1	3.3 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB02	10	1.8 E-4	2.1 E-5	4.8 E-5	1.8 E-5	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
D(C)-SB01	10	3.7 E-1	4.0 E-2	4.6 E-1	2.8 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
DC-AH01	10	3.7 E-1	4.0 E-2	4.6 E-1	2.8 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB09	10.5	3.4 E-2	3.9 E-3	1.4 E-1	2.8 E-3	2 E-8	2 E-7	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(c)-SB05	10.5	6.2 E-2	7.2 E-3	4.0 E-1	5.1 E-3	3 E-8	4 E-7	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB01	11	4.4 E-2	5.1 E-3	2.3 E-1	3.7 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
05D-SB02	11	6.4 E-2	7.2 E-3	2.3 E-1	5.2 E-3	3 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB02	11	**2.9 E+0**	3.6 E-1	**2.9 E+1**	2.5 E-1	**4 E-5**	**4 E-4**	**2 E-5**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB03	11	5.8 E-2	6.7 E-3	3.4 E-1	4.8 E-3	9 E-9	1 E-7	4 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB04	11	4.7 E-2	5.4 E-3	2.3 E-1	3.8 E-3	6 E-9	7 E-8	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB05	11	5.3 E-2	6.1 E-3	3.1 E-1	4.4 E-3	6 E-9	7 E-8	3 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
06D-SB06	11	4.5 E-2	5.3 E-3	2.8 E-1	3.8 E-3	2 E-10	2 E-9	8 E-11	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
08D-SB01	11	6.0 E-2	6.9 E-3	3.1 E-1	5.0 E-3	2 E-8	2 E-7	7 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB02	11	9.1 E-2	1.1 E-2	5.3 E-1	7.6 E-3	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB05	11	5.0 E-2	5.7 E-3	2.5 E-1	4.0 E-3	2 E-8	3 E-7	1 E-8	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
08D-SB06	11	1.8 E-3	2.2 E-4	1.8 E-2	1.6 E-4	2 E-8	3 E-7	1 E-8	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-SB05	11	3.2 E-2	3.6 E-3	1.5 E-1	2.6 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB06	11	4.7 E-2	5.4 E-3	2.2 E-1	3.9 E-3	2 E-8	3 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB07	11	4.9 E-2	5.6 E-3	2.0 E-1	4.1 E-3	2 E-8	2 E-7	9 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB08	11	4.9 E-2	5.6 E-3	2.0 E-1	4.0 E-3	2 E-8	2 E-7	8 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB10	11	**3.3 E+0**	4.1 E-1	**3.3 E+1**	2.9 E-1	**4 E-5**	**5 E-4**	**2 E-5**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
52D-SB11	11	3.0 E-2	3.5 E-3	1.3 E-1	2.5 E-3	8 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB12	11	4.3 E-2	4.8 E-3	1.4 E-1	3.4 E-3	2 E-8	2 E-7	9 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB13	11	4.0 E-2	4.7 E-3	2.4 E-1	3.3 E-3	9 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
52D-SB14	11	3.2 E-2	3.7 E-3	1.5 E-1	2.7 E-3	5 E-10	7 E-9	3 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB15	11	4.1 E-2	4.7 E-3	1.9 E-1	3.4 E-3	9 E-9	1 E-7	4 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
52D-SB17	11	5.4 E-2	6.2 E-3	2.6 E-1	4.5 E-3	2 E-8	2 E-7	8 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF1-SB01	11	3.2 E-2	3.6 E-3	1.5 E-1	2.6 E-3	9 E-9	1 E-7	4 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF1-SB02	11	2.4 E-2	2.8 E-3	1.0 E-1	2.0 E-3	2 E-9	2 E-8	9 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
AW-AF1-SB03	11	5.5 E-2	6.4 E-3	3.0 E-1	4.6 E-3	6 E-8	8 E-7	3 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF2-SB01	11	3.3 E-2	4.0 E-3	2.5 E-1	2.8 E-3	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
AW-AF2-SB02	11	4.0 E-2	4.7 E-3	3.0 E-1	3.4 E-3	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(b)-SB02	11	4.8 E-2	5.5 E-3	2.2 E-1	3.9 E-3	8 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(b)-SB03	11	6.7 E-2	7.5 E-3	2.2 E-1	5.4 E-3	7 E-10	9 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(b)-SB04	11	1.6 E-6	1.9 E-7	4.1 E-7	1.6 E-7	1 E-9	3 E-11	3 E-10	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
D(b)-SB05	11	5.3 E-2	6.0 E-3	2.3 E-1	4.3 E-3	8 E-10	1 E-8	4 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
D(c)-SB02	11	3.1 E-3	3.8 E-4	3.2 E-2	2.7 E-4	4 E-8	5 E-7	2 E-8	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
D(c)-SB03	11	4.9 E-2	5.6 E-3	2.1 E-1	4.0 E-3	2 E-9	2 E-8	8 E-10	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
D(c)-SB04	11	5.2 E-2	6.1 E-3	3.3 E-1	4.3 E-3	3 E-8	4 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB03	11.5	7.8 E-2	9.1 E-3	5.4 E-1	6.5 E-3	3 E-8	4 E-7	1 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB04	11.5	2.2 E-2	2.6 E-3	1.2 E-1	1.8 E-3	3 E-8	4 E-7	1 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
08D-SB05	11.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
08D-SB06	11.5	4.9 E-4	5.3 E-5	1.2 E-4	3.8 E-5	**NA**	**NA**	**NA**	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
52D-SB16	11.5	2.9 E-2	3.3 E-3	1.3 E-1	2.4 E-3	4 E-10	5 E-9	2 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
Minimum		1.6 E-6	1.9 E-7	4.1 E-7	1.6 E-7	2 E-10	3 E-11	8 E-11	4.6 E+0	3.3 E+0	3.3 E+0	3.3 E+0
Median		7.6 E-2	8.7 E-3	2.8 E-1	6.3 E-3	2 E-8	2 E-7	9 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
Maximum		4.3 E+0	4.8 E-1	3.3 E+1	3.4 E-1	4 E-5	5 E-4	2 E-5	3.2 E+1	6.8 E+0	1.1 E+1	5.8 E+0

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

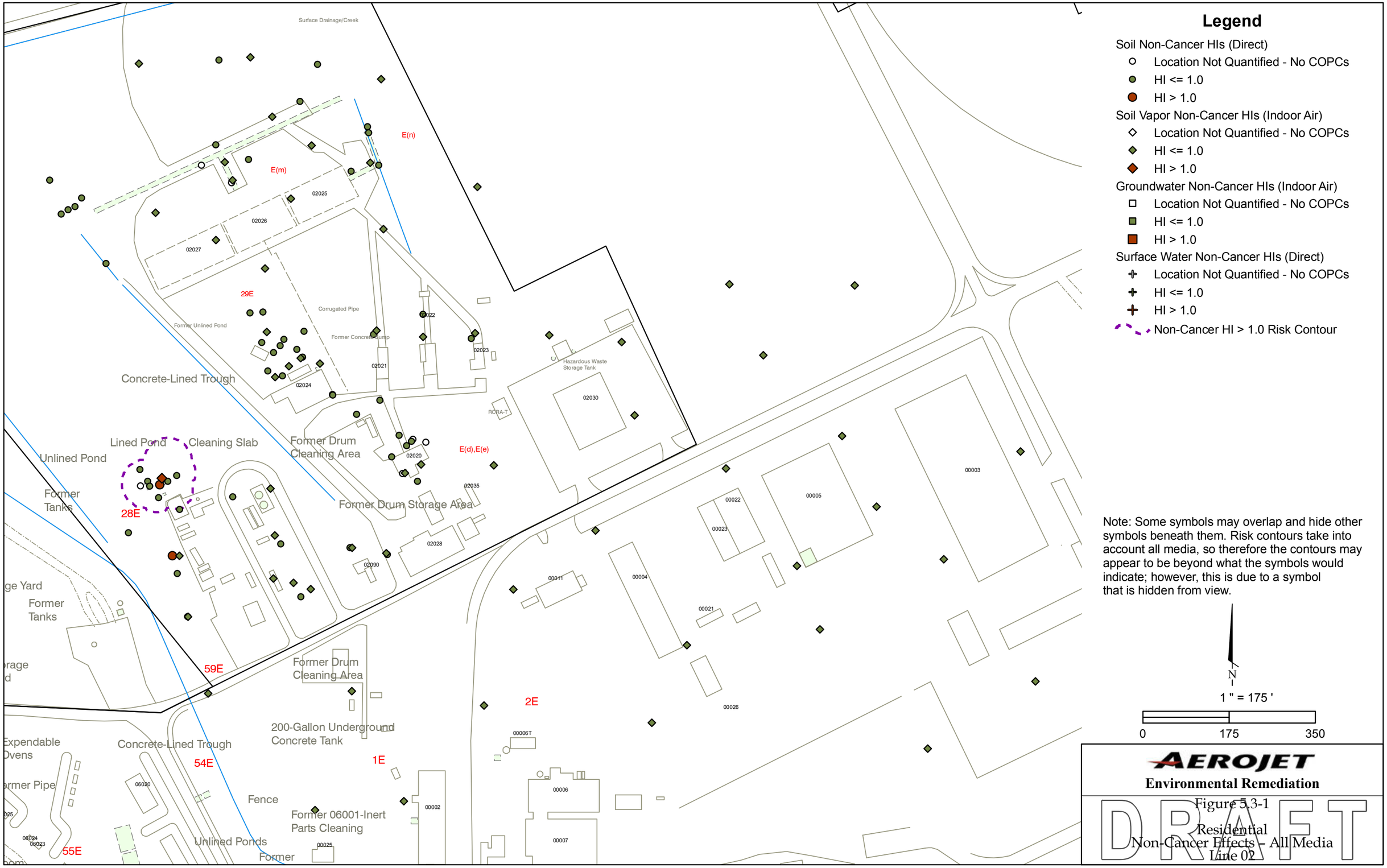
Table 5.2-60 *All Receptors Hazard Index and Cancer Risk Results - Soil Vapor*
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

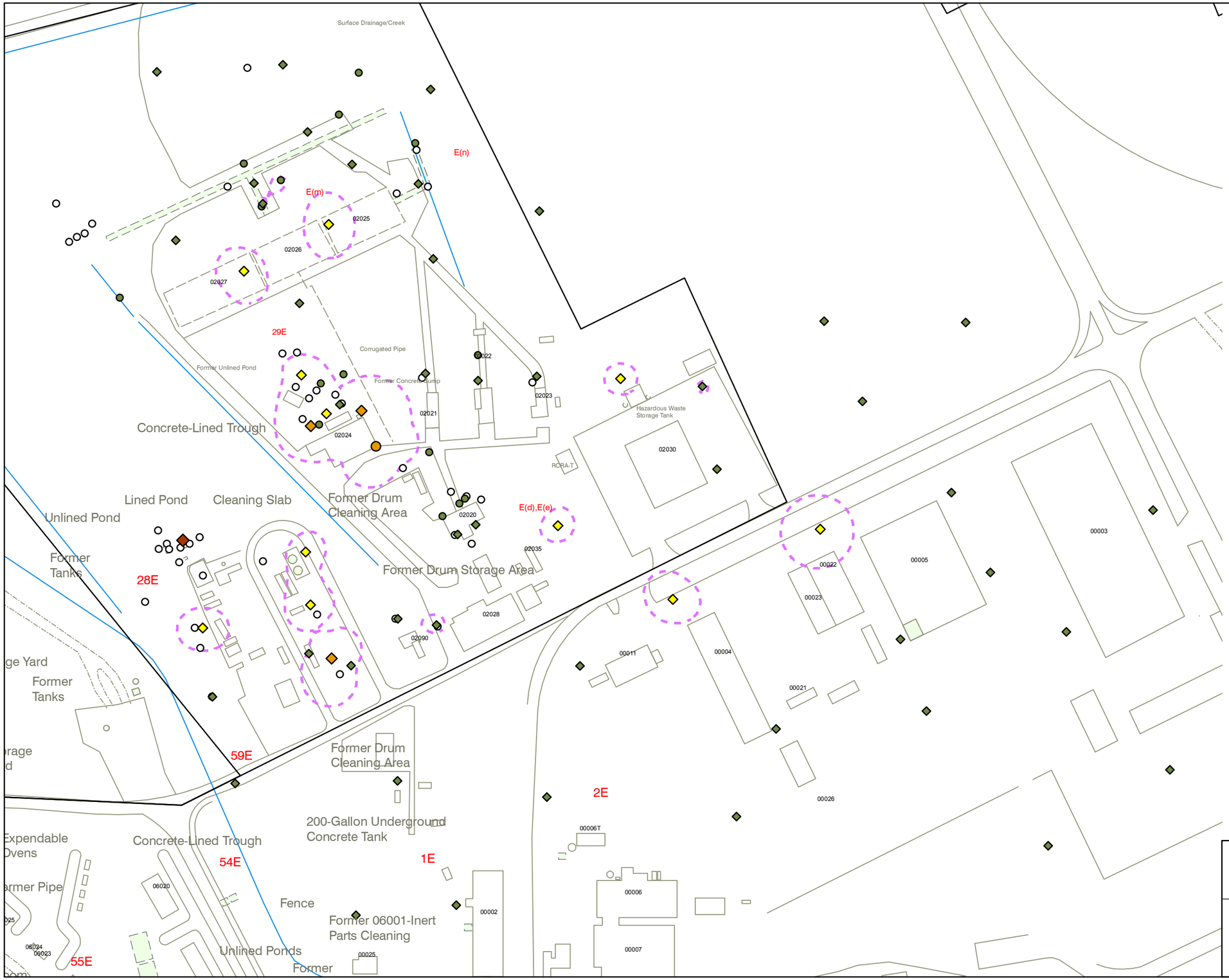
		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil Vapor		
		Resident		Construction	Commercial		Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker
08D-SP07-10	10	3.3 E-3	1.4 E-3	1.3 E-5	5.1 E-4	1 E-7	9 E-10	3 E-8
08D-SP08-10	10	6.7 E-3	2.9 E-3	2.7 E-5	1.0 E-3	9 E-7	6 E-9	2 E-7
08D-SP09-10	10	1.8 E-3	7.7 E-4	7.7 E-6	2.8 E-4	2 E-7	1 E-9	5 E-8
52D-SP24-10	10	1.8 E-2	7.6 E-3	7.1 E-5	2.7 E-3	1 E-6	8 E-9	3 E-7
52D-SP25-10	10	2.8 E-2	1.2 E-2	1.1 E-4	4.3 E-3	9 E-7	6 E-9	2 E-7
52D-SP26-10	10	7.2 E-3	3.1 E-3	2.8 E-5	1.1 E-3	7 E-7	4 E-9	2 E-7
52D-SP29-10	10	1.1 E-2	4.8 E-3	4.6 E-5	1.7 E-3	**2 E-6**	1 E-8	5 E-7
52D-SP30-10	10	3.0 E-3	1.3 E-3	1.2 E-5	4.7 E-4	5 E-7	3 E-9	1 E-7
52D-SP31-10	10	2.1 E-3	8.9 E-4	8.4 E-6	3.2 E-4	3 E-7	2 E-9	8 E-8
52D-SP32-10	10	7.0 E-3	3.0 E-3	2.8 E-5	1.1 E-3	5 E-7	3 E-9	1 E-7
52D-SP33-10	10	1.7 E-2	7.1 E-3	6.7 E-5	2.6 E-3	6 E-7	4 E-9	1 E-7
52D-SP35-10	10	3.0 E-3	1.3 E-3	1.2 E-5	4.6 E-4	1 E-7	8 E-10	3 E-8
52D-SP36-10	10	2.7 E-3	1.2 E-3	1.0 E-5	4.2 E-4	1 E-7	6 E-10	3 E-8
52D-SP37-10	10	3.6 E-3	1.5 E-3	1.4 E-5	5.6 E-4	1 E-7	7 E-10	3 E-8
52D-SP38-10	10	1.9 E-3	8.3 E-4	7.7 E-6	3.0 E-4	9 E-8	6 E-10	2 E-8
52D-SP39-10	10	7.2 E-4	3.1 E-4	3.0 E-6	1.1 E-4	3 E-8	2 E-10	8 E-9
52D-SP40-10	10	1.4 E-3	5.8 E-4	5.5 E-6	2.1 E-4	1 E-7	7 E-10	3 E-8
52D-SP41-10	10	3.1 E-3	1.3 E-3	1.2 E-5	4.8 E-4	3 E-7	2 E-9	6 E-8
52D-SP42-10	10	2.9 E-3	1.2 E-3	1.2 E-5	4.5 E-4	3 E-7	2 E-9	7 E-8
52D-SP43-10	10	5.8 E-3	2.5 E-3	2.3 E-5	9.0 E-4	5 E-7	3 E-9	1 E-7
AW-08D-SP10-10	10	5.5 E-3	2.4 E-3	2.3 E-5	8.6 E-4	5 E-7	3 E-9	1 E-7
AW-AFI-SP01-10	10	6.9 E-3	3.0 E-3	2.7 E-5	1.1 E-3	3 E-7	2 E-9	8 E-8
D(b)-SP03-10	10	6.4 E-3	2.7 E-3	2.5 E-5	9.9 E-4	8 E-7	5 E-9	2 E-7
D(b)-SP04-10	10	3.0 E-2	1.3 E-2	1.2 E-4	4.7 E-3	8 E-7	5 E-9	2 E-7
D(b)-SP05-10	10	4.1 E-4	1.7 E-4	1.6 E-6	6.3 E-5	2 E-8	9 E-11	4 E-9
D(b)-SP06-10	10	4.3 E-3	1.9 E-3	1.7 E-5	6.7 E-4	2 E-7	1 E-9	4 E-8
D(c)-SP05-10	10	2.9 E-3	1.2 E-3	1.2 E-5	4.4 E-4	4 E-7	2 E-9	9 E-8
D(c)-SP06-10	10	1.9 E-2	8.1 E-3	8.0 E-5	2.9 E-3	**5 E-6**	3 E-8	1 E-6
D(c)-SP07-10	10	4.9 E-4	2.1 E-4	2.1 E-6	7.6 E-5	1 E-7	7 E-10	2 E-8
D(c)-SP09-10	10	2.2 E-3	9.6 E-4	9.5 E-6	3.5 E-4	4 E-7	2 E-9	8 E-8
D(c)-SP10-10	10	2.7 E-4	1.1 E-4	1.2 E-6	4.2 E-5	3 E-9	2 E-11	7 E-10
D(c)-SP11-10	10	2.2 E-3	9.6 E-4	9.5 E-6	3.5 E-4	3 E-7	2 E-9	7 E-8
D(c)-SP12-10	10	2.5 E-3	1.1 E-3	9.9 E-6	3.9 E-4	2 E-7	1 E-9	4 E-8
05D-SP08-20	20	1.0 E-3	4.4 E-4	4.0 E-6	1.6 E-4	1 E-7	8 E-10	3 E-8
08D-SP07-20	20	1.8 E-3	7.9 E-4	7.1 E-6	2.8 E-4	2 E-7	1 E-9	4 E-8
08D-SP08-20	20	3.8 E-4	1.6 E-4	1.4 E-6	5.9 E-5	5 E-8	3 E-10	1 E-8
52D-SP24-20	20	6.8 E-3	2.9 E-3	2.4 E-5	1.1 E-3	2 E-7	1 E-9	5 E-8
52D-SP25-20	20	1.1 E-2	4.5 E-3	3.8 E-5	1.6 E-3	4 E-7	2 E-9	1 E-7
52D-SP27-20	20	6.5 E-3	2.8 E-3	2.3 E-5	1.0 E-3	2 E-7	9 E-10	4 E-8
52D-SP28-20	20	9.9 E-3	4.2 E-3	3.5 E-5	1.5 E-3	4 E-7	2 E-9	1 E-7
52D-SP29-20	20	1.7 E-3	7.4 E-4	6.3 E-6	2.7 E-4	4 E-7	2 E-9	9 E-8
52D-SP30-20	20	2.5 E-3	1.1 E-3	9.1 E-6	3.9 E-4	5 E-7	3 E-9	1 E-7
52D-SP32-20	20	4.7 E-3	2.0 E-3	1.7 E-5	7.2 E-4	2 E-7	9 E-10	4 E-8
52D-SP33-20	20	2.0 E-2	8.5 E-3	7.1 E-5	3.1 E-3	3 E-7	2 E-9	7 E-8
52D-SP35-20	20	1.9 E-3	8.3 E-4	7.1 E-6	3.0 E-4	1 E-7	6 E-10	3 E-8
52D-SP36-20	20	2.2 E-3	9.4 E-4	7.7 E-6	3.4 E-4	2 E-7	9 E-10	4 E-8
52D-SP39-20	20	1.5 E-3	6.3 E-4	5.5 E-6	2.3 E-4	2 E-7	1 E-9	4 E-8
52D-SP40-20	20	1.9 E-3	8.3 E-4	7.2 E-6	3.0 E-4	2 E-7	9 E-10	4 E-8
52D-SP41-20	20	6.0 E-4	2.6 E-4	2.2 E-6	9.3 E-5	4 E-8	3 E-10	1 E-8
52D-SP42-20	20	1.0 E-3	4.4 E-4	3.8 E-6	1.6 E-4	9 E-8	5 E-10	2 E-8
52D-SP43-20	20	3.0 E-3	1.3 E-3	1.1 E-5	4.7 E-4	2 E-7	1 E-9	6 E-8
52D-SP44-20	20	2.1 E-4	9.1 E-5	7.6 E-7	3.3 E-5	0 E+0	0 E+0	0 E+0
AW-08D-SP10-20	20	1.5 E-3	6.4 E-4	5.7 E-6	2.3 E-4	2 E-7	1 E-9	5 E-8
D(b)-SP03-20	20	1.4 E-3	6.0 E-4	5.2 E-6	2.2 E-4	3 E-7	1 E-9	6 E-8
D(b)-SP04-20	20	1.7 E-4	7.2 E-5	6.4 E-7	2.6 E-5	2 E-8	1 E-10	6 E-9
D(b)-SP06-20	20	3.2 E-3	1.4 E-3	1.2 E-5	4.9 E-4	2 E-7	9 E-10	4 E-8
D(c)-SP05-20	20	4.4 E-3	1.9 E-3	1.7 E-5	6.8 E-4	9 E-7	5 E-9	2 E-7
D(c)-SP06-20	20	1.6 E-5	6.7 E-6	5.7 E-8	2.4 E-6	0 E+0	0 E+0	0 E+0
D(c)-SP07-20	20	6.0 E-5	2.6 E-5	2.1 E-7	9.4 E-6	5 E-9	3 E-11	1 E-9
D(c)-SP08-20	20	1.4 E-3	6.0 E-4	5.3 E-6	2.2 E-4	2 E-7	9 E-10	4 E-8
D(c)-SP09-20	20	5.2 E-3	2.2 E-3	2.0 E-5	8.1 E-4	1 E-6	7 E-9	3 E-7
D(c)-SP10-20	20	8.3 E-4	3.6 E-4	3.1 E-6	1.3 E-4	5 E-8	3 E-10	1 E-8

Table 5.2-60 ***All Receptors Hazard Index and Cancer Risk Results - Soil Vapor***
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil Vapor		
		Resident		Construction	Commercial		Construction	Commercial
Sample Name	**Depth**	**Child**	**Adult**	**Worker**	**Worker**	**Resident**	**Worker**	**Worker**
D(c)-SP11-20	20	5.2 E-3	2.2 E-3	2.0 E-5	8.0 E-4	1 E-6	7 E-9	3 E-7
D(c)-SP12-20	20	4.3 E-3	1.8 E-3	1.5 E-5	6.6 E-4	2 E-7	1 E-9	4 E-8
52D-SP40-28	28	1.9 E-3	8.0 E-4	6.7 E-6	2.9 E-4	9 E-8	5 E-10	2 E-8
52D-SP24-30	30	4.6 E-5	2.0 E-5	1.7 E-7	7.2 E-6	4 E-9	2 E-11	9 E-10
52D-SP25-30	30	5.6 E-3	2.4 E-3	2.0 E-5	8.7 E-4	5 E-7	3 E-9	1 E-7
52D-SP27-30	30	1.2 E-2	5.3 E-3	4.5 E-5	1.9 E-3	7 E-8	4 E-10	2 E-8
52D-SP28-30	30	1.8 E-3	7.7 E-4	6.5 E-6	2.8 E-4	2 E-7	1 E-9	6 E-8
52D-SP30-30	30	**NA**	**NA**	**NA**	**NA**	0 E+0	0 E+0	**NA**
52D-SP35-30	30	4.7 E-3	2.0 E-3	1.7 E-5	7.2 E-4	7 E-7	4 E-9	2 E-7
52D-SP36-30	30	1.6 E-3	6.7 E-4	5.4 E-6	2.4 E-4	2 E-7	9 E-10	4 E-8
52D-SP37-30	30	8.2 E-4	3.5 E-4	3.0 E-6	1.3 E-4	4 E-8	2 E-10	9 E-9
52D-SP39-30	30	5.9 E-4	2.5 E-4	2.2 E-6	9.2 E-5	8 E-8	4 E-10	2 E-8
52D-SP41-30	30	2.0 E-4	8.6 E-5	7.3 E-7	3.1 E-5	7 E-9	4 E-11	2 E-9
52D-SP42-30	30	1.8 E-2	7.5 E-3	6.3 E-5	2.7 E-3	**2 E-6**	1 E-8	5 E-7
52D-SP43-30	30	2.8 E-3	1.2 E-3	1.0 E-5	4.4 E-4	2 E-8	9 E-11	4 E-9
52D-SP44-30	30	3.4 E-3	1.5 E-3	1.2 E-5	5.3 E-4	2 E-7	1 E-9	5 E-8
D(b)-SP05-30	30	1.7 E-4	7.1 E-5	6.1 E-7	2.6 E-5	6 E-9	4 E-11	2 E-9
D(c)-SP05-30	30	9.0 E-3	3.9 E-3	3.3 E-5	1.4 E-3	**2 E-6**	1 E-8	5 E-7
52D-SP44-40	40	2.4 E-3	1.0 E-3	8.6 E-6	3.8 E-4	2 E-7	9 E-10	4 E-8
Minimum		1.6 E-5	6.7 E-6	5.7 E-8	2.4 E-6	3 E-9	2 E-11	7 E-10
Median		2.8 E-3	1.2 E-3	1.0 E-5	4.3 E-4	2 E-7	1 E-9	4 E-8
Maximum		3.0 E-2	1.3 E-2	1.2 E-4	4.7 E-3	5 E-6	3 E-8	1 E-6

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable


Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Groundwater Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Surface Water Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 175 '
0
175
350
AEROJET
Environmental Remediation
DRAFT
Surface Drainage/Creek
E(n)
E(m)
02025
02026
02027
29E
Corrugated Pipe
Former Unlined Pond
Former Concrete Sump
02022
02023
02021
02024
Concrete-Lined Trough
Hazardous Waste Storage Tank
02030
RCRA-T
Lined Pond
Cleaning Slab
Unlined Pond
Former Drum Cleaning Area
02020
E(d),E(e)
02035
Former Tanks
28E
Former Drum Storage Area
02028
02090
00003
00022
00005
00023
00011
00004
00021
Former Tanks
59E
Former Drum Cleaning Area
2E
00026
200-Gallon Underground Concrete Tank
00006T
Concrete-Lined Trough
54E
1E
06020
Fence
00006
00002
Former 06001-Inert Parts Cleaning
00007
Unlined Ponds
00025
55E
Figure 5.3-1
Residential
Non-Cancer Effects – All Media
Line 02



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 175 '

0 175 350

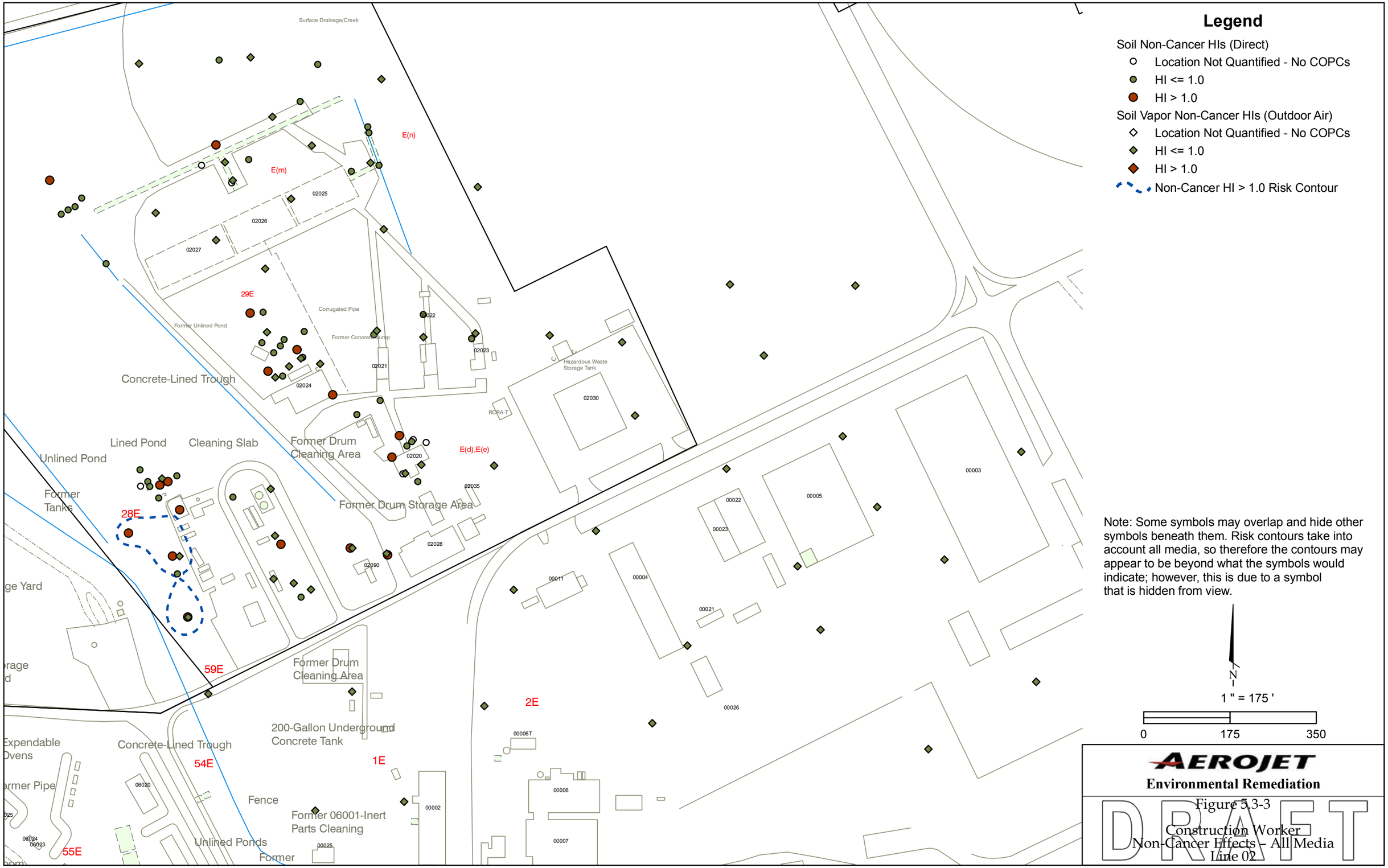
AEROJET

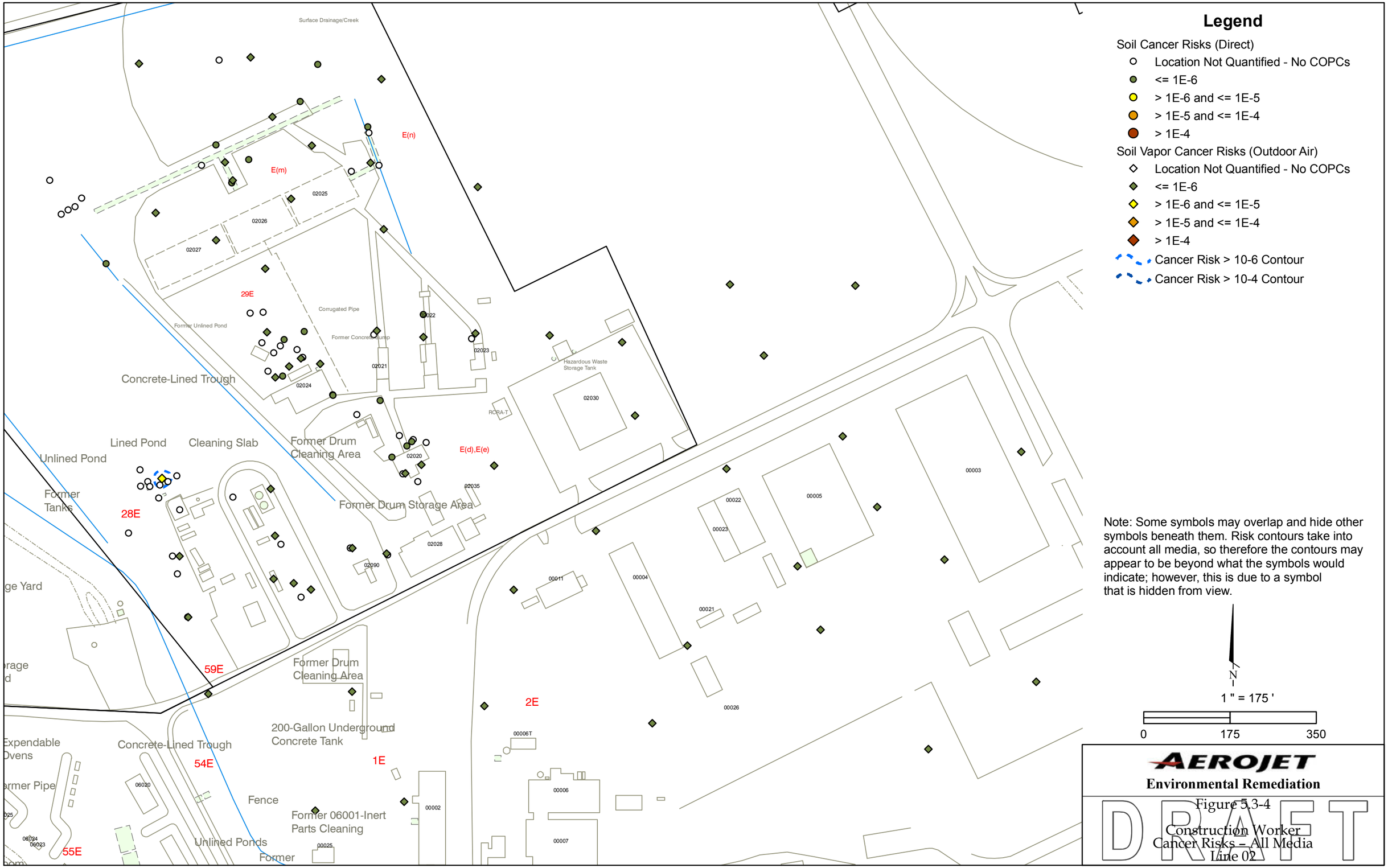
Environmental Remediation

DRAFT

Figure 5.3-2

Residential
Cancer Risks – All Media
Line 02


Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Outdoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 175 '
0
175
350
AEROJET
Environmental Remediation
DRAFT
Surface Drainage/Creek
E(n)
E(m)
02025
02026
02027
29E
Corrugated Pipe
Former Unlined Pond
Former Concrete Sump
02022
02023
02021
02024
Concrete-Lined Trough
Hazardous Waste Storage Tank
02030
RCRA-T
Lined Pond
Cleaning Slab
Former Drum Cleaning Area
E(d),E(e)
Unlined Pond
02020
02035
Former Tanks
28E
Former Drum Storage Area
02028
02090
00003
00022
00005
00023
00011
00004
00021
59E
Former Drum Cleaning Area
2E
00026
200-Gallon Underground Concrete Tank
00006T
Concrete-Lined Trough
54E
1E
06020
00006
Fence
00002
Former 06001-Inert Parts Cleaning
00007
Unlined Ponds
00025
55E
Figure 5.3-3
Construction Worker
Non-Cancer Effects – All Media
Line 02


Legend
Soil Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Soil Vapor Cancer Risks (Outdoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Cancer Risk > 10-6 Contour
Cancer Risk > 10-4 Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 175 '
0
175
350
AEROJET
Environmental Remediation
DRAFT
Surface Drainage/Creek
E(n)
E(m)
02025
02026
02027
29E
Corrugated Pipe
Former Unlined Pond
Former Concrete Sump
02022
02023
02021
02024
Concrete-Lined Trough
Hazardous Waste Storage Tank
02030
RCRA-T
Lined Pond
Cleaning Slab
Former Drum Cleaning Area
02020
E(d),E(e)
Unlined Pond
02035
Former Tanks
28E
Former Drum Storage Area
02028
02090
00003
00022
00005
00023
00011
00004
00021
59E
Former Drum Cleaning Area
2E
00026
200-Gallon Underground Concrete Tank
00006T
Concrete-Lined Trough
54E
1E
06020
00006
Fence
00002
Former 06001-Inert Parts Cleaning
00007
Unlined Ponds
00025
55E
Figure 5.3-4
Construction Worker
Cancer Risks – All Media
Line 02

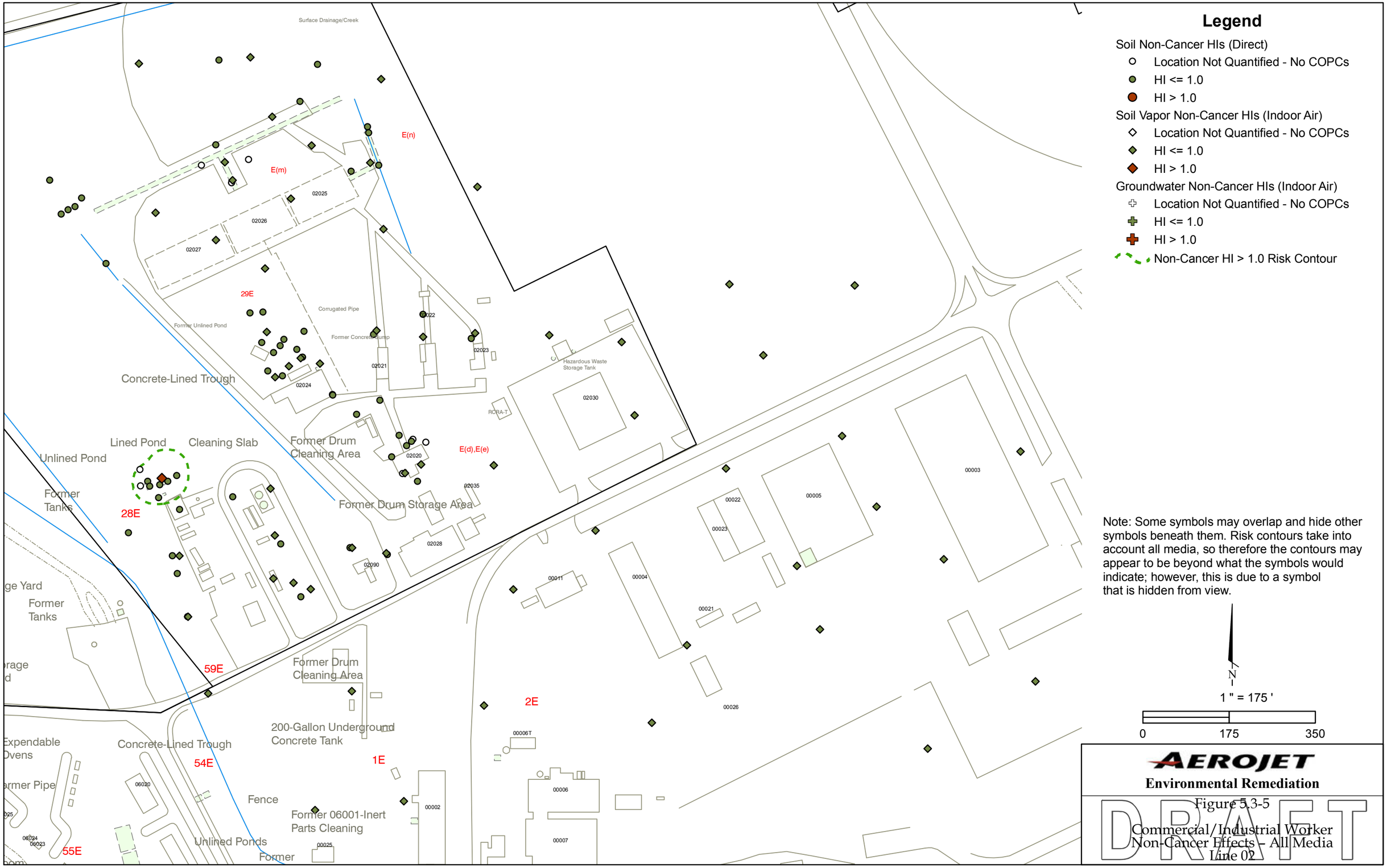


Figure 5.3-5
Commercial/Industrial Worker
Non-Cancer Effects – All Media
Line 02

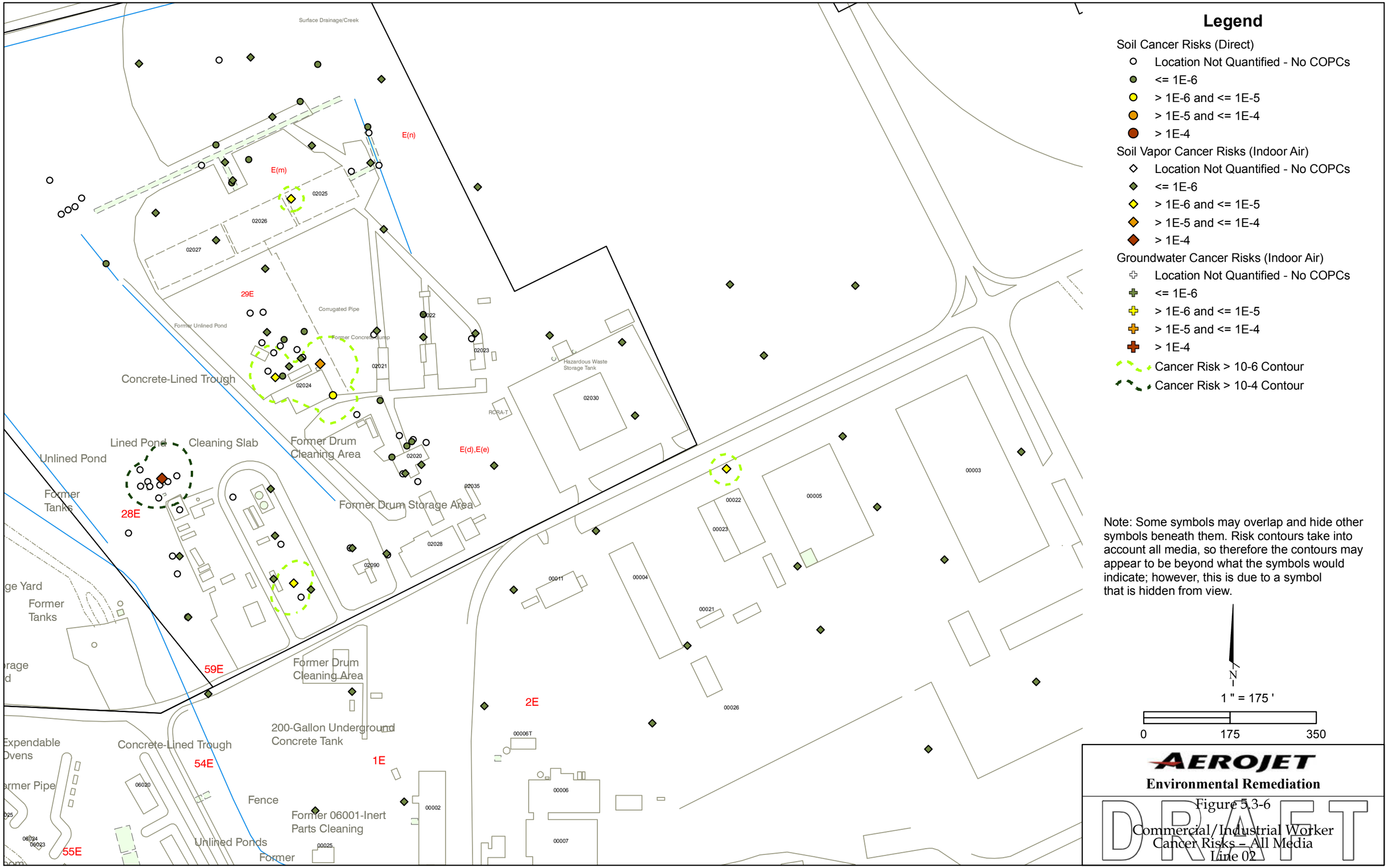


Figure 5.3-6

Commercial/Industrial Worker Cancer Risks – All Media Line 02

Table 5.3-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 2	71-55-6	1,1,1-Trichloroethane	8.7	43000	$\mu g/m^3$	28E-SP16	10	126	9	7.1%	5.7-3200	99100	nc	Y		NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	7.2-4100	2	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	5.7-3200	7	ca	N	ND*	66%
	75-34-3	1,1-Dichloroethane	13	210	$\mu g/m^3$	28E-SP16	40	126	5	4.0%	4.2-2400	66	ca	Y		NA
	75-35-4	1,1-Dichloroethene	4.4	20000	$\mu g/m^3$	28E-SP16	10	126	29	23.0%	4.1-2400	3139	nc	Y		NA
	563-58-6	1,1-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	19-11000	NA	ca	N	ND	NA
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	31-18000	9914	nc	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	6.0	49	$\mu g/m^3$	DSA-SP19	10	126	20	15.9%	5.1-2900	274	nc	Y		NA
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	8-4600	2	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	13	13	$\mu g/m^3$	DSA-SP26	10	126	1	0.8%	6.3-3600	9116	nc	N	BSL	NA
	107-06-2	1,2-Dichloroethane	5.3	190	$\mu g/m^3$	28E-SP16	30	126	7	5.6%	4.2-2400	5	ca	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	4.8-2700	11	ca	N	ND*	29%
	108-67-8	1,3,5-Trimethylbenzene	6.2	14	$\mu g/m^3$	DSA-SP19	10	126	8	6.3%	5.1-2900	274	nc	Y		NA
	106-99-0	1,3-Butadiene	3.0	560	$\mu g/m^3$	DSA-SP10	20	126	83	65.9%	2.4-1300	1	ca	N	NR	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	6.3-3600	4785	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	6.3-3600	10	ca	N	ND*	33%
	123-91-1	1,4-Dioxane	21	56	$\mu g/m^3$	29E-SP11	20	126	14	11.1%	15-8600	14	ca	Y		NA
	540-84-1	2,2,4-Trimethylpentane	6.8	130	$\mu g/m^3$	DSA-SP24	30	126	23	18.3%	4.9-2800	NA	nc	Y		NA
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	11	520	$\mu g/m^3$	DSA-SP18	20	126	49	38.9%	3.1-1800	225572	nc	Y		NA
	591-78-6	2-Hexanone	26	60	$\mu g/m^3$	DSA-SP18	20	126	3	2.4%	17-9700	NA	nc	Y		NA
	67-63-0	2-Propanol	12	28000	$\mu g/m^3$	28E-SP16	20	126	22	17.5%	10-5800	NA	nc	Y		NA
	107-05-1	3-Chloropropene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	13-7400	NA	nc	N	ND	NA
	622-96-8	4-Ethyltoluene	5.7	75	$\mu g/m^3$	DSA-SP19	10	126	19	15.1%	5.1-2900	NA	nc	Y		NA
	108-10-1	4-Methyl-2-pentanone	5.0	44	$\mu g/m^3$	29E-SP11	10	126	19	15.1%	4.3-2400	3626	nc	Y		NA
	67-64-1	Acetone	54	3000	$\mu g/m^3$	L2-ST26-SP07	18	126	73	57.9%	10-11000	15460	nc	Y		NA
	100-44-7	alpha-Chlorotoluene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	5.4-3100	2	ca	N	ND*	100%
	71-43-2	Benzene	3.9	290	$\mu g/m^3$	DSA-SP32	20	126	91	72.2%	3.3-1900	4	ca	Y		NA
	75-27-4	Bromodichloromethane	41	41	$\mu g/m^3$	DSA-SP05	20	126	1	0.8%	7-4000	3	ca	Y		NA
	75-25-2	Bromoform	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	11-6200	121	nc	N	ND*	10%
	74-83-9	Bromomethane	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	4-2300	227	nc	N	ND*	2%
	104-51-8	Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	124	0	0.0%	23-13000	6474	nc	N	ND*	2%
	75-15-0	Carbon Disulfide	3.8	8500	$\mu g/m^3$	28E-SP16	20	126	108	85.7%	3.2-1800	31158	nc	Y		NA
	56-23-5	Carbon Tetrachloride	8.1	7000	$\mu g/m^3$	29E-SP09	20	126	22	17.5%	6.6-3700	3	ca	Y		NA
	108-90-7	Chlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	4.8-2700	45404	nc	N	ND	NA
	75-00-3	Chloroethane	3.7	3.7	$\mu g/m^3$	DSA-SP31	10	126	1	0.8%	2.8-1600	122	ca	N	BSL	NA
	67-66-3	Chloroform	5.4	2400	$\mu g/m^3$	29E-SP09	20	126	57	45.2%	5.1-2900	20	ca	Y		NA
	74-87-3	Chloromethane	28	28	$\mu g/m^3$	L2-ST26-SP07	18	126	1	0.8%	8.6-4900	103	nc	N	BSL	NA

Table 5.3-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 2	156-59-2	cis-1,2-Dichloroethene	4.8	55000	$\mu g/m^3$	28E-SP16	10	126	20	15.9%	4.1-2400	1590	nc	Y		NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	4.7-2700	NA	ca	N	ND	NA
	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	5.1-2900	18309	nc	N	ND	NA
	110-82-7	Cyclohexane	4.1	100	$\mu g/m^3$	E(d)-SP03	10	126	53	42.1%	3.6-2000	NA	nc	Y		NA
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	8.9-5100	5	ca	N	ND*	100%
	64-17-5	Ethanol	9.7	560	$\mu g/m^3$	E(n)-SP12	10	126	58	46.0%	8-4500	NA	nc	Y		NA
	100-41-4	Ethyl Benzene	5.2	160	$\mu g/m^3$	DSA-SP18	20	126	30	23.8%	4.5-2600	42	nc	Y		NA
	75-69-4	Freon 11	7.6	4200	$\mu g/m^3$	DSA-SP04	20	126	47	37.3%	5.9-3300	31446	nc	Y		NA
	76-13-1	Freon 113	9.3	220000	$\mu g/m^3$	DSA-SP16	40	126	91	72.2%	8-4600	1360890	nc	Y		NA
	76-14-2	Freon 114	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	7.3-4200	NA	nc	N	ND	NA
	75-71-8	Freon 12	5.6	100	$\mu g/m^3$	29E-SP09	30	126	17	13.5%	5.2-2900	9139	nc	Y		NA
	142-82-5	Heptane	5.0	2600	$\mu g/m^3$	28E-SP16	10	126	86	68.3%	4.3-2400	NA	nc	Y		NA
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	44-25000	5	ca	N	ND*	100%
	110-54-3	Hexane	4.0	3600	$\mu g/m^3$	28E-SP16	20	126	112	88.9%	3.8-2100	8701	nc	Y		NA
	mp-Xyl	m,p-Xylene	5.3	510	$\mu g/m^3$	DSA-SP18, DSA-SP19	20, 10	126	66	52.4%	4.6-2600	31500	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	3.8-2100	400	ca	N	ND*	2%
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	3.6-2700	104	ca	N	ND*	2%
	95-47-6	o-Xylene	5.0	120	$\mu g/m^3$	DSA-SP19	10	126	26	20.6%	4.5-2600	31500	nc	Y		NA
	99-87-6	p-Cymene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	23-13000	NA	nc	N	ND	NA
	103-65-1	Propylbenzene	8.2	16	$\mu g/m^3$	DSA-SP19	10	126	3	2.4%	5.1-2900	6447	nc	N	BSL	NA
	135-98-8	sec-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	23-13000	NA	nc	N	ND	NA
	100-42-5	Styrene	6.4	7.4	$\mu g/m^3$	DSA-SP19	10	126	2	1.6%	4.4-2500	40940	nc	N	BSL	NA
	98-06-6	tert-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	23-13000	6479	nc	N	ND*	2%
	127-18-4	Tetrachloroethene	7.8	800000	$\mu g/m^3$	28E-SP16	10	126	57	45.2%	7.1-4000	18	ca	Y		NA
	109-99-9	Tetrahydrofuran	3.6	170	$\mu g/m^3$	E(m)-SP08, E(M)-SP09	20, 20	126	54	42.9%	3.1-1800	NA	ca	Y		NA
	108-88-3	Toluene	5.0	5900	$\mu g/m^3$	28E-SP16	10	126	103	81.7%	4-2200	13500	nc	Y		NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	4.1-2400	3190	nc	N	ND	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	4.7-2700	NA	ca	N	ND	NA
	79-01-6	Trichloroethene	6.9	10000000	$\mu g/m^3$	28E-SP16	10	126	96	76.2%	5.6-16000	53	ca	Y		NA
	75-01-4	Vinyl Chloride	6.7	7.6	$\mu g/m^3$	29E-SP11	20	126	2	1.6%	2.7-1500	1	ca	Y		NA

Footnotes:
(1) See Table 1
(2) FOD = Frequency of detection screening
BSL = Below screening level
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
NA = Not applicable
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible

Key:
bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/L = Micrograms per liter
nc = Noncancer

Table 5.3-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 2	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	6.2	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	60	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-6.67	0.061	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	53	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	0.35	ca	N	ND*	6%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	0.61	nc	N	ND	NA
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	18	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.5-3	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	104	0	0%	0.167-1.2	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	6.3	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	104	0	0%	0.167-1.2	1.7E-01 (s)	nc	N	ND*	93%
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	310	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.33	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	104	0	0%	0.5-3	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.33	1.8	nc	N	ND	NA
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	0.23	ca	N	ND	NA
	72-55-9	4,4'-DDE	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	0.16	ca	N	ND	NA
	50-29-3	4,4'-DDT	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	0.16	ca	N	ND	NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.33	0.61	nc	N	ND*	12%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	96	0	0%	0.2-1.2	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.33	24	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	96	0	0%	0.2-1.2	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	104	0	0%	0.5-3	2.3	ca	N	ND	NA
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.33	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	110	0	0%	0.0066-0.333	370	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	110	0	0%	0.0066-0.333	2.3E+02 (s)	nc	N	ND	NA
	309-00-2	Aldrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.0029	ca	N	ND	NA
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.009	ca	N	ND	NA
	7429-90-5	Aluminum	4800	79000	mg/kg	59E-SB03	11	118	118	100%	NA	7600	nc	Y		NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	8.5	ca	N	ND	NA
	120-12-7	Anthracene	0.021	0.021	mg/kg	L2-ST26-SB01	2	110	1	1%	0.0066-0.333	2200	nc	N	BSL	NA
	7440-36-0	Antimony	0.070	9.0	mg/kg	29E-SB05	2	114	78	68%	1-37	3	nc	Y		NA
	AER-001-095	Arsenic	0.86	8.1	mg/kg	E(m)-SD01	1.5	115	103	90%	0.57-7.4	0.0062	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	96	0	0%	0.2-1.2	0.44	ca	N	ND*	5%
	7440-39-3	Barium	27	464	mg/kg	28E-SPB02	3	115	115	100%	NA	520	nc	N	BSL	NA

Table 5.3-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 2	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	96	0	0%	0.35-2.1	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.0041	0.41	mg/kg	L2-ST26-SB01	2	110	7	6%	0.0066-0.333	0.062	ca	Y		NA
	50-32-8	Benzo (a) pyrene	0.0062	0.32	mg/kg	L2-ST26-SB01	2	110	6	5%	0.0066-0.333	0.0038	ca	Y		NA
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.012	0.74	mg/kg	L2-ST26-SB01	2	102	8	8%	0.013-0.076	3.8E-02	ca	Y		NA
	205-99-2	Benzo (b) fluoranthene	ND	ND	mg/kg	ND	ND	8	0	0%	0.167-0.333	6.2E-02	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	0.022	0.088	mg/kg	L2-ST26-SB01	2	110	5	5%	0.0066-0.333	2.3E+02 (s)	nc	Y		NA
	207-08-9	Benzo (k) fluoranthene	ND	ND	mg/kg	ND	ND	8	0	0%	0.167-0.333	3.8E-02	ca	N	ND*	100%
	65-85-0	Benzoic acid	0.27	0.27	mg/kg	L2-ST26-SB01	2	104	1	1%	0.5-3	10000	max	N	BSL	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	1800	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.11	1.2	mg/kg	59E-SB03	11	119	115	97%	0.11-0.92	15	nc	N	BSL	NA
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.032	ca	N	ND	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	0.022	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	208	0	0%	0.2-1.2	0.29	ca	N	ND*	12%
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	104	0	0%	0.333-3	3.5	ca	N	ND	NA
	7440-42-8	Boron	1.1	14	mg/kg	28E-SB03	1	115	41	36%	2.1-18	1600	nc	N	BSL	NA
	7440-43-9	Cadmium	0.035	3.3	mg/kg	E(n)-SNS01	0.5	118	62	53%	0.1-1.8	0.17	nc	N	BG	NA
	7440-70-2	Calcium	2320	4300	mg/kg	28E-SPB02	3	5	5	100%	NA	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	96	0	0%	0.2-1.2	2.4	ca	N	ND	NA
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	3	0	0%	0.021-0.022	0.043	ca	N	ND	NA
	7440-47-3	Chromium	19	95	mg/kg	28E-SB01	11.5	118	118	100%	NA	1.0E+04	max	N	BSL	NA
	18540-29-9	Chromium VI	0.072	0.097	mg/kg	29E-SB12	1	2	2	100%	NA	1.7	ca	N	BSL	NA
	218-01-9	Chrysene	0.0049	0.55	mg/kg	L2-ST26-SB01	2	110	15	14%	0.0066-0.333	0.38	ca	Y		NA
	7440-48-4	Cobalt	4.1	36	mg/kg	59E-SB04	2.5	115	115	100%	NA	66	ca	N	BSL	NA
	7440-50-8	Copper	2.8	90	mg/kg	E(n)-SB02	11	118	118	100%	NA	300	nc	N	BSL	NA
	319-86-8	delta-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	NA		N	ND	NA
	53-70-3	Dibenz (a,h) anthracene	0.031	0.031	mg/kg	L2-ST26-SB01	2	110	1	1%	0.0066-0.333	0.0062	ca	Y		NA
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	104	0	0%	0.167-1.2	15	nc	N	ND	NA
	60-57-1	Dieldrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	0.003	ca	N	ND	NA
	68334-30-5	Diesel Range Organics (C10-C28)	0.96	370	mg/kg	L2-ST24-SB01	2	79	61	77%	2-120	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	4900	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	0.39	5.4	mg/kg	29E-SB01	5	104	7	7%	0.333-2.4	610	nc	Y		NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	240	nc	N	ND	NA
	959-98-8	Endosulfan I	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	37	nc	N	ND	NA
	33213-65-9	Endosulfan II	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	37	nc	N	ND	NA
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	3.7E+01 (s)	nc	N	ND	NA
	72-20-8	Endrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	1.8	nc	N	ND	NA
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	1.8E+00 (s)	nc	N	ND	NA
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	1.8E+00 (s)	nc	N	ND	NA
	206-44-0	Fluoranthene	0.0017	0.82	mg/kg	L2-ST26-SB01	2	110	20	18%	0.0066-0.333	230	nc	Y		NA

Table 5.3-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 2	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	110	0	0%	0.0066-0.333	270	nc	N	ND	NA
	58-89-9	gamma-BHC (Lindane)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.044	ca	N	ND	NA
	76-44-8	Heptachlor	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.011	ca	N	ND	NA
	1024-57-3	Heptachlor epoxide	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.0053	ca	N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	0.03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	0.62	ca	N	ND	NA
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	104	0	0%	0.21-4.2	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	3.5	ca	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.012	0.085	mg/kg	L2-ST26-SB01	2	110	4	4%	0.0066-0.333	0.062	ca	Y		NA
	7439-89-6	Iron	23600	43600	mg/kg	28E-SPB01	0	5	5	100%	NA	2300	nc	Y		NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	51	ca	N	ND	NA
	7439-92-1	Lead	3.0	240	mg/kg	29E-SB05	2	118	118	100%	NA	15	nc	N	BG	NA
	7439-93-2	Lithium	3.0	32	mg/kg	DSA-SB02	1.5	110	110	100%	NA	160	nc	N	BSL	NA
	7439-95-4	Magnesium	3040	7860	mg/kg	28E-SPB01	0	5	5	100%	NA	NA		N	EN	NA
	7439-96-5	Manganese	130	2220	mg/kg	28E-SPB02	3	115	115	100%	NA	180	nc	N	BG	NA
	7439-97-6	Mercury	0.0036	18	mg/kg	29E-SB05	6	111	94	85%	0.02-0.42	1.8	nc	N	BG	NA
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	3	0	0%	0.021-0.022	31	nc	N	ND	NA
	7439-98-7	Molybdenum	0.14	93	mg/kg	DSA-SB03	2	110	96	87%	1.1-7.4	38	nc	Y		NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.1	1200	mg/kg	L2-ST24-SB01	2	79	70	89%	4.1-230	NA		N	ITC	NA
	91-20-3	Naphthalene	0.0032	0.0032	mg/kg	29E-SNS07	0.5	110	1	1%	0.0066-0.333	0.17	ca	N	BSL	NA
	7440-02-0	Nickel	8.7	210	mg/kg	59E-SB04	11	118	118	100%	NA	160	nc	Y		NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	2	nc	N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	116	0	0%	0.003-1.2	0.00095	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	104	0	0%	0.2-1.2	0.007	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	8	0	0%	0.333-0.667	9.9	ca	N	ND	NA
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	96	0	0%	0.2-1.2	150	nc	N	ND	NA
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	3	0	0%	0.021-0.022	0.39	ca	N	ND	NA
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0667	8.9E-03	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0667	8.9E-03	ca	N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	8.9E-03	ca	N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	8.9E-03	ca	N	ND*	100%
	11097-69-1	PCB-1254	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	0.022	ca	N	ND	NA
	11096-82-5	PCB-1260	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	8.9E-03	ca	N	ND*	100%
	87-86-5	Pentachlorophenol	0.34	0.34	mg/kg	E(m)-SD02	0.25	104	1	1%	0.667-4.2	0.3	ca	Y		NA
	14797-73-0	Perchlorate	0.0060	5.1	mg/kg	28E-SB06	5	122	47	39%	0.0051-4	0.78	ca/nc	Y		NA
	85-01-8	Phenanthrene	0.0024	0.14	mg/kg	L2-ST26-SB01	2	110	13	12%	0.0066-0.333	2.3E+02 (s)	nc	Y		NA
	108-95-2	Phenol	0.17	1.2	mg/kg	L2-ST24-SB01	11.5	104	12	12%	0.2-1.2	1800	nc	Y		NA
	AER-001-089	Polychlorinated Biphenyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.0333-0.0333	8.9E-03	ca	N	ND*	100%
	7440-09-7	Potassium	1130	3500	mg/kg	28E-SPB01	0	5	5	100%	NA	NA		N	EN	NA
	129-00-0	Pyrene	0.0060	1.1	mg/kg	L2-ST26-SB01	2	110	15	14%	0.0066-0.333	230	nc	Y		NA
	7782-49-2	Selenium	0.21	2.3	mg/kg	28E-SB03	11	115	20	17%	0.85-7.4	38	nc	N	BSL	NA
	7440-22-4	Silver	0.051	2.0	mg/kg	29E-SNS06	0.5	118	12	10%	0.43-3.7	38	nc	N	BSL	NA

Table 5.3-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 2	AER-001-082	Sodium	155	199	mg/kg	28E-SPB01	3	5	2	40%	100-100	NA		N	EN	NA
	7440-24-6	Strontium	4.0	110	mg/kg	E(e)-SB02	11	110	110	100%	NA	4700	nc	N	BSL	NA
	7440-28-0	Thallium	0.11	5.1	mg/kg	28E-SPB01	0	115	96	83%	0.51-18	0.5	nc	N	PEBG	NA
	7440-32-6	Titanium	380	2500	mg/kg	59E-SB03	11	110	110	100%	NA	10000	nc	N	BSL	NA
	AER-001-090	Total Recov. Petroleum Hydrocarbons	2140	2140	mg/kg	E(E)-SB01	1	2	1	50%	20-20	NA		N	ITC	NA
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	3	0	0%	0.084-0.087	0.044	ca	N	ND	NA
	7440-62-2	Vanadium	15	140	mg/kg	59E-SB03	11	115	115	100%	NA	0.53	nc	N	BG	NA
	7440-66-6	Zinc	17	2800	mg/kg	E(n)-SNS01	0.5	118	118	100%	NA	2300	nc	Y		NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PEBG - Evidence from previous investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.3-3 Chemical of Potential Concern Summary
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
1,1,2,2-Tetrachloroethane	N	ND*	NA	NA
1,1,1-Trichloroethane	Y		NA	NA
1,1,2-Trichloroethane	N	ND*	NA	NA
1,1-Dichloroethane	Y		NA	NA
1,1-Dichloroethene	Y		NA	NA
1,1-Dichloropropene	N	ND	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	N	ND	N	ND
1,2,4-Trimethylbenzene	Y		NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	N	ND*	NA	NA
1,2-Dichlorobenzene	N	BSL	N	ND
1,2-Dichloroethane	Y		NA	NA
cis-1,2-Dichloroethene	Y		NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA
1,2-Dichloropropane	N	ND*	NA	NA
1,2-Diphenylhydrazine	NA	NA	NA	NA
1,3,5-Trimethylbenzene	Y		NA	NA
1,3-Butadiene	N	NR	NA	NA
1,3-Dichlorobenzene	N	ND	N	ND
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	N	ND*	N	ND*
1,4-Dioxane	Y		NA	NA
2,2,4-Trimethylpentane	Y		NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	N	ND
2,4,6-Trichlorophenol	NA	NA	N	ND
2,4-Dichlorophenol	NA	NA	N	ND
2,4-Dimethylphenol	NA	NA	N	ND
2,4-Dinitrophenol	NA	NA	N	ND
2,4-Dinitrotoluene	NA	NA	N	ND
2,6-Dinitrotoluene	NA	NA	N	ND
2-Butanone (Methyl Ethyl Ketone)	Y		NA	NA
2-Chloronaphthalene	NA	NA	N	ND
2-Chlorophenol	NA	NA	N	ND
2-Chlorotoluene	NA	NA	NA	NA
2-Hexanone	Y		NA	NA
2-Methylnaphthalene	NA	NA	N	ND*
2-Methylphenol	NA	NA	N	ND
2-Nitroaniline	NA	NA	N	ND
2-Nitrophenol	NA	NA	N	ND
2-Propanol	Y		NA	NA
3,3'-Dichlorobenzidine	NA	NA	N	ND*
3-Chloropropene	N	ND	NA	NA
3-Nitroaniline	NA	NA	N	ND
4,6-Dinitro-2-methylphenol	NA	NA	N	ND*
4-Bromophenyl phenyl ether	NA	NA	N	ND
4-Chloro-3-methylphenol	NA	NA	N	ND
4-Chloroaniline	NA	NA	N	ND
4-Chlorophenyl phenyl ether	NA	NA	N	ND
4-Chlorotoluene	NA	NA	NA	NA
4-Ethyltoluene	Y		NA	NA
4-Methyl-2-pentanone	Y		NA	NA
4-Methylphenol	NA	NA	N	ND
4-Nitroaniline	NA	NA	N	ND
4-Nitrophenol	NA	NA	N	ND
Acenaphthene	NA	NA	N	ND

Table 5.3-3 Chemical of Potential Concern Summary
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Acenaphthylene	NA	NA	N	ND
Acetone	Y		NA	NA
alpha-Chlorotoluene	N	ND*	NA	NA
Aluminum	NA	NA	Y	
Aniline	NA	NA	N	ND
Anthracene	NA	NA	N	BSL
Antimony	NA	NA	Y	
PCB-1016	NA	NA	NA	NA
PCB-1221	NA	NA	NA	NA
PCB-1232	NA	NA	NA	NA
PCB-1242	NA	NA	NA	NA
PCB-1248	NA	NA	NA	NA
PCB-1254	NA	NA	NA	NA
PCB-1260	NA	NA	NA	NA
Arsenic	NA	NA	N	BG
Azobenzene	NA	NA	N	ND*
Barium	NA	NA	N	BSL
Benzene	Y		NA	NA
Benzidine	NA	NA	N	ND*
Benzo (a) anthracene	NA	NA	Y	
Benzo (a) pyrene	NA	NA	Y	
Benzo (b & k) fluoranthene (total)	NA	NA	Y	
Benzo (ghi) perylene	NA	NA	Y	
Benzo (b) fluoranthene	NA	NA	N	ND*
Benzo (k) fluoranthene	NA	NA	N	ND*
Benzoic acid	NA	NA	N	BSL
Benzyl alcohol	NA	NA	N	ND
Benzyl butyl phthalate	NA	NA	N	ND
Beryllium	NA	NA	N	BSL
Bis(2-Chloroethoxy)methane	NA	NA	N	ND
Bis(2-Chloroethyl)ether	NA	NA	N	ND*
Bis(2-Chloroisopropyl)ether	NA	NA	N	ND*
Bis(2-Ethylhexyl)phthalate	NA	NA	N	ND
Boron	NA	NA	N	BSL
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	NA
Bromodichloromethane	Y		NA	NA
Bromoform	N	ND*	NA	NA
Bromomethane	N	ND*	NA	NA
Butylbenzene	N	ND*	NA	NA
Cadmium	NA	NA	N	BG
Calcium	NA	NA	NA	NA
Carbazole	NA	NA	N	ND
Carbon Disulfide	Y		NA	NA
Carbon Tetrachloride	Y		NA	NA
Chlorobenzene	N	ND	NA	NA
Chloroethane	N	BSL	NA	NA
Chloroform	Y		NA	NA
Chloromethane	N	BSL	NA	NA
Chromium	NA	NA	N	BSL
Chrysene	NA	NA	Y	
cis-1,2-Dichloroethene	Y		NA	NA
cis-1,3-Dichloropropene	N	ND	NA	NA
Cobalt	NA	NA	N	BSL
Copper	NA	NA	N	BSL
Cyclohexane	Y		NA	NA
Dibenz (a,h) anthracene	NA	NA	Y	
Dibenzofuran	NA	NA	N	ND

Table 5.3-3 Chemical of Potential Concern Summary
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Dibromochloromethane	N	ND*	NA	NA
Dibromomethane	NA	NA	NA	NA
Freon 12	Y		NA	NA
Diesel Range Organics (C10-C28)	NA	NA	N	ITC
Diethyl phthalate	NA	NA	N	ND
Dimethyl phthalate	NA	NA	N	ND
Di-n-butyl phthalate	NA	NA	Y	
Di-n-octyl phthalate	NA	NA	N	ND
Ethanol	Y		NA	NA
Ethyl benzene	Y		NA	NA
Fluoranthene	NA	NA	Y	
Fluorene	NA	NA	N	ND
Freon 113	Y		NA	NA
Freon 114	N	ND	NA	NA
Heptane	Y		NA	NA
Hexachlorobenzene	NA	NA	N	ND*
Hexachlorobutadiene	N	ND*	N	ND
Hexachlorocyclopentadiene	NA	NA	N	ND
Hexachloroethane	NA	NA	N	ND
Hexane	Y		NA	NA
Chromium VI	NA	NA	N	BSL
Indeno (1,2,3-cd) pyrene	NA	NA	Y	
Iron	NA	NA	NA	NA
Isophorone	NA	NA	N	ND
Cumene	N	ND	NA	NA
Lead	NA	NA	N	BG
Lithium	NA	NA	N	BSL
m,p-Xylene	Y		NA	NA
Magnesium	NA	NA	NA	NA
Manganese	NA	NA	N	BG
Mercury	NA	NA	N	BG
Methyl tert-butyl ether	N	ND*	NA	NA
Methylene Chloride	N	ND*	NA	NA
Molybdenum	NA	NA	Y	
Motor Oil Range Organics (C16-C36)	NA	NA	N	ITC
Naphthalene	NA	NA	N	BSL
Butylbenzene	N	ND*	NA	NA
Nickel	NA	NA	Y	
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	NA	NA	N	ND
N-Nitrosodimethylamine	NA	NA	N	ND*
N-Nitrosodi-n-propylamine	NA	NA	N	ND*
N-Nitrosodiphenylamine	NA	NA	N	ND
Propylbenzene	N	BSL	NA	NA
o-Xylene	Y		NA	NA
Pentachlorophenol	NA	NA	Y	
Perchlorate	NA	NA	Y	
Phenanthrene	NA	NA	Y	
Phenol	NA	NA	Y	
p-Cymene	N	ND	NA	NA
Polychlorinated biphenyl	NA	NA	NA	NA
Potassium	NA	NA	NA	NA
Pyrene	NA	NA	Y	
sec-Butylbenzene	N	ND	NA	NA
Selenium	NA	NA	N	BSL
Silver	NA	NA	N	BSL
Sodium	NA	NA	NA	NA

Table 5.3-3 Chemical of Potential Concern Summary
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Strontium	NA	NA	N	BSL
Styrene	N	BSL	NA	NA
tert-Butylbenzene	N	ND*	NA	NA
Tetrachloroethene	Y		NA	NA
Tetrahydrofuran	Y		NA	NA
Thallium	NA	NA	N	PEBG
Tin	NA	NA	NA	NA
Titanium	NA	NA	N	BSL
Toluene	Y		NA	NA
Total Cyanide	NA	NA	NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA
trans-1,3-Dichloropropene	N	ND	NA	NA
Trichloroethene	Y		NA	NA
Freon 11	Y		NA	NA
Vanadium	NA	NA	N	BG
Vinyl Chloride	Y		NA	NA
Xylenes (total)	NA	NA	NA	NA
Zinc	NA	NA	Y	

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individual
PEBG - Evidence from previous investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Table 5.3-4 *Outdoor Air Exposure Point Concentration Results*
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Inorganics									
Aluminum	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Antimony	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Iron	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Molybdenum	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Nickel	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Perchlorate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Zinc	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(a)pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (b & k) fluoranthene (total)	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (ghi) perylene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Chrysene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Dibenz(a,h)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Di-n-butyl phthalate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Indeno(1,2,3-cd)pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Pentachlorophenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenanthrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg, Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.3-5 Residential Soil Vapor to Indoor Air Attenuation Factors
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors						
	Feet bgs						
Chemical/Feet bgs	**10**	**15**	**18**	**20**	**25**	**30**	**40**
1,1,1-Trichloroethane	4.7 E-4	3.3 E-4	2.8 E-4	2.7 E-4	2.1 E-4	1.7 E-4	1.3 E-4
1,1-Dichloroethane	4.5 E-4	3.2 E-4	2.7 E-4	2.4 E-4	2.0 E-4	1.7 E-4	1.3 E-4
1,1-Dichloroethene	5.3 E-4	3.7 E-4	3.2 E-4	2.9 E-4	2.4 E-4	2.0 E-4	1.5 E-4
1,2,4-Trimethylbenzene	3.8 E-4	2.6 E-4	2.2 E-4	2.1 E-4	1.6 E-4	1.4 E-4	1.0 E-4
1,2-Dichloroethane	5.9 E-4	4.2 E-4	3.6 E-4	3.3 E-4	2.7 E-4	2.3 E-4	1.7 E-4
1,3,5-Trimethylbenzene	3.8 E-4	2.6 E-4	2.2 E-4	2.1 E-4	1.6 E-4	1.4 E-4	1.0 E-4
1,4-Dioxane	5.9 E-4	4.2 E-4	3.6 E-4	3.4 E-4	2.7 E-4	2.3 E-4	1.7 E-4
2,2,4-Trimethylpentane	5.1 E-4	3.6 E-4	3.1 E-4	2.9 E-4	2.3 E-4	1.9 E-4	1.5 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	3.4 E-4	2.9 E-4	2.8 E-4	2.2 E-4	1.8 E-4	1.4 E-4
2-Hexanone	4.6 E-4	3.2 E-4	2.7 E-4	2.6 E-4	2.0 E-4	1.7 E-4	1.3 E-4
2-Propanol	5.2 E-4	3.7 E-4	3.2 E-4	3.0 E-4	2.3 E-4	2.0 E-4	1.5 E-4
4-Ethyltoluene	5.1 E-4	3.6 E-4	3.1 E-4	2.9 E-4	2.3 E-4	1.9 E-4	1.5 E-4
4-Methyl-2-pentanone	4.6 E-4	3.2 E-4	2.7 E-4	2.6 E-4	2.0 E-4	1.7 E-4	1.3 E-4
Acetone	6.8 E-4	4.9 E-4	4.2 E-4	4.0 E-4	3.2 E-4	2.7 E-4	2.1 E-4
Benzene	5.2 E-4	3.7 E-4	3.1 E-4	2.8 E-4	2.3 E-4	1.9 E-4	1.5 E-4
Bromodichloromethane	2.0 E-4	1.4 E-4	1.2 E-4	1.0 E-4	8.3 E-5	7.0 E-5	5.2 E-5
Carbon Disulfide	5.9 E-4	4.2 E-4	3.6 E-4	3.4 E-4	2.7 E-4	2.3 E-4	1.7 E-4
Carbon Tetrachloride	4.7 E-4	3.3 E-4	2.8 E-4	2.5 E-4	2.1 E-4	1.7 E-4	1.3 E-4
Chloroform	5.9 E-4	4.2 E-4	3.6 E-4	3.3 E-4	2.7 E-4	2.3 E-4	1.7 E-4
cis-1,2-Dichloroethene	4.5 E-4	3.1 E-4	2.7 E-4	2.4 E-4	2.0 E-4	1.6 E-4	1.3 E-4
Cyclohexane	4.8 E-4	3.4 E-4	2.9 E-4	2.7 E-4	2.1 E-4	1.8 E-4	1.4 E-4
Ethanol	7.0 E-4	5.1 E-4	4.4 E-4	4.2 E-4	3.3 E-4	2.8 E-4	2.2 E-4
Ethylbenzene	4.6 E-4	3.2 E-4	2.7 E-4	2.5 E-4	2.0 E-4	1.7 E-4	1.3 E-4
Freon 11	5.1 E-4	3.6 E-4	3.1 E-4	2.8 E-4	2.3 E-4	1.9 E-4	1.5 E-4
Freon 113	4.7 E-4	3.3 E-4	2.8 E-4	2.5 E-4	2.1 E-4	1.7 E-4	1.3 E-4
Freon 12	4.1 E-4	2.9 E-4	2.4 E-4	2.3 E-4	1.8 E-4	1.5 E-4	1.1 E-4
Heptane	9.3 E-4	7.0 E-4	6.1 E-4	5.8 E-4	4.7 E-4	4.0 E-4	3.1 E-4
Hexane	9.3 E-4	7.0 E-4	6.1 E-4	5.8 E-4	4.7 E-4	4.0 E-4	3.1 E-4
m,p-Xylene	4.6 E-4	3.3 E-4	2.8 E-4	2.6 E-4	2.0 E-4	1.7 E-4	1.3 E-4
o-Xylene	5.1 E-4	3.6 E-4	3.1 E-4	2.9 E-4	2.3 E-4	1.9 E-4	1.5 E-4
Tetrachloroethylene	4.4 E-4	3.1 E-4	2.6 E-4	2.4 E-4	1.9 E-4	1.6 E-4	1.2 E-4
Tetrahydrofuran	6.0 E-4	4.3 E-4	3.6 E-4	3.5 E-4	2.7 E-4	2.3 E-4	1.8 E-4
Toluene	5.1 E-4	3.6 E-4	3.1 E-4	2.9 E-4	2.3 E-4	1.9 E-4	1.5 E-4
Trichloroethylene	4.8 E-4	3.3 E-4	2.8 E-4	2.6 E-4	2.1 E-4	1.8 E-4	1.3 E-4
Vinyl Chloride	6.0 E-4	4.3 E-4	3.7 E-4	3.3 E-4	2.7 E-4	2.3 E-4	1.8 E-4

Key:
bgs = Below ground surface

Table 5.3-6 Commercial Soil Vapor to Indoor Air Attenuation Factors
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors						
	Feet bgs						
Chemical/Feet bgs	**10**	**15**	**18**	**20**	**25**	**30**	**40**
1,1,1-Trichloroethane	2.4 E-4	1.7 E-4	1.4 E-4	1.3 E-4	1.0 E-4	8.7 E-5	6.6 E-5
1,1-Dichloroethane	2.3 E-4	1.6 E-4	1.3 E-4	1.2 E-4	9.9 E-5	8.3 E-5	6.3 E-5
1,1-Dichloroethene	2.6 E-4	1.9 E-4	1.6 E-4	1.4 E-4	1.2 E-4	9.9 E-5	7.6 E-5
1,2,4-Trimethylbenzene	1.9 E-4	1.3 E-4	1.1 E-4	1.1 E-4	8.2 E-5	6.9 E-5	5.2 E-5
1,2-Dichloroethane	2.9 E-4	2.1 E-4	1.8 E-4	1.6 E-4	1.3 E-4	1.1 E-4	8.7 E-5
1,3,5-Trimethylbenzene	1.9 E-4	1.3 E-4	1.1 E-4	1.1 E-4	8.1 E-5	6.8 E-5	5.2 E-5
1,4-Dioxane	3.0 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.3 E-4	1.1 E-4	1.1 E-4
2,2,4-Trimethylpentane	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	1.1 E-4	9.6 E-5	9.6 E-5
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.7 E-4	1.5 E-4	1.4 E-4	1.1 E-4	9.1 E-5	6.9 E-5
2-Hexanone	2.3 E-4	1.6 E-4	1.4 E-4	1.3 E-4	1.0 E-4	8.4 E-5	8.4 E-5
2-Propanol	2.6 E-4	1.9 E-4	1.6 E-4	1.5 E-4	1.2 E-4	9.9 E-5	9.9 E-5
4-Ethyltoluene	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	1.1 E-4	9.6 E-5	9.6 E-5
4-Methyl-2-pentanone	2.3 E-4	1.6 E-4	1.4 E-4	1.3 E-4	1.0 E-4	8.4 E-5	6.4 E-5
Acetone	3.4 E-4	2.4 E-4	2.1 E-4	2.0 E-4	1.6 E-4	1.3 E-4	1.0 E-4
Benzene	2.6 E-4	1.8 E-4	1.6 E-4	1.4 E-4	1.2 E-4	9.7 E-5	7.4 E-5
Bromodichloromethane	1.0 E-4	6.9 E-5	5.8 E-5	5.2 E-5	4.2 E-5	3.5 E-5	2.6 E-5
Carbon Disulfide	2.9 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.3 E-4	1.1 E-4	8.7 E-5
Carbon Tetrachloride	2.4 E-4	1.6 E-4	1.4 E-4	1.3 E-4	1.0 E-4	8.7 E-5	6.6 E-5
Chloroform	2.9 E-4	2.1 E-4	1.8 E-4	1.6 E-4	1.3 E-4	1.1 E-4	8.7 E-5
cis-1,2-Dichloroethene	2.2 E-4	1.6 E-4	1.3 E-4	1.2 E-4	9.8 E-5	8.2 E-5	6.3 E-5
Cyclohexane	2.4 E-4	1.7 E-4	1.4 E-4	1.4 E-4	1.1 E-4	8.9 E-5	8.9 E-5
Ethanol	3.5 E-4	2.5 E-4	2.2 E-4	2.1 E-4	1.6 E-4	1.4 E-4	1.4 E-4
Ethylbenzene	2.3 E-4	1.6 E-4	1.4 E-4	1.2 E-4	1.0 E-4	8.4 E-5	6.4 E-5
Freon 11	2.6 E-4	1.8 E-4	1.5 E-4	1.4 E-4	1.1 E-4	9.6 E-5	7.3 E-5
Freon 113	2.4 E-4	1.6 E-4	1.4 E-4	1.3 E-4	1.0 E-4	8.7 E-5	6.6 E-5
Freon 12	2.1 E-4	1.4 E-4	1.2 E-4	1.2 E-4	8.9 E-5	7.5 E-5	5.7 E-5
Heptane	4.6 E-4	3.5 E-4	3.0 E-4	2.9 E-4	2.3 E-4	2.0 E-4	2.0 E-4
Hexane	4.6 E-4	3.5 E-4	3.0 E-4	2.9 E-4	2.3 E-4	2.0 E-4	1.6 E-4
m,p-Xylene	2.3 E-4	1.6 E-4	1.4 E-4	1.3 E-4	1.0 E-4	8.6 E-5	6.5 E-5
o-Xylene	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	1.1 E-4	9.6 E-5	7.3 E-5
Tetrachloroethylene	2.2 E-4	1.5 E-4	1.3 E-4	1.2 E-4	9.6 E-5	8.1 E-5	6.1 E-5
Tetrahydrofuran	3.0 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.4 E-4	1.2 E-4	1.2 E-4
Toluene	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	1.1 E-4	9.6 E-5	7.3 E-5
Trichloroethylene	2.4 E-4	1.7 E-4	1.4 E-4	1.3 E-4	1.0 E-4	8.8 E-5	6.7 E-5
Vinyl Chloride	3.0 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.4 E-4	1.2 E-4	8.8 E-5

Key:
bgs = Below ground surface

Table 5.3-7 Source Partitioning Coefficients and Attenuation Factors For Outdoor Air
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Soil Vapor

Chemical of Potential Concern	Diffusivity in Air (cm^2/s)	Feet bgs 10	15	18	20	25	30	40
1,1,1-Trichloroethane	7.8E-02	6.2E-06	4.2E-06	3.5E-06	3.1E-06	2.5E-06	2.1E-06	1.6E-06
1,1-Dichloroethane	7.4E-02	5.9E-06	4.0E-06	3.3E-06	3.0E-06	2.4E-06	2.0E-06	1.5E-06
1,1-Dichloroethene	9.0E-02	7.2E-06	4.8E-06	4.0E-06	3.6E-06	2.9E-06	2.4E-06	1.8E-06
1,2,4-Trimethylbenzene	6.1E-02	4.8E-06	3.2E-06	2.7E-06	2.4E-06	1.9E-06	1.6E-06	1.2E-06
1,2-Dichloroethane	1.0E-01	8.3E-06	5.5E-06	4.6E-06	4.2E-06	3.3E-06	2.8E-06	2.1E-06
1,3,5-Trimethylbenzene	6.0E-02	4.8E-06	3.2E-06	2.7E-06	2.4E-06	1.9E-06	1.6E-06	1.2E-06
1,4-Dioxane	9.9E-02	7.9E-06	5.3E-06	4.4E-06	4.0E-06	3.2E-06	2.6E-06	2.0E-06
2,2,4-Trimethylpentane	8.7E-02	6.9E-06	4.6E-06	3.9E-06	3.5E-06	2.8E-06	2.3E-06	1.7E-06
2-Butanone (Methyl Ethyl Ketone)	8.1E-02	6.5E-06	4.3E-06	3.6E-06	3.2E-06	2.6E-06	2.2E-06	1.6E-06
2-Hexanone	7.3E-02	5.8E-06	3.9E-06	3.2E-06	2.9E-06	2.3E-06	1.9E-06	1.5E-06
2-Propanol	8.6E-02	6.9E-06	4.6E-06	3.8E-06	3.4E-06	2.7E-06	2.3E-06	1.7E-06
4-Ethyltoluene	8.7E-02	6.9E-06	4.6E-06	3.9E-06	3.5E-06	2.8E-06	2.3E-06	1.7E-06
4-Methyl-2-pentanone	7.5E-02	6.0E-06	4.0E-06	3.3E-06	3.0E-06	2.4E-06	2.0E-06	1.5E-06
Acetone	1.2E-01	9.9E-06	6.6E-06	5.5E-06	5.0E-06	4.0E-06	3.3E-06	2.5E-06
Benzene	8.8E-02	7.0E-06	4.7E-06	3.9E-06	3.5E-06	2.8E-06	2.3E-06	1.8E-06
Bromodichloromethane	3.0E-02	2.4E-06	1.6E-06	1.3E-06	1.2E-06	9.5E-07	7.9E-07	5.9E-07
Carbon Disulfide	1.0E-01	8.3E-06	5.5E-06	4.6E-06	4.2E-06	3.3E-06	2.8E-06	2.1E-06
Carbon Tetrachloride	7.8E-02	6.2E-06	4.2E-06	3.5E-06	3.1E-06	2.5E-06	2.1E-06	1.6E-06
Chloroform	1.0E-01	8.3E-06	5.5E-06	4.6E-06	4.2E-06	3.3E-06	2.8E-06	2.1E-06
cis-1,2-Dichloroethene	7.4E-02	5.9E-06	3.9E-06	3.3E-06	2.9E-06	2.4E-06	2.0E-06	1.5E-06
Cyclohexane	8.0E-02	6.4E-06	4.3E-06	3.5E-06	3.2E-06	2.6E-06	2.1E-06	1.6E-06
Ethanol	1.6E-01	1.3E-05	8.4E-06	7.0E-06	6.3E-06	5.0E-06	4.2E-06	3.1E-06
Ethylbenzene	7.5E-02	6.0E-06	4.0E-06	3.3E-06	3.0E-06	2.4E-06	2.0E-06	1.5E-06
Freon 11	8.7E-02	6.9E-06	4.6E-06	3.9E-06	3.5E-06	2.8E-06	2.3E-06	1.7E-06
Freon 113	7.8E-02	6.2E-06	4.2E-06	3.5E-06	3.1E-06	2.5E-06	2.1E-06	1.6E-06
Freon 12	6.7E-02	5.3E-06	3.5E-06	3.0E-06	2.7E-06	2.1E-06	1.8E-06	1.3E-06
Heptane	6.8E-02	5.5E-06	3.6E-06	3.0E-06	2.7E-06	2.2E-06	1.8E-06	1.4E-06
Hexane	2.0E-01	1.6E-05	1.1E-05	8.9E-06	8.0E-06	6.4E-06	5.3E-06	4.0E-06
m,p-Xylene	7.0E-02	5.6E-06	3.7E-06	3.1E-06	2.8E-06	2.2E-06	1.9E-06	1.4E-06
o-Xylene	8.7E-02	6.9E-06	4.6E-06	3.9E-06	3.5E-06	2.8E-06	2.3E-06	1.7E-06
Tetrachloroethylene	7.2E-02	5.8E-06	3.8E-06	3.2E-06	2.9E-06	2.3E-06	1.9E-06	1.4E-06
Tetrahydrofuran	1.1E-01	8.4E-06	5.6E-06	4.7E-06	4.2E-06	3.4E-06	2.8E-06	2.1E-06
Toluene	8.7E-02	6.9E-06	4.6E-06	3.9E-06	3.5E-06	2.8E-06	2.3E-06	1.7E-06
Trichloroethylene	7.9E-02	6.3E-06	4.2E-06	3.5E-06	3.2E-06	2.5E-06	2.1E-06	1.6E-06
Vinyl Chloride	7.9E-02	6.3E-06	4.2E-06	3.5E-06	3.2E-06	2.5E-06	2.1E-06	1.6E-06

a = USEPA, 1988, Superfund Exposure Assessment Manual

Ambient Air Attenuation

$$\frac{\text{Dia} \times \text{Pa} \wedge (4/3) \times (\text{Area}) \times 1 / d}{w \times h \times u \times 1{,}000{,}000\ cm^3/m^3}$$

Dia =	chemical specific	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	20250000	cm^2	Area (assume 4500 cm x 4500 cm)
d =	304.8	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2	m	Breathing zone height
u =	3	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
bgs = Below ground surface
cm^2/s = Square Centimeter per second
cm = Centimeter
m = Meter
m/s = Meter per second
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
cm^3 = Cubic centimeter
m^3 = Cubic meter

Table 5.3-8 ***Resident Soil Unit Hazard and Unit Cancer Risk Results***
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Aluminum	1.0 E+0	1.3 E-5	0.0 E+0	3.4 E-7	1.3 E-5	1.4 E-6	0.0 E+0	1.4 E-7	1.5 E-6	NA	NA	NA	NA
Antimony	1.0 E+0	3.2 E-2	0.0 E+0	1.2 E-6	3.2 E-2	3.4 E-3	0.0 E+0	5.0 E-7	3.4 E-3	NA	NA	NA	NA
Iron	1.0 E+0	1.8 E-5	0.0 E+0	NA	1.8 E-5	2.0 E-6	0.0 E+0	NA	2.0 E-6	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.6 E-3	0.0 E+0	9.4 E-8	2.6 E-3	2.7 E-4	0.0 E+0	4.0 E-8	2.7 E-4	NA	NA	NA	NA
Nickel	1.0 E+0	6.4 E-4	0.0 E+0	3.3 E-5	6.7 E-4	6.8 E-5	0.0 E+0	1.4 E-5	8.3 E-5	NA	NA	NA	NA
Perchlorate	1.0 E+0	1.8 E-2	0.0 E+0	NA	1.8 E-2	2.0 E-3	0.0 E+0	NA	2.0 E-3	NA	NA	NA	NA
Zinc	1.0 E+0	4.3 E-5	0.0 E+0	1.6 E-9	4.3 E-5	4.6 E-6	0.0 E+0	6.7 E-10	4.6 E-6	NA	NA	NA	NA
Semivolatile Organic Compounds													
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	4.7 E-7	8.0 E-11	1.6 E-6
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	7.7 E-6	4.3 E-10	2.6 E-5
Benzo (b & k) fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo (ghi) perylene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Chrysene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	7.7 E-8	4.3 E-12	2.6 E-7
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	4.7 E-6	4.5 E-10	1.6 E-5
Di-n-butyl phthalate	1.0 E+0	1.3 E-4	3.6 E-5	4.7 E-9	1.6 E-4	1.4 E-5	5.5 E-6	2.0 E-9	1.9 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Pentachlorophenol	1.0 E+0	4.3 E-4	1.2 E-4	1.6 E-8	5.5 E-4	4.6 E-5	1.8 E-5	6.7 E-9	6.4 E-5	1.9 E-7	5.9 E-8	2.0 E-12	2.5 E-7
Phenanthrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.3-9 Resident Inhalation Hazard and Unit Cancer Risk Results
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
1,1,1-Trichloroethane	1.0 E+0	4.5 E-1	1.9 E-1	NA
1,1-Dichloroethane	1.0 E+0	3.2 E+0	1.4 E+0	8.5 E-4
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,3,5-Trimethylbenzene	1.0 E+0	3.8 E+2	1.6 E+2	NA
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2,2,4-Trimethylpentane	1.0 E+0	2.2 E+1	9.6 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.6 E-1	2.0 E-1	NA
2-Hexanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
4-Ethyltoluene	1.0 E+0	2.2 E+1	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	7.4 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.9 E-2
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Carbon Tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Cyclohexane	1.0 E+0	3.8 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
Ethylbenzene	1.0 E+0	2.2 E+0	9.6 E-1	1.3 E-3
Freon 11	1.0 E+0	1.1 E+1	4.8 E+0	NA
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Freon 12	1.0 E+0	1.1 E+1	4.8 E+0	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
o-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Toluene	1.0 E+0	7.4 E+0	3.2 E+0	NA
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
Vinyl Chloride	1.0 E+0	2.2 E+1	9.6 E+0	4.0 E-2

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.3-10
Location-Specific Soil Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**
Unit Hazard Child		1.3 E-5	3.2 E-2	NA	NA	NA	5.8 E-4	NA	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	2.6 E-3	6.7 E-4	5.5 E-4	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	4.3 E-5
Unit Hazard Adult		1.5 E-6	3.4 E-3	NA	NA	NA	6.9 E-5	NA	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	2.7 E-4	8.3 E-5	6.4 E-5	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	4.6 E-6
Unit Risk		NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	NA	2.6 E-7	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA
28E-SB01-1.5	1.5	27000	1.9											1.6	33		0.020				43
28E-SB01-11.5	11.5	17000	1.1												130		0.050				23
28E-SB01-5.5	5.5	20000	2.0											0.85	32		0.017				47
28E-SB02-1	1	13000									0.0017			1.4	22						34
28E-SB02-11	11	28000												0.80	40		1.4				59
28E-SB02-5	5	14000												0.79	16						29
28E-SB03-1.0	1													5.2			0.026				
28E-SB03-1.0-T	1	41000													40						46
28E-SB03-11	11	27000												0.98	69		0.069				57
28E-SB03-5.0	5	19000												0.22	31		0.024				42
28E-SB04-1.0	1																				
28E-SB04-10	10																0.0065				
28E-SB04-5.0	5																				
28E-SB05-1.0	1																0.67				
28E-SB05-10-T	10																0.069				
28E-SB05-5.0	5																0.026				
28E-SB06-1.0	1																0.11				
28E-SB06-10	10																4.3				
28E-SB06-5.0	5																5.1				
28E-SB07-1.0	1																				
28E-SB07-10	10																				
28E-SB07-5.0	5																				
28E-SPB01	0	30400											43600		49						66
28E-SPB01	3	37200											38500		51						63
28E-SPB02	0	21300											28700		36						55
28E-SPB02	3	15900											26800		28						40
29E-SB01	1									4.4											
29E-SB01	3																				
29E-SB01	5									5.4											
29E-SB01	10									0.39											
29E-SB02	1																				
29E-SB02	3									0.67											
29E-SB02	5									2.9											
29E-SB02	10									3.4											
29E-SB03-1	1	19000	0.72											3.0	29		0.033				39
29E-SB03-11	11	34000	0.21											1.5	43		0.021				46
29E-SB03-5	5	40000	0.24											0.67	45						53
29E-SB05-11.5	11.5	17000												0.85	36				0.37		32
29E-SB05-2.0	2	10000	9.0			0.031	0.061	0.0080			0.0090	0.033		0.53	30			0.0052	0.17	0.015	210
29E-SB05-6.0	6	14000	4.3											1.3	44				0.17		170
29E-SB06-11.5	11.5	20000												0.58	44				0.24		46
29E-SB06-2.0	2	11000	0.49												27						64
29E-SB06-5.5	5.5	21000												0.63	36						41
29E-SB07-1.5	1.5	16000	0.57											0.25	32						49
29E-SB07-11.5	11.5	14000	0.59											0.37	29						32
29E-SB07-5.5	5.5	18000												0.59	30						42
29E-SB08-1.5	1.5	17000	0.11											0.39	26		0.0060				36
29E-SB08-11.5	11.5	23000	0.081											0.42	69		0.0061				49
29E-SB08-5.5	5.5	19000	0.13											0.20	19		0.0068				26
29E-SB09-1.0	1													0.92	48						46
29E-SB09-1.0-T	1	47000	0.36																		
29E-SB09-11	11	20000	0.070												34						32
29E-SB09-5.0	5	45000	0.25												43						53
29E-SB10-1	1	6990													23						79
29E-SB11-1	1	17600													31						55
29E-SB12-1	1	31000													50						63
29E-SNS03-0.5	0.5	14000	0.89	0.0049	0.0069	0.020	0.022	0.013			0.014	0.012		0.24	23			0.0045		0.014	120
29E-SNS04-0.5	0.5	18000									0.0036				27		0.038				41

		Concentrations (mg/kg)																			
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**
Unit Hazard Child		1.3 E-5	3.2 E-2	NA	NA	NA	5.8 E-4	NA	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	2.6 E-3	6.7 E-4	5.5 E-4	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	4.3 E-5
Unit Hazard Adult		1.5 E-6	3.4 E-3	NA	NA	NA	6.9 E-5	NA	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	2.7 E-4	8.3 E-5	6.4 E-5	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	4.6 E-6
Unit Risk		NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	NA	2.6 E-7	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA
29E-SNS05-0.5	0.5		0.35	0.0041		0.013		0.0068			0.0095				30			0.0027		0.0095	70
29E-SNS05-0.5-T	0.5	16000												0.38							
29E-SNS06-0.5	0.5			0.0083	0.0087	0.015		0.011			0.013			0.60				0.0045		0.015	
29E-SNS06-0.5-T	0.5	15000	0.23												24						100
29E-SNS06-2.5	2.5	26000	0.14											0.21	38						31
29E-SNS07-0.5	0.5	24000	0.38											0.73	40						130
29E-SNS07-0.5-T	0.5																				
29E-SNS07-2.5	2.5	19000	0.28											0.60	27				0.47		49
59E-SB01	1	16300								0.504			23600		26						37
59E-SB02-10.5	10.5	48000	1.9												53		0.0079				66
59E-SB02-2.0	2	12000	0.93											6.1	18				0.19		29
59E-SB02-5.0	5	34000	1.6											0.66	52						45
59E-SB03-11	11	79000	3.8												130		0.050				94
59E-SB03-2.0	2	40000	3.5								0.0034				51			0.0052		0.0071	69
59E-SB03-6.0	6	18000	1.4											2.8	30						37
59E-SB04-11	11	37000	1.6												210						55
59E-SB04-2.5	2.5	48000	2.5												94						83
59E-SB04-6.0	6	16000	1.7											0.73	25			0.0024			31
DSA-SB01-1.0	1	32000	0.28											7.5	42		0.059				36
DSA-SB01-11	11	13000	0.75											2.4	31						32
DSA-SB01-5.0	5	26000	0.24											5.2	45		0.013				38
DSA-SB02-1.5	1.5	17000	1.5											1.1	28		0.014				41
DSA-SB02-10.5	10.5	19000													49		0.014				37
DSA-SB02-4.5	4.5	14000	1.2											1.4	26		0.016				34
DSA-SB03-12	12	21000	1.3											6.0	22		0.010				33
DSA-SB03-2.0	2	27000	1.9											93	24		0.011				44
DSA-SB03-4.5	4.5	17000	1.2											0.26	31		0.0060				51
DSA-SB04-1.0	1	40000	0.36											0.73	49						47
DSA-SB04-11	11	33000	0.20											0.44	43						48
DSA-SB04-5.0	5	32000	0.24											0.58	34						37
E(D)-SB01	1																				
E(D)-SB01	5																				
E(D)-SB01	10																				
E(D)-SB02	1																				
E(D)-SB02	5																				
E(D)-SB02	10																				
E(d)-SNS01-0.5	0.5	18000	0.54	0.026	0.036	0.088	0.031	0.043			0.062	0.031		0.67	29		0.027	0.025		0.11	98
E(d)-SNS01-2.5	2.5	24000	0.82	0.0046		0.012		0.0076			0.013			0.32	32			0.0042		0.011	110
E(d)-SNS02-0.5	0.5	33000	0.31					0.019			0.0064			0.40	38					0.013	74
E(d)-SNS02-2.5	2.5	31000												0.38	32						44
E(d)-SNS03-0.5	0.5	6600	0.34					0.013			0.0043			0.66	28		0.21	0.0089		0.014	37
E(d)-SNS03-10	10																0.068				
E(d)-SNS03-2.5	2.5	20000	0.27											0.50	39		0.16				92
E(E)-SB01	1																				
E(E)-SB01	5																				
E(E)-SB01	6																				
E(e)-SB02-1.0	1	22000												3.2	25						29
E(e)-SB02-11	11	41000													29		0.29				73
E(e)-SB02-5.0	5	25000												2.4	38		0.021				44
E(E)-SB03-1.0	1																0.14				
E(E)-SB03-10	10																0.057				
E(E)-SB03-5.0	5																0.14				
E(e)-SNS01-0.5	0.5	12000	2.2					0.013			0.0061			0.79	22		0.14			0.0093	62
E(e)-SNS01-2.5	2.5	15000	0.20											0.30	21		0.074				33
E(e)-SNS02-0.5	0.5	19000	0.24											0.33	30						54
E(e)-SNS02-0.5-T	0.5										0.0025										
E(e)-SNS02-2.5	2.5	20000	0.29											0.32	27						37
E(m)-SD01-0.25	0.25	24000	0.75											0.38	37						49

Table 5.3-10
Location-Specific Soil Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**
Unit Hazard Child		1.3 E-5	3.2 E-2	NA	NA	NA	5.8 E-4	NA	NA	1.6 E-4	4.4 E-4	NA	1.8 E-5	2.6 E-3	6.7 E-4	5.5 E-4	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4	4.3 E-5
Unit Hazard Adult		1.5 E-6	3.4 E-3	NA	NA	NA	6.9 E-5	NA	NA	1.9 E-5	5.2 E-5	NA	2.0 E-6	2.7 E-4	8.3 E-5	6.4 E-5	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5	4.6 E-6
Unit Risk		NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	NA	2.6 E-7	1.6 E-5	NA	NA	2.6 E-6	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA
E(m)-SD01-1.5	1.5	17000	0.34											0.29	34						50
E(m)-SD01-5.0	5	15000												0.29	24						34
E(m)-SD02-0.25	0.25	19000	0.61											0.40	29	0.34					93
E(m)-SD02-1.5	1.5	23000												0.33	40						53
E(m)-SD02-5.0	5	27000												0.38	39						52
E(N)-SB01-1.0	1	16000	0.25					0.0049			0.0071			0.44	31			0.0032		0.0060	84
E(N)-SB01-5.0	5	13000	0.12											0.33	38						36
E(N)-SB01-9.5	9.5	12000	0.13											0.68	48						36
E(N)-SB02-1.0	1		0.27								0.0025										
E(N)-SB02-1.0-T	1	15000												0.62	33						56
E(N)-SB02-11	11	8700												2.2	20						41
E(N)-SB02-5.0	5	10000												0.95	35						57
E(n)-SB03-1.0	1	21000												0.74	27						31
E(n)-SB03-11	11	18000												3.9	44						28
E(n)-SB03-5.0	5	19000												1.2	51						33
E(N)-SD01-0.25	0.25	13000	0.34								0.0039			0.74	23						93
E(N)-SD01-1.5	1.5	15000	0.14											0.66	42						88
E(N)-SD01-5.0	5	16000	0.086											0.53	62						36
E(n)-SNS01-0.5	0.5	11000	0.23											0.28	22						2800
E(n)-SNS01-2.5	2.5	15000	0.17											0.38	39						40
E(n)-SNS02-0.5	0.5	18000	0.42			0.021		0.0087			0.019			0.14	30		0.039	0.0044		0.014	62
E(n)-SNS02-2.5	2.5		0.24												40						55
E(n)-SNS02-2.5-T	2.5	27000												0.53							
E(n)-SNS03-0.5	0.5	20000	0.15											0.21	50		0.55				55
E(n)-SNS03-2.5	2.5	20000	0.18											0.31	48		0.25				57
L2-ST24-SB01-11.5	11.5	45000												0.71	25				1.2		70
L2-ST24-SB01-2.0	2	34000												0.87	49				1.0		43
L2-ST24-SB01-6.0	6	4800													8.7		0.054		0.29		17
L2-ST26-SB01-11.5	11.5	21000	1.0											0.26	42						34
L2-ST26-SB01-2.0	2	14000	1.1	0.41	0.32	0.74	0.088	0.55	0.031		0.82	0.085		0.42	24			0.14		1.1	27
L2-ST26-SB01-5.0	5	17000	1.4											0.23	25						39
L2-ST26-SB02-10	10	14000	1.0											0.35	29						32
L2-ST26-SB02-2.0	2	24000	1.5											0.20	41						41
L2-ST26-SB02-4.5	4.5	17000	1.1											0.19	24						31
L2-ST26-SB03-11.5	11.5	18000	1.2											0.24	28						37
L2-ST26-SB03-2.0	2	15000	1.4					0.0056						0.28	26				0.26		35
L2-ST26-SB03-5.0	5	43000													57						53
L2-ST26-SB04-1.0	1	16000		0.0075										0.82	28						34
L2-ST26-SB04-11	11	19000												0.44	35						41
L2-ST26-SB04-5.0	5	17000												0.29	28						39
L2-ST26-SNS01-0.5	0.5																				
L2-ST26-SNS01-2.5	2.5																				
L2-ST26-SNS02-0.5	0.5				0.055		0.048	0.082			0.013									0.099	
L2-ST26-SNS02-2.5	2.5																				
L2-ST26-SNS03-0.5	0.5				0.0062			0.0080			0.0044							0.0033		0.010	
L2-ST26-SNS03-2.5	2.5																				
L2-ST28/90-SB01-10.5	10.5	19000	0.73											0.44	43						41
L2-ST28/90-SB01-2.5	2.5	38000	1.8											0.42	34		0.075		0.36		44
L2-ST28/90-SB01-4.5	4.5	30000												0.41	30		0.14		0.66		54

Table 5.3-10
Location-Specific Soil Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																				
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	HI
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
28E-SB01-1.5	1.5	3.5 E-1	6.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	2.2 E-2	NA	3.7 E-4	NA	NA	NA	1.8 E-3	4.4 E-1
28E-SB01-11.5	11.5	2.2 E-1	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	9.1 E-4	NA	NA	NA	9.8 E-4	3.5 E-1
28E-SB01-5.5	5.5	2.6 E-1	6.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	2.2 E-2	NA	3.1 E-4	NA	NA	NA	2.0 E-3	3.5 E-1
28E-SB02-1	1	1.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-7	NA	NA	3.6 E-3	1.5 E-2	NA	NA	NA	NA	NA	1.4 E-3	1.9 E-1
28E-SB02-11	11	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	2.7 E-2	NA	2.6 E-2	NA	NA	NA	2.5 E-3	4.2 E-1
28E-SB02-5	5	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	1.1 E-2	NA	NA	NA	NA	NA	1.2 E-3	2.0 E-1
28E-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	4.7 E-4	NA	NA	NA	NA	1.4 E-2
28E-SB03-1.0-T	1	5.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	2.0 E-3	5.7 E-1
28E-SB03-11	11	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	4.6 E-2	NA	1.3 E-3	NA	NA	NA	2.4 E-3	4.1 E-1
28E-SB03-5.0	5	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	2.1 E-2	NA	4.4 E-4	NA	NA	NA	1.8 E-3	2.7 E-1
28E-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	1.2 E-4
28E-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	1.2 E-2
28E-SB05-10-T	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	1.3 E-3
28E-SB05-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA	NA	4.7 E-4
28E-SB06-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	2.0 E-3
28E-SB06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	NA	NA	7.9 E-2
28E-SB06-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	9.3 E-2
28E-SB07-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	0	4.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-1	NA	3.3 E-2	NA	NA	NA	NA	NA	2.8 E-3	1.2 E+0
28E-SPB01	3	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-1	NA	3.4 E-2	NA	NA	NA	NA	NA	2.7 E-3	1.2 E+0
28E-SPB02	0	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-1	NA	2.4 E-2	NA	NA	NA	NA	NA	2.3 E-3	8.3 E-1
28E-SPB02	3	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-1	NA	1.9 E-2	NA	NA	NA	NA	NA	1.7 E-3	7.2 E-1
29E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4
29E-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4
29E-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5
29E-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4
29E-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4
29E-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4
29E-SB03-1	1	2.5 E-1	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-3	1.9 E-2	NA	6.0 E-4	NA	NA	NA	1.7 E-3	3.0 E-1
29E-SB03-11	11	4.5 E-1	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	2.9 E-2	NA	3.8 E-4	NA	NA	NA	2.0 E-3	4.9 E-1
29E-SB03-5	5	5.2 E-1	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.0 E-2	NA	NA	NA	NA	NA	2.3 E-3	5.7 E-1
29E-SB05-11.5	11.5	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	2.4 E-2	NA	NA	NA	2.0 E-5	NA	1.4 E-3	2.5 E-1
29E-SB05-2.0	2	1.3 E-1	2.9 E-1	NA	NA	NA	3.5 E-5	NA	NA	NA	3.9 E-6	NA	NA	1.4 E-3	2.0 E-2	NA	NA	3.0 E-6	9.3 E-6	8.7 E-6	9.0 E-3	4.5 E-1
29E-SB05-6.0	6	1.8 E-1	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	3.0 E-2	NA	NA	NA	9.3 E-6	NA	7.2 E-3	3.6 E-1
29E-SB06-11.5	11.5	2.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	3.0 E-2	NA	NA	NA	1.3 E-5	NA	2.0 E-3	3.0 E-1
29E-SB06-2.0	2	1.4 E-1	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	2.7 E-3	1.8 E-1
29E-SB06-5.5	5.5	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	2.4 E-2	NA	NA	NA	NA	NA	1.7 E-3	3.0 E-1
29E-SB07-1.5	1.5	2.1 E-1	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	2.2 E-2	NA	NA	NA	NA	NA	2.1 E-3	2.5 E-1
29E-SB07-11.5	11.5	1.8 E-1	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-4	1.9 E-2	NA	NA	NA	NA	NA	1.4 E-3	2.2 E-1
29E-SB07-5.5	5.5	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	2.0 E-2	NA	NA	NA	NA	NA	1.8 E-3	2.6 E-1
29E-SB08-1.5	1.5	2.2 E-1	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	1.7 E-2	NA	1.1 E-4	NA	NA	NA	1.5 E-3	2.5 E-1
29E-SB08-11.5	11.5	3.0 E-1	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	4.6 E-2	NA	1.1 E-4	NA	NA	NA	2.1 E-3	3.5 E-1
29E-SB08-5.5	5.5	2.5 E-1	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	1.3 E-2	NA	1.2 E-4	NA	NA	NA	1.1 E-3	2.7 E-1
29E-SB09-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	3.2 E-2	NA	NA	NA	NA	NA	2.0 E-3	3.7 E-2
29E-SB09-1.0-T	1	6.2 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-1
29E-SB09-11	11	2.6 E-1	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	1.4 E-3	2.9 E-1
29E-SB09-5.0	5	5.9 E-1	8.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	2.3 E-3	6.3 E-1
29E-SB10-1	1	9.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	3.4 E-3	1.1 E-1
29E-SB11-1	1	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	2.3 E-3	2.5 E-1
29E-SB12-1	1	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	2.7 E-3	4.4 E-1
29E-SNS03-0.5	0.5	1.8 E-1	2.8 E-2	NA	NA	NA	1.3 E-5	NA	NA	NA	6.1 E-6	NA	NA	6.1 E-4	1.5 E-2	NA	NA	2.6 E-6	NA	8.1 E-6	5.1 E-3	2.3 E-1
29E-SNS04-0.5	0.5	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	1.8 E-2	NA	6.9 E-4	NA	NA	NA	1.7 E-3	2.6 E-1

		Child Non-Cancer Hazard Index																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
29E-SNS05-0.5	0.5	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	NA	2.0 E-2	NA	NA	1.6 E-6	NA	5.5 E-6	3.0 E-3	3.4 E-2
29E-SNS05-0.5-T	0.5	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-1
29E-SNS06-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	1.5 E-3	NA	NA	NA	2.6 E-6	NA	8.7 E-6	NA	1.6 E-3
29E-SNS06-0.5-T	0.5	2.0 E-1	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	4.3 E-3	2.2 E-1
29E-SNS06-2.5	2.5	3.4 E-1	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	2.6 E-2	NA	NA	NA	NA	NA	1.3 E-3	3.7 E-1
29E-SNS07-0.5	0.5	3.1 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	2.7 E-2	NA	NA	NA	NA	NA	5.5 E-3	3.6 E-1
29E-SNS07-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-2.5	2.5	2.5 E-1	9.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	1.8 E-2	NA	NA	NA	2.6 E-5	NA	2.1 E-3	2.8 E-1
59E-SB01	1	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	4.3 E-1	NA	1.8 E-2	NA	NA	NA	NA	NA	1.6 E-3	6.6 E-1
59E-SB02-10.5	10.5	6.3 E-1	6.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	1.4 E-4	NA	NA	NA	2.8 E-3	7.3 E-1
59E-SB02-2.0	2	1.6 E-1	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	1.2 E-2	NA	NA	NA	1.0 E-5	NA	1.2 E-3	2.2 E-1
59E-SB02-5.0	5	4.5 E-1	5.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.5 E-2	NA	NA	NA	NA	NA	1.9 E-3	5.4 E-1
59E-SB03-11	11	1.0 E+0	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	9.1 E-4	NA	NA	NA	4.0 E-3	1.3 E+0
59E-SB03-2.0	2	5.2 E-1	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	3.4 E-2	NA	NA	3.0 E-6	NA	4.1 E-6	2.9 E-3	6.7 E-1
59E-SB03-6.0	6	2.4 E-1	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-3	2.0 E-2	NA	NA	NA	NA	NA	1.6 E-3	3.1 E-1
59E-SB04-11	11	4.9 E-1	5.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	2.3 E-3	6.8 E-1
59E-SB04-2.5	2.5	6.3 E-1	8.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	NA	NA	NA	NA	3.5 E-3	7.8 E-1
59E-SB04-6.0	6	2.1 E-1	5.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	1.7 E-2	NA	NA	1.4 E-6	NA	NA	1.3 E-3	2.8 E-1
DSA-SB01-1.0	1	4.2 E-1	9.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	2.8 E-2	NA	1.1 E-3	NA	NA	NA	1.5 E-3	4.8 E-1
DSA-SB01-11	11	1.7 E-1	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-3	2.1 E-2	NA	NA	NA	NA	NA	1.4 E-3	2.2 E-1
DSA-SB01-5.0	5	3.4 E-1	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	3.0 E-2	NA	2.4 E-4	NA	NA	NA	1.6 E-3	3.9 E-1
DSA-SB02-1.5	1.5	2.2 E-1	4.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	1.9 E-2	NA	2.6 E-4	NA	NA	NA	1.7 E-3	2.9 E-1
DSA-SB02-10.5	10.5	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	2.6 E-4	NA	NA	NA	1.6 E-3	2.8 E-1
DSA-SB02-4.5	4.5	1.8 E-1	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	1.7 E-2	NA	2.9 E-4	NA	NA	NA	1.4 E-3	2.4 E-1
DSA-SB03-12	12	2.8 E-1	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.5 E-2	NA	1.8 E-4	NA	NA	NA	1.4 E-3	3.5 E-1
DSA-SB03-2.0	2	3.5 E-1	6.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1	1.6 E-2	NA	2.0 E-4	NA	NA	NA	1.9 E-3	6.7 E-1
DSA-SB03-4.5	4.5	2.2 E-1	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	2.1 E-2	NA	1.1 E-4	NA	NA	NA	2.2 E-3	2.9 E-1
DSA-SB04-1.0	1	5.2 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	3.3 E-2	NA	NA	NA	NA	NA	2.0 E-3	5.7 E-1
DSA-SB04-11	11	4.3 E-1	6.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.9 E-2	NA	NA	NA	NA	NA	2.0 E-3	4.7 E-1
DSA-SB04-5.0	5	4.2 E-1	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	2.3 E-2	NA	NA	NA	NA	NA	1.6 E-3	4.5 E-1
E(D)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS01-0.5	0.5	2.4 E-1	1.7 E-2	NA	NA	NA	1.8 E-5	NA	NA	NA	2.7 E-5	NA	NA	1.7 E-3	1.9 E-2	NA	4.9 E-4	1.5 E-5	NA	6.4 E-5	4.2 E-3	2.8 E-1
E(d)-SNS01-2.5	2.5	3.1 E-1	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	8.2 E-4	2.2 E-2	NA	NA	2.4 E-6	NA	6.4 E-6	4.7 E-3	3.7 E-1
E(d)-SNS02-0.5	0.5	4.3 E-1	9.9 E-3	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	1.0 E-3	2.6 E-2	NA	NA	NA	NA	7.6 E-6	3.2 E-3	4.7 E-1
E(d)-SNS02-2.5	2.5	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-4	2.2 E-2	NA	NA	NA	NA	NA	1.9 E-3	4.3 E-1
E(d)-SNS03-0.5	0.5	8.7 E-2	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	1.7 E-3	1.9 E-2	NA	3.8 E-3	5.2 E-6	NA	8.1 E-6	1.6 E-3	1.2 E-1
E(d)-SNS03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	1.2 E-3
E(d)-SNS03-2.5	2.5	2.6 E-1	8.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	2.6 E-2	NA	2.9 E-3	NA	NA	NA	3.9 E-3	3.1 E-1
E(E)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-1.0	1	2.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-3	1.7 E-2	NA	NA	NA	NA	NA	1.2 E-3	3.1 E-1
E(e)-SB02-11	11	5.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	5.3 E-3	NA	NA	NA	3.1 E-3	5.7 E-1
E(e)-SB02-5.0	5	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-3	2.6 E-2	NA	3.8 E-4	NA	NA	NA	1.9 E-3	3.6 E-1
E(E)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	2.6 E-3
E(E)-SB03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	1.0 E-3
E(E)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	2.6 E-3
E(e)-SNS01-0.5	0.5	1.6 E-1	7.0 E-2	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	2.0 E-3	1.5 E-2	NA	2.6 E-3	NA	NA	5.4 E-6	2.6 E-3	2.5 E-1
E(e)-SNS01-2.5	2.5	2.0 E-1	6.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	1.4 E-2	NA	1.4 E-3	NA	NA	NA	1.4 E-3	2.2 E-1
E(e)-SNS02-0.5	0.5	2.5 E-1	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	2.0 E-2	NA	NA	NA	NA	NA	2.3 E-3	2.8 E-1
E(e)-SNS02-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6
E(e)-SNS02-2.5	2.5	2.6 E-1	9.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	1.8 E-2	NA	NA	NA	NA	NA	1.6 E-3	2.9 E-1
E(m)-SD01-0.25	0.25	3.1 E-1	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-4	2.5 E-2	NA	NA	NA	NA	NA	2.1 E-3	3.7 E-1

		Child Non-Cancer Hazard Index																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
E(m)-SD01-1.5	1.5	2.2 E-1	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	2.3 E-2	NA	NA	NA	NA	NA	2.1 E-3	2.6 E-1
E(m)-SD01-5.0	5	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	1.6 E-2	NA	NA	NA	NA	NA	1.4 E-3	2.2 E-1
E(m)-SD02-0.25	0.25	2.5 E-1	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	1.9 E-2	1.9 E-4	NA	NA	NA	NA	4.0 E-3	2.9 E-1
E(m)-SD02-1.5	1.5	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	2.7 E-2	NA	NA	NA	NA	NA	2.3 E-3	3.3 E-1
E(m)-SD02-5.0	5	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-4	2.6 E-2	NA	NA	NA	NA	NA	2.2 E-3	3.8 E-1
E(N)-SB01-1.0	1	2.1 E-1	8.0 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	1.1 E-3	2.1 E-2	NA	NA	1.9 E-6	NA	3.5 E-6	3.6 E-3	2.4 E-1
E(N)-SB01-5.0	5	1.7 E-1	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	2.6 E-2	NA	NA	NA	NA	NA	1.5 E-3	2.0 E-1
E(N)-SB01-9.5	9.5	1.6 E-1	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.2 E-2	NA	NA	NA	NA	NA	1.5 E-3	2.0 E-1
E(N)-SB02-1.0	1	NA	8.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-3
E(N)-SB02-1.0-T	1	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	2.2 E-2	NA	NA	NA	NA	NA	2.4 E-3	2.2 E-1
E(N)-SB02-11	11	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-3	1.3 E-2	NA	NA	NA	NA	NA	1.7 E-3	1.3 E-1
E(N)-SB02-5.0	5	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	2.4 E-2	NA	NA	NA	NA	NA	2.4 E-3	1.6 E-1
E(n)-SB03-1.0	1	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	1.8 E-2	NA	NA	NA	NA	NA	1.3 E-3	3.0 E-1
E(n)-SB03-11	11	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	3.0 E-2	NA	NA	NA	NA	NA	1.2 E-3	2.8 E-1
E(n)-SB03-5.0	5	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	3.4 E-2	NA	NA	NA	NA	NA	1.4 E-3	2.9 E-1
E(N)-SD01-0.25	0.25	1.7 E-1	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	1.9 E-3	1.5 E-2	NA	NA	NA	NA	NA	4.0 E-3	2.0 E-1
E(N)-SD01-1.5	1.5	2.0 E-1	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	2.8 E-2	NA	NA	NA	NA	NA	3.8 E-3	2.3 E-1
E(N)-SD01-5.0	5	2.1 E-1	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	4.2 E-2	NA	NA	NA	NA	NA	1.5 E-3	2.6 E-1
E(n)-SNS01-0.5	0.5	1.4 E-1	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	1.5 E-2	NA	NA	NA	NA	NA	1.2 E-1	2.9 E-1
E(n)-SNS01-2.5	2.5	2.0 E-1	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-4	2.6 E-2	NA	NA	NA	NA	NA	1.7 E-3	2.3 E-1
E(n)-SNS02-0.5	0.5	2.4 E-1	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	8.3 E-6	NA	NA	3.6 E-4	2.0 E-2	NA	7.1 E-4	2.6 E-6	NA	8.1 E-6	2.6 E-3	2.7 E-1
E(n)-SNS02-2.5	2.5	NA	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	2.3 E-3	3.7 E-2
E(n)-SNS02-2.5-T	2.5	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	3.6 E-1
E(n)-SNS03-0.5	0.5	2.6 E-1	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	3.4 E-2	NA	1.0 E-2	NA	NA	NA	2.3 E-3	3.1 E-1
E(n)-SNS03-2.5	2.5	2.6 E-1	5.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-4	3.2 E-2	NA	4.6 E-3	NA	NA	NA	2.4 E-3	3.1 E-1
L2-ST24-SB01-11.5	11.5	5.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	1.7 E-2	NA	NA	NA	6.5 E-5	NA	3.0 E-3	6.1 E-1
L2-ST24-SB01-2.0	2	4.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	3.3 E-2	NA	NA	NA	5.5 E-5	NA	1.8 E-3	4.8 E-1
L2-ST24-SB01-6.0	6	6.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-3	NA	9.9 E-4	NA	1.6 E-5	NA	7.2 E-4	7.1 E-2
L2-ST26-SB01-11.5	11.5	2.8 E-1	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	2.8 E-2	NA	NA	NA	NA	NA	1.4 E-3	3.4 E-1
L2-ST26-SB01-2.0	2	1.8 E-1	3.5 E-2	NA	NA	NA	5.1 E-5	NA	NA	NA	3.6 E-4	NA	NA	1.1 E-3	1.6 E-2	NA	NA	8.1 E-5	NA	6.4 E-4	1.2 E-3	2.4 E-1
L2-ST26-SB01-5.0	5	2.2 E-1	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	1.7 E-2	NA	NA	NA	NA	NA	1.7 E-3	2.9 E-1
L2-ST26-SB02-10	10	1.8 E-1	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	1.9 E-2	NA	NA	NA	NA	NA	1.4 E-3	2.4 E-1
L2-ST26-SB02-2.0	2	3.1 E-1	4.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	2.8 E-2	NA	NA	NA	NA	NA	1.7 E-3	3.9 E-1
L2-ST26-SB02-4.5	4.5	2.2 E-1	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	1.6 E-2	NA	NA	NA	NA	NA	1.3 E-3	2.8 E-1
L2-ST26-SB03-11.5	11.5	2.4 E-1	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	1.9 E-2	NA	NA	NA	NA	NA	1.6 E-3	3.0 E-1
L2-ST26-SB03-2.0	2	2.0 E-1	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	1.7 E-2	NA	NA	NA	1.4 E-5	NA	1.5 E-3	2.6 E-1
L2-ST26-SB03-5.0	5	5.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	2.3 E-3	6.0 E-1
L2-ST26-SB04-1.0	1	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	1.9 E-2	NA	NA	NA	NA	NA	1.4 E-3	2.3 E-1
L2-ST26-SB04-11	11	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.4 E-2	NA	NA	NA	NA	NA	1.7 E-3	2.8 E-1
L2-ST26-SB04-5.0	5	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	1.9 E-2	NA	NA	NA	NA	NA	1.7 E-3	2.4 E-1
L2-ST26-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS02-0.5	0.5	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	9.1 E-5
L2-ST26-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	5.8 E-6	NA	9.6 E-6
L2-ST26-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-10.5	10.5	2.5 E-1	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.9 E-2	NA	NA	NA	NA	NA	1.7 E-3	3.0 E-1
L2-ST28/90-SB01-2.5	2.5	5.0 E-1	5.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.3 E-2	NA	1.4 E-3	NA	2.0 E-5	NA	1.9 E-3	5.8 E-1
L2-ST28/90-SB01-4.5	4.5	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.0 E-2	NA	2.6 E-3	NA	3.6 E-5	NA	2.3 E-3	4.2 E-1

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
28E-SB01-1.5	1.5	4.1 E-2	6.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	2.7 E-3	NA	3.9 E-5	NA	NA	NA	2.0 E-4	5.1 E-2
28E-SB01-11.5	11.5	2.6 E-2	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	9.8 E-5	NA	NA	NA	1.1 E-4	4.0 E-2
28E-SB01-5.5	5.5	3.0 E-2	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	2.6 E-3	NA	3.3 E-5	NA	NA	NA	2.1 E-4	4.0 E-2
28E-SB02-1	1	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	NA	NA	3.8 E-4	1.8 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.2 E-2
28E-SB02-11	11	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	3.3 E-3	NA	2.7 E-3	NA	NA	NA	2.7 E-4	4.9 E-2
28E-SB02-5	5	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	1.3 E-3	NA	NA	NA	NA	NA	1.3 E-4	2.3 E-2
28E-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	5.1 E-5	NA	NA	NA	NA	1.5 E-3
28E-SB03-1.0-T	1	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	2.1 E-4	6.6 E-2
28E-SB03-11	11	4.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	5.7 E-3	NA	1.4 E-4	NA	NA	NA	2.6 E-4	4.7 E-2
28E-SB03-5.0	5	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	2.6 E-3	NA	4.7 E-5	NA	NA	NA	1.9 E-4	3.2 E-2
28E-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	1.3 E-5
28E-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	1.3 E-3
28E-SB05-10-T	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	1.4 E-4
28E-SB05-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	NA	5.1 E-5
28E-SB06-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	2.2 E-4
28E-SB06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-3	NA	NA	NA	NA	8.4 E-3
28E-SB06-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	1.0 E-2
28E-SB07-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	0	4.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	3.0 E-4	1.4 E-1
28E-SPB01	3	5.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-2	NA	4.2 E-3	NA	NA	NA	NA	NA	2.9 E-4	1.4 E-1
28E-SPB02	0	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-2	NA	3.0 E-3	NA	NA	NA	NA	NA	2.5 E-4	9.2 E-2
28E-SPB02	3	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	2.3 E-3	NA	NA	NA	NA	NA	1.8 E-4	7.9 E-2
29E-SB01	1	NA	NA	NA	NA	NA	NA	NA	8.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-5
29E-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4
29E-SB01	10	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-6
29E-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	3	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5
29E-SB02	5	NA	NA	NA	NA	NA	NA	NA	5.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-5
29E-SB02	10	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5
29E-SB03-1	1	2.9 E-2	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	2.4 E-3	NA	6.5 E-5	NA	NA	NA	1.8 E-4	3.5 E-2
29E-SB03-11	11	5.1 E-2	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	3.6 E-3	NA	4.1 E-5	NA	NA	NA	2.1 E-4	5.6 E-2
29E-SB03-5	5	6.1 E-2	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	3.7 E-3	NA	NA	NA	NA	NA	2.4 E-4	6.6 E-2
29E-SB05-11.5	11.5	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	3.0 E-3	NA	NA	NA	2.4 E-6	NA	1.5 E-4	2.9 E-2
29E-SB05-2.0	2	1.5 E-2	3.1 E-2	NA	NA	NA	4.2 E-6	NA	NA	NA	4.7 E-7	NA	NA	1.5 E-4	2.5 E-3	NA	NA	3.6 E-7	1.1 E-6	1.0 E-6	9.6 E-4	5.0 E-2
29E-SB05-6.0	6	2.1 E-2	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	3.6 E-3	NA	NA	NA	1.1 E-6	NA	7.8 E-4	4.1 E-2
29E-SB06-11.5	11.5	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	3.6 E-3	NA	NA	NA	1.5 E-6	NA	2.1 E-4	3.4 E-2
29E-SB06-2.0	2	1.7 E-2	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	2.9 E-4	2.1 E-2
29E-SB06-5.5	5.5	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	3.0 E-3	NA	NA	NA	NA	NA	1.9 E-4	3.5 E-2
29E-SB07-1.5	1.5	2.4 E-2	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	2.6 E-3	NA	NA	NA	NA	NA	2.2 E-4	2.9 E-2
29E-SB07-11.5	11.5	2.1 E-2	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.4 E-3	NA	NA	NA	NA	NA	1.5 E-4	2.6 E-2
29E-SB07-5.5	5.5	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.5 E-3	NA	NA	NA	NA	NA	1.9 E-4	3.0 E-2
29E-SB08-1.5	1.5	2.6 E-2	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.1 E-3	NA	1.2 E-5	NA	NA	NA	1.6 E-4	2.9 E-2
29E-SB08-11.5	11.5	3.5 E-2	2.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	5.7 E-3	NA	1.2 E-5	NA	NA	NA	2.2 E-4	4.1 E-2
29E-SB08-5.5	5.5	2.9 E-2	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	1.6 E-3	NA	1.3 E-5	NA	NA	NA	1.2 E-4	3.1 E-2
29E-SB09-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	4.0 E-3	NA	NA	NA	NA	NA	2.1 E-4	4.4 E-3
29E-SB09-1.0-T	1	7.1 E-2	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-2
29E-SB09-11	11	3.0 E-2	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	1.5 E-4	3.3 E-2
29E-SB09-5.0	5	6.8 E-2	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	NA	NA	2.4 E-4	7.3 E-2
29E-SB10-1	1	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	3.6 E-4	1.3 E-2
29E-SB11-1	1	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	2.5 E-4	2.9 E-2
29E-SB12-1	1	4.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	2.9 E-4	5.1 E-2
29E-SNS03-0.5	0.5	2.1 E-2	3.0 E-3	NA	NA	NA	1.5 E-6	NA	NA	NA	7.3 E-7	NA	NA	6.6 E-5	1.9 E-3	NA	NA	3.1 E-7	NA	9.7 E-7	5.5 E-4	2.7 E-2
29E-SNS04-0.5	0.5	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	2.2 E-3	NA	7.4 E-5	NA	NA	NA	1.9 E-4	3.0 E-2

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
29E-SNS05-0.5	0.5	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	NA	2.5 E-3	NA	NA	1.9 E-7	NA	6.6 E-7	3.2 E-4	4.0 E-3
29E-SNS05-0.5-T	0.5	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
29E-SNS06-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-7	NA	NA	1.6 E-4	NA	NA	NA	3.1 E-7	NA	1.0 E-6	NA	1.7 E-4
29E-SNS06-0.5-T	0.5	2.3 E-2	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	4.6 E-4	2.6 E-2
29E-SNS06-2.5	2.5	3.9 E-2	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	3.1 E-3	NA	NA	NA	NA	NA	1.4 E-4	4.3 E-2
29E-SNS07-0.5	0.5	3.6 E-2	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	3.3 E-3	NA	NA	NA	NA	NA	5.9 E-4	4.2 E-2
29E-SNS07-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-2.5	2.5	2.9 E-2	9.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.2 E-3	NA	NA	NA	3.0 E-6	NA	2.2 E-4	3.2 E-2
59E-SB01	1	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	9.7 E-6	NA	NA	4.6 E-2	NA	2.2 E-3	NA	NA	NA	NA	NA	1.7 E-4	7.3 E-2
59E-SB02-10.5	10.5	7.3 E-2	6.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	1.5 E-5	NA	NA	NA	3.0 E-4	8.4 E-2
59E-SB02-2.0	2	1.8 E-2	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	1.5 E-3	NA	NA	NA	1.2 E-6	NA	1.3 E-4	2.5 E-2
59E-SB02-5.0	5	5.1 E-2	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	4.3 E-3	NA	NA	NA	NA	NA	2.1 E-4	6.2 E-2
59E-SB03-11	11	1.2 E-1	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	9.8 E-5	NA	NA	NA	4.3 E-4	1.4 E-1
59E-SB03-2.0	2	6.1 E-2	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	4.2 E-3	NA	NA	3.6 E-7	NA	4.9 E-7	3.2 E-4	7.7 E-2
59E-SB03-6.0	6	2.7 E-2	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	2.5 E-3	NA	NA	NA	NA	NA	1.7 E-4	3.5 E-2
59E-SB04-11	11	5.6 E-2	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	2.5 E-4	7.9 E-2
59E-SB04-2.5	2.5	7.3 E-2	8.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-3	NA	NA	NA	NA	NA	3.8 E-4	8.9 E-2
59E-SB04-6.0	6	2.4 E-2	5.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	2.1 E-3	NA	NA	1.7 E-7	NA	NA	1.4 E-4	3.2 E-2
DSA-SB01-1.0	1	4.8 E-2	9.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	3.5 E-3	NA	1.2 E-4	NA	NA	NA	1.6 E-4	5.5 E-2
DSA-SB01-11	11	2.0 E-2	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	2.6 E-3	NA	NA	NA	NA	NA	1.5 E-4	2.6 E-2
DSA-SB01-5.0	5	3.9 E-2	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	3.7 E-3	NA	2.5 E-5	NA	NA	NA	1.7 E-4	4.6 E-2
DSA-SB02-1.5	1.5	2.6 E-2	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	2.3 E-3	NA	2.7 E-5	NA	NA	NA	1.9 E-4	3.4 E-2
DSA-SB02-10.5	10.5	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	2.7 E-5	NA	NA	NA	1.7 E-4	3.3 E-2
DSA-SB02-4.5	4.5	2.1 E-2	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	2.1 E-3	NA	3.1 E-5	NA	NA	NA	1.6 E-4	2.8 E-2
DSA-SB03-12	12	3.2 E-2	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	1.8 E-3	NA	2.0 E-5	NA	NA	NA	1.5 E-4	4.0 E-2
DSA-SB03-2.0	2	4.1 E-2	6.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	2.0 E-3	NA	2.2 E-5	NA	NA	NA	2.0 E-4	7.5 E-2
DSA-SB03-4.5	4.5	2.6 E-2	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-5	2.6 E-3	NA	1.2 E-5	NA	NA	NA	2.3 E-4	3.3 E-2
DSA-SB04-1.0	1	6.1 E-2	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	4.0 E-3	NA	NA	NA	NA	NA	2.1 E-4	6.6 E-2
DSA-SB04-11	11	5.0 E-2	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	3.6 E-3	NA	NA	NA	NA	NA	2.2 E-4	5.5 E-2
DSA-SB04-5.0	5	4.8 E-2	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.8 E-3	NA	NA	NA	NA	NA	1.7 E-4	5.2 E-2
E(D)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS01-0.5	0.5	2.7 E-2	1.8 E-3	NA	NA	NA	2.1 E-6	NA	NA	NA	3.2 E-6	NA	NA	1.8 E-4	2.4 E-3	NA	5.3 E-5	1.7 E-6	NA	7.6 E-6	4.5 E-4	3.2 E-2
E(d)-SNS01-2.5	2.5	3.6 E-2	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	6.8 E-7	NA	NA	8.8 E-5	2.6 E-3	NA	NA	2.9 E-7	NA	7.6 E-7	5.0 E-4	4.2 E-2
E(d)-SNS02-0.5	0.5	5.0 E-2	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	1.1 E-4	3.1 E-3	NA	NA	NA	NA	9.0 E-7	3.4 E-4	5.5 E-2
E(d)-SNS02-2.5	2.5	4.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.6 E-3	NA	NA	NA	NA	NA	2.0 E-4	5.0 E-2
E(d)-SNS03-0.5	0.5	1.0 E-2	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	1.8 E-4	2.3 E-3	NA	4.1 E-4	6.2 E-7	NA	9.7 E-7	1.7 E-4	1.4 E-2
E(d)-SNS03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	1.3 E-4
E(d)-SNS03-2.5	2.5	3.0 E-2	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.2 E-3	NA	3.1 E-4	NA	NA	NA	4.2 E-4	3.5 E-2
E(E)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-1.0	1	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-4	2.1 E-3	NA	NA	NA	NA	NA	1.3 E-4	3.6 E-2
E(e)-SB02-11	11	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	5.7 E-4	NA	NA	NA	3.3 E-4	6.5 E-2
E(e)-SB02-5.0	5	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	3.1 E-3	NA	4.1 E-5	NA	NA	NA	2.0 E-4	4.2 E-2
E(E)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	2.7 E-4
E(E)-SB03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	1.1 E-4
E(E)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	2.7 E-4
E(e)-SNS01-0.5	0.5	1.8 E-2	7.5 E-3	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	2.2 E-4	1.8 E-3	NA	2.7 E-4	NA	NA	6.4 E-7	2.8 E-4	2.8 E-2
E(e)-SNS01-2.5	2.5	2.3 E-2	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	1.7 E-3	NA	1.4 E-4	NA	NA	NA	1.5 E-4	2.6 E-2
E(e)-SNS02-0.5	0.5	2.9 E-2	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	2.5 E-3	NA	NA	NA	NA	NA	2.5 E-4	3.2 E-2
E(e)-SNS02-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7
E(e)-SNS02-2.5	2.5	3.0 E-2	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	2.2 E-3	NA	NA	NA	NA	NA	1.7 E-4	3.4 E-2
E(m)-SD01-0.25	0.25	3.6 E-2	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	3.1 E-3	NA	NA	NA	NA	NA	2.2 E-4	4.2 E-2

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
E(m)-SD01-1.5	1.5	2.6 E-2	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-5	2.8 E-3	NA	NA	NA	NA	NA	2.3 E-4	3.0 E-2
E(m)-SD01-5.0	5	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-5	2.0 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.5 E-2
E(m)-SD02-0.25	0.25	2.9 E-2	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.4 E-3	2.2 E-5	NA	NA	NA	NA	4.2 E-4	3.4 E-2
E(m)-SD02-1.5	1.5	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	3.3 E-3	NA	NA	NA	NA	NA	2.4 E-4	3.8 E-2
E(m)-SD02-5.0	5	4.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	3.2 E-3	NA	NA	NA	NA	NA	2.4 E-4	4.4 E-2
E(N)-SB01-1.0	1	2.4 E-2	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	1.2 E-4	2.6 E-3	NA	NA	2.2 E-7	NA	4.2 E-7	3.8 E-4	2.8 E-2
E(N)-SB01-5.0	5	2.0 E-2	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	3.1 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.3 E-2
E(N)-SB01-9.5	9.5	1.8 E-2	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.0 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.3 E-2
E(N)-SB02-1.0	1	NA	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-4
E(N)-SB02-1.0-T	1	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.7 E-3	NA	NA	NA	NA	NA	2.6 E-4	2.6 E-2
E(N)-SB02-11	11	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	1.7 E-3	NA	NA	NA	NA	NA	1.9 E-4	1.6 E-2
E(N)-SB02-5.0	5	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	2.9 E-3	NA	NA	NA	NA	NA	2.6 E-4	1.9 E-2
E(n)-SB03-1.0	1	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	2.2 E-3	NA	NA	NA	NA	NA	1.4 E-4	3.4 E-2
E(n)-SB03-11	11	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	3.6 E-3	NA	NA	NA	NA	NA	1.3 E-4	3.2 E-2
E(n)-SB03-5.0	5	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	4.2 E-3	NA	NA	NA	NA	NA	1.5 E-4	3.3 E-2
E(N)-SD01-0.25	0.25	2.0 E-2	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	2.0 E-4	1.9 E-3	NA	NA	NA	NA	NA	4.2 E-4	2.3 E-2
E(N)-SD01-1.5	1.5	2.3 E-2	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	3.5 E-3	NA	NA	NA	NA	NA	4.0 E-4	2.7 E-2
E(N)-SD01-5.0	5	2.4 E-2	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	5.1 E-3	NA	NA	NA	NA	NA	1.6 E-4	3.0 E-2
E(n)-SNS01-0.5	0.5	1.7 E-2	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	1.8 E-3	NA	NA	NA	NA	NA	1.3 E-2	3.2 E-2
E(n)-SNS01-2.5	2.5	2.3 E-2	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	3.2 E-3	NA	NA	NA	NA	NA	1.8 E-4	2.7 E-2
E(n)-SNS02-0.5	0.5	2.7 E-2	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	9.9 E-7	NA	NA	3.8 E-5	2.5 E-3	NA	7.6 E-5	3.1 E-7	NA	9.7 E-7	2.8 E-4	3.2 E-2
E(n)-SNS02-2.5	2.5	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	NA	NA	NA	2.5 E-4	4.4 E-3
E(n)-SNS02-2.5-T	2.5	4.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	4.1 E-2
E(n)-SNS03-0.5	0.5	3.0 E-2	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	4.1 E-3	NA	1.1 E-3	NA	NA	NA	2.5 E-4	3.6 E-2
E(n)-SNS03-2.5	2.5	3.0 E-2	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-5	4.0 E-3	NA	4.9 E-4	NA	NA	NA	2.6 E-4	3.6 E-2
L2-ST24-SB01-11.5	11.5	6.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	2.1 E-3	NA	NA	NA	7.7 E-6	NA	3.2 E-4	7.1 E-2
L2-ST24-SB01-2.0	2	5.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	4.0 E-3	NA	NA	NA	6.4 E-6	NA	2.0 E-4	5.6 E-2
L2-ST24-SB01-6.0	6	7.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	1.1 E-4	NA	1.9 E-6	NA	7.8 E-5	8.2 E-3
L2-ST26-SB01-11.5	11.5	3.2 E-2	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-5	3.5 E-3	NA	NA	NA	NA	NA	1.6 E-4	3.9 E-2
L2-ST26-SB01-2.0	2	2.1 E-2	3.8 E-3	NA	NA	NA	6.1 E-6	NA	NA	NA	4.3 E-5	NA	NA	1.2 E-4	2.0 E-3	NA	NA	9.7 E-6	NA	7.6 E-5	1.2 E-4	2.7 E-2
L2-ST26-SB01-5.0	5	2.6 E-2	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	2.1 E-3	NA	NA	NA	NA	NA	1.8 E-4	3.3 E-2
L2-ST26-SB02-10	10	2.1 E-2	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	2.4 E-3	NA	NA	NA	NA	NA	1.5 E-4	2.7 E-2
L2-ST26-SB02-2.0	2	3.6 E-2	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	3.4 E-3	NA	NA	NA	NA	NA	1.9 E-4	4.5 E-2
L2-ST26-SB02-4.5	4.5	2.6 E-2	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	2.0 E-3	NA	NA	NA	NA	NA	1.4 E-4	3.2 E-2
L2-ST26-SB03-11.5	11.5	2.7 E-2	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	2.3 E-3	NA	NA	NA	NA	NA	1.7 E-4	3.4 E-2
L2-ST26-SB03-2.0	2	2.3 E-2	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	2.1 E-3	NA	NA	NA	1.7 E-6	NA	1.6 E-4	3.0 E-2
L2-ST26-SB03-5.0	5	6.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	2.4 E-4	7.0 E-2
L2-ST26-SB04-1.0	1	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	2.3 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.7 E-2
L2-ST26-SB04-11	11	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.9 E-3	NA	NA	NA	NA	NA	1.9 E-4	3.2 E-2
L2-ST26-SB04-5.0	5	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-5	2.3 E-3	NA	NA	NA	NA	NA	1.8 E-4	2.8 E-2
L2-ST26-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS02-0.5	0.5	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	6.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	NA	1.1 E-5
L2-ST26-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	6.9 E-7	NA	1.2 E-6
L2-ST26-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-10.5	10.5	2.9 E-2	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	3.6 E-3	NA	NA	NA	NA	NA	1.9 E-4	3.5 E-2
L2-ST28/90-SB01-2.5	2.5	5.8 E-2	6.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.8 E-3	NA	1.5 E-4	NA	2.3 E-6	NA	2.0 E-4	6.7 E-2
L2-ST28/90-SB01-4.5	4.5	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.5 E-3	NA	2.7 E-4	NA	4.2 E-6	NA	2.5 E-4	4.9 E-2

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**ILCR**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
28E-SB01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB01-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-10-T	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB05-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB05-2.0	2	NA	NA	NA	NA	8 E-8	NA	2 E-9	NA	NA	NA	9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
29E-SB05-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB10-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB11-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB12-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS03-0.5	0.5	NA	NA	8 E-9	2 E-7	5 E-8	NA	3 E-9	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
29E-SNS04-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**ILCR**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
29E-SNS05-0.5	0.5	NA	NA	7 E-9	NA	3 E-8	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
29E-SNS05-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS06-0.5	0.5	NA	NA	1 E-8	2 E-7	4 E-8	NA	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7
29E-SNS06-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS06-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-12	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS01-0.5	0.5	NA	NA	4 E-8	1 E-6	2 E-7	NA	1 E-8	NA	NA	NA	8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
E(d)-SNS01-2.5	2.5	NA	NA	7 E-9	NA	3 E-8	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
E(d)-SNS02-0.5	0.5	NA	NA	NA	NA	NA	NA	5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
E(d)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
E(d)-SNS03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
E(e)-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**ILCR**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
E(m)-SD01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD02-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	NA	NA	NA	NA	NA	8 E-8
E(m)-SD02-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB01-1.0	1	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
E(N)-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB01-9.5	9.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS02-0.5	0.5	NA	NA	NA	NA	6 E-8	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
E(n)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS02-2.5-T	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB01-2.0	2	NA	NA	7 E-7	8 E-6	2 E-6	NA	1 E-7	5 E-7	NA	NA	2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5
L2-ST26-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB03-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB03-2.0	2	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
L2-ST26-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB04-1.0	1	NA	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
L2-ST26-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS02-0.5	0.5	NA	NA	NA	1 E-6	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
L2-ST26-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS03-0.5	0.5	NA	NA	NA	2 E-7	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
L2-ST26-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.6 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	2.0 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0
Unit Risk		NA	8.5 E-4	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA
28E-SP16	10	43000		20000														
28E-SP16	20			9100								28000						8500
28E-SP16	30		97	1500		190												
28E-SP16	40		210	3700														
29E-SP07	10														95			12
29E-SP07	20			110												13		98
29E-SP08	10				7.9					94		71	6.7	25	380	43		120
29E-SP08	20			110														
29E-SP08	30			240														
29E-SP08	40			230														
29E-SP09	10	15		18												9.6		
29E-SP09	20	40		88														
29E-SP09	30			1000														33
29E-SP09	40			1300											130	9.4		29
29E-SP10	10									34					180	31		4.7
29E-SP10	20			4.4						20					90	36		18
29E-SP11	10									57		90		44	240	22		37
29E-SP11	20			210				56								16		46
59E-SP08	10																	
59E-SP09	10								72									250
59E-SP10	20														120	8.9		34
59E-SP13	20																	10
DSA-SP04	10																	
DSA-SP04	20		42	3000												32		140
DSA-SP04	30		58	4100														71
DSA-SP04	40			3000														100
DSA-SP05	10																	190
DSA-SP05	20	14		21		15		30		11		12		5.0	88	20	41	360
DSA-SP06	10														230	5.4		160
DSA-SP06	20									45		12			680			
DSA-SP07	10																	41
DSA-SP07	20																	
DSA-SP08	10								40							14		150
DSA-SP08	20							37		56		23		8.9	240	45		440
DSA-SP09	10																	27
DSA-SP09	20	21		33						35		27			650	14		190
DSA-SP10	10					6.2				93					600	77		160
DSA-SP10	20			64		6.4		21		22					110	110		1000
DSA-SP10	30			340														48
DSA-SP10	40			150											290			93
DSA-SP11	10					7.2										22		190
DSA-SP11	20															7.4		270
DSA-SP12	10					7.8										20		150
DSA-SP12	20	13	13	18		5.3									60	6.3		15
DSA-SP13	10									38		12			110	130		210
DSA-SP13	20															40		260
DSA-SP15	10																	3.8
DSA-SP15	20											12			150			63
DSA-SP15	30											16			220	13		280
DSA-SP16	10														410			170
DSA-SP16	20																	750
DSA-SP16	30																	430
DSA-SP16	40																	150
DSA-SP17	10																	66
DSA-SP17	20															4.7		78
DSA-SP17	30														220			24
DSA-SP18	10				14				15	320			20		130	56		
DSA-SP18	20				33		9.9		60	520	60		56		250	170		11
DSA-SP19	10				49		14		18				75	8.5	64	81		31

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.6 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	2.0 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0
Unit Risk		NA	8.5 E-4	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA
DSA-SP19	20								9.1	330		15			110	24		
DSA-SP20	10									55					220	32		19
DSA-SP20	20				24					97			16		310	190		120
DSA-SP21	10				22		7.5						19		82	12		32
DSA-SP21	20				29		8.3		6.8	54			21	5.9	370	24		680
DSA-SP22	10				19		6.2		13	39			18	8.3	230	59		23
DSA-SP22	20				24		6.9		15	46			18	5.4	240	26		58
DSA-SP23	10									44					180	20		82
DSA-SP23	20				20								14		340	12		490
DSA-SP23	30				22								16		200	12		190
DSA-SP24	10				29		12		60	21			43		120	48		53
DSA-SP24	20				23				100	30			24		190	78		160
DSA-SP24	30	13			17				130	77			16		660	140		54
DSA-SP25	10															11		53
DSA-SP25	20															23		340
DSA-SP26	10															58		120
DSA-SP26	20															280		140
DSA-SP27	10															7.1		70
DSA-SP27	20									22						6.9		170
DSA-SP28	10									68				7.7	260	30		38
DSA-SP28	20									110	26	34		43	350	25		31
DSA-SP29	10				36		12						13					10
DSA-SP30	10														160	7.5		74
DSA-SP30	20									68					290	66		7.0
DSA-SP31	10				6.3					150		62	5.7	35	650	62		30
DSA-SP31	20									63					220	40		69
DSA-SP32	10				6.0					55		13			190	31		19
DSA-SP32	20				8.3					510	52	200	6.9	31	2000	290		21
E(d)-SP02	10								12							10		56
E(d)-SP02	20			26				50		47		19		9.8	210	39		480
E(d)-SP03	10			14					73							18		29
E(m)-SP08	10				14					27			8.6		110	22		140
E(m)-SP08	20							53		33		19		10	160	30		110
E(M)-SP09	10									30					140	29		100
E(M)-SP09	20							31		90		23		10	380	77		340
E(m)-SP10	10	8.8							99						68	18		80
E(m)-SP10	20																	91
E(m)-SP11	20									66				7.8	400	15		19
E(n)-SP04	10								33	22					120	13		67
E(n)-SP04	20															8.2		1300
E(n)-SP05	10								11							6.8		4.8
E(n)-SP05	20							46		58					220	34		3700
E(n)-SP05	40														140			
E(n)-SP06	10								8.0						73	9.2		230
E(n)-SP06	20			21											66	3.9		44
E(n)-SP07	10			6.4											63	6.8		110
E(n)-SP08	10								26						93	9.0		190
E(n)-SP08	20	8.7														4.8		510
E(n)-SP09	10								76						91	22		26
E(n)-SP09	20							26	11							7.8		46
E(N)-SP10	10														58	11		76
E(N)-SP10	20									22					110	22		620
E(n)-SP11	15									55		22			240	8.9		
E(n)-SP11	25															4.3		14
E(n)-SP12	10									24					130	4.3		
E(n)-SP12	20									43					210	7.3		13
L2-ST24-SP03	10								7.2						54	4.1		63
L2-ST24-SP03	20							55							89	27		80
L2-ST26-SP04	10																	

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.6 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	2.0 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0
Unit Risk		NA	8.5 E-4	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA
L2-ST26-SP04	20							31						5.6		24		170
L2-ST26-SP05	10				11					43			7.0		180	67		420
L2-ST26-SP05	20							28		200		22		14	540	120		220
L2-ST26-SP06	10													10		5.2		22
L2-ST26-SP06	20							25		18					59	10		180
L2-ST26-SP07	18									78		15			3000	100		160
L2-ST28_90-SP02	10			25					80	140		34			1200	22		42
L2-ST28_90-SP02	20			56				37		82					260	80		760

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		5.6 E+1	4.9 E+1	6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	7.4 E+0	7.4 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		2.2 E-2	1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
28E-SP16	10			55000							2600				800000		5900	10000000	
28E-SP16	20											3600			97000			3200000	
28E-SP16	30		310	1400					2500		120	220			1900			180000	
28E-SP16	40		510	2200					4900						13000			380000	
29E-SP07	10								24						60		8.4		
29E-SP07	20	11	25	22				11	240		23	60			740		6.8	8900	
29E-SP08	10			5.1	6.9	55	5.2		39		82	66	14	5.3		43	71	380	
29E-SP08	20		50	1600					360			36			1600			62000	
29E-SP08	30	42	54	330					400						2500			42000	
29E-SP08	40	41	64	240					360						3300			41000	
29E-SP09	10	2200	990	330					120	15	11	15					20	18000	
29E-SP09	20	7000	2400	1400					580	75							40	60000	
29E-SP09	30	280	210	330				170	3800	100	90	160			1400	26	29	23000	
29E-SP09	40	410	260	360		26		210	4200	91	58	130			840	33	30	18000	
29E-SP10	10	10		4.8	4.4	16					8.6	44	7.8				10	340	
29E-SP10	20	100	35	100	11				92	5.6	56	130	9.4				38	780	
29E-SP11	10				9.6	19			96		47	20	13			76	84	12	
29E-SP11	20	29	120	330	16			31	480		32	260			240	74	37	15000	7.6
59E-SP08	10				42							51						310	
59E-SP09	10											100			950			5900	
59E-SP10	20					10			64		33	60	6.8		13	14	38	82	
59E-SP13	20											4.6			18	5.7	5.5	6.9	
DSA-SP04	10																	2700	
DSA-SP04	20	180	470	210				4200	110000	57	96	370			280	110	52	98000	
DSA-SP04	30	320	770	200				3700	100000			74			1400	51		160000	
DSA-SP04	40	250	580	160				2600	72000			84			1200	46		130000	
DSA-SP05	10								360									6700	
DSA-SP05	20		47			17			480		40	160	5.9		7.8	110	36	4700	
DSA-SP06	10					12					7.0	8.9	5.8			5.7	7.5	690	
DSA-SP06	20					47						8.6	8.4				12		
DSA-SP07	10																	2200	
DSA-SP07	20																5.6		
DSA-SP08	10		210		21	20			170			57				4.8	17	230	
DSA-SP08	20		530		4.8	33			150		48	240	8.8			130	45	820	
DSA-SP09	10					10			90				6.2			3.7	5.8	170	
DSA-SP09	20		6.5		18	88			720		21	95				4.4	7.4	2100	
DSA-SP10	10					22			200		78	230				12	36	66	
DSA-SP10	20	15	93			13	6.6	200	11000	7.4	180	450	8.1			47	63	2000	
DSA-SP10	30	78	160					1100	62000									7700	
DSA-SP10	40		85		16			730	44000	26		76				15		2900	
DSA-SP11	10				9.8			20	1400		76	240					20	59	
DSA-SP11	20		49					7.6	540		34	57	11	5.0		5.2	11	31	
DSA-SP12	10		7.2		11			21	720	6.5	92	170					13	24	
DSA-SP12	20	51	180					40	1100	7.2	5.0	6.9			200	3.7	11	540	
DSA-SP13	10				41		14	75	6200	6.3	800	1600	12	5.2	18		120	120	
DSA-SP13	20				24			200	10000		520	870					49	410	
DSA-SP15	10														68			260	
DSA-SP15	20		7.4		4.1	13			40			8.3			51	3.6	5.0	170	
DSA-SP15	30		19		14	13		59	14000	7.2		120			37	7.3	9.6	130	
DSA-SP16	10		270					720	90000		88	98					36	840	
DSA-SP16	20		1000					1200	160000		67	110						2000	
DSA-SP16	30		1400					1700	190000		110	270				67		1900	
DSA-SP16	40		1600					2000	220000			83						3500	
DSA-SP17	10				9.2							49					6.3	2400	
DSA-SP17	20		44		5.0				9.3			29					25	1300	
DSA-SP17	30		150			9.7			11		8.2	15				8.2	24	910	
DSA-SP18	10				27	100	43				54	100	150	34		11	380		
DSA-SP18	20				67	71	160				160	340	510	110			1500		
DSA-SP19	10				24	32	140				80	93	510	120			870		

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		5.6 E+1	4.9 E+1	6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	7.4 E+0	7.4 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		2.2 E-2	1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
DSA-SP19	20				15	240	10				22	50	30	7.0		12	120		
DSA-SP20	10		6.7				6.7	48	7900		21	46	9.9		7.8	8.2	47	3000	
DSA-SP20	20		99		50		27	240	35000		190	570	61	16		21	97	24000	
DSA-SP21	10		16				14		1000		100	270	44	18			47	14	
DSA-SP21	20		31			9.8	13	24	4000		74	260	43	19			46	34	
DSA-SP22	10						15	13	1500		160	610	44	19			73	82	
DSA-SP22	20						12	33	5400		240	840	38	17			36	170	
DSA-SP23	10							120	24000		68	140	20					130	
DSA-SP23	20							180	29000		25	36	30	14				360	
DSA-SP23	30							180	28000		12	22	34	15	22			1200	
DSA-SP24	10		19				34	65	8200	6.8	120	260	110	43			160	180	
DSA-SP24	20					100	22	200	24000	14	190	360	60	25			120	450	
DSA-SP24	30		110			16	17	200	24000	14	220	520	43	18			160	1700	
DSA-SP25	10		26					66	9500		34	39	5.3		32		9.9		
DSA-SP25	20							320	45000		140	420			70		23		
DSA-SP26	10				61			310	24000		240	1600	10		32		25		
DSA-SP26	20							1200	120000		1200	3200			310		180		
DSA-SP27	10		20					64	7100		27	120			22		5.3	530	
DSA-SP27	20		6.0					81	8600		52	78	5.6		12	3.6	16	2200	
DSA-SP28	10				6.0	57	6.3				54	66	8.9				36	20	
DSA-SP28	20				4.2	120					47	48	7.4				37		
DSA-SP29	10		15			12			35			4.0	20	15			7.0		
DSA-SP30	10					39					7.2	7.1					14		
DSA-SP30	20				8.9	83	7.5				65	100	6.2			4.7	67		
DSA-SP31	10				10	39	7.3				67	100	19	6.6		4.3	76		
DSA-SP31	20				7.3	11			340		43	74	13				31		
DSA-SP32	10					11	7.4	96	2200	6.6	22	30	16	6.6			49		
DSA-SP32	20		8.1		36	370	26	15	300		250	240	38	16			340		
E(d)-SP02	10				22			88	3800		7.9	28	7.9		13		14	27	
E(d)-SP02	20				8.0	29		42	2100		530	620	8.8			160	58	100	
E(d)-SP03	10				100			120	4800	12	14	120					15	44	
E(m)-SP08	10				4.8	42	7.1				13	19	19	7.4	16		130		
E(m)-SP08	20				7.8	36			16		41	250	9.3		19	170	57	94	
E(M)-SP09	10				5.0	26					22	46			48		36		
E(M)-SP09	20		5.4		10	35			160		39	210	7.3		83	170	62	120	
E(m)-SP10	10	20			46				22		11	77	6.8		420		22	160	
E(m)-SP10	20	62							49			12	28	16	4900		23	790	
E(m)-SP11	20					30			58		12	16	5.5		20	4.2	14		
E(n)-SP04	10				21	11			19		6.4	39	5.3				16		
E(n)-SP04	20		9.2		6.2				260		29	67	7.2		11	8.5	18	110	
E(n)-SP05	10								28			5.0	5.9		630		8.9		
E(n)-SP05	20	11				9.8	7.1		63		76	160	11		2000	17	46	1600	
E(n)-SP05	40	77	40			22			490			13			20000	20	22	2600	
E(n)-SP06	10								21			14			11		11	60	
E(n)-SP06	20	32	18		6.8	13	11	14	180		5.4	29	27	7.3	15	9.6	42	160	
E(n)-SP07	10		11		4.6			13	220			8.8			17		11	53	
E(n)-SP08	10		8.4		17	11			14			25	9.0				18	240	
E(n)-SP08	20		210						13		8.1	27				12	14	460	
E(n)-SP09	10		16		29							22	8.5				15	32	
E(n)-SP09	20	8.1	540		17				13		21	59	7.0			44	27	49	
E(N)-SP10	10					10					9.6	44			20	5.5	16	8.9	
E(N)-SP10	20					11					20	100			17	20	28	16	
E(n)-SP11	15					28					7.4	9.9	6.0			5.2	24		
E(n)-SP11	25		190						240			12	7.3			9.4	18	47	
E(n)-SP12	10					560						7.8				8.0	14		
E(n)-SP12	20		9.4			100			40		7.3	24			20	20	29	24	
L2-ST24-SP03	10				20							11					6.3		
L2-ST24-SP03	20		47		5.6	18	6.9		28		51	220	13		190	24	39	210	
L2-ST26-SP04	10																		

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		5.6 E+1	4.9 E+1	6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	7.4 E+0	7.4 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		2.2 E-2	1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
L2-ST26-SP04	20					14	5.4				220	740	11		150	40	47	690	
L2-ST26-SP05	10				10	14					35	72	12		140		110		
L2-ST26-SP05	20			11	65	47	14		14		900	2300	21	6.3	360	70	100	510	
L2-ST26-SP06	10				4.6	52						6.1			9.9		12		
L2-ST26-SP06	20					25	6.4		39		40	78	18		330	18	28	420	
L2-ST26-SP07	18				11	49	22				66	140	59	22			56	7.6	6.7
L2-ST28_90-SP02	10				43	290		280	8800		20	72	18			18	42	81	
L2-ST28_90-SP02	20		53	9.8	26	20	10	48	1300		670	1800	21		130	80	76	2400	

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
28E-SP16	10	9.1 E-3	NA	3.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	8.4 E-2	NA	NA	NA	NA	NA	NA	NA	2.1 E+0	NA	NA	NA	NA	NA	9.3 E-3
28E-SP16	30	NA	5.2 E-5	9.5 E-3	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	8.5 E-5	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	2.3 E-5
29E-SP07	20	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	1.1 E-4
29E-SP08	10	NA	NA	NA	9.6 E-4	NA	NA	NA	NA	2.1 E-5	NA	9.2 E-3	7.7 E-5	8.5 E-6	1.8 E-4	1.7 E-3	NA	2.3 E-4
29E-SP08	20	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	3.2 E-6	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA
29E-SP09	20	4.8 E-6	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5
29E-SP09	40	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	1.0 E-4	NA	1.6 E-5
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-6	NA	NA	NA	NA	8.7 E-5	1.2 E-3	NA	8.9 E-6
29E-SP10	20	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	2.6 E-5	7.6 E-4	NA	2.0 E-5
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	1.2 E-2	NA	1.5 E-5	1.2 E-4	8.5 E-4	NA	7.0 E-5
29E-SP11	20	NA	NA	1.9 E-3	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	5.0 E-5
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	1.9 E-4	NA	3.7 E-5
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	3.3 E-5	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	1.5 E-4
DSA-SP04	30	NA	3.1 E-5	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5
DSA-SP04	40	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4
DSA-SP05	20	1.7 E-6	NA	1.9 E-4	NA	2.2 E-3	NA	7.7 E-6	NA	1.4 E-6	NA	8.9 E-4	NA	9.6 E-7	2.5 E-5	4.2 E-4	1.4 E-4	3.9 E-4
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.1 E-4	NA	3.0 E-4
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	8.9 E-4	NA	NA	1.9 E-4	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	2.8 E-4
DSA-SP08	20	NA	NA	NA	NA	NA	NA	9.5 E-6	NA	7.1 E-6	NA	1.7 E-3	NA	1.7 E-6	6.8 E-5	9.5 E-4	NA	4.8 E-4
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5
DSA-SP09	20	2.5 E-6	NA	3.0 E-4	NA	NA	NA	NA	NA	4.4 E-6	NA	2.0 E-3	NA	NA	1.9 E-4	2.9 E-4	NA	2.1 E-4
DSA-SP10	10	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	2.9 E-4	3.0 E-3	NA	3.0 E-4
DSA-SP10	20	NA	NA	5.9 E-4	NA	9.6 E-4	NA	5.4 E-6	NA	2.8 E-6	NA	NA	NA	NA	3.1 E-5	2.3 E-3	NA	1.1 E-3
DSA-SP10	30	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5
DSA-SP10	40	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	5.2 E-5
DSA-SP11	10	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	3.6 E-4
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	3.0 E-4
DSA-SP12	10	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	2.8 E-4
DSA-SP12	20	1.5 E-6	1.0 E-5	1.7 E-4	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	1.3 E-4	NA	1.6 E-5
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-6	NA	1.5 E-3	NA	NA	5.3 E-5	5.0 E-3	NA	4.0 E-4
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	2.8 E-4
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-6
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4	NA	NA	4.3 E-5	NA	NA	6.9 E-5
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	4.2 E-5	1.9 E-4	NA	2.0 E-4
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	3.2 E-4
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-5
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	8.5 E-5
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	1.7 E-5
DSA-SP18	10	NA	NA	NA	1.7 E-3	NA	NA	NA	1.7 E-4	7.1 E-5	NA	NA	2.3 E-4	NA	6.2 E-5	2.2 E-3	NA	NA
DSA-SP18	20	NA	NA	NA	2.2 E-3	NA	7.8 E-4	NA	3.9 E-4	6.6 E-5	1.2 E-5	NA	3.7 E-4	NA	7.1 E-5	3.6 E-3	NA	1.2 E-5
DSA-SP19	10	NA	NA	NA	6.0 E-3	NA	2.0 E-3	NA	2.1 E-4	NA	NA	NA	8.6 E-4	2.9 E-6	3.1 E-5	3.1 E-3	NA	5.8 E-5

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	4.2 E-5	NA	1.1 E-3	NA	NA	3.1 E-5	5.0 E-4	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	1.1 E-4	1.2 E-3	NA	3.6 E-5
DSA-SP20	20	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	1.2 E-5	NA	NA	1.1 E-4	NA	8.8 E-5	4.0 E-3	NA	1.3 E-4
DSA-SP21	10	NA	NA	NA	2.7 E-3	NA	1.1 E-3	NA	NA	NA	NA	NA	2.2 E-4	NA	3.9 E-5	4.6 E-4	NA	6.0 E-5
DSA-SP21	20	NA	NA	NA	2.0 E-3	NA	6.6 E-4	NA	4.5 E-5	6.8 E-6	NA	NA	1.4 E-4	1.1 E-6	1.1 E-4	5.0 E-4	NA	7.5 E-4
DSA-SP22	10	NA	NA	NA	2.3 E-3	NA	8.9 E-4	NA	1.5 E-4	8.7 E-6	NA	NA	2.1 E-4	2.8 E-6	1.1 E-4	2.3 E-3	NA	4.3 E-5
DSA-SP22	20	NA	NA	NA	1.6 E-3	NA	5.5 E-4	NA	9.9 E-5	5.8 E-6	NA	NA	1.2 E-4	1.0 E-6	6.8 E-5	5.5 E-4	NA	6.4 E-5
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-6	NA	NA	NA	NA	8.7 E-5	7.7 E-4	NA	1.5 E-4
DSA-SP23	20	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	9.7 E-5	2.5 E-4	NA	5.4 E-4
DSA-SP23	30	NA	NA	NA	9.7 E-4	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	3.8 E-5	1.7 E-4	NA	1.4 E-4
DSA-SP24	10	NA	NA	NA	3.5 E-3	NA	1.7 E-3	NA	6.9 E-4	4.7 E-6	NA	NA	4.9 E-4	NA	5.8 E-5	1.8 E-3	NA	1.0 E-4
DSA-SP24	20	NA	NA	NA	1.6 E-3	NA	NA	NA	6.6 E-4	3.8 E-6	NA	NA	1.6 E-4	NA	5.4 E-5	1.6 E-3	NA	1.8 E-4
DSA-SP24	30	1.0 E-6	NA	NA	7.5 E-4	NA	NA	NA	5.6 E-4	6.4 E-6	NA	NA	6.9 E-5	NA	1.3 E-4	2.0 E-3	NA	3.9 E-5
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	1.0 E-4
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	3.7 E-4
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	2.3 E-4
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	1.5 E-4
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	1.3 E-4
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	1.5 E-4	NA	1.9 E-4
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	2.6 E-6	1.2 E-4	1.2 E-3	NA	7.2 E-5
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	5.0 E-6	2.5 E-3	NA	8.2 E-6	1.0 E-4	5.3 E-4	NA	3.4 E-5
DSA-SP29	10	NA	NA	NA	4.4 E-3	NA	1.7 E-3	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	1.9 E-5
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	2.9 E-4	NA	1.4 E-4
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	NA	NA	8.3 E-5	1.4 E-3	NA	7.7 E-6
DSA-SP31	10	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	3.3 E-5	NA	8.0 E-3	6.5 E-5	1.2 E-5	3.1 E-4	2.4 E-3	NA	5.7 E-5
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-6	NA	NA	NA	NA	6.3 E-5	8.4 E-4	NA	7.6 E-5
DSA-SP32	10	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	1.2 E-5	NA	1.7 E-3	NA	NA	9.1 E-5	1.2 E-3	NA	3.6 E-5
DSA-SP32	20	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	6.5 E-5	1.0 E-5	1.5 E-2	4.5 E-5	5.9 E-6	5.7 E-4	6.1 E-3	NA	2.3 E-5
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	1.1 E-4
E(d)-SP02	20	NA	NA	2.4 E-4	NA	NA	NA	1.3 E-5	NA	5.9 E-6	NA	1.4 E-3	NA	1.9 E-6	6.0 E-5	8.2 E-4	NA	5.3 E-4
E(d)-SP03	10	NA	NA	2.4 E-4	NA	NA	NA	NA	8.4 E-4	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	5.5 E-5
E(m)-SP08	10	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	6.0 E-6	NA	NA	9.9 E-5	NA	5.3 E-5	8.5 E-4	NA	2.6 E-4
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	4.2 E-6	NA	1.4 E-3	NA	1.9 E-6	4.6 E-5	6.3 E-4	NA	1.2 E-4
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	6.7 E-5	1.1 E-3	NA	1.9 E-4
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	8.0 E-6	NA	1.1 E-5	NA	1.7 E-3	NA	1.9 E-6	1.1 E-4	1.6 E-3	NA	3.7 E-4
E(m)-SP10	10	1.9 E-6	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	3.3 E-5	6.9 E-4	NA	1.5 E-4
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	1.5 E-6	1.1 E-4	3.2 E-4	NA	2.1 E-5
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	4.9 E-6	NA	NA	NA	NA	5.8 E-5	5.0 E-4	NA	1.3 E-4
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	1.4 E-3
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	9.0 E-6
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	7.3 E-6	NA	NA	NA	NA	6.3 E-5	7.2 E-4	NA	4.1 E-3
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	NA	NA	NA	NA	3.5 E-5	3.5 E-4	NA	4.3 E-4
E(n)-SP06	20	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	8.2 E-5	NA	4.8 E-5
E(n)-SP07	10	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	2.6 E-4	NA	2.1 E-4
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	4.5 E-5	3.5 E-4	NA	3.6 E-4
E(n)-SP08	20	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	5.6 E-4
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	4.4 E-5	8.5 E-4	NA	4.9 E-5
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	6.7 E-6	7.2 E-5	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	5.0 E-5
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	4.2 E-4	NA	1.4 E-4
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	3.1 E-5	4.6 E-4	NA	6.8 E-4
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	2.0 E-3	NA	NA	8.4 E-5	2.4 E-4	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	1.2 E-5
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-6	NA	NA	NA	NA	6.2 E-5	1.7 E-4	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	NA	NA	6.0 E-5	1.5 E-4	NA	1.4 E-5
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	8.3 E-5	NA	NA	NA	NA	NA	2.6 E-5	1.6 E-4	NA	1.2 E-4
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	2.5 E-5	5.7 E-4	NA	8.8 E-5
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	8.0 E-6	NA	NA	NA	NA	NA	1.1 E-6	NA	5.0 E-4	NA	1.9 E-4
L2-ST26-SP05	10	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	9.6 E-6	NA	NA	8.0 E-5	NA	8.7 E-5	2.6 E-3	NA	7.9 E-4
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	2.5 E-5	NA	1.6 E-3	NA	2.7 E-6	1.5 E-4	2.5 E-3	NA	2.4 E-4
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	2.0 E-4	NA	4.1 E-5
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	2.3 E-6	NA	NA	NA	NA	1.7 E-5	2.1 E-4	NA	2.0 E-4
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	1.2 E-3	NA	NA	9.0 E-4	2.3 E-3	NA	1.8 E-4
L2-ST28_90-SP02	10	NA	NA	4.2 E-4	NA	NA	NA	NA	9.2 E-4	3.1 E-5	NA	4.4 E-3	NA	NA	5.8 E-4	8.5 E-4	NA	7.9 E-5
L2-ST28_90-SP02	20	NA	NA	5.2 E-4	NA	NA	NA	9.5 E-6	NA	1.0 E-5	NA	NA	NA	NA	7.4 E-5	1.7 E-3	NA	8.3 E-4

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
28E-SP16	10	NA	NA	1.6 E+0	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	NA	2.3 E+1	NA	2.3 E-2	1.8 E+1	NA	4.2 E+1
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	1.5 E+0	NA	NA	3.1 E+0	NA	6.7 E+0
28E-SP16	30	NA	3.5 E-3	1.5 E-2	NA	NA	NA	NA	3.2 E-5	NA	1.5 E-4	2.8 E-4	NA	NA	2.0 E-2	NA	NA	1.2 E-1	NA	1.9 E-1
28E-SP16	40	NA	4.4 E-3	1.8 E-2	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	1.9 E-1	NA	3.3 E-1
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	8.4 E-7	NA	NA	NA	NA	NA	1.7 E-3	NA	3.2 E-5	NA	NA	1.8 E-3
29E-SP07	20	1.6 E-4	4.0 E-4	3.4 E-4	NA	NA	NA	3.5 E-5	4.5 E-6	NA	4.3 E-5	1.1 E-4	NA	NA	1.1 E-2	NA	1.5 E-5	8.6 E-3	NA	2.2 E-2
29E-SP08	10	NA	NA	1.5 E-4	1.2 E-6	4.9 E-5	5.3 E-6	NA	1.4 E-6	NA	2.4 E-4	2.0 E-4	1.5 E-4	6.1 E-5	NA	1.9 E-4	2.7 E-4	6.8 E-4	NA	1.4 E-2
29E-SP08	20	NA	8.1 E-4	2.5 E-2	NA	NA	NA	NA	6.8 E-6	NA	NA	6.7 E-5	NA	NA	2.4 E-2	NA	NA	6.0 E-2	NA	1.1 E-1
29E-SP08	30	4.1 E-4	6.0 E-4	3.5 E-3	NA	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	2.8 E-2	NA	6.0 E-2
29E-SP08	40	3.0 E-4	5.5 E-4	1.9 E-3	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	2.1 E-2	NA	5.0 E-2
29E-SP09	10	5.8 E-2	2.9 E-2	9.5 E-3	NA	NA	NA	NA	4.2 E-6	6.9 E-5	3.3 E-5	4.5 E-5	NA	NA	NA	NA	7.6 E-5	3.2 E-2	NA	1.3 E-1
29E-SP09	20	1.0 E-1	3.9 E-2	2.2 E-2	NA	NA	NA	NA	1.1 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	8.7 E-5	5.8 E-2	NA	2.2 E-1
29E-SP09	30	2.7 E-3	2.3 E-3	3.5 E-3	NA	NA	NA	3.7 E-4	4.9 E-5	1.7 E-4	1.2 E-4	2.1 E-4	NA	NA	1.4 E-2	4.4 E-5	4.2 E-5	1.5 E-2	NA	4.6 E-2
29E-SP09	40	3.0 E-3	2.2 E-3	2.9 E-3	NA	7.2 E-6	NA	3.5 E-4	4.1 E-5	1.2 E-4	5.8 E-5	1.3 E-4	NA	NA	6.6 E-3	4.3 E-5	3.3 E-5	9.1 E-3	NA	3.1 E-2
29E-SP10	10	2.6 E-4	NA	1.4 E-4	7.9 E-7	1.4 E-5	NA	NA	NA	NA	2.6 E-5	1.3 E-4	8.1 E-5	NA	NA	NA	3.8 E-5	6.1 E-4	NA	2.6 E-3
29E-SP10	20	1.4 E-3	5.6 E-4	1.5 E-3	1.1 E-6	NA	NA	NA	1.7 E-6	1.4 E-5	1.0 E-4	2.4 E-4	5.5 E-5	NA	NA	NA	8.3 E-5	7.5 E-4	NA	5.6 E-3
29E-SP11	10	NA	NA	NA	1.7 E-6	1.7 E-5	NA	NA	3.4 E-6	NA	1.4 E-4	5.9 E-5	1.4 E-4	NA	NA	3.4 E-4	3.2 E-4	2.1 E-5	NA	1.4 E-2
29E-SP11	20	4.1 E-4	1.9 E-3	5.1 E-3	1.6 E-6	NA	NA	9.7 E-5	9.1 E-6	NA	6.0 E-5	4.9 E-4	NA	NA	3.6 E-3	1.9 E-4	8.1 E-5	1.5 E-2	5.7 E-5	2.9 E-2
59E-SP08	10	NA	NA	NA	7.6 E-6	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	5.5 E-4	NA	7.1 E-4
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	2.7 E-2	NA	NA	1.1 E-2	NA	3.9 E-2
59E-SP10	20	NA	NA	NA	NA	5.4 E-6	NA	NA	1.2 E-6	NA	6.2 E-5	1.1 E-4	4.0 E-5	NA	2.0 E-4	3.6 E-5	8.3 E-5	7.9 E-5	NA	8.7 E-4
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	2.7 E-4	1.5 E-5	1.2 E-5	6.7 E-6	NA	3.3 E-4
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3	NA	4.8 E-3
DSA-SP04	20	2.6 E-3	7.6 E-3	3.2 E-3	NA	NA	NA	1.3 E-2	2.1 E-3	1.5 E-4	1.8 E-4	6.9 E-4	NA	NA	4.2 E-3	2.8 E-4	1.1 E-4	9.5 E-2	NA	1.6 E-1
DSA-SP04	30	3.1 E-3	8.6 E-3	2.1 E-3	NA	NA	NA	8.0 E-3	1.3 E-3	NA	NA	9.5 E-5	NA	NA	1.4 E-2	8.7 E-5	NA	1.1 E-1	NA	1.7 E-1
DSA-SP04	40	1.9 E-3	4.9 E-3	1.3 E-3	NA	NA	NA	4.3 E-3	7.1 E-4	NA	NA	8.4 E-5	NA	NA	9.4 E-3	6.0 E-5	NA	6.6 E-2	NA	1.0 E-1
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	1.2 E-2
DSA-SP05	20	NA	7.6 E-4	NA	NA	9.1 E-6	NA	NA	9.1 E-6	NA	7.5 E-5	3.0 E-4	3.5 E-5	NA	1.2 E-4	2.8 E-4	7.9 E-5	4.5 E-3	NA	1.1 E-2
DSA-SP06	10	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	2.1 E-5	2.6 E-5	6.0 E-5	NA	NA	2.5 E-5	2.9 E-5	1.2 E-3	NA	2.0 E-3
DSA-SP06	20	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	1.6 E-5	4.9 E-5	NA	NA	NA	2.6 E-5	NA	NA	1.2 E-3
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-3	NA	4.0 E-3
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	1.2 E-5
DSA-SP08	10	NA	6.1 E-3	NA	3.8 E-6	1.8 E-5	NA	NA	5.9 E-6	NA	NA	1.7 E-4	NA	NA	NA	2.1 E-5	6.5 E-5	4.1 E-4	NA	8.1 E-3
DSA-SP08	20	NA	8.5 E-3	NA	4.9 E-7	1.8 E-5	NA	NA	2.8 E-6	NA	9.0 E-5	4.5 E-4	5.2 E-5	NA	NA	3.4 E-4	9.8 E-5	7.9 E-4	NA	1.4 E-2
DSA-SP09	10	NA	NA	NA	NA	9.0 E-6	NA	NA	3.1 E-6	NA	NA	NA	6.5 E-5	NA	NA	1.6 E-5	2.2 E-5	3.0 E-4	NA	4.7 E-4
DSA-SP09	20	NA	1.0 E-4	NA	1.8 E-6	4.7 E-5	NA	NA	1.4 E-5	NA	3.9 E-5	1.8 E-4	NA	NA	NA	1.1 E-5	1.6 E-5	2.0 E-3	NA	5.4 E-3
DSA-SP10	10	NA	NA	NA	NA	2.0 E-5	NA	NA	7.0 E-6	NA	2.3 E-4	6.8 E-4	NA	NA	NA	5.3 E-5	1.4 E-4	1.2 E-4	NA	6.5 E-3
DSA-SP10	20	2.1 E-4	1.5 E-3	NA	NA	7.0 E-6	3.6 E-6	6.3 E-4	2.1 E-4	1.9 E-5	3.4 E-4	8.4 E-4	4.8 E-5	NA	NA	1.2 E-4	1.4 E-4	1.9 E-3	NA	1.1 E-2
DSA-SP10	30	7.6 E-4	1.8 E-3	NA	NA	NA	NA	2.4 E-3	8.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	1.3 E-2
DSA-SP10	40	NA	7.3 E-4	NA	8.2 E-7	NA	NA	1.2 E-3	4.3 E-4	3.3 E-5	NA	7.6 E-5	NA	NA	NA	2.0 E-5	NA	1.5 E-3	NA	4.8 E-3
DSA-SP11	10	NA	NA	NA	1.8 E-6	NA	NA	1.2 E-4	4.9 E-5	NA	2.3 E-4	7.1 E-4	NA	NA	NA	NA	7.6 E-5	1.1 E-4	NA	4.4 E-3
DSA-SP11	20	NA	7.9 E-4	NA	NA	NA	NA	2.4 E-5	1.0 E-5	NA	6.3 E-5	1.1 E-4	6.5 E-5	3.3 E-5	NA	1.3 E-5	2.4 E-5	3.0 E-5	NA	1.6 E-3
DSA-SP12	10	NA	2.1 E-4	NA	2.0 E-6	NA	NA	1.2 E-4	2.5 E-5	3.0 E-5	2.7 E-4	5.0 E-4	NA	NA	NA	NA	5.0 E-5	4.3 E-5	NA	4.4 E-3
DSA-SP12	20	7.3 E-4	2.9 E-3	NA	NA	NA	NA	1.3 E-4	2.1 E-5	1.9 E-5	9.3 E-6	1.3 E-5	NA	NA	3.0 E-3	9.6 E-6	2.4 E-5	5.2 E-4	NA	8.5 E-3
DSA-SP13	10	NA	NA	NA	7.4 E-6	NA	1.4 E-5	4.3 E-4	2.2 E-4	2.9 E-5	2.4 E-3	4.7 E-3	1.2 E-4	6.0 E-5	5.1 E-4	NA	4.6 E-4	2.1 E-4	NA	1.6 E-2
DSA-SP13	20	NA	NA	NA	2.5 E-6	NA	NA	6.3 E-4	1.9 E-4	NA	9.7 E-4	1.6 E-3	NA	NA	NA	NA	1.1 E-4	4.0 E-4	NA	5.0 E-3
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	4.6 E-4	NA	2.4 E-3
DSA-SP15	20	NA	1.2 E-4	NA	4.2 E-7	7.0 E-6	NA	NA	7.6 E-7	NA	NA	1.5 E-5	NA	NA	7.7 E-4	9.3 E-6	1.1 E-5	1.6 E-4	NA	2.1 E-3
DSA-SP15	30	NA	2.1 E-4	NA	9.4 E-7	4.7 E-6	NA	1.3 E-4	1.8 E-4	1.2 E-5	NA	1.5 E-4	NA	NA	3.8 E-4	1.2 E-5	1.4 E-5	8.6 E-5	NA	2.4 E-3
DSA-SP16	10	NA	7.8 E-3	NA	NA	NA	NA	4.1 E-3	3.1 E-3	NA	2.6 E-4	2.9 E-4	NA	NA	NA	NA	1.4 E-4	1.5 E-3	NA	1.8 E-2
DSA-SP16	20	NA	1.6 E-2	NA	NA	NA	NA	3.8 E-3	3.0 E-3	NA	1.3 E-4	2.1 E-4	NA	NA	NA	NA	NA	1.9 E-3	NA	2.6 E-2
DSA-SP16	30	NA	1.6 E-2	NA	NA	NA	NA	3.7 E-3	2.5 E-3	NA	1.4 E-4	3.5 E-4	NA	NA	NA	1.1 E-4	NA	1.3 E-3	NA	2.4 E-2
DSA-SP16	40	NA	1.4 E-2	NA	NA	NA	NA	3.3 E-3	2.2 E-3	NA	NA	8.3 E-5	NA	NA	NA	NA	NA	1.8 E-3	NA	2.1 E-2
DSA-SP17	10	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	2.4 E-5	4.3 E-3	NA	4.6 E-3
DSA-SP17	20	NA	7.1 E-4	NA	5.1 E-7	NA	NA	NA	1.8 E-7	NA	NA	5.4 E-5	NA	NA	NA	NA	5.5 E-5	1.3 E-3	NA	2.3 E-3
DSA-SP17	30	NA	1.7 E-3	NA	NA	3.5 E-6	NA	NA	1.4 E-7	NA	1.1 E-5	1.9 E-5	NA	NA	NA	1.4 E-5	3.4 E-5	6.0 E-4	NA	2.4 E-3
DSA-SP18	10	NA	NA	NA	4.9 E-6	9.0 E-5	4.4 E-5	NA	NA	NA	1.6 E-4	3.0 E-4	1.6 E-3	3.9 E-4	NA	4.9 E-5	1.4 E-3	NA	NA	8.4 E-3
DSA-SP18	20	NA	NA	NA	6.9 E-6	3.8 E-5	8.8 E-5	NA	NA	NA	3.0 E-4	6.3 E-4	3.0 E-3	7.2 E-4	NA	NA	3.3 E-3	NA	NA	1.6 E-2
DSA-SP19	10	NA	NA	NA	4.3 E-6	2.9 E-5	1.4 E-4	NA	NA	NA	2.4 E-4	2.8 E-4	5.3 E-3	1.4 E-3	NA	NA	3.3 E-3	NA	NA	2.3 E-2

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
DSA-SP19	20	NA	NA	NA	1.5 E-6	1.3 E-4	5.5 E-6	NA	NA	NA	4.1 E-5	9.3 E-5	1.8 E-4	4.6 E-5	NA	3.1 E-5	2.6 E-4	NA	NA	2.5 E-3
DSA-SP20	10	NA	1.9 E-4	NA	NA	NA	6.8 E-6	2.8 E-4	2.8 E-4	NA	6.2 E-5	1.4 E-4	1.0 E-4	NA	2.2 E-4	3.6 E-5	1.8 E-4	5.4 E-3	NA	8.2 E-3
DSA-SP20	20	NA	1.6 E-3	NA	5.1 E-6	NA	1.5 E-5	7.5 E-4	6.6 E-4	NA	3.5 E-4	1.1 E-3	3.6 E-4	1.1 E-4	NA	5.4 E-5	2.1 E-4	2.3 E-2	NA	3.4 E-2
DSA-SP21	10	NA	4.6 E-4	NA	NA	NA	1.4 E-5	NA	3.5 E-5	NA	3.0 E-4	8.0 E-4	4.6 E-4	2.1 E-4	NA	NA	1.8 E-4	2.5 E-5	NA	7.0 E-3
DSA-SP21	20	NA	5.0 E-4	NA	NA	5.2 E-6	7.1 E-6	7.5 E-5	7.6 E-5	NA	1.4 E-4	4.9 E-4	2.5 E-4	1.2 E-4	NA	NA	1.0 E-4	3.3 E-5	NA	6.0 E-3
DSA-SP22	10	NA	NA	NA	NA	NA	1.5 E-5	7.5 E-5	5.2 E-5	NA	4.7 E-4	1.8 E-3	4.6 E-4	2.2 E-4	NA	NA	2.8 E-4	1.5 E-4	NA	9.5 E-3
DSA-SP22	20	NA	NA	NA	NA	NA	6.6 E-6	1.0 E-4	1.0 E-4	NA	4.5 E-4	1.6 E-3	2.2 E-4	1.1 E-4	NA	NA	7.9 E-5	1.6 E-4	NA	5.9 E-3
DSA-SP23	10	NA	NA	NA	NA	NA	NA	6.9 E-4	8.4 E-4	NA	2.0 E-4	4.2 E-4	2.1 E-4	NA	NA	NA	NA	2.3 E-4	NA	3.6 E-3
DSA-SP23	20	NA	NA	NA	NA	NA	NA	5.7 E-4	5.5 E-4	NA	4.7 E-5	6.7 E-5	1.8 E-4	9.2 E-5	NA	NA	NA	3.5 E-4	NA	4.2 E-3
DSA-SP23	30	NA	NA	NA	NA	NA	NA	3.9 E-4	3.6 E-4	NA	1.5 E-5	2.8 E-5	1.3 E-4	6.5 E-5	2.3 E-4	NA	NA	8.0 E-4	NA	3.4 E-3
DSA-SP24	10	NA	5.5 E-4	NA	NA	NA	3.5 E-5	3.7 E-4	2.9 E-4	3.1 E-5	3.6 E-4	7.7 E-4	1.1 E-3	4.9 E-4	NA	NA	6.1 E-4	3.2 E-4	NA	1.3 E-2
DSA-SP24	20	NA	NA	NA	NA	5.4 E-5	1.2 E-5	6.3 E-4	4.5 E-4	3.6 E-5	3.5 E-4	6.7 E-4	3.5 E-4	1.6 E-4	NA	NA	2.6 E-4	4.4 E-4	NA	7.7 E-3
DSA-SP24	30	NA	1.2 E-3	NA	NA	5.7 E-6	6.4 E-6	4.3 E-4	3.1 E-4	2.4 E-5	2.8 E-4	6.7 E-4	1.7 E-4	7.8 E-5	NA	NA	2.3 E-4	1.1 E-3	NA	8.1 E-3
DSA-SP25	10	NA	7.5 E-4	NA	NA	NA	NA	3.8 E-4	3.3 E-4	NA	1.0 E-4	1.2 E-4	5.5 E-5	NA	9.0 E-4	NA	3.8 E-5	NA	NA	3.2 E-3
DSA-SP25	20	NA	NA	NA	NA	NA	NA	1.0 E-3	8.5 E-4	NA	2.6 E-4	7.8 E-4	NA	NA	1.1 E-3	NA	5.0 E-5	NA	NA	4.9 E-3
DSA-SP26	10	NA	NA	NA	1.1 E-5	NA	NA	1.8 E-3	8.4 E-4	NA	7.1 E-4	4.7 E-3	1.0 E-4	NA	9.0 E-4	NA	9.5 E-5	NA	NA	1.2 E-2
DSA-SP26	20	NA	NA	NA	NA	NA	NA	3.8 E-3	2.3 E-3	NA	2.2 E-3	6.0 E-3	NA	NA	4.7 E-3	NA	3.9 E-4	NA	NA	2.5 E-2
DSA-SP27	10	NA	5.8 E-4	NA	NA	NA	NA	3.7 E-4	2.5 E-4	NA	8.0 E-5	3.6 E-4	NA	NA	6.2 E-4	NA	2.0 E-5	9.5 E-4	NA	3.6 E-3
DSA-SP27	20	NA	9.7 E-5	NA	NA	NA	NA	2.5 E-4	1.6 E-4	NA	9.7 E-5	1.5 E-4	3.3 E-5	NA	1.8 E-4	9.3 E-6	3.5 E-5	2.1 E-3	NA	3.5 E-3
DSA-SP28	10	NA	NA	NA	1.1 E-6	5.1 E-5	6.4 E-6	NA	NA	NA	1.6 E-4	2.0 E-4	9.3 E-5	NA	NA	NA	1.4 E-4	3.6 E-5	NA	2.0 E-3
DSA-SP28	20	NA	NA	NA	4.3 E-7	6.4 E-5	NA	NA	NA	NA	8.8 E-5	9.0 E-5	4.4 E-5	NA	NA	NA	8.1 E-5	NA	NA	3.6 E-3
DSA-SP29	10	NA	4.3 E-4	NA	NA	1.1 E-5	NA	NA	1.2 E-6	NA	NA	1.2 E-5	2.1 E-4	1.7 E-4	NA	NA	2.7 E-5	NA	NA	7.1 E-3
DSA-SP30	10	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	2.1 E-5	2.1 E-5	NA	NA	NA	NA	5.3 E-5	NA	NA	6.4 E-4
DSA-SP30	20	NA	NA	NA	9.1 E-7	4.4 E-5	4.1 E-6	NA	NA	NA	1.2 E-4	1.9 E-4	3.6 E-5	NA	NA	1.2 E-5	1.5 E-4	NA	NA	2.0 E-3
DSA-SP31	10	NA	NA	NA	1.8 E-6	3.5 E-5	7.4 E-6	NA	NA	NA	2.0 E-4	3.0 E-4	2.0 E-4	7.6 E-5	NA	1.9 E-5	2.9 E-4	NA	NA	1.3 E-2
DSA-SP31	20	NA	NA	NA	7.5 E-7	5.9 E-6	NA	NA	6.4 E-6	NA	8.0 E-5	1.4 E-4	7.7 E-5	NA	NA	NA	6.8 E-5	NA	NA	1.4 E-3
DSA-SP32	10	NA	NA	NA	NA	9.9 E-6	7.5 E-6	5.5 E-4	7.7 E-5	3.1 E-5	6.5 E-5	8.9 E-5	1.7 E-4	7.6 E-5	NA	NA	1.9 E-4	NA	NA	5.0 E-3
DSA-SP32	20	NA	1.3 E-4	NA	3.7 E-6	2.0 E-4	1.4 E-5	4.7 E-5	5.7 E-6	NA	4.7 E-4	4.5 E-4	2.2 E-4	1.1 E-4	NA	NA	7.4 E-4	NA	NA	2.5 E-2
E(d)-SP02	10	NA	NA	NA	4.0 E-6	NA	NA	5.1 E-4	1.3 E-4	NA	2.3 E-5	8.3 E-5	8.2 E-5	NA	3.7 E-4	NA	5.3 E-5	4.8 E-5	NA	1.9 E-3
E(d)-SP02	20	NA	NA	NA	8.2 E-7	1.6 E-5	NA	1.3 E-4	4.0 E-5	NA	9.9 E-4	1.2 E-3	5.2 E-5	NA	NA	4.1 E-4	1.3 E-4	9.7 E-5	NA	6.1 E-3
E(d)-SP03	10	NA	NA	NA	1.8 E-5	NA	NA	6.9 E-4	1.7 E-4	5.6 E-5	4.2 E-5	3.6 E-4	NA	NA	NA	NA	5.7 E-5	7.9 E-5	NA	3.3 E-3
E(m)-SP08	10	NA	NA	NA	8.7 E-7	3.8 E-5	7.2 E-6	NA	NA	NA	3.9 E-5	5.6 E-5	2.0 E-4	8.5 E-5	4.5 E-4	NA	5.0 E-4	NA	NA	4.3 E-3
E(m)-SP08	20	NA	NA	NA	8.0 E-7	1.9 E-5	NA	NA	3.0 E-7	NA	7.7 E-5	4.7 E-4	5.5 E-5	NA	2.9 E-4	4.4 E-4	1.2 E-4	9.1 E-5	NA	3.8 E-3
E(M)-SP09	10	NA	NA	NA	9.0 E-7	2.3 E-5	NA	NA	NA	NA	6.5 E-5	1.4 E-4	NA	NA	1.4 E-3	NA	1.4 E-4	NA	NA	3.1 E-3
E(M)-SP09	20	NA	8.7 E-5	NA	1.0 E-6	1.9 E-5	NA	NA	3.0 E-6	NA	7.3 E-5	3.9 E-4	4.3 E-5	NA	1.3 E-3	4.4 E-4	1.4 E-4	1.2 E-4	NA	6.4 E-3
E(m)-SP10	10	5.3 E-4	NA	NA	8.3 E-6	NA	NA	NA	7.7 E-7	NA	3.3 E-5	2.3 E-4	7.1 E-5	NA	1.2 E-2	NA	8.4 E-5	2.9 E-4	NA	1.5 E-2
E(m)-SP10	20	8.8 E-4	NA	NA	NA	NA	NA	NA	9.3 E-7	NA	NA	2.2 E-5	1.6 E-4	1.1 E-4	7.4 E-2	NA	5.0 E-5	7.6 E-4	NA	7.6 E-2
E(m)-SP11	20	NA	NA	NA	NA	1.6 E-5	NA	NA	1.1 E-6	NA	2.2 E-5	3.0 E-5	3.2 E-5	NA	3.0 E-4	1.1 E-5	3.1 E-5	NA	NA	9.1 E-4
E(n)-SP04	10	NA	NA	NA	3.8 E-6	9.9 E-6	NA	NA	6.6 E-7	NA	1.9 E-5	1.2 E-4	5.5 E-5	NA	NA	NA	6.1 E-5	NA	NA	1.3 E-3
E(n)-SP04	20	NA	1.5 E-4	NA	6.4 E-7	NA	NA	NA	4.9 E-6	NA	5.4 E-5	1.3 E-4	4.2 E-5	NA	1.7 E-4	2.2 E-5	3.9 E-5	1.1 E-4	NA	2.3 E-3
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	9.8 E-7	NA	NA	1.5 E-5	6.1 E-5	NA	1.8 E-2	NA	3.4 E-5	NA	NA	1.8 E-2
E(n)-SP05	20	1.6 E-4	NA	NA	NA	5.2 E-6	3.9 E-6	NA	1.2 E-6	NA	1.4 E-4	3.0 E-4	6.5 E-5	NA	3.0 E-2	4.4 E-5	1.0 E-4	1.5 E-3	NA	3.7 E-2
E(n)-SP05	40	5.7 E-4	3.4 E-4	NA	NA	6.1 E-6	NA	NA	4.8 E-6	NA	NA	1.3 E-5	NA	NA	1.6 E-1	2.6 E-5	2.4 E-5	1.3 E-3	NA	1.6 E-1
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	NA	4.2 E-5	NA	NA	3.1 E-4	NA	4.2 E-5	1.1 E-4	NA	1.4 E-3
E(n)-SP06	20	4.5 E-4	2.9 E-4	NA	7.0 E-7	7.0 E-6	6.0 E-6	4.4 E-5	3.4 E-6	NA	1.0 E-5	5.4 E-5	1.6 E-4	4.8 E-5	2.3 E-4	2.5 E-5	9.2 E-5	1.5 E-4	NA	1.9 E-3
E(n)-SP07	10	NA	3.2 E-4	NA	8.3 E-7	NA	NA	7.5 E-5	7.7 E-6	NA	NA	2.6 E-5	NA	NA	4.8 E-4	NA	4.2 E-5	9.5 E-5	NA	1.7 E-3
E(n)-SP08	10	NA	2.4 E-4	NA	3.1 E-6	9.9 E-6	NA	NA	4.9 E-7	NA	NA	7.4 E-5	9.4 E-5	NA	NA	NA	6.9 E-5	4.3 E-4	NA	2.0 E-3
E(n)-SP08	20	NA	3.4 E-3	NA	NA	NA	NA	NA	2.5 E-7	NA	1.5 E-5	5.0 E-5	NA	NA	NA	3.1 E-5	3.1 E-5	4.4 E-4	NA	4.6 E-3
E(n)-SP09	10	NA	4.6 E-4	NA	5.2 E-6	NA	NA	NA	NA	NA	NA	6.5 E-5	8.8 E-5	NA	NA	NA	5.7 E-5	5.7 E-5	NA	2.5 E-3
E(n)-SP09	20	1.2 E-4	8.7 E-3	NA	1.7 E-6	NA	NA	NA	2.5 E-7	NA	3.9 E-5	1.1 E-4	4.1 E-5	NA	NA	1.1 E-4	5.9 E-5	4.7 E-5	NA	9.5 E-3
E(N)-SP10	10	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	NA	2.8 E-5	1.3 E-4	NA	NA	5.6 E-4	2.4 E-5	6.1 E-5	1.6 E-5	NA	1.4 E-3
E(N)-SP10	20	NA	NA	NA	NA	5.9 E-6	NA	NA	NA	NA	3.7 E-5	1.9 E-4	NA	NA	2.6 E-4	5.2 E-5	6.1 E-5	1.5 E-5	NA	1.8 E-3
E(n)-SP11	15	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	1.7 E-5	2.2 E-5	4.4 E-5	NA	NA	1.6 E-5	6.5 E-5	NA	NA	2.5 E-3
E(n)-SP11	25	NA	2.5 E-3	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	1.8 E-5	3.3 E-5	NA	NA	1.9 E-5	3.1 E-5	3.7 E-5	NA	2.7 E-3
E(n)-SP12	10	NA	NA	NA	NA	5.0 E-4	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	3.5 E-5	5.3 E-5	NA	NA	8.5 E-4
E(n)-SP12	20	NA	1.5 E-4	NA	NA	5.4 E-5	NA	NA	7.6 E-7	NA	1.4 E-5	4.5 E-5	NA	NA	3.0 E-4	5.2 E-5	6.3 E-5	2.3 E-5	NA	9.4 E-4
L2-ST24-SP03	10	NA	NA	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	2.4 E-5	NA	NA	4.5 E-4
L2-ST24-SP03	20	NA	7.6 E-4	NA	5.7 E-7	9.6 E-6	3.8 E-6	NA	5.3 E-7	NA	9.5 E-5	4.1 E-4	7.7 E-5	NA	2.9 E-3	6.2 E-5	8.5 E-5	2.0 E-4	NA	5.3 E-3
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
L2-ST26-SP04	20	NA	NA	NA	NA	7.5 E-6	3.0 E-6	NA	NA	NA	4.1 E-4	1.4 E-3	6.5 E-5	NA	2.3 E-3	1.0 E-4	1.0 E-4	6.7 E-4	NA	5.7 E-3
L2-ST26-SP05	10	NA	NA	NA	1.8 E-6	1.3 E-5	NA	NA	NA	NA	1.0 E-4	2.1 E-4	1.2 E-4	NA	3.9 E-3	NA	4.2 E-4	NA	NA	9.7 E-3
L2-ST26-SP05	20	NA	NA	1.7 E-4	6.7 E-6	2.5 E-5	7.7 E-6	NA	2.6 E-7	NA	1.7 E-3	4.3 E-3	1.2 E-4	4.1 E-5	5.4 E-3	1.8 E-4	2.2 E-4	4.9 E-4	NA	1.7 E-2
L2-ST26-SP06	10	NA	NA	NA	8.3 E-7	4.7 E-5	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	2.8 E-4	NA	4.6 E-5	NA	NA	6.4 E-4
L2-ST26-SP06	20	NA	NA	NA	NA	1.3 E-5	3.5 E-6	NA	7.4 E-7	NA	7.5 E-5	1.5 E-4	1.1 E-4	NA	5.0 E-3	4.6 E-5	6.1 E-5	4.1 E-4	NA	6.3 E-3
L2-ST26-SP07	18	NA	NA	NA	1.2 E-6	2.7 E-5	1.3 E-5	NA	NA	NA	1.3 E-4	2.7 E-4	3.6 E-4	1.5 E-4	NA	NA	1.3 E-4	8.1 E-6	5.5 E-5	5.7 E-3
L2-ST28_90-SP02	10	NA	NA	NA	7.8 E-6	2.6 E-4	NA	1.6 E-3	3.1 E-4	NA	5.9 E-5	2.1 E-4	1.9 E-4	NA	NA	8.0 E-5	1.6 E-4	1.4 E-4	NA	1.0 E-2
L2-ST28_90-SP02	20	NA	8.5 E-4	1.5 E-4	2.7 E-6	1.1 E-5	5.5 E-6	1.5 E-4	2.5 E-5	NA	1.3 E-3	3.4 E-3	1.2 E-4	NA	2.0 E-3	2.1 E-4	1.7 E-4	2.3 E-3	NA	1.4 E-2

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
28E-SP16	10	3.9 E-3	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	8.9 E-1	NA	NA	NA	NA	NA	4.0 E-3
28E-SP16	30	NA	2.2 E-5	4.1 E-3	NA	8.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	3.6 E-5	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	9.7 E-6
29E-SP07	20	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	4.6 E-5
29E-SP08	10	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	9.0 E-6	NA	3.9 E-3	3.3 E-5	3.6 E-6	7.8 E-5	7.1 E-4	NA	9.7 E-5
29E-SP08	20	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	1.4 E-6	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA
29E-SP09	20	2.0 E-6	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5
29E-SP09	40	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-6	4.4 E-5	NA	6.9 E-6
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	3.7 E-5	5.1 E-4	NA	3.8 E-6
29E-SP10	20	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	1.1 E-5	3.2 E-4	NA	8.5 E-6
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	5.0 E-3	NA	6.4 E-6	4.9 E-5	3.6 E-4	NA	3.0 E-5
29E-SP11	20	NA	NA	8.3 E-4	NA	NA	NA	6.2 E-6	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	2.2 E-5
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	8.0 E-5	NA	1.6 E-5
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-6
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	1.4 E-5	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	6.6 E-5
DSA-SP04	30	NA	1.3 E-5	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5
DSA-SP04	40	NA	NA	6.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4
DSA-SP05	20	7.2 E-7	NA	8.3 E-5	NA	9.6 E-4	NA	3.3 E-6	NA	6.0 E-7	NA	3.8 E-4	NA	4.1 E-7	1.1 E-5	1.8 E-4	5.8 E-5	1.7 E-4
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	8.9 E-5	NA	1.3 E-4
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	3.8 E-4	NA	NA	8.3 E-5	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	1.2 E-4
DSA-SP08	20	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	3.0 E-6	NA	7.3 E-4	NA	7.3 E-7	2.9 E-5	4.1 E-4	NA	2.1 E-4
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5
DSA-SP09	20	1.1 E-6	NA	1.3 E-4	NA	NA	NA	NA	NA	1.9 E-6	NA	8.6 E-4	NA	NA	7.9 E-5	1.3 E-4	NA	8.9 E-5
DSA-SP10	10	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	8.9 E-6	NA	NA	NA	NA	1.2 E-4	1.3 E-3	NA	1.3 E-4
DSA-SP10	20	NA	NA	2.5 E-4	NA	4.1 E-4	NA	2.3 E-6	NA	1.2 E-6	NA	NA	NA	NA	1.3 E-5	9.9 E-4	NA	4.7 E-4
DSA-SP10	30	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5
DSA-SP10	40	NA	NA	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	2.2 E-5
DSA-SP11	10	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	1.5 E-4
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	1.3 E-4
DSA-SP12	10	NA	NA	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	1.2 E-4
DSA-SP12	20	6.6 E-7	4.3 E-6	7.1 E-5	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-6	5.7 E-5	NA	7.0 E-6
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	6.6 E-4	NA	NA	2.3 E-5	2.1 E-3	NA	1.7 E-4
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	1.2 E-4
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	1.8 E-5	NA	NA	3.0 E-5
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	1.8 E-5	8.1 E-5	NA	8.7 E-5
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-5	NA	NA	1.4 E-4
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	3.7 E-5
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	7.5 E-6
DSA-SP18	10	NA	NA	NA	7.3 E-4	NA	NA	NA	7.4 E-5	3.1 E-5	NA	NA	9.8 E-5	NA	2.7 E-5	9.2 E-4	NA	NA
DSA-SP18	20	NA	NA	NA	9.6 E-4	NA	3.4 E-4	NA	1.7 E-4	2.8 E-5	4.9 E-6	NA	1.6 E-4	NA	3.1 E-5	1.5 E-3	NA	5.2 E-6
DSA-SP19	10	NA	NA	NA	2.6 E-3	NA	8.6 E-4	NA	8.9 E-5	NA	NA	NA	3.7 E-4	1.2 E-6	1.3 E-5	1.3 E-3	NA	2.5 E-5

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	1.8 E-5	NA	4.8 E-4	NA	NA	1.3 E-5	2.2 E-4	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	4.5 E-5	5.3 E-4	NA	1.5 E-5
DSA-SP20	20	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	5.3 E-6	NA	NA	4.5 E-5	NA	3.8 E-5	1.7 E-3	NA	5.6 E-5
DSA-SP21	10	NA	NA	NA	1.2 E-3	NA	4.6 E-4	NA	NA	NA	NA	NA	9.4 E-5	NA	1.7 E-5	2.0 E-4	NA	2.6 E-5
DSA-SP21	20	NA	NA	NA	8.4 E-4	NA	2.8 E-4	NA	1.9 E-5	2.9 E-6	NA	NA	5.9 E-5	4.8 E-7	4.5 E-5	2.2 E-4	NA	3.2 E-4
DSA-SP22	10	NA	NA	NA	9.9 E-4	NA	3.8 E-4	NA	6.4 E-5	3.7 E-6	NA	NA	8.9 E-5	1.2 E-6	4.7 E-5	9.7 E-4	NA	1.9 E-5
DSA-SP22	20	NA	NA	NA	7.0 E-4	NA	2.3 E-4	NA	4.2 E-5	2.5 E-6	NA	NA	5.1 E-5	4.4 E-7	2.9 E-5	2.3 E-4	NA	2.7 E-5
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	NA	NA	3.7 E-5	3.3 E-4	NA	6.6 E-5
DSA-SP23	20	NA	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	4.2 E-5	1.1 E-4	NA	2.3 E-4
DSA-SP23	30	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	1.6 E-5	7.4 E-5	NA	5.9 E-5
DSA-SP24	10	NA	NA	NA	1.5 E-3	NA	7.3 E-4	NA	3.0 E-4	2.0 E-6	NA	NA	2.1 E-4	NA	2.5 E-5	7.9 E-4	NA	4.3 E-5
DSA-SP24	20	NA	NA	NA	6.7 E-4	NA	NA	NA	2.8 E-4	1.6 E-6	NA	NA	6.8 E-5	NA	2.3 E-5	7.0 E-4	NA	7.5 E-5
DSA-SP24	30	4.3 E-7	NA	NA	3.2 E-4	NA	NA	NA	2.4 E-4	2.7 E-6	NA	NA	3.0 E-5	NA	5.4 E-5	8.7 E-4	NA	1.7 E-5
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	4.3 E-5
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	1.6 E-4
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-4	NA	9.7 E-5
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	6.6 E-5
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	5.7 E-5
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	6.2 E-5	NA	8.0 E-5
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	1.1 E-6	5.4 E-5	5.0 E-4	NA	3.1 E-5
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	2.1 E-6	1.1 E-3	NA	3.5 E-6	4.3 E-5	2.3 E-4	NA	1.5 E-5
DSA-SP29	10	NA	NA	NA	1.9 E-3	NA	7.3 E-4	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	8.1 E-6
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	1.2 E-4	NA	6.0 E-5
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	3.5 E-5	6.0 E-4	NA	3.3 E-6
DSA-SP31	10	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	1.4 E-5	NA	3.4 E-3	2.8 E-5	5.1 E-6	1.3 E-4	1.0 E-3	NA	2.4 E-5
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	NA	NA	2.7 E-5	3.6 E-4	NA	3.2 E-5
DSA-SP32	10	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	5.2 E-6	NA	7.2 E-4	NA	NA	3.9 E-5	5.1 E-4	NA	1.5 E-5
DSA-SP32	20	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	2.8 E-5	4.3 E-6	6.3 E-3	1.9 E-5	2.5 E-6	2.4 E-4	2.6 E-3	NA	9.9 E-6
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	4.5 E-5
E(d)-SP02	20	NA	NA	1.0 E-4	NA	NA	NA	5.5 E-6	NA	2.5 E-6	NA	6.0 E-4	NA	8.1 E-7	2.6 E-5	3.5 E-4	NA	2.3 E-4
E(d)-SP03	10	NA	NA	1.0 E-4	NA	NA	NA	NA	3.6 E-4	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	2.3 E-5
E(m)-SP08	10	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	2.6 E-6	NA	NA	4.2 E-5	NA	2.3 E-5	3.6 E-4	NA	1.1 E-4
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	1.8 E-6	NA	6.0 E-4	NA	8.2 E-7	2.0 E-5	2.7 E-4	NA	5.2 E-5
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	2.9 E-5	4.8 E-4	NA	8.1 E-5
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	4.9 E-6	NA	7.3 E-4	NA	8.2 E-7	4.6 E-5	6.9 E-4	NA	1.6 E-4
E(m)-SP10	10	7.9 E-7	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	1.4 E-5	3.0 E-4	NA	6.5 E-5
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	NA	6.4 E-7	4.9 E-5	1.4 E-4	NA	8.9 E-6
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.1 E-6	NA	NA	NA	NA	2.5 E-5	2.1 E-4	NA	5.4 E-5
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	6.1 E-4
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	3.9 E-6
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	3.1 E-6	NA	NA	NA	NA	2.7 E-5	3.1 E-4	NA	1.7 E-3
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	NA	1.5 E-5	1.5 E-4	NA	1.9 E-4
E(n)-SP06	20	NA	NA	8.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-6	3.5 E-5	NA	2.1 E-5
E(n)-SP07	10	NA	NA	4.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	1.1 E-4	NA	8.9 E-5
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	1.9 E-5	1.5 E-4	NA	1.5 E-4
E(n)-SP08	20	4.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	2.4 E-4
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	1.9 E-5	3.6 E-4	NA	2.1 E-5
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	2.9 E-6	3.1 E-5	NA	NA	NA	NA	NA	NA	7.0 E-5	NA	2.2 E-5
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	1.8 E-4	NA	6.1 E-5
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	1.3 E-5	2.0 E-4	NA	2.9 E-4
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	8.6 E-4	NA	NA	3.6 E-5	1.0 E-4	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	5.1 E-6
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	2.7 E-5	7.1 E-5	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	2.6 E-5	6.6 E-5	NA	6.1 E-6
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	1.1 E-5	6.8 E-5	NA	5.1 E-5
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	NA	NA	NA	NA	NA	1.1 E-5	2.4 E-4	NA	3.8 E-5
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	NA	NA	NA	4.6 E-7	NA	2.2 E-4	NA	8.0 E-5
L2-ST26-SP05	10	NA	NA	NA	5.8 E-4	NA	NA	NA	NA	4.1 E-6	NA	NA	3.4 E-5	NA	3.7 E-5	1.1 E-3	NA	3.4 E-4
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	1.1 E-5	NA	7.0 E-4	NA	1.2 E-6	6.6 E-5	1.1 E-3	NA	1.0 E-4
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	8.6 E-5	NA	1.8 E-5
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	9.8 E-7	NA	NA	NA	NA	7.2 E-6	9.0 E-5	NA	8.5 E-5
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	5.0 E-4	NA	NA	3.8 E-4	9.9 E-4	NA	7.9 E-5
L2-ST28_90-SP02	10	NA	NA	1.8 E-4	NA	NA	NA	NA	3.9 E-4	1.3 E-5	NA	1.9 E-3	NA	NA	2.5 E-4	3.6 E-4	NA	3.4 E-5
L2-ST28_90-SP02	20	NA	NA	2.2 E-4	NA	NA	NA	4.1 E-6	NA	4.4 E-6	NA	NA	NA	NA	3.2 E-5	7.2 E-4	NA	3.6 E-4

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
28E-SP16	10	NA	NA	6.8 E-1	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	NA	9.7 E+0	NA	9.6 E-3	7.7 E+0	NA	1.8 E+1
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	6.3 E-1	NA	NA	1.3 E+0	NA	2.9 E+0
28E-SP16	30	NA	1.5 E-3	6.3 E-3	NA	NA	NA	NA	1.4 E-5	NA	6.6 E-5	1.2 E-4	NA	NA	8.4 E-3	NA	NA	5.1 E-2	NA	8.0 E-2
28E-SP16	40	NA	1.9 E-3	7.6 E-3	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	8.2 E-2	NA	1.4 E-1
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	7.2 E-4	NA	1.4 E-5	NA	NA	7.7 E-4
29E-SP07	20	6.7 E-5	1.7 E-4	1.5 E-4	NA	NA	NA	1.5 E-5	1.9 E-6	NA	1.8 E-5	4.8 E-5	NA	NA	4.8 E-3	NA	6.4 E-6	3.7 E-3	NA	9.6 E-3
29E-SP08	10	NA	NA	6.3 E-5	5.3 E-7	2.1 E-5	2.3 E-6	NA	5.8 E-7	NA	1.0 E-4	8.4 E-5	6.2 E-5	2.6 E-5	NA	8.2 E-5	1.2 E-4	2.9 E-4	NA	6.1 E-3
29E-SP08	20	NA	3.5 E-4	1.1 E-2	NA	NA	NA	NA	2.9 E-6	NA	NA	2.9 E-5	NA	NA	1.0 E-2	NA	NA	2.6 E-2	NA	4.7 E-2
29E-SP08	30	1.8 E-4	2.6 E-4	1.5 E-3	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	1.2 E-2	NA	2.6 E-2
29E-SP08	40	1.3 E-4	2.3 E-4	8.2 E-4	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	8.9 E-3	NA	2.2 E-2
29E-SP09	10	2.5 E-2	1.2 E-2	4.1 E-3	NA	NA	NA	NA	1.8 E-6	3.0 E-5	1.4 E-5	1.9 E-5	NA	NA	NA	NA	3.3 E-5	1.4 E-2	NA	5.5 E-2
29E-SP09	20	4.3 E-2	1.7 E-2	9.3 E-3	NA	NA	NA	NA	4.7 E-6	8.3 E-5	NA	NA	NA	NA	NA	NA	3.7 E-5	2.5 E-2	NA	9.4 E-2
29E-SP09	30	1.2 E-3	1.0 E-3	1.5 E-3	NA	NA	NA	1.6 E-4	2.1 E-5	7.2 E-5	5.0 E-5	8.8 E-5	NA	NA	6.2 E-3	1.9 E-5	1.8 E-5	6.5 E-3	NA	2.0 E-2
29E-SP09	40	1.3 E-3	9.5 E-4	1.2 E-3	NA	3.1 E-6	NA	1.5 E-4	1.8 E-5	5.0 E-5	2.5 E-5	5.6 E-5	NA	NA	2.8 E-3	1.9 E-5	1.4 E-5	3.9 E-3	NA	1.3 E-2
29E-SP10	10	1.1 E-4	NA	5.9 E-5	3.4 E-7	6.2 E-6	NA	NA	NA	NA	1.1 E-5	5.6 E-5	3.5 E-5	NA	NA	NA	1.6 E-5	2.6 E-4	NA	1.1 E-3
29E-SP10	20	6.1 E-4	2.4 E-4	6.6 E-4	4.8 E-7	NA	NA	NA	7.4 E-7	6.2 E-6	4.5 E-5	1.0 E-4	2.4 E-5	NA	NA	NA	3.6 E-5	3.2 E-4	NA	2.4 E-3
29E-SP11	10	NA	NA	NA	7.4 E-7	7.3 E-6	NA	NA	1.4 E-6	NA	6.0 E-5	2.5 E-5	5.8 E-5	NA	NA	1.4 E-4	1.4 E-4	9.2 E-6	NA	5.9 E-3
29E-SP11	20	1.8 E-4	8.3 E-4	2.2 E-3	7.0 E-7	NA	NA	4.2 E-5	3.9 E-6	NA	2.6 E-5	2.1 E-4	NA	NA	1.6 E-3	8.2 E-5	3.5 E-5	6.2 E-3	2.4 E-5	1.2 E-2
59E-SP08	10	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	NA	NA	NA	NA	2.4 E-4	NA	3.1 E-4
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	1.1 E-2	NA	NA	4.5 E-3	NA	1.7 E-2
59E-SP10	20	NA	NA	NA	NA	2.3 E-6	NA	NA	5.2 E-7	NA	2.6 E-5	4.8 E-5	1.7 E-5	NA	8.4 E-5	1.5 E-5	3.6 E-5	3.4 E-5	NA	3.7 E-4
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	1.2 E-4	6.3 E-6	5.1 E-6	2.9 E-6	NA	1.4 E-4
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	2.1 E-3
DSA-SP04	20	1.1 E-3	3.2 E-3	1.4 E-3	NA	NA	NA	5.7 E-3	8.9 E-4	6.3 E-5	7.7 E-5	3.0 E-4	NA	NA	1.8 E-3	1.2 E-4	4.9 E-5	4.1 E-2	NA	6.8 E-2
DSA-SP04	30	1.3 E-3	3.7 E-3	9.0 E-4	NA	NA	NA	3.4 E-3	5.5 E-4	NA	NA	4.1 E-5	NA	NA	6.2 E-3	3.7 E-5	NA	4.5 E-2	NA	7.3 E-2
DSA-SP04	40	7.9 E-4	2.1 E-3	5.5 E-4	NA	NA	NA	1.8 E-3	3.0 E-4	NA	NA	3.6 E-5	NA	NA	4.0 E-3	2.6 E-5	NA	2.8 E-2	NA	4.4 E-2
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	5.3 E-3
DSA-SP05	20	NA	3.2 E-4	NA	NA	3.9 E-6	NA	NA	3.9 E-6	NA	3.2 E-5	1.3 E-4	1.5 E-5	NA	5.1 E-5	1.2 E-4	3.4 E-5	1.9 E-3	NA	4.5 E-3
DSA-SP06	10	NA	NA	NA	NA	4.6 E-6	NA	NA	NA	NA	8.9 E-6	1.1 E-5	2.6 E-5	NA	NA	1.1 E-5	1.2 E-5	5.3 E-4	NA	8.7 E-4
DSA-SP06	20	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	6.9 E-6	2.1 E-5	NA	NA	NA	1.1 E-5	NA	NA	5.2 E-4
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	1.7 E-3
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	5.2 E-6
DSA-SP08	10	NA	2.6 E-3	NA	1.6 E-6	7.7 E-6	NA	NA	2.5 E-6	NA	NA	7.2 E-5	NA	NA	NA	9.1 E-6	2.8 E-5	1.8 E-4	NA	3.5 E-3
DSA-SP08	20	NA	3.7 E-3	NA	2.1 E-7	7.6 E-6	NA	NA	1.2 E-6	NA	3.8 E-5	1.9 E-4	2.2 E-5	NA	NA	1.4 E-4	4.2 E-5	3.4 E-4	NA	5.8 E-3
DSA-SP09	10	NA	NA	NA	NA	3.8 E-6	NA	NA	1.3 E-6	NA	NA	NA	2.8 E-5	NA	NA	7.0 E-6	9.5 E-6	1.3 E-4	NA	2.0 E-4
DSA-SP09	20	NA	4.5 E-5	NA	7.9 E-7	2.0 E-5	NA	NA	5.8 E-6	NA	1.7 E-5	7.6 E-5	NA	NA	NA	4.9 E-6	6.9 E-6	8.7 E-4	NA	2.3 E-3
DSA-SP10	10	NA	NA	NA	NA	8.5 E-6	NA	NA	3.0 E-6	NA	9.9 E-5	2.9 E-4	NA	NA	NA	2.3 E-5	5.9 E-5	5.1 E-5	NA	2.8 E-3
DSA-SP10	20	9.1 E-5	6.4 E-4	NA	NA	3.0 E-6	1.6 E-6	2.7 E-4	8.9 E-5	8.2 E-6	1.4 E-4	3.6 E-4	2.0 E-5	NA	NA	5.2 E-5	5.9 E-5	8.3 E-4	NA	4.7 E-3
DSA-SP10	30	3.3 E-4	7.6 E-4	NA	NA	NA	NA	1.0 E-3	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	5.6 E-3
DSA-SP10	40	NA	3.1 E-4	NA	3.5 E-7	NA	NA	5.2 E-4	1.9 E-4	1.4 E-5	NA	3.3 E-5	NA	NA	NA	8.4 E-6	NA	6.3 E-4	NA	2.0 E-3
DSA-SP11	10	NA	NA	NA	7.6 E-7	NA	NA	4.9 E-5	2.1 E-5	NA	9.7 E-5	3.1 E-4	NA	NA	NA	NA	3.3 E-5	4.5 E-5	NA	1.9 E-3
DSA-SP11	20	NA	3.4 E-4	NA	NA	NA	NA	1.0 E-5	4.4 E-6	NA	2.7 E-5	4.6 E-5	2.8 E-5	1.4 E-5	NA	5.8 E-6	1.0 E-5	1.3 E-5	NA	6.9 E-4
DSA-SP12	10	NA	8.9 E-5	NA	8.5 E-7	NA	NA	5.2 E-5	1.1 E-5	1.3 E-5	1.2 E-4	2.2 E-4	NA	NA	NA	NA	2.1 E-5	1.8 E-5	NA	1.9 E-3
DSA-SP12	20	3.1 E-4	1.2 E-3	NA	NA	NA	NA	5.4 E-5	8.9 E-6	8.0 E-6	4.0 E-6	5.5 E-6	NA	NA	1.3 E-3	4.1 E-6	1.0 E-5	2.2 E-4	NA	3.7 E-3
DSA-SP13	10	NA	NA	NA	3.2 E-6	NA	6.1 E-6	1.9 E-4	9.3 E-5	1.2 E-5	1.0 E-3	2.0 E-3	5.4 E-5	2.6 E-5	2.2 E-4	NA	2.0 E-4	9.2 E-5	NA	6.9 E-3
DSA-SP13	20	NA	NA	NA	1.1 E-6	NA	NA	2.7 E-4	8.1 E-5	NA	4.2 E-4	7.0 E-4	NA	NA	NA	NA	4.6 E-5	1.7 E-4	NA	2.2 E-3
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	2.0 E-4	NA	1.0 E-3
DSA-SP15	20	NA	5.1 E-5	NA	1.8 E-7	3.0 E-6	NA	NA	3.2 E-7	NA	NA	6.6 E-6	NA	NA	3.3 E-4	4.0 E-6	4.7 E-6	7.0 E-5	NA	9.0 E-4
DSA-SP15	30	NA	9.1 E-5	NA	4.0 E-7	2.0 E-6	NA	5.5 E-5	7.8 E-5	5.2 E-6	NA	6.6 E-5	NA	NA	1.6 E-4	5.4 E-6	5.9 E-6	3.7 E-5	NA	1.0 E-3
DSA-SP16	10	NA	3.4 E-3	NA	NA	NA	NA	1.8 E-3	1.3 E-3	NA	1.1 E-4	1.2 E-4	NA	NA	NA	NA	5.9 E-5	6.4 E-4	NA	7.6 E-3
DSA-SP16	20	NA	6.9 E-3	NA	NA	NA	NA	1.6 E-3	1.3 E-3	NA	5.4 E-5	8.8 E-5	NA	NA	NA	NA	NA	8.3 E-4	NA	1.1 E-2
DSA-SP16	30	NA	6.7 E-3	NA	NA	NA	NA	1.6 E-3	1.1 E-3	NA	6.1 E-5	1.5 E-4	NA	NA	NA	4.9 E-5	NA	5.4 E-4	NA	1.0 E-2
DSA-SP16	40	NA	5.8 E-3	NA	NA	NA	NA	1.4 E-3	9.3 E-4	NA	NA	3.6 E-5	NA	NA	NA	NA	NA	7.6 E-4	NA	9.0 E-3
DSA-SP17	10	NA	NA	NA	7.1 E-7	NA	NA	NA	NA	NA	NA	6.2 E-5	NA	NA	NA	NA	1.0 E-5	1.8 E-3	NA	2.0 E-3
DSA-SP17	20	NA	3.0 E-4	NA	2.2 E-7	NA	NA	NA	7.5 E-8	NA	NA	2.3 E-5	NA	NA	NA	NA	2.3 E-5	5.4 E-4	NA	9.7 E-4
DSA-SP17	30	NA	7.2 E-4	NA	NA	1.5 E-6	NA	NA	6.1 E-8	NA	4.5 E-6	8.3 E-6	NA	NA	NA	6.0 E-6	1.5 E-5	2.6 E-4	NA	1.0 E-3
DSA-SP18	10	NA	NA	NA	2.1 E-6	3.8 E-5	1.9 E-5	NA	NA	NA	6.9 E-5	1.3 E-4	6.7 E-4	1.7 E-4	NA	2.1 E-5	6.2 E-4	NA	NA	3.6 E-3
DSA-SP18	20	NA	NA	NA	2.9 E-6	1.6 E-5	3.8 E-5	NA	NA	NA	1.3 E-4	2.7 E-4	1.3 E-3	3.1 E-4	NA	NA	1.4 E-3	NA	NA	6.7 E-3
DSA-SP19	10	NA	NA	NA	1.9 E-6	1.2 E-5	6.1 E-5	NA	NA	NA	1.0 E-4	1.2 E-4	2.3 E-3	5.9 E-4	NA	NA	1.4 E-3	NA	NA	9.8 E-3

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
DSA-SP19	20	NA	NA	NA	6.6 E-7	5.5 E-5	2.4 E-6	NA	NA	NA	1.8 E-5	4.0 E-5	7.6 E-5	2.0 E-5	NA	1.3 E-5	1.1 E-4	NA	NA	1.1 E-3
DSA-SP20	10	NA	8.3 E-5	NA	NA	NA	2.9 E-6	1.2 E-4	1.2 E-4	NA	2.7 E-5	5.8 E-5	4.4 E-5	NA	9.4 E-5	1.6 E-5	7.7 E-5	2.3 E-3	NA	3.5 E-3
DSA-SP20	20	NA	6.8 E-4	NA	2.2 E-6	NA	6.4 E-6	3.2 E-4	2.8 E-4	NA	1.5 E-4	4.6 E-4	1.5 E-4	4.5 E-5	NA	2.3 E-5	9.1 E-5	9.9 E-3	NA	1.5 E-2
DSA-SP21	10	NA	2.0 E-4	NA	NA	NA	6.1 E-6	NA	1.5 E-5	NA	1.3 E-4	3.4 E-4	2.0 E-4	8.9 E-5	NA	NA	7.7 E-5	1.1 E-5	NA	3.0 E-3
DSA-SP21	20	NA	2.1 E-4	NA	NA	2.2 E-6	3.1 E-6	3.2 E-5	3.2 E-5	NA	5.9 E-5	2.1 E-4	1.1 E-4	5.3 E-5	NA	NA	4.3 E-5	1.4 E-5	NA	2.6 E-3
DSA-SP22	10	NA	NA	NA	NA	NA	6.6 E-6	3.2 E-5	2.2 E-5	NA	2.0 E-4	7.8 E-4	2.0 E-4	9.4 E-5	NA	NA	1.2 E-4	6.3 E-5	NA	
DSA-SP22	20	NA	NA	NA	NA	NA	2.8 E-6	4.4 E-5	4.4 E-5	NA	1.9 E-4	6.7 E-4	9.6 E-5	4.8 E-5	NA	NA	3.4 E-5	7.0 E-5	NA	#REF!
DSA-SP23	10	NA	NA	NA	NA	NA	NA	3.0 E-4	3.6 E-4	NA	8.6 E-5	1.8 E-4	8.9 E-5	NA	NA	NA	NA	1.0 E-4	NA	#REF!
DSA-SP23	20	NA	NA	NA	NA	NA	NA	2.4 E-4	2.3 E-4	NA	2.0 E-5	2.9 E-5	7.6 E-5	3.9 E-5	NA	NA	NA	1.5 E-4	NA	#REF!
DSA-SP23	30	NA	NA	NA	NA	NA	NA	1.7 E-4	1.6 E-4	NA	6.6 E-6	1.2 E-5	5.6 E-5	2.8 E-5	9.7 E-5	NA	NA	3.4 E-4	NA	#REF!
DSA-SP24	10	NA	2.4 E-4	NA	NA	NA	1.5 E-5	1.6 E-4	1.2 E-4	1.3 E-5	1.5 E-4	3.3 E-4	4.9 E-4	2.1 E-4	NA	NA	2.6 E-4	1.4 E-4	NA	#REF!
DSA-SP24	20	NA	NA	NA	NA	2.3 E-5	5.2 E-6	2.7 E-4	1.9 E-4	1.6 E-5	1.5 E-4	2.9 E-4	1.5 E-4	7.0 E-5	NA	NA	1.1 E-4	1.9 E-4	NA	#REF!
DSA-SP24	30	NA	5.3 E-4	NA	NA	2.5 E-6	2.7 E-6	1.9 E-4	1.3 E-4	1.0 E-5	1.2 E-4	2.9 E-4	7.1 E-5	3.3 E-5	NA	NA	9.8 E-5	4.8 E-4	NA	#REF!
DSA-SP25	10	NA	3.2 E-4	NA	NA	NA	NA	1.6 E-4	1.4 E-4	NA	4.3 E-5	5.0 E-5	2.4 E-5	NA	3.9 E-4	NA	1.6 E-5	NA	NA	#REF!
DSA-SP25	20	NA	NA	NA	NA	NA	NA	4.3 E-4	3.6 E-4	NA	1.1 E-4	3.4 E-4	NA	NA	4.5 E-4	NA	2.2 E-5	NA	NA	#REF!
DSA-SP26	10	NA	NA	NA	4.7 E-6	NA	NA	7.6 E-4	3.6 E-4	NA	3.1 E-4	2.0 E-3	4.5 E-5	NA	3.9 E-4	NA	4.1 E-5	NA	NA	#REF!
DSA-SP26	20	NA	NA	NA	NA	NA	NA	1.6 E-3	9.7 E-4	NA	9.6 E-4	2.6 E-3	NA	NA	2.0 E-3	NA	1.7 E-4	NA	NA	#REF!
DSA-SP27	10	NA	2.5 E-4	NA	NA	NA	NA	1.6 E-4	1.1 E-4	NA	3.4 E-5	1.5 E-4	NA	NA	2.7 E-4	NA	8.7 E-6	4.1 E-4	NA	#REF!
DSA-SP27	20	NA	4.1 E-5	NA	NA	NA	NA	1.1 E-4	7.0 E-5	NA	4.2 E-5	6.2 E-5	1.4 E-5	NA	7.8 E-5	4.0 E-6	1.5 E-5	9.1 E-4	NA	#REF!
DSA-SP28	10	NA	NA	NA	4.6 E-7	2.2 E-5	2.8 E-6	NA	NA	NA	6.9 E-5	8.4 E-5	4.0 E-5	NA	NA	NA	5.9 E-5	1.5 E-5	NA	#REF!
DSA-SP28	20	NA	NA	NA	1.8 E-7	2.8 E-5	NA	NA	NA	NA	3.8 E-5	3.8 E-5	1.9 E-5	NA	NA	NA	3.5 E-5	NA	NA	#REF!
DSA-SP29	10	NA	1.9 E-4	NA	NA	4.6 E-6	NA	NA	5.2 E-7	NA	NA	5.1 E-6	8.9 E-5	7.4 E-5	NA	NA	1.1 E-5	NA	NA	#REF!
DSA-SP30	10	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	9.2 E-6	9.0 E-6	NA	NA	NA	NA	2.3 E-5	NA	NA	#REF!
DSA-SP30	20	NA	NA	NA	3.9 E-7	1.9 E-5	1.8 E-6	NA	NA	NA	5.2 E-5	8.0 E-5	1.6 E-5	NA	NA	5.2 E-6	6.3 E-5	NA	NA	#REF!
DSA-SP31	10	NA	NA	NA	7.7 E-7	1.5 E-5	3.2 E-6	NA	NA	NA	8.5 E-5	1.3 E-4	8.5 E-5	3.2 E-5	NA	8.2 E-6	1.2 E-4	NA	NA	#REF!
DSA-SP31	20	NA	NA	NA	3.2 E-7	2.5 E-6	NA	NA	2.8 E-6	NA	3.4 E-5	5.9 E-5	3.3 E-5	NA	NA	NA	2.9 E-5	NA	NA	#REF!
DSA-SP32	10	NA	NA	NA	NA	4.2 E-6	3.2 E-6	2.4 E-4	3.3 E-5	1.3 E-5	2.8 E-5	3.8 E-5	7.1 E-5	3.2 E-5	NA	NA	8.0 E-5	NA	NA	#REF!
DSA-SP32	20	NA	5.6 E-5	NA	1.6 E-6	8.5 E-5	6.1 E-6	2.0 E-5	2.4 E-6	NA	2.0 E-4	1.9 E-4	9.6 E-5	4.5 E-5	NA	NA	3.2 E-4	NA	NA	#REF!
E(d)-SP02	10	NA	NA	NA	1.7 E-6	NA	NA	2.2 E-4	5.7 E-5	NA	1.0 E-5	3.6 E-5	3.5 E-5	NA	1.6 E-4	NA	2.3 E-5	2.1 E-5	NA	#REF!
E(d)-SP02	20	NA	NA	NA	3.5 E-7	6.6 E-6	NA	5.7 E-5	1.7 E-5	NA	4.2 E-4	5.0 E-4	2.2 E-5	NA	NA	1.8 E-4	5.4 E-5	4.1 E-5	NA	#REF!
E(d)-SP03	10	NA	NA	NA	7.7 E-6	NA	NA	3.0 E-4	7.2 E-5	2.4 E-5	1.8 E-5	1.5 E-4	NA	NA	NA	NA	2.5 E-5	3.4 E-5	NA	#REF!
E(m)-SP08	10	NA	NA	NA	3.7 E-7	1.6 E-5	3.1 E-6	NA	NA	NA	1.7 E-5	2.4 E-5	8.5 E-5	3.6 E-5	1.9 E-4	NA	2.1 E-4	NA	NA	#REF!
E(m)-SP08	20	NA	NA	NA	3.4 E-7	8.3 E-6	NA	NA	1.3 E-7	NA	3.3 E-5	2.0 E-4	2.3 E-5	NA	1.2 E-4	1.9 E-4	5.3 E-5	3.9 E-5	NA	#REF!
E(M)-SP09	10	NA	NA	NA	3.9 E-7	1.0 E-5	NA	NA	NA	NA	2.8 E-5	5.8 E-5	NA	NA	5.8 E-4	NA	5.9 E-5	NA	NA	#REF!
E(M)-SP09	20	NA	3.7 E-5	NA	4.4 E-7	8.0 E-6	NA	NA	1.3 E-6	NA	3.1 E-5	1.7 E-4	1.8 E-5	NA	5.4 E-4	1.9 E-4	5.8 E-5	5.0 E-5	NA	#REF!
E(m)-SP10	10	2.3 E-4	NA	NA	3.6 E-6	NA	NA	NA	3.3 E-7	NA	1.4 E-5	9.8 E-5	3.0 E-5	NA	5.1 E-3	NA	3.6 E-5	1.2 E-4	NA	#REF!
E(m)-SP10	20	3.8 E-4	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	9.6 E-6	7.1 E-5	4.5 E-5	3.2 E-2	NA	2.2 E-5	3.3 E-4	NA	#REF!
E(m)-SP11	20	NA	NA	NA	NA	6.9 E-6	NA	NA	4.7 E-7	NA	9.6 E-6	1.3 E-5	1.4 E-5	NA	1.3 E-4	4.6 E-6	1.3 E-5	NA	NA	3.9 E-4
E(n)-SP04	10	NA	NA	NA	1.6 E-6	4.2 E-6	NA	NA	2.8 E-7	NA	8.1 E-6	5.0 E-5	2.4 E-5	NA	NA	NA	2.6 E-5	NA	NA	5.7 E-4
E(n)-SP04	20	NA	6.4 E-5	NA	2.7 E-7	NA	NA	NA	2.1 E-6	NA	2.3 E-5	5.4 E-5	1.8 E-5	NA	7.1 E-5	9.4 E-6	1.7 E-5	4.6 E-5	NA	9.9 E-4
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	6.4 E-6	2.6 E-5	NA	7.6 E-3	NA	1.5 E-5	NA	NA	7.8 E-3
E(n)-SP05	20	6.7 E-5	NA	NA	NA	2.2 E-6	1.7 E-6	NA	5.1 E-7	NA	6.1 E-5	1.3 E-4	2.8 E-5	NA	1.3 E-2	1.9 E-5	4.3 E-5	6.6 E-4	NA	1.6 E-2
E(n)-SP05	40	2.4 E-4	1.5 E-4	NA	NA	2.6 E-6	NA	NA	2.1 E-6	NA	NA	5.6 E-6	NA	NA	6.7 E-2	1.1 E-5	1.0 E-5	5.6 E-4	NA	6.8 E-2
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	1.8 E-5	NA	NA	1.3 E-4	NA	1.8 E-5	4.6 E-5	NA	6.1 E-4
E(n)-SP06	20	1.9 E-4	1.2 E-4	NA	3.0 E-7	3.0 E-6	2.6 E-6	1.9 E-5	1.5 E-6	NA	4.3 E-6	2.3 E-5	6.8 E-5	2.1 E-5	9.7 E-5	1.1 E-5	3.9 E-5	6.6 E-5	NA	8.2 E-4
E(n)-SP07	10	NA	1.4 E-4	NA	3.6 E-7	NA	NA	3.2 E-5	3.3 E-6	NA	NA	1.1 E-5	NA	NA	2.1 E-4	NA	1.8 E-5	4.1 E-5	NA	7.1 E-4
E(n)-SP08	10	NA	1.0 E-4	NA	1.3 E-6	4.2 E-6	NA	NA	2.1 E-7	NA	NA	3.2 E-5	4.0 E-5	NA	NA	NA	2.9 E-5	1.8 E-4	NA	8.4 E-4
E(n)-SP08	20	NA	1.4 E-3	NA	NA	NA	NA	NA	1.1 E-7	NA	6.5 E-6	2.2 E-5	NA	NA	NA	1.3 E-5	1.3 E-5	1.9 E-4	NA	2.0 E-3
E(n)-SP09	10	NA	2.0 E-4	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	2.8 E-5	3.8 E-5	NA	NA	NA	2.5 E-5	2.5 E-5	NA	1.1 E-3
E(n)-SP09	20	4.9 E-5	3.7 E-3	NA	7.5 E-7	NA	NA	NA	1.1 E-7	NA	1.7 E-5	4.7 E-5	1.8 E-5	NA	NA	4.9 E-5	2.5 E-5	2.0 E-5	NA	4.1 E-3
E(N)-SP10	10	NA	NA	NA	NA	3.8 E-6	NA	NA	NA	NA	1.2 E-5	5.6 E-5	NA	NA	2.4 E-4	1.0 E-5	2.6 E-5	6.8 E-6	NA	6.1 E-4
E(N)-SP10	20	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	1.6 E-5	8.0 E-5	NA	NA	1.1 E-4	2.2 E-5	2.6 E-5	6.6 E-6	NA	7.7 E-4
E(n)-SP11	15	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	NA	7.1 E-6	9.5 E-6	1.9 E-5	NA	NA	7.1 E-6	2.8 E-5	NA	NA	1.1 E-3
E(n)-SP11	25	NA	1.1 E-3	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	7.7 E-6	1.4 E-5	NA	NA	8.1 E-6	1.3 E-5	1.6 E-5	NA	1.2 E-3
E(n)-SP12	10	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	9.9 E-6	NA	NA	NA	1.5 E-5	2.3 E-5	NA	NA	3.6 E-4
E(n)-SP12	20	NA	6.5 E-5	NA	NA	2.3 E-5	NA	NA	3.2 E-7	NA	5.8 E-6	1.9 E-5	NA	NA	1.3 E-4	2.2 E-5	2.7 E-5	9.9 E-6	NA	4.0 E-4
L2-ST24-SP03	10	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	1.0 E-5	NA	NA	1.9 E-4
L2-ST24-SP03	20	NA	3.2 E-4	NA	2.5 E-7	4.1 E-6	1.6 E-6	NA	2.3 E-7	NA	4.1 E-5	1.8 E-4	3.3 E-5	NA	1.2 E-3	2.7 E-5	3.6 E-5	8.7 E-5	NA	2.3 E-3
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
L2-ST26-SP04	20	NA	NA	NA	NA	3.2 E-6	1.3 E-6	NA	NA	NA	1.8 E-4	5.9 E-4	2.8 E-5	NA	9.7 E-4	4.4 E-5	4.4 E-5	2.9 E-4	NA	2.4 E-3
L2-ST26-SP05	10	NA	NA	NA	7.7 E-7	5.4 E-6	NA	NA	NA	NA	4.5 E-5	9.2 E-5	5.4 E-5	NA	1.7 E-3	NA	1.8 E-4	NA	NA	4.2 E-3
L2-ST26-SP05	20	NA	NA	7.3 E-5	2.9 E-6	1.1 E-5	3.3 E-6	NA	1.1 E-7	NA	7.2 E-4	1.8 E-3	5.3 E-5	1.8 E-5	2.3 E-3	7.7 E-5	9.3 E-5	2.1 E-4	NA	7.4 E-3
L2-ST26-SP06	10	NA	NA	NA	3.6 E-7	2.0 E-5	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	1.2 E-4	NA	2.0 E-5	NA	NA	2.7 E-4
L2-ST26-SP06	20	NA	NA	NA	NA	5.7 E-6	1.5 E-6	NA	3.2 E-7	NA	3.2 E-5	6.2 E-5	4.5 E-5	NA	2.1 E-3	2.0 E-5	2.6 E-5	1.7 E-4	NA	2.7 E-3
L2-ST26-SP07	18	NA	NA	NA	5.1 E-7	1.2 E-5	5.7 E-6	NA	NA	NA	5.5 E-5	1.2 E-4	1.6 E-4	6.5 E-5	NA	NA	5.5 E-5	3.5 E-6	2.3 E-5	2.5 E-3
L2-ST28_90-SP02	10	NA	NA	NA	3.3 E-6	1.1 E-4	NA	6.9 E-4	1.3 E-4	NA	2.5 E-5	9.2 E-5	8.0 E-5	NA	NA	3.4 E-5	6.9 E-5	6.2 E-5	NA	4.4 E-3
L2-ST28_90-SP02	20	NA	3.7 E-4	6.5 E-5	1.1 E-6	4.6 E-6	2.4 E-6	6.5 E-5	1.1 E-5	NA	5.4 E-4	1.4 E-3	5.3 E-5	NA	8.4 E-4	8.9 E-5	7.1 E-5	9.9 E-4	NA	5.9 E-3

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	30	NA	1.4 E-8	NA	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA
29E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA
29E-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA
29E-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA
29E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
29E-SP11	20	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA
DSA-SP04	30	NA	8.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	20	NA	NA	NA	NA	6.7 E-8	NA	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	8.2 E-8	NA
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
DSA-SP08	20	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA
DSA-SP10	10	NA	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA
DSA-SP10	20	NA	NA	NA	NA	2.8 E-8	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA
DSA-SP10	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP11	10	NA	NA	NA	NA	5.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA
DSA-SP12	10	NA	NA	NA	NA	6.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
DSA-SP12	20	NA	2.7 E-9	NA	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA
DSA-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-7	NA	NA
DSA-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	NA	NA

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA
DSA-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA
DSA-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA
DSA-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
DSA-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA
DSA-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA
DSA-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA
DSA-SP24	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA
DSA-SP24	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA	NA
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
DSA-SP29	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA
DSA-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
DSA-SP32	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA
DSA-SP32	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	NA
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
E(m)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA
E(m)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	NA	NA
E(n)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
E(n)-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA
E(n)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	7.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
L2-ST28_90-SP02	20	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	ILCR
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	4.9 E-3	NA	6E-03
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	NA	8.6 E-4	NA	9E-04
28E-SP16	30	NA	8.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	3.3 E-5	NA	4E-05
28E-SP16	40	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	5.3 E-5	NA	6E-05
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	NA	NA	8E-08
29E-SP07	20	6.2 E-8	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	2.4 E-6	NA	3E-06
29E-SP08	10	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	1.9 E-7	NA	5E-07
29E-SP08	20	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	1.7 E-5	NA	2E-05
29E-SP08	30	1.6 E-7	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	7.7 E-6	NA	9E-06
29E-SP08	40	1.2 E-7	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	5.7 E-6	NA	7E-06
29E-SP09	10	2.3 E-5	7.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-6	NA	4E-05
29E-SP09	20	4.0 E-5	9.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	7E-05
29E-SP09	30	1.1 E-6	5.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	6.0 E-9	NA	4.2 E-6	NA	7E-06
29E-SP09	40	1.2 E-6	5.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	5.9 E-9	NA	2.5 E-6	NA	5E-06
29E-SP10	10	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	5E-07
29E-SP10	20	5.7 E-7	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	1E-06
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	5.9 E-9	NA	2E-07
29E-SP11	20	1.6 E-7	4.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	2.6 E-8	NA	4.0 E-6	1.0 E-7	5E-06
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	2E-07
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	2.9 E-6	NA	4E-06
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	4.9 E-9	NA	2.2 E-8	NA	7E-08
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	2.0 E-9	NA	1.8 E-9	NA	2E-08
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	1E-06
DSA-SP04	20	1.0 E-6	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	3.9 E-8	NA	2.6 E-5	NA	3E-05
DSA-SP04	30	1.2 E-6	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	1.2 E-8	NA	2.9 E-5	NA	3E-05
DSA-SP04	40	7.4 E-7	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	8.2 E-9	NA	1.8 E-5	NA	2E-05
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	3E-06
DSA-SP05	20	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-9	3.9 E-8	NA	1.3 E-6	NA	2E-06
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	3.4 E-7	NA	4E-07
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	1E-06
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP08	10	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	1.1 E-7	NA	2E-06
DSA-SP08	20	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	2.2 E-7	NA	3E-06
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	8.4 E-8	NA	9E-08
DSA-SP09	20	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	5.6 E-7	NA	6E-07
DSA-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-9	NA	3.3 E-8	NA	7E-07
DSA-SP10	20	8.5 E-8	3.6 E-7	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	5.4 E-7	NA	2E-06
DSA-SP10	30	3.0 E-7	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	2E-06
DSA-SP10	40	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	4.0 E-7	NA	6E-07
DSA-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	3E-07
DSA-SP11	20	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	8.3 E-9	NA	2E-07
DSA-SP12	10	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	3E-07
DSA-SP12	20	2.9 E-7	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	1.3 E-9	NA	1.4 E-7	NA	1E-06
DSA-SP13	10	NA	NA	NA	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	5.9 E-8	NA	1E-06
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	3E-07
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-8	NA	NA	1.3 E-7	NA	2E-07
DSA-SP15	20	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	1.3 E-9	NA	4.6 E-8	NA	1E-07
DSA-SP15	30	NA	5.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	1.7 E-9	NA	2.4 E-8	NA	1E-07
DSA-SP16	10	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	2E-06
DSA-SP16	20	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	NA	4E-06
DSA-SP16	30	NA	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	3.5 E-7	NA	4E-06
DSA-SP16	40	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	4E-06
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	1E-06
DSA-SP17	20	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	5E-07
DSA-SP17	30	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	1.7 E-7	NA	6E-07
DSA-SP18	10	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	5E-07
DSA-SP18	20	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8E-07
DSA-SP19	10	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7E-07

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
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Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	ILCR
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
DSA-SP19	20	NA	NA	NA	NA	NA	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	1E-07
DSA-SP20	10	NA	4.7 E-8	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	4.9 E-9	NA	1.5 E-6	NA	2E-06
DSA-SP20	20	NA	3.9 E-7	NA	NA	NA	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	6.4 E-6	NA	8E-06
DSA-SP21	10	NA	1.1 E-7	NA	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	2E-07
DSA-SP21	20	NA	1.2 E-7	NA	NA	NA	4.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	2E-07
DSA-SP22	10	NA	NA	NA	NA	NA	8.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	5E-07
DSA-SP22	20	NA	NA	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	2E-07
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	NA	2E-07
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	NA	1E-07
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	2.2 E-7	NA	3E-07
DSA-SP24	10	NA	1.3 E-7	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	6E-07
DSA-SP24	20	NA	NA	NA	NA	NA	7.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	5E-07
DSA-SP24	30	NA	3.0 E-7	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	1E-06
DSA-SP25	10	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	NA	NA	3E-07
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	NA	NA	1E-07
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	NA	NA	5E-07
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	1E-06
DSA-SP27	10	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	2.6 E-7	NA	5E-07
DSA-SP27	20	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	1.3 E-9	NA	5.9 E-7	NA	7E-07
DSA-SP28	10	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	2E-07
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-07
DSA-SP29	10	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-07
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6E-08
DSA-SP30	20	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	3E-07
DSA-SP31	10	NA	NA	NA	NA	NA	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	5E-07
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-07
DSA-SP32	10	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-07
DSA-SP32	20	NA	3.2 E-8	NA	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-06
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	1.3 E-8	NA	1E-07
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	2.7 E-8	NA	3E-07
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	2E-07
E(m)-SP08	10	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	2E-07
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	6.0 E-8	NA	2.5 E-8	NA	3E-07
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	NA	3E-07
E(M)-SP09	20	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	6.0 E-8	NA	3.2 E-8	NA	5E-07
E(m)-SP10	10	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	7.9 E-8	NA	1E-06
E(m)-SP10	20	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	2.1 E-7	NA	4E-06
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	1.5 E-9	NA	NA	NA	8E-08
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-07
E(n)-SP04	20	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	3.0 E-9	NA	2.9 E-8	NA	1E-07
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-7	NA	NA	NA	NA	9E-07
E(n)-SP05	20	6.2 E-8	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	6.0 E-9	NA	4.3 E-7	NA	2E-06
E(n)-SP05	40	2.3 E-7	8.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	3.6 E-9	NA	3.6 E-7	NA	8E-06
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	3.0 E-8	NA	1E-07
E(n)-SP06	20	1.8 E-7	7.1 E-8	NA	NA	NA	3.5 E-9	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	3.4 E-9	NA	4.3 E-8	NA	3E-07
E(n)-SP07	10	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	2.6 E-8	NA	2E-07
E(n)-SP08	10	NA	5.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	2E-07
E(n)-SP08	20	NA	8.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	1.2 E-7	NA	1E-06
E(n)-SP09	10	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	3E-07
E(n)-SP09	20	4.6 E-8	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	1.3 E-8	NA	2E-06
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	3.3 E-9	NA	4.4 E-9	NA	1E-07
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	7.0 E-9	NA	4.3 E-9	NA	1E-07
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	5E-08
E(n)-SP11	25	NA	6.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	1.0 E-8	NA	6E-07
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	NA	4E-08
E(n)-SP12	20	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	7.0 E-9	NA	6.4 E-9	NA	1E-07
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-08
L2-ST24-SP03	20	NA	1.8 E-7	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	8.4 E-9	NA	5.6 E-8	NA	6E-07
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00

Table 5.3-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
L2-ST26-SP04	20	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	1.4 E-8	NA	1.8 E-7	NA	5E-07
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	7E-07
L2-ST26-SP05	20	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	2.5 E-8	NA	1.4 E-7	NA	1E-06
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	5E-08
L2-ST26-SP06	20	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	6.3 E-9	NA	1.1 E-7	NA	4E-07
L2-ST26-SP07	18	NA	NA	NA	NA	NA	7.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	9.8 E-8	6E-07
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	4.0 E-8	NA	2E-07
L2-ST28_90-SP02	20	NA	2.1 E-7	NA	NA	NA	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	2.8 E-8	NA	6.4 E-7	NA	1E-06

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.6 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	2.0 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0
Unit Risk		NA	8.5 E-4	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA
28E-SP16	10	43000		20000														
28E-SP16	20			9100								28000						8500
28E-SP16	30		97	1500		190												
28E-SP16	40		210	3700														
29E-SP07	10														95			12
29E-SP07	20			110												13		98
29E-SP08	10				7.9					94		71	6.7	25	380	43		120
29E-SP08	20			110														
29E-SP08	30			240														
29E-SP08	40			230														
29E-SP09	10	15		18												9.6		
29E-SP09	20	40		88														
29E-SP09	30			1000														33
29E-SP09	40			1300											130	9.4		29
29E-SP10	10									34					180	31		4.7
29E-SP10	20			4.4						20					90	36		18
29E-SP11	10									57		90		44	240	22		37
29E-SP11	20			210				56								16		46
59E-SP08	10																	
59E-SP09	10								72									250
59E-SP10	20														120	8.9		34
59E-SP13	20																	10
DSA-SP04	10																	
DSA-SP04	20		42	3000												32		140
DSA-SP04	30		58	4100														71
DSA-SP04	40			3000														100
DSA-SP05	10																	190
DSA-SP05	20	14		21		15		30		11		12		5.0	88	20	41	360
DSA-SP06	10														230	5.4		160
DSA-SP06	20									45		12			680			
DSA-SP07	10																	41
DSA-SP07	20																	
DSA-SP08	10								40							14		150
DSA-SP08	20							37		56		23		8.9	240	45		440
DSA-SP09	10																	27
DSA-SP09	20	21		33						35		27			650	14		190
DSA-SP10	10					6.2				93					600	77		160
DSA-SP10	20			64		6.4		21		22					110	110		1000
DSA-SP10	30			340														48
DSA-SP10	40			150											290			93
DSA-SP11	10					7.2										22		190
DSA-SP11	20															7.4		270
DSA-SP12	10					7.8										20		150
DSA-SP12	20	13	13	18		5.3									60	6.3		15
DSA-SP13	10									38		12			110	130		210
DSA-SP13	20															40		260
DSA-SP15	10																	3.8
DSA-SP15	20											12			150			63
DSA-SP15	30											16			220	13		280
DSA-SP16	10														410			170
DSA-SP16	20																	750
DSA-SP16	30																	430
DSA-SP16	40																	150
DSA-SP17	10																	66
DSA-SP17	20															4.7		78
DSA-SP17	30														220			24
DSA-SP18	10				14				15	320			20		130	56		
DSA-SP18	20				33		9.9		60	520	60		56		250	170		11
DSA-SP19	10				49		14		18				75	8.5	64	81		31

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.6 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	2.0 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0
Unit Risk		NA	8.5 E-4	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA
DSA-SP19	20								9.1	330		15			110	24		
DSA-SP20	10									55					220	32		19
DSA-SP20	20				24					97			16		310	190		120
DSA-SP21	10				22		7.5						19		82	12		32
DSA-SP21	20				29		8.3		6.8	54			21	5.9	370	24		680
DSA-SP22	10				19		6.2		13	39			18	8.3	230	59		23
DSA-SP22	20				24		6.9		15	46			18	5.4	240	26		58
DSA-SP23	10									44					180	20		82
DSA-SP23	20				20								14		340	12		490
DSA-SP23	30				22								16		200	12		190
DSA-SP24	10				29		12		60	21			43		120	48		53
DSA-SP24	20				23				100	30			24		190	78		160
DSA-SP24	30	13			17				130	77			16		660	140		54
DSA-SP25	10															11		53
DSA-SP25	20															23		340
DSA-SP26	10															58		120
DSA-SP26	20															280		140
DSA-SP27	10															7.1		70
DSA-SP27	20									22						6.9		170
DSA-SP28	10									68				7.7	260	30		38
DSA-SP28	20									110	26	34		43	350	25		31
DSA-SP29	10				36		12						13					10
DSA-SP30	10														160	7.5		74
DSA-SP30	20									68					290	66		7
DSA-SP31	10				6.3					150		62	5.7	35	650	62		30
DSA-SP31	20									63					220	40		69
DSA-SP32	10				6.0					55		13			190	31		19
DSA-SP32	20				8.3					510	52	200	6.9	31	2000	290		21
E(d)-SP02	10								12							10		56
E(d)-SP02	20			26				50		47		19		9.8	210	39		480
E(d)-SP03	10			14					73							18		29
E(m)-SP08	10				14					27			8.6		110	22		140
E(m)-SP08	20							53		33		19		10	160	30		110
E(M)-SP09	10									30					140	29		100
E(M)-SP09	20							31		90		23		10	380	77		340
E(m)-SP10	10	8.8							99						68	18		80
E(m)-SP10	20																	91
E(m)-SP11	20									66				7.8	400	15		19
E(n)-SP04	10								33	22					120	13		67
E(n)-SP04	20															8.2		1300
E(n)-SP05	10								11							6.8		4.8
E(n)-SP05	20							46		58					220	34		3700
E(n)-SP05	40														140			
E(n)-SP06	10								8.0						73	9.2		230
E(n)-SP06	20			21											66	3.9		44
E(n)-SP07	10			6.4											63	6.8		110
E(n)-SP08	10								26						93	9.0		190
E(n)-SP08	20	8.7														4.8		510
E(n)-SP09	10								76						91	22		26
E(n)-SP09	20							26	11							7.8		46
E(N)-SP10	10														58	11		76
E(N)-SP10	20									22					110	22		620
E(n)-SP11	15									55		22			240	8.9		
E(n)-SP11	25															4.3		14
E(n)-SP12	10									24					130	4.3		
E(n)-SP12	20									43					210	7.3		13
L2-ST24-SP03	10								7.2						54	4.1		63
L2-ST24-SP03	20							55							89	27		80
L2-ST26-SP04	10																	

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child		4.5 E-1	3.2 E+0	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.6 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.4 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0
Unit Hazard Adult		1.9 E-1	1.4 E+0	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	2.0 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0
Unit Risk		NA	8.5 E-4	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA
L2-ST26-SP04	20							31						5.6		24		170
L2-ST26-SP05	10				11					43			7.0		180	67		420
L2-ST26-SP05	20							28		200		22		14	540	120		220
L2-ST26-SP06	10													10		5.2		22
L2-ST26-SP06	20							25		18					59	10		180
L2-ST26-SP07	18									78		15			3000	100		160
L2-ST28_90-SP02	10			25					80	140		34			1200	22		42
L2-ST28_90-SP02	20			56				37		82					260	80		760

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		5.6 E+1	4.9 E+1	6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	7.4 E+0	7.4 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		2.2 E-2	1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
28E-SP16	10			55000							2600				800000		5900	10000000	
28E-SP16	20											3600			97000			3200000	
28E-SP16	30		310	1400					2500		120	220			1900			180000	
28E-SP16	40		510	2200					4900						13000			380000	
29E-SP07	10								24						60		8.4		
29E-SP07	20	11	25	22				11	240		23	60			740		6.8	8900	
29E-SP08	10			5.1	6.9	55	5.2		39		82	66	14	5.3		43	71	380	
29E-SP08	20		50	1600					360			36			1600			62000	
29E-SP08	30	42	54	330					400						2500			42000	
29E-SP08	40	41	64	240					360						3300			41000	
29E-SP09	10	2200	990	330					120	15	11	15					20	18000	
29E-SP09	20	7000	2400	1400					580	75							40	60000	
29E-SP09	30	280	210	330				170	3800	100	90	160			1400	26	29	23000	
29E-SP09	40	410	260	360		26		210	4200	91	58	130			840	33	30	18000	
29E-SP10	10	10		4.8	4.4	16					8.6	44	7.8				10	340	
29E-SP10	20	100	35	100	11				92	5.6	56	130	9.4				38	780	
29E-SP11	10				9.6	19			96		47	20	13			76	84	12	
29E-SP11	20	29	120	330	16			31	480		32	260			240	74	37	15000	7.6
59E-SP08	10				42							51						310	
59E-SP09	10											100			950			5900	
59E-SP10	20					10			64		33	60	6.8		13	14	38	82	
59E-SP13	20											4.6			18	5.7	5.5	6.9	
DSA-SP04	10																	2700	
DSA-SP04	20	180	470	210				4200	110000	57	96	370			280	110	52	98000	
DSA-SP04	30	320	770	200				3700	100000			74			1400	51		160000	
DSA-SP04	40	250	580	160				2600	72000			84			1200	46		130000	
DSA-SP05	10								360									6700	
DSA-SP05	20		47			17			480		40	160	5.9		7.8	110	36	4700	
DSA-SP06	10					12					7.0	8.9	5.8			5.7	7.5	690	
DSA-SP06	20					47						8.6	8.4				12		
DSA-SP07	10																	2200	
DSA-SP07	20																5.6		
DSA-SP08	10		210		21	20			170			57				4.8	17	230	
DSA-SP08	20		530		4.8	33			150		48	240	8.8			130	45	820	
DSA-SP09	10					10			90				6.2			3.7	5.8	170	
DSA-SP09	20		6.5		18	88			720		21	95				4.4	7.4	2100	
DSA-SP10	10					22			200		78	230				12	36	66	
DSA-SP10	20	15	93			13	6.6	200	11000	7.4	180	450	8.1			47	63	2000	
DSA-SP10	30	78	160					1100	62000									7700	
DSA-SP10	40		85		16			730	44000	26		76				15		2900	
DSA-SP11	10				9.8			20	1400		76	240					20	59	
DSA-SP11	20		49					7.6	540		34	57	11	5.0		5.2	11	31	
DSA-SP12	10		7.2		11			21	720	6.5	92	170					13	24	
DSA-SP12	20	51	180					40	1100	7.2	5.0	6.9			200	3.7	11	540	
DSA-SP13	10				41		14	75	6200	6.3	800	1600	12	5.2	18		120	120	
DSA-SP13	20				24			200	10000		520	870					49	410	
DSA-SP15	10														68			260	
DSA-SP15	20		7.4		4.1	13			40			8.3			51	3.6	5.0	170	
DSA-SP15	30		19		14	13		59	14000	7.2		120			37	7.3	9.6	130	
DSA-SP16	10		270					720	90000		88	98					36	840	
DSA-SP16	20		1000					1200	160000		67	110						2000	
DSA-SP16	30		1400					1700	190000		110	270				67		1900	
DSA-SP16	40		1600					2000	220000			83						3500	
DSA-SP17	10				9.2							49					6.3	2400	
DSA-SP17	20		44		5.0				9.3			29					25	1300	
DSA-SP17	30		150			9.7			11		8.2	15				8.2	24	910	
DSA-SP18	10				27	100	43				54	100	150	34		11	380		
DSA-SP18	20				67	71	160				160	340	510	110			1500		
DSA-SP19	10				24	32	140				80	93	510	120			870		

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		5.6 E+1	4.9 E+1	6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	7.4 E+0	7.4 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		2.2 E-2	1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
DSA-SP19	20				15	240	10				22	50	30	7.0		12	120		
DSA-SP20	10		6.7				6.7	48	7900		21	46	9.9		7.8	8.2	47	3000	
DSA-SP20	20		99		50		27	240	35000		190	570	61	16		21	97	24000	
DSA-SP21	10		16				14		1000		100	270	44	18			47	14	
DSA-SP21	20		31			9.8	13	24	4000		74	260	43	19			46	34	
DSA-SP22	10						15	13	1500		160	610	44	19			73	82	
DSA-SP22	20						12	33	5400		240	840	38	17			36	170	
DSA-SP23	10							120	24000		68	140	20					130	
DSA-SP23	20							180	29000		25	36	30	14				360	
DSA-SP23	30							180	28000		12	22	34	15	22			1200	
DSA-SP24	10		19				34	65	8200	6.8	120	260	110	43			160	180	
DSA-SP24	20					100	22	200	24000	14	190	360	60	25			120	450	
DSA-SP24	30		110			16	17	200	24000	14	220	520	43	18			160	1700	
DSA-SP25	10		26					66	9500		34	39	5.3		32		9.9		
DSA-SP25	20							320	45000		140	420			70		23		
DSA-SP26	10				61			310	24000		240	1600	10		32		25		
DSA-SP26	20							1200	120000		1200	3200			310		180		
DSA-SP27	10		20					64	7100		27	120			22		5.3	530	
DSA-SP27	20		6.0					81	8600		52	78	5.6		12	3.6	16	2200	
DSA-SP28	10				6.0	57	6.3				54	66	8.9				36	20	
DSA-SP28	20				4.2	120					47	48	7.4				37		
DSA-SP29	10		15			12			35			4.0	20	15			7.0		
DSA-SP30	10					39					7.2	7.1					14		
DSA-SP30	20				8.9	83	7.5				65	100	6.2			4.7	67		
DSA-SP31	10				10	39	7.3				67	100	19	6.6		4.3	76		
DSA-SP31	20				7.3	11			340		43	74	13				31		
DSA-SP32	10					11	7.4	96	2200	6.6	22	30	16	6.6			49		
DSA-SP32	20		8.1		36	370	26	15	300		250	240	38	16			340		
E(d)-SP02	10				22			88	3800		7.9	28	7.9		13		14	27	
E(d)-SP02	20				8.0	29		42	2100		530	620	8.8			160	58	100	
E(d)-SP03	10				100			120	4800	12	14	120					15	44	
E(m)-SP08	10				4.8	42	7.1				13	19	19	7.4	16		130		
E(m)-SP08	20				7.8	36			16		41	250	9.3		19	170	57	94	
E(M)-SP09	10				5.0	26					22	46			48		36		
E(M)-SP09	20		5.4		10	35			160		39	210	7.3		83	170	62	120	
E(m)-SP10	10	20			46				22		11	77	6.8		420		22	160	
E(m)-SP10	20	62							49			12	28	16	4900		23	790	
E(m)-SP11	20					30			58		12	16	5.5		20	4.2	14		
E(n)-SP04	10				21	11			19		6.4	39	5.3				16		
E(n)-SP04	20		9.2		6.2				260		29	67	7.2		11	8.5	18	110	
E(n)-SP05	10								28			5.0	5.9		630		8.9		
E(n)-SP05	20	11				9.8	7.1		63		76	160	11		2000	17	46	1600	
E(n)-SP05	40	77	40			22			490			13			20000	20	22	2600	
E(n)-SP06	10								21			14			11		11	60	
E(n)-SP06	20	32	18		6.8	13	11	14	180		5.4	29	27	7.3	15	9.6	42	160	
E(n)-SP07	10		11		4.6			13	220			8.8			17		11	53	
E(n)-SP08	10		8.4		17	11			14			25	9.0				18	240	
E(n)-SP08	20		210						13		8.1	27				12	14	460	
E(n)-SP09	10		16		29							22	8.5				15	32	
E(n)-SP09	20	8.1	540		17				13		21	59	7.0			44	27	49	
E(N)-SP10	10					10					9.6	44			20	5.5	16	8.9	
E(N)-SP10	20					11					20	100			17	20	28	16	
E(n)-SP11	15					28					7.4	9.9	6.0			5.2	24		
E(n)-SP11	25		190						240			12	7.3			9.4	18	47	
E(n)-SP12	10					560						7.8				8	14		
E(n)-SP12	20		9.4			100			40		7.3	24			20	20	29	24	
L2-ST24-SP03	10				20							11					6.3		
L2-ST24-SP03	20		47		5.6	18	6.9		28		51	220	13		190	24	39	210	
L2-ST26-SP04	10																		

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		5.6 E+1	4.9 E+1	6.4 E+1	3.8 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	1.1 E+1	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	7.4 E+0	7.4 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	4.8 E+0	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		2.2 E-2	1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
L2-ST26-SP04	20					14	5.4				220	740	11		150	40	47	690	
L2-ST26-SP05	10				10	14					35	72	12		140		110		
L2-ST26-SP05	20			11	65	47	14		14		900	2300	21	6.3	360	70	100	510	
L2-ST26-SP06	10				4.6	52						6.1			9.9		12		
L2-ST26-SP06	20					25	6.4		39		40	78	18		330	18	28	420	
L2-ST26-SP07	18				11	49	22				66	140	59	22			56	7.6	6.7
L2-ST28_90-SP02	10				43	290		280	8800		20	72	18			18	42	81	
L2-ST28_90-SP02	20		53	9.8	26	20	10	48	1300		670	1800	21		130	80	76	2400	

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
28E-SP16	10	1.2 E-4	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	1.1 E-4
28E-SP16	30	NA	6.1 E-7	1.1 E-4	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	9.9 E-7	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	3.2 E-7
29E-SP07	20	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	1.3 E-6
29E-SP08	10	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	2.8 E-7	NA	1.2 E-4	1.0 E-6	1.1 E-7	2.7 E-6	2.2 E-5	NA	3.2 E-6
29E-SP08	20	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	4.2 E-8	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA
29E-SP09	20	5.6 E-8	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7
29E-SP09	40	NA	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	1.2 E-6	NA	1.9 E-7
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	1.3 E-6	1.6 E-5	NA	1.2 E-7
29E-SP10	20	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	3.2 E-7	9.4 E-6	NA	2.4 E-7
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	1.5 E-4	NA	2.0 E-7	1.7 E-6	1.1 E-5	NA	9.8 E-7
29E-SP11	20	NA	NA	2.4 E-5	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	4.2 E-6	NA	6.1 E-7
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	2.3 E-6	NA	4.5 E-7
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	4.0 E-7	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	1.9 E-6
DSA-SP04	30	NA	3.7 E-7	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-7
DSA-SP04	40	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-7
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-6
DSA-SP05	20	2.0 E-8	NA	2.4 E-6	NA	2.8 E-5	NA	8.8 E-8	NA	1.6 E-8	NA	1.0 E-5	NA	1.1 E-8	3.1 E-7	5.2 E-6	1.6 E-6	4.8 E-6
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	2.8 E-6	NA	4.2 E-6
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	1.0 E-5	NA	NA	2.4 E-6	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	6.2 E-6	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	4.0 E-6
DSA-SP08	20	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	8.3 E-8	NA	1.9 E-5	NA	2.0 E-8	8.4 E-7	1.2 E-5	NA	5.8 E-6
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-7
DSA-SP09	20	2.9 E-8	NA	3.8 E-6	NA	NA	NA	NA	NA	5.2 E-8	NA	2.3 E-5	NA	NA	2.3 E-6	3.7 E-6	NA	2.5 E-6
DSA-SP10	10	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	4.2 E-6	4.0 E-5	NA	4.2 E-6
DSA-SP10	20	NA	NA	7.4 E-6	NA	1.2 E-5	NA	6.2 E-8	NA	3.2 E-8	NA	NA	NA	NA	3.9 E-7	2.9 E-5	NA	1.3 E-5
DSA-SP10	30	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-7
DSA-SP10	40	NA	NA	8.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	6.2 E-7
DSA-SP11	10	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	5.0 E-6
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	3.6 E-6
DSA-SP12	10	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	4.0 E-6
DSA-SP12	20	1.8 E-8	1.2 E-7	2.1 E-6	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	1.6 E-6	NA	2.0 E-7
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	2.0 E-5	NA	NA	7.7 E-7	6.8 E-5	NA	5.6 E-6
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	3.5 E-6
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	5.3 E-7	NA	NA	8.4 E-7
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-6	NA	NA	5.2 E-7	2.3 E-6	NA	2.5 E-6
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	4.5 E-6
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	1.0 E-6
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	2.1 E-7
DSA-SP18	10	NA	NA	NA	2.2 E-5	NA	NA	NA	2.3 E-6	9.4 E-7	NA	NA	3.1 E-6	NA	9.1 E-7	2.9 E-5	NA	NA
DSA-SP18	20	NA	NA	NA	2.6 E-5	NA	8.9 E-6	NA	4.7 E-6	7.7 E-7	1.3 E-7	NA	4.4 E-6	NA	8.8 E-7	4.4 E-5	NA	1.5 E-7
DSA-SP19	10	NA	NA	NA	7.6 E-5	NA	2.5 E-5	NA	2.8 E-6	NA	NA	NA	1.2 E-5	3.8 E-8	4.5 E-7	4.2 E-5	NA	8.2 E-7

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	4.9 E-7	NA	1.3 E-5	NA	NA	3.9 E-7	6.3 E-6	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	1.5 E-6	1.7 E-5	NA	5.0 E-7
DSA-SP20	20	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	1.4 E-7	NA	NA	1.2 E-6	NA	1.1 E-6	5.0 E-5	NA	1.6 E-6
DSA-SP21	10	NA	NA	NA	3.4 E-5	NA	1.4 E-5	NA	NA	NA	NA	NA	3.0 E-6	NA	5.8 E-7	6.3 E-6	NA	8.5 E-7
DSA-SP21	20	NA	NA	NA	2.2 E-5	NA	7.5 E-6	NA	5.3 E-7	8.0 E-8	NA	NA	1.6 E-6	1.3 E-8	1.3 E-6	6.3 E-6	NA	9.0 E-6
DSA-SP22	10	NA	NA	NA	2.9 E-5	NA	1.1 E-5	NA	2.0 E-6	1.1 E-7	NA	NA	2.8 E-6	3.7 E-8	1.6 E-6	3.1 E-5	NA	6.1 E-7
DSA-SP22	20	NA	NA	NA	1.9 E-5	NA	6.2 E-6	NA	1.2 E-6	6.8 E-8	NA	NA	1.4 E-6	1.2 E-8	8.4 E-7	6.8 E-6	NA	7.7 E-7
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	1.3 E-6	1.0 E-5	NA	2.2 E-6
DSA-SP23	20	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	1.2 E-6	3.1 E-6	NA	6.5 E-6
DSA-SP23	30	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	4.7 E-7	2.1 E-6	NA	1.7 E-6
DSA-SP24	10	NA	NA	NA	4.5 E-5	NA	2.2 E-5	NA	9.3 E-6	6.2 E-8	NA	NA	6.7 E-6	NA	8.4 E-7	2.5 E-5	NA	1.4 E-6
DSA-SP24	20	NA	NA	NA	1.8 E-5	NA	NA	NA	7.8 E-6	4.4 E-8	NA	NA	1.9 E-6	NA	6.7 E-7	2.0 E-5	NA	2.1 E-6
DSA-SP24	30	1.2 E-8	NA	NA	8.8 E-6	NA	NA	NA	6.7 E-6	7.6 E-8	NA	NA	8.3 E-7	NA	1.5 E-6	2.4 E-5	NA	4.8 E-7
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	1.4 E-6
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	4.5 E-6
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	3.2 E-6
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	1.9 E-6
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	1.9 E-6
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	1.8 E-6	NA	2.3 E-6
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	3.4 E-8	1.8 E-6	1.6 E-5	NA	1.0 E-6
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	5.6 E-8	2.9 E-5	NA	9.6 E-8	1.2 E-6	6.5 E-6	NA	4.1 E-7
DSA-SP29	10	NA	NA	NA	5.6 E-5	NA	2.2 E-5	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	2.7 E-7
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	3.9 E-6	NA	2.0 E-6
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	1.0 E-6	1.7 E-5	NA	9.3 E-8
DSA-SP31	10	NA	NA	NA	9.7 E-6	NA	NA	NA	NA	4.4 E-7	NA	1.0 E-4	8.9 E-7	1.6 E-7	4.6 E-6	3.2 E-5	NA	8.0 E-7
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA	NA	NA	7.7 E-7	1.0 E-5	NA	9.2 E-7
DSA-SP32	10	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	1.6 E-7	NA	2.2 E-5	NA	NA	1.3 E-6	1.6 E-5	NA	5.0 E-7
DSA-SP32	20	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	7.5 E-7	1.1 E-7	1.7 E-4	5.4 E-7	6.9 E-8	7.0 E-6	7.6 E-5	NA	2.8 E-7
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	1.5 E-6
E(d)-SP02	20	NA	NA	3.0 E-6	NA	NA	NA	1.5 E-7	NA	6.9 E-8	NA	1.6 E-5	NA	2.2 E-8	7.4 E-7	1.0 E-5	NA	6.4 E-6
E(d)-SP03	10	NA	NA	3.2 E-6	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	7.7 E-7
E(m)-SP08	10	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	8.0 E-8	NA	NA	1.3 E-6	NA	7.7 E-7	1.1 E-5	NA	3.7 E-6
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	4.9 E-8	NA	1.6 E-5	NA	2.2 E-8	5.6 E-7	7.8 E-6	NA	1.5 E-6
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	NA	NA	NA	NA	9.8 E-7	1.5 E-5	NA	2.7 E-6
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	9.1 E-8	NA	1.3 E-7	NA	1.9 E-5	NA	2.2 E-8	1.3 E-6	2.0 E-5	NA	4.5 E-6
E(m)-SP10	10	2.5 E-8	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	4.8 E-7	9.4 E-6	NA	2.1 E-6
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA	NA	NA	1.7 E-8	1.4 E-6	3.9 E-6	NA	2.5 E-7
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	6.5 E-8	NA	NA	NA	NA	8.4 E-7	6.8 E-6	NA	1.8 E-6
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	1.7 E-5
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	1.3 E-7
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	8.5 E-8	NA	NA	NA	NA	7.7 E-7	8.9 E-6	NA	4.9 E-5
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	5.1 E-7	4.8 E-6	NA	6.1 E-6
E(n)-SP06	20	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	1.0 E-6	NA	5.8 E-7
E(n)-SP07	10	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	3.6 E-6	NA	2.9 E-6
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	6.5 E-7	4.7 E-6	NA	5.0 E-6
E(n)-SP08	20	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	6.8 E-6
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	6.4 E-7	1.1 E-5	NA	6.9 E-7
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	7.7 E-8	8.6 E-7	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	6.1 E-7
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	5.7 E-6	NA	2.0 E-6
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	3.9 E-7	5.7 E-6	NA	8.2 E-6
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	2.5 E-5	NA	NA	1.1 E-6	3.1 E-6	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-7	NA	1.5 E-7
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	NA	NA	NA	NA	9.1 E-7	2.2 E-6	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	7.4 E-7	1.9 E-6	NA	1.7 E-7
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	3.8 E-7	2.1 E-6	NA	1.7 E-6
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	3.1 E-7	7.1 E-6	NA	1.1 E-6
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	9.1 E-8	NA	NA	NA	NA	NA	1.2 E-8	NA	6.3 E-6	NA	2.3 E-6
L2-ST26-SP05	10	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	1.3 E-7	NA	NA	1.1 E-6	NA	1.3 E-6	3.5 E-5	NA	1.1 E-5
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	8.3 E-8	NA	2.9 E-7	NA	1.9 E-5	NA	3.1 E-8	1.9 E-6	3.1 E-5	NA	2.9 E-6
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	2.7 E-6	NA	5.8 E-7
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	2.7 E-8	NA	NA	NA	NA	2.1 E-7	2.6 E-6	NA	2.4 E-6
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	1.4 E-5	NA	NA	1.2 E-5	2.9 E-5	NA	2.4 E-6
L2-ST28_90-SP02	10	NA	NA	5.7 E-6	NA	NA	NA	NA	1.2 E-5	4.1 E-7	NA	5.7 E-5	NA	NA	8.4 E-6	1.1 E-5	NA	1.1 E-6
L2-ST28_90-SP02	20	NA	NA	6.4 E-6	NA	NA	NA	1.1 E-7	NA	1.2 E-7	NA	NA	NA	NA	9.1 E-7	2.1 E-5	NA	1.0 E-5

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
28E-SP16	10	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	2.9 E-1	NA	3.0 E-4	2.4 E-1	NA	5.6 E-1
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	NA	1.8 E-2	NA	NA	3.8 E-2	NA	8.1 E-2
28E-SP16	30	NA	4.2 E-5	1.8 E-4	NA	NA	NA	NA	3.9 E-7	NA	7.0 E-7	3.7 E-6	NA	NA	2.3 E-4	NA	NA	1.4 E-3	NA	2.2 E-3
28E-SP16	40	NA	5.2 E-5	2.1 E-4	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	2.3 E-3	NA	3.9 E-3
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	2.2 E-5	NA	4.3 E-7	NA	NA	2.3 E-5
29E-SP07	20	1.9 E-6	5.1 E-6	4.1 E-6	NA	NA	NA	4.3 E-7	5.6 E-8	NA	2.0 E-7	1.5 E-6	NA	NA	1.4 E-4	NA	1.8 E-7	1.1 E-4	NA	2.7 E-4
29E-SP08	10	NA	NA	1.9 E-6	1.7 E-8	8.8 E-7	7.0 E-8	NA	1.8 E-8	NA	1.4 E-6	3.4 E-6	1.8 E-6	8.2 E-7	NA	2.7 E-6	3.7 E-6	9.0 E-6	NA	1.9 E-4
29E-SP08	20	NA	1.0 E-5	3.0 E-4	NA	NA	NA	NA	8.3 E-8	NA	NA	9.2 E-7	NA	NA	2.9 E-4	NA	NA	7.4 E-4	NA	1.4 E-3
29E-SP08	30	4.9 E-6	7.4 E-6	4.1 E-5	NA	NA	NA	NA	6.2 E-8	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	3.3 E-4	NA	7.1 E-4
29E-SP08	40	3.6 E-6	6.5 E-6	2.3 E-5	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	2.4 E-4	NA	5.9 E-4
29E-SP09	10	7.7 E-4	4.0 E-4	1.2 E-4	NA	NA	NA	NA	5.6 E-8	8.9 E-7	1.9 E-7	7.7 E-7	NA	NA	NA	NA	1.0 E-6	4.3 E-4	NA	1.7 E-3
29E-SP09	20	1.2 E-3	4.9 E-4	2.6 E-4	NA	NA	NA	NA	1.3 E-7	2.2 E-6	NA	NA	NA	NA	NA	NA	1.0 E-6	7.1 E-4	NA	2.7 E-3
29E-SP09	30	3.3 E-5	2.9 E-5	4.1 E-5	NA	NA	NA	4.4 E-6	5.9 E-7	2.0 E-6	5.2 E-7	2.7 E-6	NA	NA	1.7 E-4	5.4 E-7	5.0 E-7	1.8 E-4	NA	5.4 E-4
29E-SP09	40	3.6 E-5	2.7 E-5	3.4 E-5	NA	1.0 E-7	NA	4.1 E-6	4.9 E-7	1.4 E-6	2.5 E-7	1.7 E-6	NA	NA	7.7 E-5	5.1 E-7	3.9 E-7	1.1 E-4	NA	3.7 E-4
29E-SP10	10	3.5 E-6	NA	1.8 E-6	1.1 E-8	2.6 E-7	NA	NA	NA	NA	1.5 E-7	2.2 E-6	9.8 E-7	NA	NA	NA	5.2 E-7	8.1 E-6	NA	3.5 E-5
29E-SP10	20	1.7 E-5	7.1 E-6	1.9 E-5	1.3 E-8	NA	NA	NA	2.1 E-8	1.7 E-7	4.9 E-7	3.3 E-6	5.9 E-7	NA	NA	NA	9.8 E-7	9.3 E-6	NA	6.9 E-5
29E-SP11	10	NA	NA	NA	2.3 E-8	3.0 E-7	NA	NA	4.4 E-8	NA	8.2 E-7	1.0 E-6	1.6 E-6	NA	NA	4.7 E-6	4.3 E-6	2.8 E-7	NA	1.8 E-4
29E-SP11	20	5.1 E-6	2.5 E-5	6.2 E-5	1.9 E-8	NA	NA	1.2 E-6	1.1 E-7	NA	2.8 E-7	6.6 E-6	NA	NA	4.4 E-5	2.3 E-6	9.6 E-7	1.8 E-4	5.4 E-7	3.5 E-4
59E-SP08	10	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	7.4 E-6	NA	1.0 E-5
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	NA	3.5 E-4	NA	NA	1.4 E-4	NA	5.1 E-4
59E-SP10	20	NA	NA	NA	NA	8.0 E-8	NA	NA	1.5 E-8	NA	2.9 E-7	1.5 E-6	4.3 E-7	NA	2.4 E-6	4.4 E-7	9.8 E-7	9.7 E-7	NA	1.0 E-5
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	3.3 E-6	1.8 E-7	1.4 E-7	8.2 E-8	NA	4.0 E-6
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	NA	6.4 E-5
DSA-SP04	20	3.1 E-5	9.6 E-5	3.9 E-5	NA	NA	NA	1.6 E-4	2.5 E-5	1.7 E-6	8.4 E-7	9.4 E-6	NA	NA	5.1 E-5	3.4 E-6	1.3 E-6	1.2 E-3	NA	1.9 E-3
DSA-SP04	30	3.7 E-5	1.0 E-4	2.5 E-5	NA	NA	NA	9.6 E-5	1.5 E-5	NA	NA	1.3 E-6	NA	NA	1.7 E-4	1.1 E-6	NA	1.3 E-3	NA	2.0 E-3
DSA-SP04	40	2.2 E-5	5.9 E-5	1.5 E-5	NA	NA	NA	5.1 E-5	8.3 E-6	NA	NA	1.1 E-6	NA	NA	1.1 E-4	7.2 E-7	NA	7.7 E-4	NA	1.2 E-3
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	1.6 E-4
DSA-SP05	20	NA	9.6 E-6	NA	NA	1.4 E-7	NA	NA	1.1 E-7	NA	3.5 E-7	4.1 E-6	3.7 E-7	NA	1.4 E-6	3.4 E-6	9.3 E-7	5.6 E-5	NA	1.3 E-4
DSA-SP06	10	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	1.2 E-7	4.5 E-7	7.3 E-7	NA	NA	3.6 E-7	3.9 E-7	1.6 E-5	NA	2.7 E-5
DSA-SP06	20	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	2.2 E-7	5.3 E-7	NA	NA	NA	3.1 E-7	NA	NA	1.4 E-5
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	5.3 E-5
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	1.4 E-7
DSA-SP08	10	NA	8.6 E-5	NA	5.0 E-8	3.2 E-7	NA	NA	7.9 E-8	NA	NA	2.9 E-6	NA	NA	NA	3.0 E-7	8.8 E-7	5.5 E-6	NA	1.1 E-4
DSA-SP08	20	NA	1.1 E-4	NA	5.8 E-9	2.6 E-7	NA	NA	3.5 E-8	NA	4.2 E-7	6.1 E-6	5.5 E-7	NA	NA	4.1 E-6	1.2 E-6	9.7 E-6	NA	1.7 E-4
DSA-SP09	10	NA	NA	NA	NA	1.6 E-7	NA	NA	4.2 E-8	NA	NA	NA	7.8 E-7	NA	NA	2.3 E-7	3.0 E-7	4.0 E-6	NA	6.3 E-6
DSA-SP09	20	NA	1.3 E-6	NA	2.2 E-8	7.0 E-7	NA	NA	1.7 E-7	NA	1.8 E-7	2.4 E-6	NA	NA	NA	1.4 E-7	1.9 E-7	2.5 E-5	NA	6.5 E-5
DSA-SP10	10	NA	NA	NA	NA	3.5 E-7	NA	NA	9.3 E-8	NA	1.4 E-6	1.2 E-5	NA	NA	NA	7.5 E-7	1.9 E-6	1.6 E-6	NA	9.0 E-5
DSA-SP10	20	2.6 E-6	1.9 E-5	NA	NA	1.0 E-7	4.4 E-8	7.8 E-6	2.5 E-6	2.2 E-7	1.6 E-6	1.1 E-5	5.1 E-7	NA	NA	1.5 E-6	1.6 E-6	2.4 E-5	NA	1.3 E-4
DSA-SP10	30	9.1 E-6	2.2 E-5	NA	NA	NA	NA	2.9 E-5	9.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5	NA	1.6 E-4
DSA-SP10	40	NA	8.7 E-6	NA	9.6 E-9	NA	NA	1.4 E-5	5.1 E-6	3.9 E-7	NA	9.7 E-7	NA	NA	NA	2.3 E-7	NA	1.7 E-5	NA	5.7 E-5
DSA-SP11	10	NA	NA	NA	2.4 E-8	NA	NA	1.6 E-6	6.5 E-7	NA	1.3 E-6	1.2 E-5	NA	NA	NA	NA	1.0 E-6	1.4 E-6	NA	6.2 E-5
DSA-SP11	20	NA	1.0 E-5	NA	NA	NA	NA	3.0 E-7	1.3 E-7	NA	3.0 E-7	1.5 E-6	6.9 E-7	3.9 E-7	NA	1.6 E-7	2.8 E-7	3.7 E-7	NA	2.0 E-5
DSA-SP12	10	NA	2.9 E-6	NA	2.6 E-8	NA	NA	1.6 E-6	3.3 E-7	3.9 E-7	1.6 E-6	8.7 E-6	NA	NA	NA	NA	6.7 E-7	5.7 E-7	NA	6.1 E-5
DSA-SP12	20	8.9 E-6	3.7 E-5	NA	NA	NA	NA	1.6 E-6	2.5 E-7	2.1 E-7	4.4 E-8	1.8 E-7	NA	NA	3.7 E-5	1.2 E-7	2.8 E-7	6.4 E-6	NA	1.1 E-4
DSA-SP13	10	NA	NA	NA	9.9 E-8	NA	1.9 E-7	5.8 E-6	2.9 E-6	3.8 E-7	1.4 E-5	8.2 E-5	1.5 E-6	8.1 E-7	6.6 E-6	NA	6.2 E-6	2.8 E-6	NA	2.2 E-4
DSA-SP13	20	NA	NA	NA	2.9 E-8	NA	NA	7.8 E-6	2.3 E-6	NA	4.5 E-6	2.2 E-5	NA	NA	NA	NA	1.3 E-6	4.9 E-6	NA	5.7 E-5
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	6.2 E-6	NA	3.1 E-5
DSA-SP15	20	NA	1.5 E-6	NA	4.9 E-9	1.0 E-7	NA	NA	9.3 E-9	NA	NA	2.1 E-7	NA	NA	9.4 E-6	1.1 E-7	1.3 E-7	2.0 E-6	NA	2.5 E-5
DSA-SP15	30	NA	2.6 E-6	NA	1.1 E-8	6.9 E-8	NA	1.5 E-6	2.2 E-6	1.4 E-7	NA	2.0 E-6	NA	NA	4.5 E-6	1.5 E-7	1.7 E-7	1.0 E-6	NA	2.9 E-5
DSA-SP16	10	NA	1.1 E-4	NA	NA	NA	NA	5.6 E-5	4.2 E-5	NA	1.5 E-6	5.0 E-6	NA	NA	NA	NA	1.9 E-6	2.0 E-5	NA	2.4 E-4
DSA-SP16	20	NA	2.0 E-4	NA	NA	NA	NA	4.7 E-5	3.7 E-5	NA	5.8 E-7	2.8 E-6	NA	NA	NA	NA	NA	2.4 E-5	NA	3.3 E-4
DSA-SP16	30	NA	1.9 E-4	NA	NA	NA	NA	4.4 E-5	2.9 E-5	NA	6.4 E-7	4.6 E-6	NA	NA	NA	1.4 E-6	NA	1.5 E-5	NA	2.9 E-4
DSA-SP16	40	NA	1.6 E-4	NA	NA	NA	NA	3.9 E-5	2.5 E-5	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	2.1 E-5	NA	2.5 E-4
DSA-SP17	10	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	3.3 E-7	5.7 E-5	NA	6.2 E-5
DSA-SP17	20	NA	9.0 E-6	NA	6.0 E-9	NA	NA	NA	2.2 E-9	NA	NA	7.4 E-7	NA	NA	NA	NA	6.5 E-7	1.5 E-5	NA	2.8 E-5
DSA-SP17	30	NA	2.0 E-5	NA	NA	5.2 E-8	NA	NA	1.7 E-9	NA	4.8 E-8	2.6 E-7	NA	NA	NA	1.7 E-7	4.1 E-7	7.2 E-6	NA	2.9 E-5
DSA-SP18	10	NA	NA	NA	6.5 E-8	1.6 E-6	5.8 E-7	NA	NA	NA	9.4 E-7	5.1 E-6	1.9 E-5	5.3 E-6	NA	6.9 E-7	2.0 E-5	NA	NA	1.1 E-4
DSA-SP18	20	NA	NA	NA	8.0 E-8	5.7 E-7	1.1 E-6	NA	NA	NA	1.4 E-6	8.7 E-6	3.2 E-5	8.6 E-6	NA	NA	3.9 E-5	NA	NA	1.8 E-4
DSA-SP19	10	NA	NA	NA	5.8 E-8	5.1 E-7	1.9 E-6	NA	NA	NA	1.4 E-6	4.7 E-6	6.4 E-5	1.9 E-5	NA	NA	4.5 E-5	NA	NA	3.0 E-4

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
DSA-SP19	20	NA	NA	NA	1.8 E-8	1.9 E-6	6.7 E-8	NA	NA	NA	1.9 E-7	1.3 E-6	1.9 E-6	5.4 E-7	NA	3.7 E-7	3.1 E-6	NA	NA	3.0 E-5
DSA-SP20	10	NA	2.7 E-6	NA	NA	NA	9.0 E-8	3.7 E-6	3.7 E-6	NA	3.7 E-7	2.3 E-6	1.2 E-6	NA	2.9 E-6	5.1 E-7	2.4 E-6	7.1 E-5	NA	1.1 E-4
DSA-SP20	20	NA	2.0 E-5	NA	6.0 E-8	NA	1.8 E-7	9.4 E-6	8.1 E-6	NA	1.7 E-6	1.5 E-5	3.8 E-6	1.2 E-6	NA	6.5 E-7	2.5 E-6	2.8 E-4	NA	4.2 E-4
DSA-SP21	10	NA	6.5 E-6	NA	NA	NA	1.9 E-7	NA	4.6 E-7	NA	1.7 E-6	1.4 E-5	5.5 E-6	2.8 E-6	NA	NA	2.4 E-6	3.3 E-7	NA	9.2 E-5
DSA-SP21	20	NA	6.3 E-6	NA	NA	7.9 E-8	8.7 E-8	9.4 E-7	9.3 E-7	NA	6.5 E-7	6.6 E-6	2.7 E-6	1.5 E-6	NA	NA	1.2 E-6	4.0 E-7	NA	7.0 E-5
DSA-SP22	10	NA	NA	NA	NA	NA	2.0 E-7	1.0 E-6	6.9 E-7	NA	2.8 E-6	3.1 E-5	5.5 E-6	3.0 E-6	NA	NA	3.8 E-6	1.9 E-6	NA	1.3 E-4
DSA-SP22	20	NA	NA	NA	NA	NA	8.0 E-8	1.3 E-6	1.3 E-6	NA	2.1 E-6	2.1 E-5	2.4 E-6	1.3 E-6	NA	NA	9.3 E-7	2.0 E-6	NA	6.9 E-5
DSA-SP23	10	NA	NA	NA	NA	NA	NA	9.4 E-6	1.1 E-5	NA	1.2 E-6	7.1 E-6	2.5 E-6	NA	NA	NA	NA	3.1 E-6	NA	4.8 E-5
DSA-SP23	20	NA	NA	NA	NA	NA	NA	7.0 E-6	6.7 E-6	NA	2.2 E-7	9.2 E-7	1.9 E-6	1.1 E-6	NA	NA	NA	4.3 E-6	NA	4.9 E-5
DSA-SP23	30	NA	NA	NA	NA	NA	NA	4.7 E-6	4.3 E-6	NA	7.0 E-8	3.7 E-7	1.4 E-6	7.8 E-7	2.7 E-6	NA	NA	9.5 E-6	NA	4.0 E-5
DSA-SP24	10	NA	7.8 E-6	NA	NA	NA	4.6 E-7	5.1 E-6	3.8 E-6	4.1 E-7	2.1 E-6	1.3 E-5	1.4 E-5	6.7 E-6	NA	NA	8.3 E-6	4.3 E-6	NA	1.8 E-4
DSA-SP24	20	NA	NA	NA	NA	8.0 E-7	1.5 E-7	7.8 E-6	5.6 E-6	4.2 E-7	1.7 E-6	9.2 E-6	3.8 E-6	1.9 E-6	NA	NA	3.1 E-6	5.3 E-6	NA	9.0 E-5
DSA-SP24	30	NA	1.5 E-5	NA	NA	8.5 E-8	7.6 E-8	5.2 E-6	3.7 E-6	2.8 E-7	1.3 E-6	8.8 E-6	1.8 E-6	9.3 E-7	NA	NA	2.8 E-6	1.3 E-5	NA	9.6 E-5
DSA-SP25	10	NA	1.1 E-5	NA	NA	NA	NA	5.1 E-6	4.4 E-6	NA	5.9 E-7	2.0 E-6	6.6 E-7	NA	1.2 E-5	NA	5.1 E-7	NA	NA	4.3 E-5
DSA-SP25	20	NA	NA	NA	NA	NA	NA	1.2 E-5	1.0 E-5	NA	1.2 E-6	1.1 E-5	NA	NA	1.3 E-5	NA	5.9 E-7	NA	NA	5.9 E-5
DSA-SP26	10	NA	NA	NA	1.5 E-7	NA	NA	2.4 E-5	1.1 E-5	NA	4.2 E-6	8.2 E-5	1.3 E-6	NA	1.2 E-5	NA	1.3 E-6	NA	NA	1.7 E-4
DSA-SP26	20	NA	NA	NA	NA	NA	NA	4.7 E-5	2.8 E-5	NA	1.0 E-5	8.2 E-5	NA	NA	5.7 E-5	NA	4.6 E-6	NA	NA	3.0 E-4
DSA-SP27	10	NA	8.2 E-6	NA	NA	NA	NA	5.0 E-6	3.3 E-6	NA	4.7 E-7	6.1 E-6	NA	NA	8.1 E-6	NA	2.7 E-7	1.3 E-5	NA	5.0 E-5
DSA-SP27	20	NA	1.2 E-6	NA	NA	NA	NA	3.2 E-6	2.0 E-6	NA	4.5 E-7	2.0 E-6	3.5 E-7	NA	2.2 E-6	1.1 E-7	4.1 E-7	2.6 E-5	NA	4.2 E-5
DSA-SP28	10	NA	NA	NA	1.4 E-8	9.1 E-7	8.4 E-8	NA	NA	NA	9.4 E-7	3.4 E-6	1.1 E-6	NA	NA	NA	1.9 E-6	4.7 E-7	NA	2.8 E-5
DSA-SP28	20	NA	NA	NA	5.0 E-9	9.6 E-7	NA	NA	NA	NA	4.1 E-7	1.2 E-6	4.6 E-7	NA	NA	NA	9.6 E-7	NA	NA	4.1 E-5
DSA-SP29	10	NA	6.1 E-6	NA	NA	1.9 E-7	NA	NA	1.6 E-8	NA	NA	2.0 E-7	2.5 E-6	2.3 E-6	NA	NA	3.6 E-7	NA	NA	9.1 E-5
DSA-SP30	10	NA	NA	NA	NA	6.2 E-7	NA	NA	NA	NA	1.3 E-7	3.6 E-7	NA	NA	NA	NA	7.2 E-7	NA	NA	8.8 E-6
DSA-SP30	20	NA	NA	NA	1.1 E-8	6.6 E-7	5.0 E-8	NA	NA	NA	5.7 E-7	2.6 E-6	3.9 E-7	NA	NA	1.5 E-7	1.7 E-6	NA	NA	2.5 E-5
DSA-SP31	10	NA	NA	NA	2.4 E-8	6.2 E-7	9.8 E-8	NA	NA	NA	1.2 E-6	5.1 E-6	2.4 E-6	1.0 E-6	NA	2.7 E-7	3.9 E-6	NA	NA	1.7 E-4
DSA-SP31	20	NA	NA	NA	8.8 E-9	8.8 E-8	NA	NA	7.9 E-8	NA	3.8 E-7	1.9 E-6	8.1 E-7	NA	NA	NA	8.0 E-7	NA	NA	1.6 E-5
DSA-SP32	10	NA	NA	NA	NA	1.8 E-7	9.9 E-8	7.5 E-6	1.0 E-6	3.9 E-7	3.8 E-7	1.5 E-6	2.0 E-6	1.0 E-6	NA	NA	2.5 E-6	NA	NA	6.6 E-5
DSA-SP32	20	NA	1.7 E-6	NA	4.3 E-8	3.0 E-6	1.7 E-7	5.8 E-7	6.9 E-8	NA	2.2 E-6	6.1 E-6	2.4 E-6	1.2 E-6	NA	NA	8.8 E-6	NA	NA	2.9 E-4
E(d)-SP02	10	NA	NA	NA	5.3 E-8	NA	NA	6.9 E-6	1.8 E-6	NA	1.4 E-7	1.4 E-6	9.9 E-7	NA	4.8 E-6	NA	7.2 E-7	6.4 E-7	NA	2.6 E-5
E(d)-SP02	20	NA	NA	NA	9.6 E-9	2.3 E-7	NA	1.6 E-6	4.9 E-7	NA	4.6 E-6	1.6 E-5	5.5 E-7	NA	NA	5.0 E-6	1.5 E-6	1.2 E-6	NA	6.8 E-5
E(d)-SP03	10	NA	NA	NA	2.4 E-7	NA	NA	9.4 E-6	2.2 E-6	7.1 E-7	2.4 E-7	6.1 E-6	NA	NA	NA	NA	7.7 E-7	1.0 E-6	NA	4.5 E-5
E(m)-SP08	10	NA	NA	NA	1.2 E-8	6.7 E-7	9.5 E-8	NA	NA	NA	2.3 E-7	9.7 E-7	2.4 E-6	1.2 E-6	5.9 E-6	NA	6.7 E-6	NA	NA	5.7 E-5
E(m)-SP08	20	NA	NA	NA	9.4 E-9	2.9 E-7	NA	NA	3.7 E-9	NA	3.6 E-7	6.4 E-6	5.8 E-7	NA	3.5 E-6	5.3 E-6	1.5 E-6	1.1 E-6	NA	4.5 E-5
E(M)-SP09	10	NA	NA	NA	1.2 E-8	4.2 E-7	NA	NA	NA	NA	3.8 E-7	2.3 E-6	NA	NA	1.8 E-5	NA	1.9 E-6	NA	NA	4.2 E-5
E(M)-SP09	20	NA	1.1 E-6	NA	1.2 E-8	2.8 E-7	NA	NA	3.7 E-8	NA	3.4 E-7	5.4 E-6	4.6 E-7	NA	1.5 E-5	5.3 E-6	1.6 E-6	1.4 E-6	NA	7.7 E-5
E(m)-SP10	10	7.0 E-6	NA	NA	1.1 E-7	NA	NA	NA	1.0 E-8	NA	1.9 E-7	3.9 E-6	8.5 E-7	NA	1.5 E-4	NA	1.1 E-6	3.8 E-6	NA	2.0 E-4
E(m)-SP10	20	1.1 E-5	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	3.1 E-7	1.8 E-6	1.2 E-6	9.0 E-4	NA	5.9 E-7	9.4 E-6	NA	9.3 E-4
E(m)-SP11	20	NA	NA	NA	NA	2.4 E-7	NA	NA	1.3 E-8	NA	1.0 E-7	4.1 E-7	3.4 E-7	NA	3.7 E-6	1.3 E-7	3.6 E-7	NA	NA	1.1 E-5
E(n)-SP04	10	NA	NA	NA	5.0 E-8	1.8 E-7	NA	NA	8.8 E-9	NA	1.1 E-7	2.0 E-6	6.6 E-7	NA	NA	NA	8.3 E-7	NA	NA	1.8 E-5
E(n)-SP04	20	NA	1.9 E-6	NA	7.4 E-9	NA	NA	NA	6.0 E-8	NA	2.5 E-7	1.7 E-6	4.5 E-7	NA	2.0 E-6	2.6 E-7	4.6 E-7	1.3 E-6	NA	2.8 E-5
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	2.6 E-7	7.4 E-7	NA	2.3 E-4	NA	4.6 E-7	NA	NA	2.4 E-4
E(n)-SP05	20	1.9 E-6	NA	NA	NA	7.9 E-8	4.8 E-8	NA	1.5 E-8	NA	6.6 E-7	4.1 E-6	6.9 E-7	NA	3.7 E-4	5.3 E-7	1.2 E-6	1.9 E-5	NA	4.5 E-4
E(n)-SP05	40	6.7 E-6	4.1 E-6	NA	NA	8.8 E-8	NA	NA	5.7 E-8	NA	NA	1.7 E-7	NA	NA	1.8 E-3	3.1 E-7	2.8 E-7	1.5 E-5	NA	1.9 E-3
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	7.1 E-7	NA	NA	4.0 E-6	NA	5.7 E-7	1.4 E-6	NA	1.9 E-5
E(n)-SP06	20	5.6 E-6	3.7 E-6	NA	8.2 E-9	1.0 E-7	7.4 E-8	5.5 E-7	4.2 E-8	NA	4.7 E-8	7.4 E-7	1.7 E-6	5.7 E-7	2.8 E-6	3.0 E-7	1.1 E-6	1.9 E-6	NA	2.3 E-5
E(n)-SP07	10	NA	4.5 E-6	NA	1.1 E-8	NA	NA	1.0 E-6	1.0 E-7	NA	NA	4.5 E-7	NA	NA	6.2 E-6	NA	5.7 E-7	1.3 E-6	NA	2.3 E-5
E(n)-SP08	10	NA	3.4 E-6	NA	4.1 E-8	1.8 E-7	NA	NA	6.5 E-9	NA	NA	1.3 E-6	1.1 E-6	NA	NA	NA	9.3 E-7	5.7 E-6	NA	2.7 E-5
E(n)-SP08	20	NA	4.3 E-5	NA	NA	NA	NA	NA	3.0 E-9	NA	7.1 E-8	6.9 E-7	NA	NA	NA	3.7 E-7	3.6 E-7	5.5 E-6	NA	5.8 E-5
E(n)-SP09	10	NA	6.5 E-6	NA	7.0 E-8	NA	NA	NA	NA	NA	NA	1.1 E-6	1.1 E-6	NA	NA	NA	7.7 E-7	7.6 E-7	NA	3.5 E-5
E(n)-SP09	20	1.4 E-6	1.1 E-4	NA	2.0 E-8	NA	NA	NA	3.0 E-9	NA	1.8 E-7	1.5 E-6	4.4 E-7	NA	NA	1.4 E-6	7.0 E-7	5.8 E-7	NA	1.2 E-4
E(N)-SP10	10	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	1.7 E-7	2.2 E-6	NA	NA	7.4 E-6	3.4 E-7	8.3 E-7	2.1 E-7	NA	1.9 E-5
E(N)-SP10	20	NA	NA	NA	NA	8.8 E-8	NA	NA	NA	NA	1.7 E-7	2.6 E-6	NA	NA	3.1 E-6	6.2 E-7	7.2 E-7	1.9 E-7	NA	2.2 E-5
E(n)-SP11	15	NA	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	8.6 E-8	3.4 E-7	5.0 E-7	NA	NA	2.2 E-7	8.3 E-7	NA	NA	3.1 E-5
E(n)-SP11	25	NA	3.1 E-5	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	2.5 E-7	3.7 E-7	NA	NA	2.3 E-7	3.7 E-7	4.5 E-7	NA	3.4 E-5
E(n)-SP12	10	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	NA	5.0 E-7	7.2 E-7	NA	NA	1.4 E-5
E(n)-SP12	20	NA	1.9 E-6	NA	NA	8.0 E-7	NA	NA	9.3 E-9	NA	6.4 E-8	6.1 E-7	NA	NA	3.7 E-6	6.2 E-7	7.5 E-7	2.8 E-7	NA	1.2 E-5
L2-ST24-SP03	10	NA	NA	NA	4.8 E-8	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	3.3 E-7	NA	NA	6.2 E-6
L2-ST24-SP03	20	NA	9.6 E-6	NA	6.7 E-9	1.4 E-7	4.6 E-8	NA	6.5 E-9	NA	4.5 E-7	5.6 E-6	8.1 E-7	NA	3.5 E-5	7.5 E-7	1.0 E-6	2.5 E-6	NA	6.4 E-5
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
L2-ST26-SP04	20	NA	NA	NA	NA	1.1 E-7	3.6 E-8	NA	NA	NA	1.9 E-6	1.9 E-5	6.9 E-7	NA	2.8 E-5	1.2 E-6	1.2 E-6	8.2 E-6	NA	6.8 E-5
L2-ST26-SP05	10	NA	NA	NA	2.4 E-8	2.2 E-7	NA	NA	NA	NA	6.1 E-7	3.7 E-6	1.5 E-6	NA	5.1 E-5	NA	5.7 E-6	NA	NA	1.3 E-4
L2-ST26-SP05	20	NA	NA	2.1 E-6	7.8 E-8	3.8 E-7	9.4 E-8	NA	3.2 E-9	NA	7.9 E-6	5.9 E-5	1.3 E-6	4.9 E-7	6.6 E-5	2.2 E-6	2.6 E-6	6.0 E-6	NA	2.0 E-4
L2-ST26-SP06	10	NA	NA	NA	1.1 E-8	8.3 E-7	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	3.6 E-6	NA	6.2 E-7	NA	NA	8.8 E-6
L2-ST26-SP06	20	NA	NA	NA	NA	2.0 E-7	4.3 E-8	NA	9.0 E-9	NA	3.5 E-7	2.0 E-6	1.1 E-6	NA	6.1 E-5	5.6 E-7	7.2 E-7	5.0 E-6	NA	7.6 E-5
L2-ST26-SP07	18	NA	NA	NA	1.5 E-8	4.4 E-7	1.6 E-7	NA	NA	NA	6.4 E-7	4.0 E-6	4.1 E-6	1.9 E-6	NA	NA	1.6 E-6	1.0 E-7	5.3 E-7	7.1 E-5
L2-ST28_90-SP02	10	NA	NA	NA	1.0 E-7	4.6 E-6	NA	2.2 E-5	4.1 E-6	NA	3.5 E-7	3.7 E-6	2.3 E-6	NA	NA	1.1 E-6	2.2 E-6	1.9 E-6	NA	1.4 E-4
L2-ST28_90-SP02	20	NA	1.1 E-5	1.8 E-6	3.1 E-8	1.6 E-7	6.7 E-8	1.9 E-6	3.0 E-7	NA	5.8 E-6	4.6 E-5	1.3 E-6	NA	2.4 E-5	2.5 E-6	2.0 E-6	2.8 E-5	NA	1.6 E-4

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
28E-SP16	10	5.1 E-5	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	4.8 E-5
28E-SP16	30	NA	2.6 E-7	4.9 E-5	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	4.3 E-7	9.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	1.4 E-7
29E-SP07	20	NA	NA	5.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	5.6 E-7
29E-SP08	10	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	1.2 E-7	NA	5.1 E-5	4.5 E-7	4.8 E-8	1.1 E-6	9.6 E-6	NA	1.4 E-6
29E-SP08	20	NA	NA	5.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	7.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	1.8 E-8	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA
29E-SP09	20	2.4 E-8	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7
29E-SP09	40	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	5.3 E-7	NA	8.2 E-8
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	5.4 E-7	6.9 E-6	NA	5.3 E-8
29E-SP10	20	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	1.4 E-7	4.0 E-6	NA	1.0 E-7
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-8	NA	6.5 E-5	NA	8.4 E-8	7.2 E-7	4.9 E-6	NA	4.2 E-7
29E-SP11	20	NA	NA	1.0 E-5	NA	NA	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	2.6 E-7
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	1.0 E-6	NA	1.9 E-7
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-8
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	1.7 E-7	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	8.0 E-7
DSA-SP04	30	NA	1.6 E-7	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7
DSA-SP04	40	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6
DSA-SP05	20	8.4 E-9	NA	1.0 E-6	NA	1.2 E-5	NA	3.8 E-8	NA	6.9 E-9	NA	4.3 E-6	NA	4.8 E-9	1.3 E-7	2.2 E-6	6.7 E-7	2.0 E-6
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-7	1.2 E-6	NA	1.8 E-6
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	4.3 E-6	NA	NA	1.0 E-6	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	1.7 E-6
DSA-SP08	20	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	3.5 E-8	NA	8.3 E-6	NA	8.5 E-9	3.6 E-7	5.0 E-6	NA	2.5 E-6
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7
DSA-SP09	20	1.3 E-8	NA	1.6 E-6	NA	NA	NA	NA	NA	2.2 E-8	NA	9.8 E-6	NA	NA	9.8 E-7	1.6 E-6	NA	1.1 E-6
DSA-SP10	10	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	1.8 E-6	1.7 E-5	NA	1.8 E-6
DSA-SP10	20	NA	NA	3.2 E-6	NA	5.2 E-6	NA	2.7 E-8	NA	1.4 E-8	NA	NA	NA	NA	1.7 E-7	1.2 E-5	NA	5.7 E-6
DSA-SP10	30	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7
DSA-SP10	40	NA	NA	3.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	2.6 E-7
DSA-SP11	10	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	2.2 E-6
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	1.5 E-6
DSA-SP12	10	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	NA	1.7 E-6
DSA-SP12	20	7.8 E-9	5.3 E-8	8.9 E-7	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	7.1 E-7	NA	8.5 E-8
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	8.7 E-6	NA	NA	3.3 E-7	2.9 E-5	NA	2.4 E-6
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	NA	1.5 E-6
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-6	NA	NA	2.3 E-7	NA	NA	3.6 E-7
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	2.2 E-7	9.7 E-7	NA	1.1 E-6
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	1.9 E-6
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-6
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-7
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	4.4 E-7
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	9.1 E-8
DSA-SP18	10	NA	NA	NA	9.3 E-6	NA	NA	NA	1.0 E-6	4.0 E-7	NA	NA	1.3 E-6	NA	3.9 E-7	1.3 E-5	NA	NA
DSA-SP18	20	NA	NA	NA	1.1 E-5	NA	3.8 E-6	NA	2.0 E-6	3.3 E-7	5.6 E-8	NA	1.9 E-6	NA	3.8 E-7	1.9 E-5	NA	6.3 E-8
DSA-SP19	10	NA	NA	NA	3.2 E-5	NA	1.1 E-5	NA	1.2 E-6	NA	NA	NA	5.0 E-6	1.6 E-8	1.9 E-7	1.8 E-5	NA	3.5 E-7

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	2.1 E-7	NA	5.4 E-6	NA	NA	1.7 E-7	2.7 E-6	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	6.6 E-7	7.2 E-6	NA	2.2 E-7
DSA-SP20	20	NA	NA	NA	8.0 E-6	NA	NA	NA	NA	6.1 E-8	NA	NA	5.3 E-7	NA	4.7 E-7	2.1 E-5	NA	6.8 E-7
DSA-SP21	10	NA	NA	NA	1.5 E-5	NA	5.8 E-6	NA	NA	NA	NA	NA	1.3 E-6	NA	2.5 E-7	2.7 E-6	NA	3.6 E-7
DSA-SP21	20	NA	NA	NA	9.6 E-6	NA	3.2 E-6	NA	2.3 E-7	3.4 E-8	NA	NA	7.0 E-7	5.6 E-9	5.6 E-7	2.7 E-6	NA	3.9 E-6
DSA-SP22	10	NA	NA	NA	1.3 E-5	NA	4.8 E-6	NA	8.7 E-7	4.9 E-8	NA	NA	1.2 E-6	1.6 E-8	6.9 E-7	1.3 E-5	NA	2.6 E-7
DSA-SP22	20	NA	NA	NA	8.0 E-6	NA	2.7 E-6	NA	5.0 E-7	2.9 E-8	NA	NA	6.0 E-7	5.2 E-9	3.6 E-7	2.9 E-6	NA	3.3 E-7
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	5.4 E-7	4.5 E-6	NA	9.3 E-7
DSA-SP23	20	NA	NA	NA	6.6 E-6	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	5.1 E-7	1.3 E-6	NA	2.8 E-6
DSA-SP23	30	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	2.0 E-7	9.0 E-7	NA	7.2 E-7
DSA-SP24	10	NA	NA	NA	1.9 E-5	NA	9.3 E-6	NA	4.0 E-6	2.7 E-8	NA	NA	2.9 E-6	NA	3.6 E-7	1.1 E-5	NA	6.0 E-7
DSA-SP24	20	NA	NA	NA	7.6 E-6	NA	NA	NA	3.3 E-6	1.9 E-8	NA	NA	8.0 E-7	NA	2.9 E-7	8.7 E-6	NA	9.1 E-7
DSA-SP24	30	5.2 E-9	NA	NA	3.8 E-6	NA	NA	NA	2.9 E-6	3.2 E-8	NA	NA	3.6 E-7	NA	6.6 E-7	1.0 E-5	NA	2.0 E-7
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	6.0 E-7
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	1.9 E-6
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	1.4 E-6
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	8.0 E-7
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	8.0 E-7
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	7.7 E-7	NA	9.7 E-7
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-8	NA	NA	NA	1.5 E-8	7.8 E-7	6.7 E-6	NA	4.3 E-7
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	2.4 E-8	1.2 E-5	NA	4.1 E-8	5.3 E-7	2.8 E-6	NA	1.8 E-7
DSA-SP29	10	NA	NA	NA	2.4 E-5	NA	9.3 E-6	NA	NA	NA	NA	NA	8.7 E-7	NA	NA	NA	NA	1.1 E-7
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	1.7 E-6	NA	8.4 E-7
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	4.4 E-7	7.4 E-6	NA	4.0 E-8
DSA-SP31	10	NA	NA	NA	4.2 E-6	NA	NA	NA	NA	1.9 E-7	NA	4.5 E-5	3.8 E-7	6.7 E-8	2.0 E-6	1.4 E-5	NA	3.4 E-7
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	3.3 E-7	4.5 E-6	NA	3.9 E-7
DSA-SP32	10	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	6.9 E-8	NA	9.4 E-6	NA	NA	5.7 E-7	6.9 E-6	NA	2.2 E-7
DSA-SP32	20	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	3.2 E-7	4.8 E-8	7.2 E-5	2.3 E-7	3.0 E-8	3.0 E-6	3.2 E-5	NA	1.2 E-7
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	6.4 E-7
E(d)-SP02	20	NA	NA	1.3 E-6	NA	NA	NA	6.3 E-8	NA	3.0 E-8	NA	6.9 E-6	NA	9.3 E-9	3.2 E-7	4.4 E-6	NA	2.7 E-6
E(d)-SP03	10	NA	NA	1.4 E-6	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	3.3 E-7
E(m)-SP08	10	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	3.4 E-8	NA	NA	5.7 E-7	NA	3.3 E-7	4.9 E-6	NA	1.6 E-6
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	2.1 E-8	NA	6.9 E-6	NA	9.5 E-9	2.4 E-7	3.4 E-6	NA	6.3 E-7
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	4.2 E-7	6.5 E-6	NA	1.1 E-6
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	5.7 E-8	NA	8.3 E-6	NA	9.5 E-9	5.7 E-7	8.6 E-6	NA	1.9 E-6
E(m)-SP10	10	1.1 E-8	NA	NA	NA	NA	NA	NA	6.6 E-6	NA	NA	NA	NA	NA	2.0 E-7	4.0 E-6	NA	9.1 E-7
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	7.4 E-9	6.0 E-7	1.7 E-6	NA	1.1 E-7
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	2.8 E-8	NA	NA	NA	NA	3.6 E-7	2.9 E-6	NA	7.6 E-7
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-7	NA	7.4 E-6
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	5.5 E-8
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	3.7 E-8	NA	NA	NA	NA	3.3 E-7	3.8 E-6	NA	2.1 E-5
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	NA	NA	2.2 E-7	2.1 E-6	NA	2.6 E-6
E(n)-SP06	20	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-8	4.4 E-7	NA	2.5 E-7
E(n)-SP07	10	NA	NA	6.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	1.5 E-6	NA	1.3 E-6
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	2.8 E-7	2.0 E-6	NA	2.2 E-6
E(n)-SP08	20	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	NA	2.9 E-6
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	2.7 E-7	4.9 E-6	NA	3.0 E-7
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	3.3 E-8	3.7 E-7	NA	NA	NA	NA	NA	NA	8.7 E-7	NA	2.6 E-7
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	2.5 E-6	NA	8.6 E-7
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	1.7 E-7	2.5 E-6	NA	3.5 E-6
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	1.1 E-5	NA	NA	4.8 E-7	1.3 E-6	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	6.4 E-8
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	3.9 E-7	9.6 E-7	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	3.2 E-7	8.2 E-7	NA	7.4 E-8
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	1.6 E-7	9.2 E-7	NA	7.2 E-7
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	1.3 E-7	3.0 E-6	NA	4.6 E-7
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	5.3 E-9	NA	2.7 E-6	NA	9.7 E-7
L2-ST26-SP05	10	NA	NA	NA	7.3 E-6	NA	NA	NA	NA	5.4 E-8	NA	NA	4.7 E-7	NA	5.4 E-7	1.5 E-5	NA	4.8 E-6
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	1.3 E-7	NA	8.0 E-6	NA	1.3 E-8	8.1 E-7	1.3 E-5	NA	1.3 E-6
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	1.2 E-6	NA	2.5 E-7
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	1.1 E-8	NA	NA	NA	NA	8.9 E-8	1.1 E-6	NA	1.0 E-6
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	6.0 E-6	NA	NA	5.0 E-6	1.2 E-5	NA	1.0 E-6
L2-ST28_90-SP02	10	NA	NA	2.5 E-6	NA	NA	NA	NA	5.3 E-6	1.8 E-7	NA	2.5 E-5	NA	NA	3.6 E-6	4.9 E-6	NA	4.8 E-7
L2-ST28_90-SP02	20	NA	NA	2.8 E-6	NA	NA	NA	4.7 E-8	NA	5.2 E-8	NA	NA	NA	NA	3.9 E-7	9.0 E-6	NA	4.3 E-6

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
28E-SP16	10	NA	NA	8.9 E-3	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	1.3 E-1	NA	1.3 E-4	1.0 E-1	NA	2.4 E-1
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	7.6 E-3	NA	NA	1.6 E-2	NA	3.5 E-2
28E-SP16	30	NA	1.8 E-5	7.5 E-5	NA	NA	NA	NA	1.7 E-7	NA	3.0 E-7	1.6 E-6	NA	NA	1.0 E-4	NA	NA	6.1 E-4	NA	9.6 E-4
28E-SP16	40	NA	2.2 E-5	8.9 E-5	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	9.7 E-4	NA	1.7 E-3
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	NA	NA	NA	9.5 E-6	NA	1.9 E-7	NA	NA	1.0 E-5
29E-SP07	20	8.2 E-7	2.2 E-6	1.8 E-6	NA	NA	NA	1.8 E-7	2.4 E-8	NA	8.6 E-8	6.6 E-7	NA	NA	5.8 E-5	NA	7.5 E-8	4.5 E-5	NA	1.2 E-4
29E-SP08	10	NA	NA	8.2 E-7	7.1 E-9	3.8 E-7	3.0 E-8	NA	7.7 E-9	NA	6.1 E-7	1.4 E-6	7.5 E-7	3.5 E-7	NA	1.1 E-6	1.6 E-6	3.9 E-6	NA	8.0 E-5
29E-SP08	20	NA	4.4 E-6	1.3 E-4	NA	NA	NA	NA	3.6 E-8	NA	NA	3.9 E-7	NA	NA	1.3 E-4	NA	NA	3.2 E-4	NA	5.8 E-4
29E-SP08	30	2.1 E-6	3.2 E-6	1.8 E-5	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	1.4 E-4	NA	3.0 E-4
29E-SP08	40	1.5 E-6	2.8 E-6	9.7 E-6	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	1.0 E-4	NA	2.5 E-4
29E-SP09	10	3.3 E-4	1.7 E-4	5.3 E-5	NA	NA	NA	NA	2.4 E-8	3.8 E-7	8.2 E-8	3.3 E-7	NA	NA	NA	NA	4.4 E-7	1.8 E-4	NA	7.4 E-4
29E-SP09	20	5.2 E-4	2.1 E-4	1.1 E-4	NA	NA	NA	NA	5.8 E-8	9.6 E-7	NA	NA	NA	NA	NA	NA	4.4 E-7	3.1 E-4	NA	1.2 E-3
29E-SP09	30	1.4 E-5	1.2 E-5	1.8 E-5	NA	NA	NA	1.9 E-6	2.5 E-7	8.5 E-7	2.2 E-7	1.2 E-6	NA	NA	7.4 E-5	2.3 E-7	2.1 E-7	7.8 E-5	NA	2.3 E-4
29E-SP09	40	1.5 E-5	1.1 E-5	1.4 E-5	NA	4.5 E-8	NA	1.8 E-6	2.1 E-7	5.8 E-7	1.1 E-7	7.1 E-7	NA	NA	3.3 E-5	2.2 E-7	1.7 E-7	4.6 E-5	NA	1.6 E-4
29E-SP10	10	1.5 E-6	NA	7.7 E-7	4.5 E-9	1.1 E-7	NA	NA	NA	NA	6.4 E-8	9.6 E-7	4.2 E-7	NA	NA	NA	2.2 E-7	3.5 E-6	NA	1.5 E-5
29E-SP10	20	7.5 E-6	3.1 E-6	8.1 E-6	5.7 E-9	NA	NA	NA	9.1 E-9	7.1 E-8	2.1 E-7	1.4 E-6	2.5 E-7	NA	NA	NA	4.2 E-7	4.0 E-6	NA	2.9 E-5
29E-SP11	10	NA	NA	NA	9.9 E-9	1.3 E-7	NA	NA	1.9 E-8	NA	3.5 E-7	4.4 E-7	7.0 E-7	NA	NA	2.0 E-6	1.9 E-6	1.2 E-7	NA	7.7 E-5
29E-SP11	20	2.2 E-6	1.1 E-5	2.7 E-5	8.2 E-9	NA	NA	5.2 E-7	4.8 E-8	NA	1.2 E-7	2.8 E-6	NA	NA	1.9 E-5	9.9 E-7	4.1 E-7	7.6 E-5	2.3 E-7	1.5 E-4
59E-SP08	10	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	3.2 E-6	NA	4.3 E-6
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	1.5 E-4	NA	NA	6.0 E-5	NA	2.2 E-4
59E-SP10	20	NA	NA	NA	NA	3.4 E-8	NA	NA	6.4 E-9	NA	1.2 E-7	6.6 E-7	1.8 E-7	NA	1.0 E-6	1.9 E-7	4.2 E-7	4.2 E-7	NA	4.4 E-6
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	1.4 E-6	7.6 E-8	6.1 E-8	3.5 E-8	NA	1.7 E-6
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	2.7 E-5
DSA-SP04	20	1.3 E-5	4.1 E-5	1.7 E-5	NA	NA	NA	7.0 E-5	1.1 E-5	7.3 E-7	3.6 E-7	4.0 E-6	NA	NA	2.2 E-5	1.5 E-6	5.8 E-7	5.0 E-4	NA	8.3 E-4
DSA-SP04	30	1.6 E-5	4.5 E-5	1.1 E-5	NA	NA	NA	4.1 E-5	6.6 E-6	NA	NA	5.4 E-7	NA	NA	7.4 E-5	4.5 E-7	NA	5.4 E-4	NA	8.7 E-4
DSA-SP04	40	9.3 E-6	2.5 E-5	6.4 E-6	NA	NA	NA	2.2 E-5	3.6 E-6	NA	NA	4.6 E-7	NA	NA	4.7 E-5	3.1 E-7	NA	3.3 E-4	NA	5.2 E-4
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	NA	7.0 E-5
DSA-SP05	20	NA	4.1 E-6	NA	NA	5.8 E-8	NA	NA	4.8 E-8	NA	1.5 E-7	1.8 E-6	1.6 E-7	NA	6.1 E-7	1.5 E-6	4.0 E-7	2.4 E-5	NA	5.5 E-5
DSA-SP06	10	NA	NA	NA	NA	8.2 E-8	NA	NA	NA	NA	5.2 E-8	1.9 E-7	3.1 E-7	NA	NA	1.5 E-7	1.7 E-7	7.0 E-6	NA	1.2 E-5
DSA-SP06	20	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	9.4 E-8	2.3 E-7	NA	NA	NA	1.3 E-7	NA	NA	6.0 E-6
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	2.3 E-5
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	6.2 E-8
DSA-SP08	10	NA	3.7 E-5	NA	2.2 E-8	1.4 E-7	NA	NA	3.4 E-8	NA	NA	1.2 E-6	NA	NA	NA	1.3 E-7	3.8 E-7	2.3 E-6	NA	4.9 E-5
DSA-SP08	20	NA	4.6 E-5	NA	2.5 E-9	1.1 E-7	NA	NA	1.5 E-8	NA	1.8 E-7	2.6 E-6	2.4 E-7	NA	NA	1.7 E-6	5.0 E-7	4.2 E-6	NA	7.2 E-5
DSA-SP09	10	NA	NA	NA	NA	6.9 E-8	NA	NA	1.8 E-8	NA	NA	NA	3.3 E-7	NA	NA	9.9 E-8	1.3 E-7	1.7 E-6	NA	2.7 E-6
DSA-SP09	20	NA	5.7 E-7	NA	9.3 E-9	3.0 E-7	NA	NA	7.1 E-8	NA	7.9 E-8	1.0 E-6	NA	NA	NA	5.9 E-8	8.2 E-8	1.1 E-5	NA	2.8 E-5
DSA-SP10	10	NA	NA	NA	NA	1.5 E-7	NA	NA	4.0 E-8	NA	5.8 E-7	5.0 E-6	NA	NA	NA	3.2 E-7	8.0 E-7	6.7 E-7	NA	3.9 E-5
DSA-SP10	20	1.1 E-6	8.1 E-6	NA	NA	4.5 E-8	1.9 E-8	3.3 E-6	1.1 E-6	9.4 E-8	6.7 E-7	4.9 E-6	2.2 E-7	NA	NA	6.3 E-7	7.0 E-7	1.0 E-5	NA	5.8 E-5
DSA-SP10	30	3.9 E-6	9.3 E-6	NA	NA	NA	NA	1.2 E-5	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	6.7 E-5
DSA-SP10	40	NA	3.7 E-6	NA	4.1 E-9	NA	NA	6.1 E-6	2.2 E-6	1.7 E-7	NA	4.2 E-7	NA	NA	NA	1.0 E-7	NA	7.4 E-6	NA	2.4 E-5
DSA-SP11	10	NA	NA	NA	1.0 E-8	NA	NA	6.7 E-7	2.8 E-7	NA	5.7 E-7	5.3 E-6	NA	NA	NA	NA	4.4 E-7	6.0 E-7	NA	2.7 E-5
DSA-SP11	20	NA	4.3 E-6	NA	NA	NA	NA	1.3 E-7	5.4 E-8	NA	1.3 E-7	6.2 E-7	2.9 E-7	1.7 E-7	NA	6.9 E-8	1.2 E-7	1.6 E-7	NA	8.4 E-6
DSA-SP12	10	NA	1.3 E-6	NA	1.1 E-8	NA	NA	7.0 E-7	1.4 E-7	1.7 E-7	6.9 E-7	3.7 E-6	NA	NA	NA	NA	2.9 E-7	2.4 E-7	NA	2.6 E-5
DSA-SP12	20	3.8 E-6	1.6 E-5	NA	NA	NA	NA	6.7 E-7	1.1 E-7	9.2 E-8	1.9 E-8	7.5 E-8	NA	NA	1.6 E-5	4.9 E-8	1.2 E-7	2.7 E-6	NA	4.5 E-5
DSA-SP13	10	NA	NA	NA	4.2 E-8	NA	8.0 E-8	2.5 E-6	1.2 E-6	1.6 E-7	6.0 E-6	3.5 E-5	6.4 E-7	3.5 E-7	2.8 E-6	NA	2.7 E-6	1.2 E-6	NA	9.3 E-5
DSA-SP13	20	NA	NA	NA	1.2 E-8	NA	NA	3.3 E-6	9.9 E-7	NA	1.9 E-6	9.5 E-6	NA	NA	NA	NA	5.4 E-7	2.1 E-6	NA	2.4 E-5
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	2.6 E-6	NA	1.3 E-5
DSA-SP15	20	NA	6.5 E-7	NA	2.1 E-9	4.5 E-8	NA	NA	4.0 E-9	NA	NA	9.1 E-8	NA	NA	4.0 E-6	4.8 E-8	5.5 E-8	8.6 E-7	NA	1.1 E-5
DSA-SP15	30	NA	1.1 E-6	NA	4.8 E-9	3.0 E-8	NA	6.6 E-7	9.3 E-7	6.1 E-8	NA	8.8 E-7	NA	NA	1.9 E-6	6.5 E-8	7.1 E-8	4.4 E-7	NA	1.2 E-5
DSA-SP16	10	NA	4.7 E-5	NA	NA	NA	NA	2.4 E-5	1.8 E-5	NA	6.6 E-7	2.1 E-6	NA	NA	NA	NA	8.0 E-7	8.5 E-6	NA	1.0 E-4
DSA-SP16	20	NA	8.8 E-5	NA	NA	NA	NA	2.0 E-5	1.6 E-5	NA	2.5 E-7	1.2 E-6	NA	NA	NA	NA	NA	1.0 E-5	NA	1.4 E-4
DSA-SP16	30	NA	8.2 E-5	NA	NA	NA	NA	1.9 E-5	1.3 E-5	NA	2.7 E-7	2.0 E-6	NA	NA	NA	6.0 E-7	NA	6.4 E-6	NA	1.2 E-4
DSA-SP16	40	NA	7.0 E-5	NA	NA	NA	NA	1.7 E-5	1.1 E-5	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	8.9 E-6	NA	1.1 E-4
DSA-SP17	10	NA	NA	NA	9.5 E-9	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	1.4 E-7	2.4 E-5	NA	2.6 E-5
DSA-SP17	20	NA	3.9 E-6	NA	2.6 E-9	NA	NA	NA	9.2 E-10	NA	NA	3.2 E-7	NA	NA	NA	NA	2.8 E-7	6.6 E-6	NA	1.2 E-5
DSA-SP17	30	NA	8.8 E-6	NA	NA	2.2 E-8	NA	NA	7.3 E-10	NA	2.0 E-8	1.1 E-7	NA	NA	NA	7.3 E-8	1.8 E-7	3.1 E-6	NA	1.3 E-5
DSA-SP18	10	NA	NA	NA	2.8 E-8	6.9 E-7	2.5 E-7	NA	NA	NA	4.0 E-7	2.2 E-6	8.0 E-6	2.3 E-6	NA	2.9 E-7	8.4 E-6	NA	NA	4.8 E-5
DSA-SP18	20	NA	NA	NA	3.4 E-8	2.4 E-7	4.6 E-7	NA	NA	NA	6.0 E-7	3.7 E-6	1.4 E-5	3.7 E-6	NA	NA	1.7 E-5	NA	NA	7.7 E-5
DSA-SP19	10	NA	NA	NA	2.5 E-8	2.2 E-7	8.0 E-7	NA	NA	NA	6.0 E-7	2.0 E-6	2.7 E-5	8.0 E-6	NA	NA	1.9 E-5	NA	NA	1.3 E-4

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
DSA-SP19	20	NA	NA	NA	7.7 E-9	8.2 E-7	2.9 E-8	NA	NA	NA	8.2 E-8	5.5 E-7	8.0 E-7	2.3 E-7	NA	1.6 E-7	1.3 E-6	NA	NA	1.3 E-5
DSA-SP20	10	NA	1.2 E-6	NA	NA	NA	3.8 E-8	1.6 E-6	1.6 E-6	NA	1.6 E-7	1.0 E-6	5.3 E-7	NA	1.2 E-6	2.2 E-7	1.0 E-6	3.1 E-5	NA	4.7 E-5
DSA-SP20	20	NA	8.7 E-6	NA	2.6 E-8	NA	7.8 E-8	4.0 E-6	3.5 E-6	NA	7.1 E-7	6.2 E-6	1.6 E-6	5.3 E-7	NA	2.8 E-7	1.1 E-6	1.2 E-4	NA	1.8 E-4
DSA-SP21	10	NA	2.8 E-6	NA	NA	NA	8.0 E-8	NA	2.0 E-7	NA	7.5 E-7	5.9 E-6	2.4 E-6	1.2 E-6	NA	NA	1.0 E-6	1.4 E-7	NA	3.9 E-5
DSA-SP21	20	NA	2.7 E-6	NA	NA	3.4 E-8	3.7 E-8	4.0 E-7	4.0 E-7	NA	2.8 E-7	2.8 E-6	1.2 E-6	6.3 E-7	NA	NA	5.1 E-7	1.7 E-7	NA	3.0 E-5
DSA-SP22	10	NA	NA	NA	NA	NA	8.6 E-8	4.3 E-7	3.0 E-7	NA	1.2 E-6	1.3 E-5	2.4 E-6	1.3 E-6	NA	NA	1.6 E-6	8.3 E-7	NA	5.5 E-5
DSA-SP22	20	NA	NA	NA	NA	NA	3.4 E-8	5.5 E-7	5.4 E-7	NA	9.0 E-7	9.2 E-6	1.0 E-6	5.7 E-7	NA	NA	4.0 E-7	8.6 E-7	NA	2.9 E-5
DSA-SP23	10	NA	NA	NA	NA	NA	NA	4.0 E-6	4.8 E-6	NA	5.1 E-7	3.1 E-6	1.1 E-6	NA	NA	NA	NA	1.3 E-6	NA	2.1 E-5
DSA-SP23	20	NA	NA	NA	NA	NA	NA	3.0 E-6	2.9 E-6	NA	9.4 E-8	3.9 E-7	8.0 E-7	4.7 E-7	NA	NA	NA	1.8 E-6	NA	2.1 E-5
DSA-SP23	30	NA	NA	NA	NA	NA	NA	2.0 E-6	1.9 E-6	NA	3.0 E-8	1.6 E-7	6.1 E-7	3.3 E-7	1.2 E-6	NA	NA	4.1 E-6	NA	1.7 E-5
DSA-SP24	10	NA	3.3 E-6	NA	NA	NA	2.0 E-7	2.2 E-6	1.6 E-6	1.7 E-7	9.0 E-7	5.7 E-6	5.9 E-6	2.9 E-6	NA	NA	3.5 E-6	1.8 E-6	NA	7.5 E-5
DSA-SP24	20	NA	NA	NA	NA	3.4 E-7	6.3 E-8	3.3 E-6	2.4 E-6	1.8 E-7	7.1 E-7	3.9 E-6	1.6 E-6	8.3 E-7	NA	NA	1.3 E-6	2.3 E-6	NA	3.9 E-5
DSA-SP24	30	NA	6.4 E-6	NA	NA	3.7 E-8	3.3 E-8	2.2 E-6	1.6 E-6	1.2 E-7	5.5 E-7	3.8 E-6	7.7 E-7	4.0 E-7	NA	NA	1.2 E-6	5.8 E-6	NA	4.1 E-5
DSA-SP25	10	NA	4.6 E-6	NA	NA	NA	NA	2.2 E-6	1.9 E-6	NA	2.5 E-7	8.5 E-7	2.8 E-7	NA	5.0 E-6	NA	2.2 E-7	NA	NA	1.8 E-5
DSA-SP25	20	NA	NA	NA	NA	NA	NA	5.3 E-6	4.5 E-6	NA	5.2 E-7	4.6 E-6	NA	NA	5.5 E-6	NA	2.5 E-7	NA	NA	2.5 E-5
DSA-SP26	10	NA	NA	NA	6.3 E-8	NA	NA	1.0 E-5	4.8 E-6	NA	1.8 E-6	3.5 E-5	5.4 E-7	NA	5.0 E-6	NA	5.5 E-7	NA	NA	7.2 E-5
DSA-SP26	20	NA	NA	NA	NA	NA	NA	2.0 E-5	1.2 E-5	NA	4.5 E-6	3.5 E-5	NA	NA	2.4 E-5	NA	2.0 E-6	NA	NA	1.3 E-4
DSA-SP27	10	NA	3.5 E-6	NA	NA	NA	NA	2.1 E-6	1.4 E-6	NA	2.0 E-7	2.6 E-6	NA	NA	3.5 E-6	NA	1.2 E-7	5.4 E-6	NA	2.1 E-5
DSA-SP27	20	NA	5.3 E-7	NA	NA	NA	NA	1.4 E-6	8.5 E-7	NA	1.9 E-7	8.5 E-7	1.5 E-7	NA	9.5 E-7	4.8 E-8	1.8 E-7	1.1 E-5	NA	1.8 E-5
DSA-SP28	10	NA	NA	NA	6.2 E-9	3.9 E-7	3.6 E-8	NA	NA	NA	4.0 E-7	1.4 E-6	4.8 E-7	NA	NA	NA	8.0 E-7	2.0 E-7	NA	1.2 E-5
DSA-SP28	20	NA	NA	NA	2.2 E-9	4.1 E-7	NA	NA	NA	NA	1.8 E-7	5.3 E-7	2.0 E-7	NA	NA	NA	4.1 E-7	NA	NA	1.8 E-5
DSA-SP29	10	NA	2.6 E-6	NA	NA	8.2 E-8	NA	NA	6.9 E-9	NA	NA	8.8 E-8	1.1 E-6	1.0 E-6	NA	NA	1.5 E-7	NA	NA	3.9 E-5
DSA-SP30	10	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	5.4 E-8	1.6 E-7	NA	NA	NA	NA	3.1 E-7	NA	NA	3.8 E-6
DSA-SP30	20	NA	NA	NA	4.6 E-9	2.8 E-7	2.2 E-8	NA	NA	NA	2.4 E-7	1.1 E-6	1.7 E-7	NA	NA	6.3 E-8	7.4 E-7	NA	NA	1.1 E-5
DSA-SP31	10	NA	NA	NA	1.0 E-8	2.7 E-7	4.2 E-8	NA	NA	NA	5.0 E-7	2.2 E-6	1.0 E-6	4.4 E-7	NA	1.1 E-7	1.7 E-6	NA	NA	7.2 E-5
DSA-SP31	20	NA	NA	NA	3.8 E-9	3.8 E-8	NA	NA	3.4 E-8	NA	1.6 E-7	8.1 E-7	3.5 E-7	NA	NA	NA	3.4 E-7	NA	NA	7.0 E-6
DSA-SP32	10	NA	NA	NA	NA	7.6 E-8	4.3 E-8	3.2 E-6	4.4 E-7	1.7 E-7	1.6 E-7	6.6 E-7	8.6 E-7	4.4 E-7	NA	NA	1.1 E-6	NA	NA	2.8 E-5
DSA-SP32	20	NA	7.1 E-7	NA	1.9 E-8	1.3 E-6	7.5 E-8	2.5 E-7	3.0 E-8	NA	9.4 E-7	2.6 E-6	1.0 E-6	5.3 E-7	NA	NA	3.8 E-6	NA	NA	1.2 E-4
E(d)-SP02	10	NA	NA	NA	2.3 E-8	NA	NA	2.9 E-6	7.5 E-7	NA	5.9 E-8	6.1 E-7	4.2 E-7	NA	2.0 E-6	NA	3.1 E-7	2.7 E-7	NA	1.1 E-5
E(d)-SP02	20	NA	NA	NA	4.1 E-9	1.0 E-7	NA	7.0 E-7	2.1 E-7	NA	2.0 E-6	6.8 E-6	2.4 E-7	NA	NA	2.1 E-6	6.4 E-7	5.1 E-7	NA	2.9 E-5
E(d)-SP03	10	NA	NA	NA	1.0 E-7	NA	NA	4.0 E-6	9.5 E-7	3.1 E-7	1.0 E-7	2.6 E-6	NA	NA	NA	NA	3.3 E-7	4.5 E-7	NA	1.9 E-5
E(m)-SP08	10	NA	NA	NA	4.9 E-9	2.9 E-7	4.1 E-8	NA	NA	NA	9.7 E-8	4.2 E-7	1.0 E-6	4.9 E-7	2.5 E-6	NA	2.9 E-6	NA	NA	2.4 E-5
E(m)-SP08	20	NA	NA	NA	4.0 E-9	1.2 E-7	NA	NA	1.6 E-9	NA	1.5 E-7	2.7 E-6	2.5 E-7	NA	1.5 E-6	2.3 E-6	6.3 E-7	4.8 E-7	NA	1.9 E-5
E(M)-SP09	10	NA	NA	NA	5.1 E-9	1.8 E-7	NA	NA	NA	NA	1.6 E-7	1.0 E-6	NA	NA	7.6 E-6	NA	8.0 E-7	NA	NA	1.8 E-5
E(M)-SP09	20	NA	4.7 E-7	NA	5.1 E-9	1.2 E-7	NA	NA	1.6 E-8	NA	1.5 E-7	2.3 E-6	2.0 E-7	NA	6.5 E-6	2.3 E-6	6.9 E-7	6.1 E-7	NA	3.3 E-5
E(m)-SP10	10	3.0 E-6	NA	NA	4.7 E-8	NA	NA	NA	4.4 E-9	NA	8.2 E-8	1.7 E-6	3.6 E-7	NA	6.6 E-5	NA	4.9 E-7	1.6 E-6	NA	8.5 E-5
E(m)-SP10	20	4.6 E-6	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA	1.3 E-7	7.5 E-7	5.3 E-7	3.9 E-4	NA	2.5 E-7	4.0 E-6	NA	4.0 E-4
E(m)-SP11	20	NA	NA	NA	NA	1.0 E-7	NA	NA	5.8 E-9	NA	4.5 E-8	1.8 E-7	1.5 E-7	NA	1.6 E-6	5.6 E-8	1.5 E-7	NA	NA	4.7 E-6
E(n)-SP04	10	NA	NA	NA	2.2 E-8	7.6 E-8	NA	NA	3.8 E-9	NA	4.8 E-8	8.5 E-7	2.8 E-7	NA	NA	NA	3.5 E-7	NA	NA	7.9 E-6
E(n)-SP04	20	NA	8.1 E-7	NA	3.2 E-9	NA	NA	NA	2.6 E-8	NA	1.1 E-7	7.3 E-7	1.9 E-7	NA	8.7 E-7	1.1 E-7	2.0 E-7	5.6 E-7	NA	1.2 E-5
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	NA	1.1 E-7	3.2 E-7	NA	9.9 E-5	NA	2.0 E-7	NA	NA	1.0 E-4
E(n)-SP05	20	8.2 E-7	NA	NA	NA	3.4 E-8	2.0 E-8	NA	6.3 E-9	NA	2.8 E-7	1.8 E-6	2.9 E-7	NA	1.6 E-4	2.3 E-7	5.1 E-7	8.1 E-6	NA	1.9 E-4
E(n)-SP05	40	2.9 E-6	1.8 E-6	NA	NA	3.8 E-8	NA	NA	2.4 E-8	NA	NA	7.1 E-8	NA	NA	7.9 E-4	1.3 E-7	1.2 E-7	6.6 E-6	NA	8.0 E-4
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	3.1 E-7	NA	NA	1.7 E-6	NA	2.4 E-7	6.1 E-7	NA	8.3 E-6
E(n)-SP06	20	2.4 E-6	1.6 E-6	NA	3.5 E-9	4.5 E-8	3.2 E-8	2.3 E-7	1.8 E-8	NA	2.0 E-8	3.2 E-7	7.2 E-7	2.4 E-7	1.2 E-6	1.3 E-7	4.6 E-7	8.1 E-7	NA	1.0 E-5
E(n)-SP07	10	NA	1.9 E-6	NA	4.7 E-9	NA	NA	4.3 E-7	4.4 E-8	NA	NA	1.9 E-7	NA	NA	2.7 E-6	NA	2.4 E-7	5.4 E-7	NA	9.7 E-6
E(n)-SP08	10	NA	1.5 E-6	NA	1.8 E-8	7.6 E-8	NA	NA	2.8 E-9	NA	NA	5.5 E-7	4.8 E-7	NA	NA	NA	4.0 E-7	2.4 E-6	NA	1.2 E-5
E(n)-SP08	20	NA	1.8 E-5	NA	NA	NA	NA	NA	1.3 E-9	NA	3.0 E-8	3.0 E-7	NA	NA	NA	1.6 E-7	1.5 E-7	2.3 E-6	NA	2.5 E-5
E(n)-SP09	10	NA	2.8 E-6	NA	3.0 E-8	NA	NA	NA	NA	NA	NA	4.8 E-7	4.6 E-7	NA	NA	NA	3.3 E-7	3.3 E-7	NA	1.5 E-5
E(n)-SP09	20	6.0 E-7	4.7 E-5	NA	8.8 E-9	NA	NA	NA	1.3 E-9	NA	7.9 E-8	6.5 E-7	1.9 E-7	NA	NA	5.9 E-7	3.0 E-7	2.5 E-7	NA	5.1 E-5
E(N)-SP10	10	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	7.2 E-8	9.6 E-7	NA	NA	3.2 E-6	1.5 E-7	3.5 E-7	9.0 E-8	NA	8.3 E-6
E(N)-SP10	20	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	7.5 E-8	1.1 E-6	NA	NA	1.3 E-6	2.7 E-7	3.1 E-7	8.1 E-8	NA	9.4 E-6
E(n)-SP11	15	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	3.7 E-8	1.4 E-7	2.1 E-7	NA	NA	9.3 E-8	3.5 E-7	NA	NA	1.3 E-5
E(n)-SP11	25	NA	1.3 E-5	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	1.1 E-7	1.6 E-7	NA	NA	1.0 E-7	1.6 E-7	1.9 E-7	NA	1.4 E-5
E(n)-SP12	10	NA	NA	NA	NA	3.8 E-6	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	2.1 E-7	3.1 E-7	NA	NA	5.9 E-6
E(n)-SP12	20	NA	8.2 E-7	NA	NA	3.4 E-7	NA	NA	4.0 E-9	NA	2.7 E-8	2.6 E-7	NA	NA	1.6 E-6	2.7 E-7	3.2 E-7	1.2 E-7	NA	5.0 E-6
L2-ST24-SP03	10	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	1.4 E-7	NA	NA	2.7 E-6
L2-ST24-SP03	20	NA	4.1 E-6	NA	2.9 E-9	6.2 E-8	2.0 E-8	NA	2.8 E-9	NA	1.9 E-7	2.4 E-6	3.5 E-7	NA	1.5 E-5	3.2 E-7	4.3 E-7	1.1 E-6	NA	2.8 E-5
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
L2-ST26-SP04	20	NA	NA	NA	NA	4.8 E-8	1.6 E-8	NA	NA	NA	8.2 E-7	8.1 E-6	2.9 E-7	NA	1.2 E-5	5.3 E-7	5.2 E-7	3.5 E-6	NA	2.9 E-5
L2-ST26-SP05	10	NA	NA	NA	1.0 E-8	9.6 E-8	NA	NA	NA	NA	2.6 E-7	1.6 E-6	6.4 E-7	NA	2.2 E-5	NA	2.4 E-6	NA	NA	5.5 E-5
L2-ST26-SP05	20	NA	NA	8.9 E-7	3.3 E-8	1.6 E-7	4.0 E-8	NA	1.4 E-9	NA	3.4 E-6	2.5 E-5	5.6 E-7	2.1 E-7	2.8 E-5	9.3 E-7	1.1 E-6	2.6 E-6	NA	8.7 E-5
L2-ST26-SP06	10	NA	NA	NA	4.7 E-9	3.6 E-7	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	1.6 E-6	NA	2.7 E-7	NA	NA	3.8 E-6
L2-ST26-SP06	20	NA	NA	NA	NA	8.6 E-8	1.8 E-8	NA	3.9 E-9	NA	1.5 E-7	8.5 E-7	4.8 E-7	NA	2.6 E-5	2.4 E-7	3.1 E-7	2.1 E-6	NA	3.3 E-5
L2-ST26-SP07	18	NA	NA	NA	6.3 E-9	1.9 E-7	7.0 E-8	NA	NA	NA	2.7 E-7	1.7 E-6	1.8 E-6	8.1 E-7	NA	NA	6.9 E-7	4.3 E-8	2.3 E-7	3.0 E-5
L2-ST28_90-SP02	10	NA	NA	NA	4.4 E-8	2.0 E-6	NA	9.4 E-6	1.7 E-6	NA	1.5 E-7	1.6 E-6	9.6 E-7	NA	NA	4.8 E-7	9.3 E-7	8.2 E-7	NA	6.0 E-5
L2-ST28_90-SP02	20	NA	4.6 E-6	7.9 E-7	1.3 E-8	6.9 E-8	2.9 E-8	8.0 E-7	1.3 E-7	NA	2.5 E-6	2.0 E-5	5.6 E-7	NA	1.0 E-5	1.1 E-6	8.4 E-7	1.2 E-5	NA	7.0 E-5

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	30	NA	1.6 E-10	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-10	NA	NA
29E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	NA
29E-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA
29E-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA
29E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
29E-SP11	20	NA	NA	NA	NA	NA	NA	8.9 E-10	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA
DSA-SP04	30	NA	9.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	20	NA	NA	NA	NA	8.4 E-10	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	9.4 E-10	NA
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
DSA-SP08	20	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-10	NA	NA
DSA-SP10	10	NA	NA	NA	NA	7.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	NA
DSA-SP10	20	NA	NA	NA	NA	3.6 E-10	NA	3.3 E-10	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	NA
DSA-SP10	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP11	10	NA	NA	NA	NA	8.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA
DSA-SP12	10	NA	NA	NA	NA	8.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA
DSA-SP12	20	NA	3.3 E-11	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	NA
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-9	NA	NA
DSA-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA
DSA-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-9	NA	NA

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA
DSA-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA
DSA-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA
DSA-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA
DSA-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-9	NA	NA
DSA-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA
DSA-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA
DSA-SP24	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-9	NA	NA
DSA-SP24	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	NA
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	NA
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA
DSA-SP29	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	NA	NA
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA
DSA-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA
DSA-SP32	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA
DSA-SP32	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA
E(m)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA
E(m)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	NA	NA
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-10	NA	NA
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-10	NA	NA
E(n)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA
E(n)-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-10	NA	NA
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-10	NA	NA
E(n)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-10	NA	NA
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-9	NA	NA
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	NA
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-9	NA	NA
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
L2-ST28_90-SP02	20	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	ILCR
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	6.6 E-5	NA	8E-05
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-7	NA	NA	1.1 E-5	NA	1E-05
28E-SP16	30	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	3.9 E-7	NA	4E-07
28E-SP16	40	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	6.2 E-7	NA	7E-07
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	1E-09
29E-SP07	20	7.6 E-10	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	2.9 E-8	NA	4E-08
29E-SP08	10	NA	NA	NA	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	2.5 E-9	NA	7E-09
29E-SP08	20	NA	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	2.0 E-7	NA	2E-07
29E-SP08	30	1.9 E-9	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	9.2 E-8	NA	1E-07
29E-SP08	40	1.4 E-9	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	6.7 E-8	NA	9E-08
29E-SP09	10	3.1 E-7	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	5E-07
29E-SP09	20	4.9 E-7	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	8E-07
29E-SP09	30	1.3 E-8	7.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	7.3 E-11	NA	5.0 E-8	NA	8E-08
29E-SP09	40	1.4 E-8	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	7.0 E-11	NA	3.0 E-8	NA	5E-08
29E-SP10	10	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	7E-09
29E-SP10	20	6.9 E-9	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	1E-08
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	7.9 E-11	NA	3E-09
29E-SP11	20	2.0 E-9	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	3.1 E-10	NA	4.9 E-8	9.6 E-10	6E-08
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	2E-09
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	3.9 E-8	NA	6E-08
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	5.9 E-11	NA	2.7 E-10	NA	9E-10
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	2.4 E-11	NA	2.3 E-11	NA	2E-10
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	2E-08
DSA-SP04	20	1.3 E-8	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	4.7 E-10	NA	3.2 E-7	NA	4E-07
DSA-SP04	30	1.5 E-8	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	1.4 E-10	NA	3.5 E-7	NA	4E-07
DSA-SP04	40	8.7 E-9	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-9	9.8 E-11	NA	2.1 E-7	NA	2E-07
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	4E-08
DSA-SP05	20	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-11	4.7 E-10	NA	1.5 E-8	NA	2E-08
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-11	NA	4.5 E-9	NA	5E-09
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	1E-08
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP08	10	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-11	NA	1.5 E-9	NA	2E-08
DSA-SP08	20	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-10	NA	2.7 E-9	NA	3E-08
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	1.1 E-9	NA	1E-09
DSA-SP09	20	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	6.9 E-9	NA	8E-09
DSA-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	4.3 E-10	NA	9E-09
DSA-SP10	20	1.0 E-9	4.6 E-9	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	6.6 E-9	NA	2E-08
DSA-SP10	30	3.6 E-9	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	3E-08
DSA-SP10	40	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	4.8 E-9	NA	7E-09
DSA-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	3E-09
DSA-SP11	20	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	1.0 E-10	NA	3E-09
DSA-SP12	10	NA	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	4E-09
DSA-SP12	20	3.5 E-9	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	1.6 E-11	NA	1.8 E-9	NA	2E-08
DSA-SP13	10	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	7.9 E-10	NA	1E-08
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	3E-09
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	1.7 E-9	NA	3E-09
DSA-SP15	20	NA	3.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	1.5 E-11	NA	5.6 E-10	NA	1E-09
DSA-SP15	30	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	2.1 E-11	NA	2.8 E-10	NA	2E-09
DSA-SP16	10	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	3E-08
DSA-SP16	20	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	6E-08
DSA-SP16	30	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	4.2 E-9	NA	5E-08
DSA-SP16	40	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	5E-08
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	2E-08
DSA-SP17	20	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	7E-09
DSA-SP17	30	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	2.0 E-9	NA	7E-09
DSA-SP18	10	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	6E-09
DSA-SP18	20	NA	NA	NA	NA	NA	6.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-08
DSA-SP19	10	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-08

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
DSA-SP19	20	NA	NA	NA	NA	NA	3.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	1E-09
DSA-SP20	10	NA	6.7 E-10	NA	NA	NA	5.2 E-11	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	7.0 E-11	NA	2.0 E-8	NA	2E-08
DSA-SP20	20	NA	4.9 E-9	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-11	NA	7.9 E-8	NA	9E-08
DSA-SP21	10	NA	1.6 E-9	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-11	NA	3E-09
DSA-SP21	20	NA	1.5 E-9	NA	NA	NA	5.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	3E-09
DSA-SP22	10	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	7E-09
DSA-SP22	20	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	2E-09
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	3E-09
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	2E-09
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	2.6 E-9	NA	3E-09
DSA-SP24	10	NA	1.9 E-9	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	8E-09
DSA-SP24	20	NA	NA	NA	NA	NA	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	6E-09
DSA-SP24	30	NA	3.6 E-9	NA	NA	NA	4.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	1E-08
DSA-SP25	10	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	4E-09
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	2E-09
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	7E-09
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	NA	2E-08
DSA-SP27	10	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	3.5 E-9	NA	7E-09
DSA-SP27	20	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	1.5 E-11	NA	7.2 E-9	NA	8E-09
DSA-SP28	10	NA	NA	NA	NA	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	3E-09
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-09
DSA-SP29	10	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-09
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8E-10
DSA-SP30	20	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	3E-09
DSA-SP31	10	NA	NA	NA	NA	NA	5.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	NA	NA	7E-09
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-09
DSA-SP32	10	NA	NA	NA	NA	NA	5.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-09
DSA-SP32	20	NA	4.0 E-10	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-08
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	1.8 E-10	NA	1E-09
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-10	NA	3.3 E-10	NA	4E-09
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	2E-09
E(m)-SP08	10	NA	NA	NA	NA	NA	5.5 E-11	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	3E-09
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	7.2 E-10	NA	3.1 E-10	NA	4E-09
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	NA	NA	4E-09
E(M)-SP09	20	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-10	7.2 E-10	NA	3.9 E-10	NA	7E-09
E(m)-SP10	10	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-9	NA	NA	1.1 E-9	NA	1E-08
E(m)-SP10	20	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	2.6 E-9	NA	5E-08
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	1.8 E-11	NA	NA	NA	1E-09
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-09
E(n)-SP04	20	NA	4.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	3.6 E-11	NA	3.6 E-10	NA	1E-09
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	1E-08
E(n)-SP05	20	7.6 E-10	NA	NA	NA	NA	2.8 E-11	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	7.2 E-11	NA	5.3 E-9	NA	3E-08
E(n)-SP05	40	2.7 E-9	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	4.2 E-11	NA	4.3 E-9	NA	1E-07
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	3.9 E-10	NA	2E-09
E(n)-SP06	20	2.2 E-9	8.9 E-10	NA	NA	NA	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	4.1 E-11	NA	5.3 E-10	NA	4E-09
E(n)-SP07	10	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	3.5 E-10	NA	2E-09
E(n)-SP08	10	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	3E-09
E(n)-SP08	20	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	1.5 E-9	NA	1E-08
E(n)-SP09	10	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	4E-09
E(n)-SP09	20	5.6 E-10	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	1.6 E-10	NA	3E-08
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	4.7 E-11	NA	5.8 E-11	NA	2E-09
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	8.5 E-11	NA	5.3 E-11	NA	1E-09
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	6E-10
E(n)-SP11	25	NA	7.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	1.2 E-10	NA	8E-09
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	NA	NA	5E-10
E(n)-SP12	20	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	8.5 E-11	NA	7.9 E-11	NA	1E-09
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-10
L2-ST24-SP03	20	NA	2.3 E-9	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	1.0 E-10	NA	6.9 E-10	NA	7E-09
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00

Table 5.3-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
L2-ST26-SP04	20	NA	NA	NA	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	1.7 E-10	NA	2.3 E-9	NA	6E-09
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	1E-08
L2-ST26-SP05	20	NA	NA	NA	NA	NA	5.4 E-11	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	3.0 E-10	NA	1.7 E-9	NA	1E-08
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	7E-10
L2-ST26-SP06	20	NA	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	7.6 E-11	NA	1.4 E-9	NA	5E-09
L2-ST26-SP07	18	NA	NA	NA	NA	NA	9.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	9.4 E-10	7E-09
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	5.3 E-10	NA	3E-09
L2-ST28_90-SP02	20	NA	2.6 E-9	NA	NA	NA	3.9 E-11	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	3.4 E-10	NA	7.9 E-9	NA	2E-08

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.3-7) x the unit hazard or unit risk for the chemical).

Table 5.3-13 Construction Worker Unit Soil Hazard and Unit Cancer Risk Results
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Aluminum	1.0 E+0	3.2 E-6	0.0 E+0	2.2 E-5	2.6 E-5	NA	NA	NA	NA
Antimony	1.0 E+0	8.1 E-3	0.0 E+0	2.4 E-4	8.3 E-3	NA	NA	NA	NA
Iron	1.0 E+0	4.6 E-6	0.0 E+0	NA	4.6 E-6	NA	NA	NA	NA
Molybdenum	1.0 E+0	6.5 E-4	0.0 E+0	2.0 E-5	6.7 E-4	NA	NA	NA	NA
Nickel	1.0 E+0	1.6 E-4	0.0 E+0	6.8 E-3	7.0 E-3	NA	NA	NA	NA
Perchlorate	1.0 E+0	4.6 E-3	0.0 E+0	NA	4.6 E-3	NA	NA	NA	NA
Zinc	1.0 E+0	1.1 E-5	0.0 E+0	3.3 E-7	1.1 E-5	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	3 E-8	1 E-8	1 E-9	5 E-8
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	6 E-7	2 E-7	5 E-9	8 E-7
Benzo (b & k) fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	6 E-8	2 E-8	5 E-10	8 E-8
Benzo (ghi) perylene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Chrysene	1.0 E+0	NA	NA	NA	NA	6 E-9	2 E-9	5 E-11	8 E-9
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	3 E-7	1 E-7	6 E-9	5 E-7
Di-n-butyl phthalate	1.0 E+0	3.2 E-5	9.7 E-6	9.8 E-7	4.3 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	6 E-8	2 E-8	5 E-10	8 E-8
Pentachlorophenol	1.0 E+0	1.1 E-4	3.2 E-5	3.3 E-6	1.4 E-4	6 E-9	2 E-9	3 E-11	7 E-9
Phenanthrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.3-14 Construction Worker Inhalation Hazard and Unit Cancer Risk Results
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1,1-Trichloroethane	1.0 E+0	1.4 E-1	NA
1,1-Dichloroethane	1.0 E+0	9.8 E-1	2 E-5
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	3 E-4
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
1,4-Dioxane	1.0 E+0	2.3 E-1	8 E-5
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
2-Hexanone	1.0 E+0	2.2 E-1	NA
2-Propanol	1.0 E+0	7.5 E+1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Benzene	1.0 E+0	2.3 E+1	3 E-4
Bromodichloromethane	1.0 E+0	9.8 E+0	4 E-4
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Carbon Tetrachloride	1.0 E+0	1.7 E+1	4 E-4
Chloroform	1.0 E+0	1.5 E+1	2 E-4
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Cyclohexane	1.0 E+0	1.2 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Ethylbenzene	1.0 E+0	6.8 E-1	2 E-5
Freon 11	1.0 E+0	3.4 E+0	NA
Freon 113	1.0 E+0	2.3 E-2	NA
Freon 12	1.0 E+0	3.4 E+0	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	6 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	2 E-5
Toluene	1.0 E+0	2.3 E+0	NA
Trichloroethylene	1.0 E+0	1.2 E+0	2 E-5
Vinyl Chloride	1.0 E+0	6.8 E+0	8 E-4

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.3-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**
Unit Hazard		2.6 E-5	8.3 E-3	NA	NA	NA	1.5 E-4	NA	NA	4.3 E-5	1.1 E-4	NA	4.6 E-6	6.7 E-4	7.0 E-3	1.4 E-4	4.6 E-3	1.5 E-4	1.6 E-5	1.5 E-4	1.1 E-5
Unit Risk		NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	NA	7.7 E-9	4.7 E-7	NA	NA	7.7 E-8	NA	NA	NA	7.2 E-9	NA	NA	NA	NA	NA
28E-SB01-1.5	1.5	27000	1.9											1.6	33		0.02				43
28E-SB01-11.5	11.5	17000	1.1												130		0.05				23
28E-SB01-5.5	5.5	20000	2.0											0.85	32		0.017				47
28E-SB02-1	1	13000									0.0017			1.4	22						34
28E-SB02-11	11	28000												0.80	40		1.4				59
28E-SB02-5	5	14000												0.79	16						29
28E-SB03-1.0	1													5.2			0.026				
28E-SB03-1.0-T	1	41000													40						46
28E-SB03-11	11	27000												0.98	69		0.069				57
28E-SB03-5.0	5	19000												0.22	31		0.024				42
28E-SB04-1.0	1																				
28E-SB04-10	10																0.0065				
28E-SB04-5.0	5																				
28E-SB05-1.0	1																0.67				
28E-SB05-10-T	10																0.069				
28E-SB05-5.0	5																0.026				
28E-SB06-1.0	1																0.11				
28E-SB06-10	10																4.3				
28E-SB06-5.0	5																5.1				
28E-SB07-1.0	1																				
28E-SB07-10	10																				
28E-SB07-5.0	5																				
28E-SPB01	0	30400											43600		49						66
28E-SPB01	3	37200											38500		51						63
28E-SPB02	0	21300											28700		36						55
28E-SPB02	3	15900											26800		28						40
29E-SB01	1									4.4											
29E-SB01	3																				
29E-SB01	5									5.4											
29E-SB01	10									0.39											
29E-SB02	1																				
29E-SB02	3									0.67											
29E-SB02	5									2.9											
29E-SB02	10									3.4											
29E-SB03-1	1	19000	0.72											3.0	29		0.033				39
29E-SB03-11	11	34000	0.21											1.5	43		0.021				46
29E-SB03-5	5	40000	0.24											0.67	45						53
29E-SB05-11.5	11.5	17000												0.85	36				0.37		32
29E-SB05-2.0	2	10000	9.0			0.031	0.061	0.0080			0.0090	0.033		0.53	30			0.0052	0.17	0.015	210
29E-SB05-6.0	6	14000	4.3											1.3	44				0.17		170
29E-SB06-11.5	11.5	20000												0.58	44				0.24		46
29E-SB06-2.0	2	11000	0.49												27						64
29E-SB06-5.5	5.5	21000												0.63	36						41
29E-SB07-1.5	1.5	16000	0.57											0.25	32						49
29E-SB07-11.5	11.5	14000	0.59											0.37	29						32
29E-SB07-5.5	5.5	18000												0.59	30						42
29E-SB08-1.5	1.5	17000	0.11											0.39	26		0.0060				36
29E-SB08-11.5	11.5	23000	0.081											0.42	69		0.0061				49
29E-SB08-5.5	5.5	19000	0.13											0.20	19		0.0068				26
29E-SB09-1.0	1													0.92	48						46
29E-SB09-1.0-T	1	47000	0.36																		
29E-SB09-11	11	20000	0.070												34						32
29E-SB09-5.0	5	45000	0.25												43						53
29E-SB10-1	1	6990													23						79
29E-SB11-1	1	17600													31						55
29E-SB12-1	1	31000													50						63
29E-SNS03-0.5	0.5	14000	0.89	0.0049	0.0069	0.020	0.022	0.013			0.014	0.012		0.24	23			0.0045		0.014	120
29E-SNS04-0.5	0.5	18000									0.0036				27		0.038				41
29E-SNS05-0.5	0.5		0.35	0.0041		0.013		0.0068			0.0095				30			0.0027		0.0095	70

Table 5.3-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc
29E-SNS05-0.5-T	0.5	16000												0.38							
29E-SNS06-0.5	0.5			0.0083	0.0087	0.015		0.011			0.013			0.60				0.0045		0.015	
29E-SNS06-0.5-T	0.5	15000	0.23												24						100
29E-SNS06-2.5	2.5	26000	0.14											0.21	38						31
29E-SNS07-0.5	0.5	24000	0.38											0.73	40						130
29E-SNS07-0.5-T	0.5																				
29E-SNS07-2.5	2.5	19000	0.28											0.60	27				0.47		49
59E-SB01	1	16300								0.50			23600		26						37
59E-SB02-10.5	10.5	48000	1.9												53		0.0079				66
59E-SB02-2.0	2	12000	0.93											6.1	18				0.19		29
59E-SB02-5.0	5	34000	1.6											0.66	52						45
59E-SB03-11	11	79000	3.8												130		0.050				94
59E-SB03-2.0	2	40000	3.5								0.0034				51			0.0052		0.0071	69
59E-SB03-6.0	6	18000	1.4											2.8	30						37
59E-SB04-11	11	37000	1.6												210						55
59E-SB04-2.5	2.5	48000	2.5												94						83
59E-SB04-6.0	6	16000	1.7											0.73	25			0.0024			31
DSA-SB01-1.0	1	32000	0.28											7.5	42		0.059				36
DSA-SB01-11	11	13000	0.75											2.4	31						32
DSA-SB01-5.0	5	26000	0.24											5.2	45		0.013				38
DSA-SB02-1.5	1.5	17000	1.5											1.1	28		0.014				41
DSA-SB02-10.5	10.5	19000													49		0.014				37
DSA-SB02-4.5	4.5	14000	1.2											1.4	26		0.016				34
DSA-SB03-12	12	21000	1.3											6.0	22		0.010				33
DSA-SB03-2.0	2	27000	1.9											93	24		0.011				44
DSA-SB03-4.5	4.5	17000	1.2											0.26	31		0.0060				51
DSA-SB04-1.0	1	40000	0.36											0.73	49						47
DSA-SB04-11	11	33000	0.20											0.44	43						48
DSA-SB04-5.0	5	32000	0.24											0.58	34						37
E(D)-SB01	1																				
E(D)-SB01	5																				
E(D)-SB01	10																				
E(D)-SB02	1																				
E(D)-SB02	5																				
E(D)-SB02	10																				
E(d)-SNS01-0.5	0.5	18000	0.54	0.026	0.036	0.088	0.031	0.043			0.062	0.031		0.67	29		0.027	0.025		0.11	98
E(d)-SNS01-2.5	2.5	24000	0.82	0.0046		0.012		0.0076			0.013			0.32	32			0.0042		0.011	110
E(d)-SNS02-0.5	0.5	33000	0.31					0.019			0.0064			0.40	38					0.013	74
E(d)-SNS02-2.5	2.5	31000												0.38	32						44
E(d)-SNS03-0.5	0.5	6600	0.34					0.013			0.0043			0.66	28		0.21	0.0089		0.014	37
E(d)-SNS03-10	10																0.068				
E(d)-SNS03-2.5	2.5	20000	0.27											0.50	39		0.16				92
E(E)-SB01	1																				
E(E)-SB01	5																				
E(E)-SB01	6																				
E(e)-SB02-1.0	1	22000												3.2	25						29
E(e)-SB02-11	11	41000													29		0.29				73
E(e)-SB02-5.0	5	25000												2.4	38		0.021				44
E(E)-SB03-1.0	1																0.14				
E(E)-SB03-10	10																0.057				
E(E)-SB03-5.0	5																0.14				
E(e)-SNS01-0.5	0.5	12000	2.2					0.013			0.0061			0.79	22		0.14			0.0093	62
E(e)-SNS01-2.5	2.5	15000	0.20											0.30	21		0.074				33
E(e)-SNS02-0.5	0.5	19000	0.24											0.33	30						54
E(e)-SNS02-0.5-T	0.5										0.0025										
E(e)-SNS02-2.5	2.5	20000	0.29											0.32	27						37
E(m)-SD01-0.25	0.25	24000	0.75											0.38	37						49
E(m)-SD01-1.5	1.5	17000	0.34											0.29	34						50
E(m)-SD01-5.0	5	15000												0.29	24						34
E(m)-SD02-0.25	0.25	19000	0.61											0.40	29	0.34					93
E(m)-SD02-1.5	1.5	23000												0.33	40						53

Table 5.3-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc
E(m)-SD02-5.0	5	27000												0.38	39						52
E(N)-SB01-1.0	1	16000	0.25					0.0049			0.0071			0.44	31			0.0032		0.0060	84
E(N)-SB01-5.0	5	13000	0.12											0.33	38						36
E(N)-SB01-9.5	9.5	12000	0.13											0.68	48						36
E(N)-SB02-1.0	1		0.27								0.0025										
E(N)-SB02-1.0-T	1	15000												0.62	33						56
E(N)-SB02-11	11	8700												2.2	20						41
E(N)-SB02-5.0	5	10000												0.95	35						57
E(n)-SB03-1.0	1	21000												0.74	27						31
E(n)-SB03-11	11	18000												3.9	44						28
E(n)-SB03-5.0	5	19000												1.2	51						33
E(N)-SD01-0.25	0.25	13000	0.34								0.0039			0.74	23						93
E(N)-SD01-1.5	1.5	15000	0.14											0.66	42						88
E(N)-SD01-5.0	5	16000	0.086											0.53	62						36
E(n)-SNS01-0.5	0.5	11000	0.23											0.28	22						2800
E(n)-SNS01-2.5	2.5	15000	0.17											0.38	39						40
E(n)-SNS02-0.5	0.5	18000	0.42			0.021		0.0087			0.019			0.14	30		0.039	0.0044		0.014	62
E(n)-SNS02-2.5	2.5		0.24												40						55
E(n)-SNS02-2.5-T	2.5	27000												0.53							
E(n)-SNS03-0.5	0.5	20000	0.15											0.21	50		0.55				55
E(n)-SNS03-2.5	2.5	20000	0.18											0.31	48		0.25				57
L2-ST24-SB01-11.5	11.5	45000												0.71	25				1.2		70
L2-ST24-SB01-2.0	2	34000												0.87	49				1.0		43
L2-ST24-SB01-6.0	6	4800													8.7		0.054		0.29		17
L2-ST26-SB01-11.5	11.5	21000	1.0											0.26	42						34
L2-ST26-SB01-2.0	2	14000	1.1	0.41	0.32	0.74	0.088	0.55	0.031		0.82	0.085		0.42	24			0.14		1.1	27
L2-ST26-SB01-5.0	5	17000	1.4											0.23	25						39
L2-ST26-SB02-10	10	14000	1.0											0.35	29						32
L2-ST26-SB02-2.0	2	24000	1.5											0.20	41						41
L2-ST26-SB02-4.5	4.5	17000	1.1											0.19	24						31
L2-ST26-SB03-11.5	11.5	18000	1.2											0.24	28						37
L2-ST26-SB03-2.0	2	15000	1.4					0.0056						0.28	26				0.26		35
L2-ST26-SB03-5.0	5	43000													57						53
L2-ST26-SB04-1.0	1	16000		0.0075										0.82	28						34
L2-ST26-SB04-11	11	19000												0.44	35						41
L2-ST26-SB04-5.0	5	17000												0.29	28						39
L2-ST26-SNS01-0.5	0.5																				
L2-ST26-SNS01-2.5	2.5																				
L2-ST26-SNS02-0.5	0.5				0.055		0.048	0.082			0.013									0.099	
L2-ST26-SNS02-2.5	2.5																				
L2-ST26-SNS03-0.5	0.5				0.0062			0.0080			0.0044							0.0033		0.010	
L2-ST26-SNS03-2.5	2.5																				
L2-ST28/90-SB01-10.5	10.5	19000	0.73											0.44	43						41
L2-ST28/90-SB01-2.5	2.5	38000	1.8											0.42	34		0.075		0.36		44
L2-ST28/90-SB01-4.5	4.5	30000												0.41	30		0.14		0.66		54

Table 5.3-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																				
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	HI
Unit Hazard																						
Unit Risk																						
28E-SB01-1.5	1.5	6.9 E-1	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.3 E-1	NA	9.2 E-5	NA	NA	NA	4.8 E-4	9.4 E-1
28E-SB01-11.5	11.5	4.3 E-1	9.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-1	NA	2.3 E-4	NA	NA	NA	2.6 E-4	1.4 E+0
28E-SB01-5.5	5.5	5.1 E-1	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	2.2 E-1	NA	7.8 E-5	NA	NA	NA	5.2 E-4	7.5 E-1
28E-SB02-1	1	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	9.3 E-4	1.5 E-1	NA	NA	NA	NA	NA	3.8 E-4	4.9 E-1
28E-SB02-11	11	7.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	2.8 E-1	NA	6.5 E-3	NA	NA	NA	6.5 E-4	1.0 E+0
28E-SB02-5	5	3.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	1.1 E-1	NA	NA	NA	NA	NA	3.2 E-4	4.7 E-1
28E-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	NA	NA	1.2 E-4	NA	NA	NA	NA	3.6 E-3
28E-SB03-1.0-T	1	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	5.1 E-4	1.3 E+0
28E-SB03-11	11	6.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	4.8 E-1	NA	3.2 E-4	NA	NA	NA	6.3 E-4	1.2 E+0
28E-SB03-5.0	5	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	2.2 E-1	NA	1.1 E-4	NA	NA	NA	4.7 E-4	7.0 E-1
28E-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	3.0 E-5
28E-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	3.1 E-3
28E-SB05-10-T	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	3.2 E-4
28E-SB05-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	1.2 E-4
28E-SB06-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	5.1 E-4
28E-SB06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	2.0 E-2
28E-SB06-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	2.4 E-2
28E-SB07-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	0	7.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	3.4 E-1	NA	NA	NA	NA	NA	7.3 E-4	1.3 E+0
28E-SPB01	3	9.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	3.6 E-1	NA	NA	NA	NA	NA	6.9 E-4	1.5 E+0
28E-SPB02	0	5.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	2.6 E-1	NA	NA	NA	NA	NA	6.1 E-4	9.3 E-1
28E-SPB02	3	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	2.0 E-1	NA	NA	NA	NA	NA	4.5 E-4	7.3 E-1
29E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4
29E-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4
29E-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5
29E-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5
29E-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4
29E-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4
29E-SB03-1	1	4.9 E-1	6.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	2.0 E-1	NA	1.5 E-4	NA	NA	NA	4.3 E-4	7.0 E-1
29E-SB03-11	11	8.7 E-1	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	3.0 E-1	NA	9.7 E-5	NA	NA	NA	5.1 E-4	1.2 E+0
29E-SB03-5	5	1.0 E+0	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	3.2 E-1	NA	NA	NA	NA	NA	5.9 E-4	1.3 E+0
29E-SB05-11.5	11.5	4.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	2.5 E-1	NA	NA	NA	5.8 E-6	NA	3.5 E-4	6.9 E-1
29E-SB05-2.0	2	2.6 E-1	7.5 E-2	NA	NA	NA	9.3 E-6	NA	NA	NA	1.0 E-6	NA	NA	3.5 E-4	2.1 E-1	NA	NA	7.9 E-7	2.7 E-6	2.3 E-6	2.3 E-3	5.4 E-1
29E-SB05-6.0	6	3.6 E-1	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-4	3.1 E-1	NA	NA	NA	2.7 E-6	NA	1.9 E-3	7.0 E-1
29E-SB06-11.5	11.5	5.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	3.1 E-1	NA	NA	NA	3.8 E-6	NA	5.1 E-4	8.2 E-1
29E-SB06-2.0	2	2.8 E-1	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	NA	NA	7.1 E-4	4.8 E-1
29E-SB06-5.5	5.5	5.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	2.5 E-1	NA	NA	NA	NA	NA	4.5 E-4	7.9 E-1
29E-SB07-1.5	1.5	4.1 E-1	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.2 E-1	NA	NA	NA	NA	NA	5.4 E-4	6.4 E-1
29E-SB07-11.5	11.5	3.6 E-1	4.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	2.0 E-1	NA	NA	NA	NA	NA	3.5 E-4	5.7 E-1
29E-SB07-5.5	5.5	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	2.1 E-1	NA	NA	NA	NA	NA	4.7 E-4	6.7 E-1
29E-SB08-1.5	1.5	4.3 E-1	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	1.8 E-1	NA	2.8 E-5	NA	NA	NA	4.0 E-4	6.2 E-1
29E-SB08-11.5	11.5	5.9 E-1	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	4.8 E-1	NA	2.8 E-5	NA	NA	NA	5.4 E-4	1.1 E+0
29E-SB08-5.5	5.5	4.9 E-1	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	1.3 E-1	NA	3.1 E-5	NA	NA	NA	2.9 E-4	6.2 E-1
29E-SB09-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	3.4 E-1	NA	NA	NA	NA	NA	5.1 E-4	3.4 E-1
29E-SB09-1.0-T	1	1.2 E+0	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+0
29E-SB09-11	11	5.1 E-1	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1	NA	NA	NA	NA	NA	3.5 E-4	7.5 E-1
29E-SB09-5.0	5	1.2 E+0	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1	NA	NA	NA	NA	NA	5.9 E-4	1.5 E+0
29E-SB10-1	1	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	NA	NA	NA	NA	NA	8.7 E-4	3.4 E-1
29E-SB11-1	1	4.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	NA	NA	NA	6.1 E-4	6.7 E-1
29E-SB12-1	1	7.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	7.0 E-4	1.1 E+0
29E-SNS03-0.5	0.5	3.6 E-1	7.4 E-3	NA	NA	NA	3.4 E-6	NA	NA	NA	1.6 E-6	NA	NA	1.6 E-4	1.6 E-1	NA	NA	6.9 E-7	NA	2.1 E-6	1.3 E-3	5.3 E-1
29E-SNS04-0.5	0.5	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	1.9 E-1	NA	1.8 E-4	NA	NA	NA	4.5 E-4	6.5 E-1
29E-SNS05-0.5	0.5	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	2.1 E-1	NA	NA	4.1 E-7	NA	1.5 E-6	7.8 E-4	2.1 E-1

		Non-Cancer Hazard Index																				
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	HI
29E-SNS05-0.5-T	0.5	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	4.1 E-1
29E-SNS06-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	4.0 E-4	NA	NA	NA	6.9 E-7	NA	2.3 E-6	NA	4.0 E-4
29E-SNS06-0.5-T	0.5	3.8 E-1	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	1.1 E-3	5.5 E-1
29E-SNS06-2.5	2.5	6.6 E-1	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	2.7 E-1	NA	NA	NA	NA	NA	3.4 E-4	9.3 E-1
29E-SNS07-0.5	0.5	6.1 E-1	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	2.8 E-1	NA	NA	NA	NA	NA	1.4 E-3	9.0 E-1
29E-SNS07-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-2.5	2.5	4.9 E-1	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	1.9 E-1	NA	NA	NA	7.4 E-6	NA	5.4 E-4	6.8 E-1
59E-SB01	1	4.2 E-1	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	1.1 E-1	NA	1.9 E-1	NA	NA	NA	NA	NA	4.1 E-4	7.1 E-1
59E-SB02-10.5	10.5	1.2 E+0	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	3.6 E-5	NA	NA	NA	7.3 E-4	1.6 E+0
59E-SB02-2.0	2	3.1 E-1	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	1.3 E-1	NA	NA	NA	3.0 E-6	NA	3.2 E-4	4.5 E-1
59E-SB02-5.0	5	8.7 E-1	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	3.6 E-1	NA	NA	NA	NA	NA	5.0 E-4	1.2 E+0
59E-SB03-11	11	2.0 E+0	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-1	NA	2.3 E-4	NA	NA	NA	1.0 E-3	3.0 E+0
59E-SB03-2.0	2	1.0 E+0	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	3.6 E-1	NA	NA	7.9 E-7	NA	1.1 E-6	7.7 E-4	1.4 E+0
59E-SB03-6.0	6	4.6 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	2.1 E-1	NA	NA	NA	NA	NA	4.1 E-4	6.8 E-1
59E-SB04-11	11	9.5 E-1	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E+0	NA	NA	NA	NA	NA	6.1 E-4	2.4 E+0
59E-SB04-2.5	2.5	1.2 E+0	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-1	NA	NA	NA	NA	NA	9.2 E-4	1.9 E+0
59E-SB04-6.0	6	4.1 E-1	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	1.8 E-1	NA	NA	3.7 E-7	NA	NA	3.4 E-4	6.0 E-1
DSA-SB01-1.0	1	8.2 E-1	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-3	2.9 E-1	NA	2.7 E-4	NA	NA	NA	4.0 E-4	1.1 E+0
DSA-SB01-11	11	3.3 E-1	6.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	2.2 E-1	NA	NA	NA	NA	NA	3.5 E-4	5.6 E-1
DSA-SB01-5.0	5	6.6 E-1	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	3.2 E-1	NA	6.0 E-5	NA	NA	NA	4.2 E-4	9.9 E-1
DSA-SB02-1.5	1.5	4.3 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	2.0 E-1	NA	6.5 E-5	NA	NA	NA	4.5 E-4	6.4 E-1
DSA-SB02-10.5	10.5	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-1	NA	6.5 E-5	NA	NA	NA	4.1 E-4	8.3 E-1
DSA-SB02-4.5	4.5	3.6 E-1	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	1.8 E-1	NA	7.4 E-5	NA	NA	NA	3.8 E-4	5.5 E-1
DSA-SB03-12	12	5.4 E-1	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	1.5 E-1	NA	4.6 E-5	NA	NA	NA	3.7 E-4	7.1 E-1
DSA-SB03-2.0	2	6.9 E-1	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-2	1.7 E-1	NA	5.1 E-5	NA	NA	NA	4.9 E-4	9.4 E-1
DSA-SB03-4.5	4.5	4.3 E-1	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.2 E-1	NA	2.8 E-5	NA	NA	NA	5.7 E-4	6.6 E-1
DSA-SB04-1.0	1	1.0 E+0	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	3.4 E-1	NA	NA	NA	NA	NA	5.2 E-4	1.4 E+0
DSA-SB04-11	11	8.4 E-1	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	3.0 E-1	NA	NA	NA	NA	NA	5.3 E-4	1.1 E+0
DSA-SB04-5.0	5	8.2 E-1	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	2.4 E-1	NA	NA	NA	NA	NA	4.1 E-4	1.1 E+0
E(D)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS01-0.5	0.5	4.6 E-1	4.5 E-3	NA	NA	NA	4.7 E-6	NA	NA	NA	7.1 E-6	NA	NA	4.5 E-4	2.0 E-1	NA	1.2 E-4	3.8 E-6	NA	1.7 E-5	1.1 E-3	6.7 E-1
E(d)-SNS01-2.5	2.5	6.1 E-1	6.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	2.1 E-4	2.2 E-1	NA	NA	6.4 E-7	NA	1.7 E-6	1.2 E-3	8.5 E-1
E(d)-SNS02-0.5	0.5	8.4 E-1	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	7.3 E-7	NA	NA	2.7 E-4	2.7 E-1	NA	NA	NA	NA	2.0 E-6	8.2 E-4	1.1 E+0
E(d)-SNS02-2.5	2.5	7.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	2.2 E-1	NA	NA	NA	NA	NA	4.9 E-4	1.0 E+0
E(d)-SNS03-0.5	0.5	1.7 E-1	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	4.4 E-4	2.0 E-1	NA	9.7 E-4	1.4 E-6	NA	2.1 E-6	4.1 E-4	3.7 E-1
E(d)-SNS03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	3.1 E-4
E(d)-SNS03-2.5	2.5	5.1 E-1	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	2.7 E-1	NA	7.4 E-4	NA	NA	NA	1.0 E-3	7.9 E-1
E(E)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-1.0	1	5.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	1.8 E-1	NA	NA	NA	NA	NA	3.2 E-4	7.4 E-1
E(e)-SB02-11	11	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	1.3 E-3	NA	NA	NA	8.1 E-4	1.3 E+0
E(e)-SB02-5.0	5	6.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	2.7 E-1	NA	9.7 E-5	NA	NA	NA	4.9 E-4	9.1 E-1
E(E)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	6.5 E-4
E(E)-SB03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	2.6 E-4
E(E)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	6.5 E-4
E(e)-SNS01-0.5	0.5	3.1 E-1	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	7.0 E-7	NA	NA	5.3 E-4	1.5 E-1	NA	6.5 E-4	NA	NA	1.4 E-6	6.9 E-4	4.8 E-1
E(e)-SNS01-2.5	2.5	3.8 E-1	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	1.5 E-1	NA	3.4 E-4	NA	NA	NA	3.7 E-4	5.3 E-1
E(e)-SNS02-0.5	0.5	4.9 E-1	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	2.1 E-1	NA	NA	NA	NA	NA	6.0 E-4	7.0 E-1
E(e)-SNS02-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7
E(e)-SNS02-2.5	2.5	5.1 E-1	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	1.9 E-1	NA	NA	NA	NA	NA	4.1 E-4	7.0 E-1
E(m)-SD01-0.25	0.25	6.1 E-1	6.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	2.6 E-1	NA	NA	NA	NA	NA	5.4 E-4	8.8 E-1
E(m)-SD01-1.5	1.5	4.3 E-1	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	2.4 E-1	NA	NA	NA	NA	NA	5.5 E-4	6.8 E-1
E(m)-SD01-5.0	5	3.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	1.7 E-1	NA	NA	NA	NA	NA	3.8 E-4	5.5 E-1
E(m)-SD02-0.25	0.25	4.9 E-1	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	2.0 E-1	4.9 E-5	NA	NA	NA	NA	1.0 E-3	7.0 E-1
E(m)-SD02-1.5	1.5	5.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	2.8 E-1	NA	NA	NA	NA	NA	5.9 E-4	8.7 E-1

Table 5.3-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																				
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	HI
E(m)-SD02-5.0	5	6.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	2.7 E-1	NA	NA	NA	NA	NA	5.8 E-4	9.6 E-1
E(N)-SB01-1.0	1	4.1 E-1	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	8.1 E-7	NA	NA	2.9 E-4	2.2 E-1	NA	NA	4.9 E-7	NA	9.2 E-7	9.3 E-4	6.3 E-1
E(N)-SB01-5.0	5	3.3 E-1	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	2.7 E-1	NA	NA	NA	NA	NA	4.0 E-4	6.0 E-1
E(N)-SB01-9.5	9.5	3.1 E-1	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	3.4 E-1	NA	NA	NA	NA	NA	4.0 E-4	6.5 E-1
E(N)-SB02-1.0	1	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
E(N)-SB02-1.0-T	1	3.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	2.3 E-1	NA	NA	NA	NA	NA	6.2 E-4	6.2 E-1
E(N)-SB02-11	11	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	1.4 E-1	NA	NA	NA	NA	NA	4.5 E-4	3.6 E-1
E(N)-SB02-5.0	5	2.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	2.5 E-1	NA	NA	NA	NA	NA	6.3 E-4	5.0 E-1
E(n)-SB03-1.0	1	5.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	1.9 E-1	NA	NA	NA	NA	NA	3.4 E-4	7.3 E-1
E(n)-SB03-11	11	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	3.1 E-1	NA	NA	NA	NA	NA	3.1 E-4	7.7 E-1
E(n)-SB03-5.0	5	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-4	3.6 E-1	NA	NA	NA	NA	NA	3.7 E-4	8.4 E-1
E(N)-SD01-0.25	0.25	3.3 E-1	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	4.9 E-4	1.6 E-1	NA	NA	NA	NA	NA	1.0 E-3	5.0 E-1
E(N)-SD01-1.5	1.5	3.8 E-1	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	2.9 E-1	NA	NA	NA	NA	NA	9.8 E-4	6.8 E-1
E(N)-SD01-5.0	5	4.1 E-1	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	4.3 E-1	NA	NA	NA	NA	NA	4.0 E-4	8.5 E-1
E(n)-SNS01-0.5	0.5	2.8 E-1	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	1.5 E-1	NA	NA	NA	NA	NA	3.1 E-2	4.7 E-1
E(n)-SNS01-2.5	2.5	3.8 E-1	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	2.7 E-1	NA	NA	NA	NA	NA	4.4 E-4	6.6 E-1
E(n)-SNS02-0.5	0.5	4.6 E-1	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	9.3 E-5	2.1 E-1	NA	1.8 E-4	6.7 E-7	NA	2.1 E-6	6.9 E-4	6.7 E-1
E(n)-SNS02-2.5	2.5	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	6.1 E-4	2.8 E-1
E(n)-SNS02-2.5-T	2.5	6.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	6.9 E-1
E(n)-SNS03-0.5	0.5	5.1 E-1	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.5 E-1	NA	2.5 E-3	NA	NA	NA	6.1 E-4	8.7 E-1
E(n)-SNS03-2.5	2.5	5.1 E-1	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	3.4 E-1	NA	1.2 E-3	NA	NA	NA	6.3 E-4	8.5 E-1
L2-ST24-SB01-11.5	11.5	1.2 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	1.8 E-1	NA	NA	NA	1.9 E-5	NA	7.8 E-4	1.3 E+0
L2-ST24-SB01-2.0	2	8.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4	3.4 E-1	NA	NA	NA	1.6 E-5	NA	4.8 E-4	1.2 E+0
L2-ST24-SB01-6.0	6	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2	NA	2.5 E-4	NA	4.6 E-6	NA	1.9 E-4	1.8 E-1
L2-ST26-SB01-11.5	11.5	5.4 E-1	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.9 E-1	NA	NA	NA	NA	NA	3.8 E-4	8.4 E-1
L2-ST26-SB01-2.0	2	3.6 E-1	9.1 E-3	NA	NA	NA	1.3 E-5	NA	NA	NA	9.4 E-5	NA	NA	2.8 E-4	1.7 E-1	NA	NA	2.1 E-5	NA	1.7 E-4	3.0 E-4	5.4 E-1
L2-ST26-SB01-5.0	5	4.3 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	1.8 E-1	NA	NA	NA	NA	NA	4.3 E-4	6.2 E-1
L2-ST26-SB02-10	10	3.6 E-1	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	2.0 E-1	NA	NA	NA	NA	NA	3.5 E-4	5.7 E-1
L2-ST26-SB02-2.0	2	6.1 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.9 E-1	NA	NA	NA	NA	NA	4.5 E-4	9.1 E-1
L2-ST26-SB02-4.5	4.5	4.3 E-1	9.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	1.7 E-1	NA	NA	NA	NA	NA	3.4 E-4	6.1 E-1
L2-ST26-SB03-11.5	11.5	4.6 E-1	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.0 E-1	NA	NA	NA	NA	NA	4.1 E-4	6.7 E-1
L2-ST26-SB03-2.0	2	3.8 E-1	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	1.8 E-1	NA	NA	NA	4.1 E-6	NA	3.9 E-4	5.8 E-1
L2-ST26-SB03-5.0	5	1.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	NA	NA	NA	NA	NA	5.9 E-4	1.5 E+0
L2-ST26-SB04-1.0	1	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	2.0 E-1	NA	NA	NA	NA	NA	3.8 E-4	6.1 E-1
L2-ST26-SB04-11	11	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	2.5 E-1	NA	NA	NA	NA	NA	4.5 E-4	7.3 E-1
L2-ST26-SB04-5.0	5	4.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	2.0 E-1	NA	NA	NA	NA	NA	4.3 E-4	6.3 E-1
L2-ST26-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS02-0.5	0.5	NA	NA	NA	NA	NA	7.3 E-6	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	2.4 E-5
L2-ST26-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	NA	NA	NA	NA	NA	NA	5.0 E-7	NA	1.5 E-6	NA	2.5 E-6
L2-ST26-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-10.5	10.5	4.9 E-1	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	3.0 E-1	NA	NA	NA	NA	NA	4.5 E-4	7.9 E-1
L2-ST28/90-SB01-2.5	2.5	9.7 E-1	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	2.4 E-1	NA	3.5 E-4	NA	5.7 E-6	NA	4.9 E-4	1.2 E+0
L2-ST28/90-SB01-4.5	4.5	7.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	2.1 E-1	NA	6.5 E-4	NA	1.0 E-5	NA	6.0 E-4	9.8 E-1

		Incremental Lifetime Cancer Risk																			
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a)pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h)anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	ILCR
Unit Hazard																						
Unit Risk																						
28E-SB01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB01-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-10-T	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB05-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB05-2.0	2	NA	NA	NA	NA	2.4 E-9	NA	6.2 E-11	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
29E-SB05-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB10-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB11-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB12-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS03-0.5	0.5	NA	NA	2.3 E-10	5.3 E-9	1.5 E-9	NA	1.0 E-10	NA	NA	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
29E-SNS04-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS05-0.5	0.5	NA	NA	2.0 E-10	NA	1.0 E-9	NA	5.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9

Table 5.3-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a)pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h)anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	ILCR
29E-SNS05-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS06-0.5	0.5	NA	NA	4.0 E-10	6.7 E-9	1.2 E-9	NA	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
29E-SNS06-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS06-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-12	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS01-0.5	0.5	NA	NA	1.2 E-9	2.8 E-8	6.8 E-9	NA	3.3 E-10	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
E(d)-SNS01-2.5	2.5	NA	NA	2.2 E-10	NA	9.3 E-10	NA	5.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
E(d)-SNS02-0.5	0.5	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
E(d)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
E(d)-SNS03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
E(e)-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD02-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	2 E-9
E(m)-SD02-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a)pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h)anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	ILCR
E(m)-SD02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB01-1.0	1	NA	NA	NA	NA	NA	NA	3.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
E(N)-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB01-9.5	9.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS02-0.5	0.5	NA	NA	NA	NA	1.6 E-9	NA	6.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
E(n)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS02-2.5-T	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB01-2.0	2	NA	NA	2.0 E-8	2.5 E-7	5.7 E-8	NA	4.3 E-9	1.5 E-8	NA	NA	6.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
L2-ST26-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB03-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB03-2.0	2	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
L2-ST26-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB04-1.0	1	NA	NA	3.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
L2-ST26-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS02-0.5	0.5	NA	NA	NA	4.3 E-8	NA	NA	6.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
L2-ST26-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS03-0.5	0.5	NA	NA	NA	4.8 E-9	NA	NA	6.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
L2-ST26-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	2.2 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1
Unit Risk		NA	1.6 E-5	NA	NA	2.5 E-4	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	3.6 E-4	NA
28E-SP16	10	43000		20000														
28E-SP16	20			9100								28000						8500
28E-SP16	30		97	1500		190												
28E-SP16	40		210	3700														
29E-SP07	10														95			12
29E-SP07	20			110												13		98
29E-SP08	10				7.9					94		71	6.7	25	380	43		120
29E-SP08	20			110														
29E-SP08	30			240														
29E-SP08	40			230														
29E-SP09	10	15		18												9.6		
29E-SP09	20	40		88														
29E-SP09	30			1000														33
29E-SP09	40			1300											130	9.4		29
29E-SP10	10									34					180	31		4.7
29E-SP10	20			4.4						20					90	36		18
29E-SP11	10									57		90		44	240	22		37
29E-SP11	20			210				56								16		46
59E-SP08	10																	
59E-SP09	10								72									250
59E-SP10	20														120	8.9		34
59E-SP13	20																	10
DSA-SP04	10																	
DSA-SP04	20		42	3000												32		140
DSA-SP04	30		58	4100														71
DSA-SP04	40			3000														100
DSA-SP05	10																	190
DSA-SP05	20	14		21		15		30		11		12		5.0	88	20	41	360
DSA-SP06	10														230	5.4		160
DSA-SP06	20									45		12			680			
DSA-SP07	10																	41
DSA-SP07	20																	
DSA-SP08	10								40							14		150
DSA-SP08	20							37		56		23		8.9	240	45		440
DSA-SP09	10																	27
DSA-SP09	20	21		33						35		27			650	14		190
DSA-SP10	10					6.2				93					600	77		160
DSA-SP10	20			64		6.4		21		22					110	110		1000
DSA-SP10	30			340														48
DSA-SP10	40			150											290			93
DSA-SP11	10					7.2										22		190
DSA-SP11	20															7.4		270
DSA-SP12	10					7.8										20		150
DSA-SP12	20	13	13	18		5.3									60	6.3		15
DSA-SP13	10									38		12			110	130		210
DSA-SP13	20															40		260
DSA-SP15	10																	3.8
DSA-SP15	20											12			150			63
DSA-SP15	30											16			220	13		280
DSA-SP16	10														410			170
DSA-SP16	20																	750
DSA-SP16	30																	430
DSA-SP16	40																	150
DSA-SP17	10																	66
DSA-SP17	20															4.7		78
DSA-SP17	30														220			24
DSA-SP18	10				14				15	320			20		130	56		
DSA-SP18	20				33		9.9		60	520	60		56		250	170		11
DSA-SP19	10				49		14		18				75	8.5	64	81		31

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	2.2 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1
Unit Risk		NA	1.6 E-5	NA	NA	2.5 E-4	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	3.6 E-4	NA
28E-SP16	10	43000		20000														
DSA-SP19	20								9.1	330		15			110	24		
DSA-SP20	10									55					220	32		19
DSA-SP20	20				24					97			16		310	190		120
DSA-SP21	10				22		7.5						19		82	12		32
DSA-SP21	20				29		8.3		6.8	54			21	5.9	370	24		680
DSA-SP22	10				19		6.2		13	39			18	8.3	230	59		23
DSA-SP22	20				24		6.9		15	46			18	5.4	240	26		58
DSA-SP23	10									44					180	20		82
DSA-SP23	20				20								14		340	12		490
DSA-SP23	30				22								16		200	12		190
DSA-SP24	10				29		12		60	21			43		120	48		53
DSA-SP24	20				23				100	30			24		190	78		160
DSA-SP24	30	13			17				130	77			16		660	140		54
DSA-SP25	10															11		53
DSA-SP25	20															23		340
DSA-SP26	10															58		120
DSA-SP26	20															280		140
DSA-SP27	10															7.1		70
DSA-SP27	20									22						6.9		170
DSA-SP28	10									68				7.7	260	30		38
DSA-SP28	20									110	26	34		43	350	25		31
DSA-SP29	10				36		12						13					10
DSA-SP30	10														160	7.5		74
DSA-SP30	20									68					290	66		7.0
DSA-SP31	10				6.3					150		62	5.7	35	650	62		30
DSA-SP31	20									63					220	40		69
DSA-SP32	10				6.0					55		13			190	31		19
DSA-SP32	20				8.3					510	52	200	6.9	31	2000	290		21
E(d)-SP02	10								12							10		56
E(d)-SP02	20			26				50		47		19		9.8	210	39		480
E(d)-SP03	10			14					73							18		29
E(m)-SP08	10				14					27			8.6		110	22		140
E(m)-SP08	20							53		33		19		10	160	30		110
E(M)-SP09	10									30					140	29		100
E(M)-SP09	20							31		90		23		10	380	77		340
E(m)-SP10	10	8.8							99						68	18		80
E(m)-SP10	20																	91
E(m)-SP11	20									66				7.8	400	15		19
E(n)-SP04	10								33	22					120	13		67
E(n)-SP04	20															8.2		1300
E(n)-SP05	10								11							6.8		4.8
E(n)-SP05	20							46		58					220	34		3700
E(n)-SP05	40														140			
E(n)-SP06	10								8.0						73	9.2		230
E(n)-SP06	20			21											66	3.9		44
E(n)-SP07	10			6.4											63	6.8		110
E(n)-SP08	10								26						93	9.0		190
E(n)-SP08	20	8.7														4.8		510
E(n)-SP09	10								76						91	22		26
E(n)-SP09	20							26	11							7.8		46
E(N)-SP10	10														58	11		76
E(N)-SP10	20									22					110	22		620
E(n)-SP11	15									55		22			240	8.9		
E(n)-SP11	25															4.3		14
E(n)-SP12	10									24					130	4.3		
E(n)-SP12	20									43					210	7.3		13
L2-ST24-SP03	10								7.2						54	4.1		63
L2-ST24-SP03	20							55							89	27		80

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	2.2 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1
Unit Risk		NA	1.6 E-5	NA	NA	2.5 E-4	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	3.6 E-4	NA
28E-SP16	10	43000		20000														
L2-ST26-SP04	10																	
L2-ST26-SP04	20							31						5.6		24		170
L2-ST26-SP05	10				11					43			7.0		180	67		420
L2-ST26-SP05	20							28		200		22		14	540	120		220
L2-ST26-SP06	10													10		5.2		22
L2-ST26-SP06	20							25		18					59	10		180
L2-ST26-SP07	18									78		15			3000	100		160
L2-ST28_90-SP02	10			25					80	140		34			1200	22		42
L2-ST28_90-SP02	20			56				37		82					260	80		760

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+1	1.5 E+1	2.0 E+1	1.2 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		4.2 E-4	2.3 E-4	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5	7.5 E-4
28E-SP16	10			55000							2600				800000		5900	10000000	
28E-SP16	20											3600			97000			3200000	
28E-SP16	30		310	1400					2500		120	220			1900			180000	
28E-SP16	40		510	2200					4900						13000			380000	
29E-SP07	10								24						60		8.4		
29E-SP07	20	11	25	22				11	240		23	60			740		6.8	8900	
29E-SP08	10			5.1	6.9	55	5.2		39		82	66	14	5.3		43	71	380	
29E-SP08	20		50	1600					360			36			1600			62000	
29E-SP08	30	42	54	330					400						2500			42000	
29E-SP08	40	41	64	240					360						3300			41000	
29E-SP09	10	2200	990	330					120	15	11	15					20	18000	
29E-SP09	20	7000	2400	1400					580	75							40	60000	
29E-SP09	30	280	210	330				170	3800	100	90	160			1400	26	29	23000	
29E-SP09	40	410	260	360		26		210	4200	91	58	130			840	33	30	18000	
29E-SP10	10	10		4.8	4.4	16					8.6	44	7.8				10	340	
29E-SP10	20	100	35	100	11				92	5.6	56	130	9.4				38	780	
29E-SP11	10				9.6	19			96		47	20	13			76	84	12	
29E-SP11	20	29	120	330	16			31	480		32	260			240	74	37	15000	7.6
59E-SP08	10				42							51						310	
59E-SP09	10											100			950			5900	
59E-SP10	20					10			64		33	60	6.8		13	14	38	82	
59E-SP13	20											4.6			18	5.7	5.5	6.9	
DSA-SP04	10																	2700	
DSA-SP04	20	180	470	210				4200	110000	57	96	370			280	110	52	98000	
DSA-SP04	30	320	770	200				3700	100000			74			1400	51		160000	
DSA-SP04	40	250	580	160				2600	72000			84			1200	46		130000	
DSA-SP05	10								360									6700	
DSA-SP05	20		47			17			480		40	160	5.9		7.8	110	36	4700	
DSA-SP06	10					12					7.0	8.9	5.8			5.7	7.5	690	
DSA-SP06	20					47						8.6	8.4				12		
DSA-SP07	10																	2200	
DSA-SP07	20																5.6		
DSA-SP08	10		210		21	20			170			57				4.8	17	230	
DSA-SP08	20		530		4.8	33			150		48	240	8.8			130	45	820	
DSA-SP09	10					10			90				6.2			3.7	5.8	170	
DSA-SP09	20		6.5		18	88			720		21	95				4.4	7.4	2100	
DSA-SP10	10					22			200		78	230				12	36	66	
DSA-SP10	20	15	93			13	6.6	200	11000	7.4	180	450	8.1			47	63	2000	
DSA-SP10	30	78	160					1100	62000									7700	
DSA-SP10	40		85		16			730	44000	26		76				15		2900	
DSA-SP11	10				9.8			20	1400		76	240					20	59	
DSA-SP11	20		49					7.6	540		34	57	11	5.0		5.2	11	31	
DSA-SP12	10		7.2		11			21	720	6.5	92	170					13	24	
DSA-SP12	20	51	180					40	1100	7.2	5.0	6.9			200	3.7	11	540	
DSA-SP13	10				41		14	75	6200	6.3	800	1600	12	5.2	18		120	120	
DSA-SP13	20				24			200	10000		520	870					49	410	
DSA-SP15	10														68			260	
DSA-SP15	20		7.4		4.1	13			40			8.3			51	3.6	5.0	170	
DSA-SP15	30		19		14	13		59	14000	7.2		120			37	7.3	9.6	130	
DSA-SP16	10		270					720	90000		88	98					36	840	
DSA-SP16	20		1000					1200	160000		67	110						2000	
DSA-SP16	30		1400					1700	190000		110	270				67		1900	
DSA-SP16	40		1600					2000	220000			83						3500	
DSA-SP17	10				9.2							49					6.3	2400	
DSA-SP17	20		44		5.0				9.3			29					25	1300	
DSA-SP17	30		150			9.7			11		8.2	15				8.2	24	910	
DSA-SP18	10				27	100	43				54	100	150	34		11	380		
DSA-SP18	20				67	71	160				160	340	510	110			1500		
DSA-SP19	10				24	32	140				80	93	510	120			870		

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+1	1.5 E+1	2.0 E+1	1.2 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		4.2 E-4	2.3 E-4	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5	7.5 E-4
28E-SP16	10			55000							2600				800000		5900	10000000	
DSA-SP19	20				15	240	10				22	50	30	7.0		12	120		
DSA-SP20	10		6.7				6.7	48	7900		21	46	9.9		7.8	8.2	47	3000	
DSA-SP20	20		99		50		27	240	35000		190	570	61	16		21	97	24000	
DSA-SP21	10		16				14		1000		100	270	44	18			47	14	
DSA-SP21	20		31			9.8	13	24	4000		74	260	43	19			46	34	
DSA-SP22	10						15	13	1500		160	610	44	19			73	82	
DSA-SP22	20						12	33	5400		240	840	38	17			36	170	
DSA-SP23	10							120	24000		68	140	20					130	
DSA-SP23	20							180	29000		25	36	30	14				360	
DSA-SP23	30							180	28000		12	22	34	15	22			1200	
DSA-SP24	10		19				34	65	8200	6.8	120	260	110	43			160	180	
DSA-SP24	20					100	22	200	24000	14	190	360	60	25			120	450	
DSA-SP24	30		110			16	17	200	24000	14	220	520	43	18			160	1700	
DSA-SP25	10		26					66	9500		34	39	5.3		32		9.9		
DSA-SP25	20							320	45000		140	420			70		23		
DSA-SP26	10				61			310	24000		240	1600	10		32		25		
DSA-SP26	20							1200	120000		1200	3200			310		180		
DSA-SP27	10		20					64	7100		27	120			22		5.3	530	
DSA-SP27	20		6.0					81	8600		52	78	5.6		12	3.6	16	2200	
DSA-SP28	10				6.0	57	6.3				54	66	8.9				36	20	
DSA-SP28	20				4.2	120					47	48	7.4				37		
DSA-SP29	10		15			12			35			4.0	20	15			7.0		
DSA-SP30	10					39					7.2	7.1					14		
DSA-SP30	20				8.9	83	7.5				65	100	6.2			4.7	67		
DSA-SP31	10				10	39	7.3				67	100	19	6.6		4.3	76		
DSA-SP31	20				7.3	11			340		43	74	13				31		
DSA-SP32	10					11	7.4	96	2200	6.6	22	30	16	6.6			49		
DSA-SP32	20		8.1		36	370	26	15	300		250	240	38	16			340		
E(d)-SP02	10				22			88	3800		7.9	28	7.9		13		14	27	
E(d)-SP02	20				8.0	29		42	2100		530	620	8.8			160	58	100	
E(d)-SP03	10				100			120	4800	12	14	120					15	44	
E(m)-SP08	10				4.8	42	7.1				13	19	19	7.4	16		130		
E(m)-SP08	20				7.8	36			16		41	250	9.3		19	170	57	94	
E(M)-SP09	10				5.0	26					22	46			48		36		
E(M)-SP09	20		5.4		10	35			160		39	210	7.3		83	170	62	120	
E(m)-SP10	10	20			46				22		11	77	6.8		420		22	160	
E(m)-SP10	20	62							49			12	28	16	4900		23	790	
E(m)-SP11	20					30			58		12	16	5.5		20	4.2	14		
E(n)-SP04	10				21	11			19		6.4	39	5.3				16		
E(n)-SP04	20		9.2		6.2				260		29	67	7.2		11	8.5	18	110	
E(n)-SP05	10								28			5.0	5.9		630		8.9		
E(n)-SP05	20	11				9.8	7.1		63		76	160	11		2000	17	46	1600	
E(n)-SP05	40	77	40			22			490			13			20000	20	22	2600	
E(n)-SP06	10								21			14			11		11	60	
E(n)-SP06	20	32	18		6.8	13	11	14	180		5.4	29	27	7.3	15	9.6	42	160	
E(n)-SP07	10		11		4.6			13	220			8.8			17		11	53	
E(n)-SP08	10		8.4		17	11			14			25	9.0				18	240	
E(n)-SP08	20		210						13		8.1	27				12	14	460	
E(n)-SP09	10		16		29							22	8.5				15	32	
E(n)-SP09	20	8.1	540		17				13		21	59	7.0			44	27	49	
E(N)-SP10	10					10					9.6	44			20	5.5	16	8.9	
E(N)-SP10	20					11					20	100			17	20	28	16	
E(n)-SP11	15					28					7.4	9.9	6.0			5.2	24		
E(n)-SP11	25		190						240			12	7.3			9.4	18	47	
E(n)-SP12	10					560						7.8				8.0	14		
E(n)-SP12	20		9.4			100			40		7.3	24			20	20	29	24	
L2-ST24-SP03	10				20							11					6.3		
L2-ST24-SP03	20		47		5.6	18	6.9		28		51	220	13		190	24	39	210	

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+1	1.5 E+1	2.0 E+1	1.2 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		4.2 E-4	2.3 E-4	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5	7.5 E-4
28E-SP16	10			55000							2600				800000		5900	10000000	
L2-ST26-SP04	10																		
L2-ST26-SP04	20					14	5.4				220	740	11		150	40	47	690	
L2-ST26-SP05	10				10	14					35	72	12		140		110		
L2-ST26-SP05	20			11	65	47	14		14		900	2300	21	6.3	360	70	100	510	
L2-ST26-SP06	10				4.6	52						6.1			9.9		12		
L2-ST26-SP06	20					25	6.4		39		40	78	18		330	18	28	420	
L2-ST26-SP07	18				11	49	22				66	140	59	22			56	7.6	6.7
L2-ST28_90-SP02	10				43	290		280	8800		20	72	18			18	42	81	
L2-ST28_90-SP02	20		53	9.8	26	20	10	48	1300		670	1800	21		130	80	76	2400	

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
Unit Hazard																		
Unit Risk																		
28E-SP16	10	3.7 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	7.2 E-3	NA	NA	NA	NA	NA	3.5 E-5
28E-SP16	30	NA	1.9 E-7	3.5 E-5	NA	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	3.0 E-7	6.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	9.8 E-8
29E-SP07	20	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	4.0 E-7
29E-SP08	10	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	8.5 E-8	NA	3.7 E-5	3.2 E-7	3.4 E-8	8.2 E-7	6.9 E-6	NA	9.8 E-7
29E-SP08	20	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	5.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	1.3 E-8	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA
29E-SP09	20	1.7 E-8	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8
29E-SP09	40	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-8	3.8 E-7	NA	5.9 E-8
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	3.9 E-7	5.0 E-6	NA	3.8 E-8
29E-SP10	20	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	9.0 E-9	NA	NA	NA	NA	9.7 E-8	2.9 E-6	NA	7.3 E-8
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	4.7 E-5	NA	6.0 E-8	5.2 E-7	3.5 E-6	NA	3.0 E-7
29E-SP11	20	NA	NA	7.4 E-6	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	1.9 E-7
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-6
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	7.1 E-7	NA	1.4 E-7
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	1.2 E-7	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	5.7 E-7
DSA-SP04	30	NA	1.1 E-7	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7
DSA-SP04	40	NA	NA	5.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6
DSA-SP05	20	6.0 E-9	NA	7.4 E-7	NA	8.7 E-6	NA	2.7 E-8	NA	5.0 E-9	NA	3.1 E-6	NA	3.4 E-9	9.5 E-8	1.6 E-6	4.8 E-7	1.5 E-6
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	8.6 E-7	NA	1.3 E-6
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	3.1 E-6	NA	NA	7.3 E-7	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	1.2 E-6
DSA-SP08	20	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	2.5 E-8	NA	5.9 E-6	NA	6.1 E-9	2.6 E-7	3.6 E-6	NA	1.8 E-6
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7
DSA-SP09	20	9.0 E-9	NA	1.2 E-6	NA	NA	NA	NA	NA	1.6 E-8	NA	7.0 E-6	NA	NA	7.0 E-7	1.1 E-6	NA	7.7 E-7
DSA-SP10	10	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	8.4 E-8	NA	NA	NA	NA	1.3 E-6	1.2 E-5	NA	1.3 E-6
DSA-SP10	20	NA	NA	2.3 E-6	NA	3.7 E-6	NA	1.9 E-8	NA	9.9 E-9	NA	NA	NA	NA	1.2 E-7	8.8 E-6	NA	4.1 E-6
DSA-SP10	30	NA	NA	8.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7
DSA-SP10	40	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	1.9 E-7
DSA-SP11	10	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	1.5 E-6
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	1.1 E-6
DSA-SP12	10	NA	NA	NA	NA	9.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	1.2 E-6
DSA-SP12	20	5.5 E-9	3.8 E-8	6.3 E-7	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	5.0 E-7	NA	6.1 E-8
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	6.2 E-6	NA	NA	2.4 E-7	2.1 E-5	NA	1.7 E-6
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	1.1 E-6
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	1.6 E-7	NA	NA	2.6 E-7
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	1.6 E-7	6.9 E-7	NA	7.6 E-7
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	1.4 E-6
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-6
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	3.2 E-7
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	6.5 E-8
DSA-SP18	10	NA	NA	NA	6.6 E-6	NA	NA	NA	7.1 E-7	2.9 E-7	NA	NA	9.5 E-7	NA	2.8 E-7	9.0 E-6	NA	NA
DSA-SP18	20	NA	NA	NA	7.8 E-6	NA	2.7 E-6	NA	1.4 E-6	2.3 E-7	3.8 E-8	NA	1.3 E-6	NA	2.7 E-7	1.4 E-5	NA	4.5 E-8
DSA-SP19	10	NA	NA	NA	2.3 E-5	NA	7.7 E-6	NA	8.6 E-7	NA	NA	NA	3.6 E-6	1.2 E-8	1.4 E-7	1.3 E-5	NA	2.5 E-7

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
Unit Hazard																		
Unit Risk																		
28E-SP16	10	3.7 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	1.5 E-7	NA	3.9 E-6	NA	NA	1.2 E-7	1.9 E-6	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	4.7 E-7	5.1 E-6	NA	1.5 E-7
DSA-SP20	20	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	4.4 E-8	NA	NA	3.8 E-7	NA	3.3 E-7	1.5 E-5	NA	4.9 E-7
DSA-SP21	10	NA	NA	NA	1.0 E-5	NA	4.2 E-6	NA	NA	NA	NA	NA	9.0 E-7	NA	1.8 E-7	1.9 E-6	NA	2.6 E-7
DSA-SP21	20	NA	NA	NA	6.9 E-6	NA	2.3 E-6	NA	1.6 E-7	2.4 E-8	NA	NA	5.0 E-7	4.0 E-9	4.0 E-7	1.9 E-6	NA	2.8 E-6
DSA-SP22	10	NA	NA	NA	9.0 E-6	NA	3.4 E-6	NA	6.2 E-7	3.5 E-8	NA	NA	8.6 E-7	1.1 E-8	5.0 E-7	9.4 E-6	NA	1.9 E-7
DSA-SP22	20	NA	NA	NA	5.7 E-6	NA	1.9 E-6	NA	3.6 E-7	2.1 E-8	NA	NA	4.3 E-7	3.7 E-9	2.6 E-7	2.1 E-6	NA	2.4 E-7
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	3.9 E-7	3.2 E-6	NA	6.7 E-7
DSA-SP23	20	NA	NA	NA	4.7 E-6	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	3.7 E-7	9.6 E-7	NA	2.0 E-6
DSA-SP23	30	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	1.4 E-7	6.4 E-7	NA	5.1 E-7
DSA-SP24	10	NA	NA	NA	1.4 E-5	NA	6.6 E-6	NA	2.9 E-6	1.9 E-8	NA	NA	2.0 E-6	NA	2.6 E-7	7.7 E-6	NA	4.3 E-7
DSA-SP24	20	NA	NA	NA	5.4 E-6	NA	NA	NA	2.4 E-6	1.4 E-8	NA	NA	5.7 E-7	NA	2.0 E-7	6.2 E-6	NA	6.5 E-7
DSA-SP24	30	3.7 E-9	NA	NA	2.7 E-6	NA	NA	NA	2.1 E-6	2.3 E-8	NA	NA	2.5 E-7	NA	4.7 E-7	7.5 E-6	NA	1.5 E-7
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	4.3 E-7
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	1.4 E-6
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	9.8 E-7
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	5.7 E-7
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	5.7 E-7
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	5.5 E-7	NA	6.9 E-7
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	NA	1.0 E-8	5.6 E-7	4.8 E-6	NA	3.1 E-7
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	1.6 E-8	8.8 E-6	NA	2.9 E-8	3.8 E-7	2.0 E-6	NA	1.3 E-7
DSA-SP29	10	NA	NA	NA	1.7 E-5	NA	6.6 E-6	NA	NA	NA	NA	NA	6.2 E-7	NA	NA	NA	NA	8.1 E-8
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	1.2 E-6	NA	6.0 E-7
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	3.1 E-7	5.3 E-6	NA	2.8 E-8
DSA-SP31	10	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	1.4 E-7	NA	3.2 E-5	2.7 E-7	4.8 E-8	1.4 E-6	9.9 E-6	NA	2.4 E-7
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	2.4 E-7	3.2 E-6	NA	2.8 E-7
DSA-SP32	10	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	5.0 E-8	NA	6.7 E-6	NA	NA	4.1 E-7	5.0 E-6	NA	1.5 E-7
DSA-SP32	20	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	2.3 E-7	3.3 E-8	5.2 E-5	1.6 E-7	2.1 E-8	2.2 E-6	2.3 E-5	NA	8.5 E-8
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	4.6 E-7
E(d)-SP02	20	NA	NA	9.1 E-7	NA	NA	NA	4.5 E-8	NA	2.1 E-8	NA	4.9 E-6	NA	6.7 E-9	2.3 E-7	3.1 E-6	NA	2.0 E-6
E(d)-SP03	10	NA	NA	9.8 E-7	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	2.4 E-7
E(m)-SP08	10	NA	NA	NA	6.6 E-6	NA	NA	NA	NA	2.4 E-8	NA	NA	4.1 E-7	NA	2.4 E-7	3.5 E-6	NA	1.1 E-6
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	1.5 E-8	NA	4.9 E-6	NA	6.8 E-9	1.7 E-7	2.4 E-6	NA	4.5 E-7
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	3.0 E-7	4.6 E-6	NA	8.1 E-7
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	4.1 E-8	NA	5.9 E-6	NA	6.8 E-9	4.1 E-7	6.2 E-6	NA	1.4 E-6
E(m)-SP10	10	7.5 E-9	NA	NA	NA	NA	NA	NA	4.7 E-6	NA	NA	NA	NA	NA	1.5 E-7	2.9 E-6	NA	6.5 E-7
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	5.3 E-9	4.3 E-7	1.2 E-6	NA	7.7 E-8
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	2.0 E-8	NA	NA	NA	NA	2.6 E-7	2.1 E-6	NA	5.4 E-7
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-7	NA	5.3 E-6
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	3.9 E-8
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	2.6 E-8	NA	NA	NA	NA	2.4 E-7	2.7 E-6	NA	1.5 E-5
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	1.6 E-7	1.5 E-6	NA	1.9 E-6
E(n)-SP06	20	NA	NA	7.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	3.1 E-7	NA	1.8 E-7
E(n)-SP07	10	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	1.1 E-6	NA	8.9 E-7
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	2.0 E-7	1.4 E-6	NA	1.5 E-6
E(n)-SP08	20	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	2.1 E-6
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	NA	NA	NA	2.0 E-7	3.5 E-6	NA	2.1 E-7
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	2.3 E-8	2.6 E-7	NA	NA	NA	NA	NA	NA	6.2 E-7	NA	1.9 E-7
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	1.8 E-6	NA	6.2 E-7
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	1.2 E-7	1.8 E-6	NA	2.5 E-6
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	7.6 E-6	NA	NA	3.4 E-7	9.5 E-7	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	4.6 E-8
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	2.8 E-7	6.9 E-7	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	2.3 E-7	5.8 E-7	NA	5.3 E-8
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	1.2 E-7	6.6 E-7	NA	5.1 E-7
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	9.6 E-8	2.2 E-6	NA	3.3 E-7

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
28E-SP16	10	3.7 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	3.8 E-9	NA	1.9 E-6	NA	6.9 E-7
L2-ST26-SP05	10	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	3.9 E-8	NA	NA	3.3 E-7	NA	3.9 E-7	1.1 E-5	NA	3.4 E-6
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	9.0 E-8	NA	5.7 E-6	NA	9.5 E-9	5.8 E-7	9.6 E-6	NA	8.9 E-7
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	8.3 E-7	NA	1.8 E-7
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	8.1 E-9	NA	NA	NA	NA	6.4 E-8	8.0 E-7	NA	7.3 E-7
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	4.3 E-6	NA	NA	3.6 E-6	8.9 E-6	NA	7.2 E-7
L2-ST28_90-SP02	10	NA	NA	1.8 E-6	NA	NA	NA	NA	3.8 E-6	1.3 E-7	NA	1.8 E-5	NA	NA	2.6 E-6	3.5 E-6	NA	3.4 E-7
L2-ST28_90-SP02	20	NA	NA	2.0 E-6	NA	NA	NA	3.3 E-8	NA	3.7 E-8	NA	NA	NA	NA	2.8 E-7	6.4 E-6	NA	3.1 E-6

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	9.0 E-2	NA	9.3 E-5	7.3 E-2	NA	1.7 E-1
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	5.5 E-3	NA	NA	1.2 E-2	NA	2.5 E-2
28E-SP16	30	NA	1.3 E-5	5.4 E-5	NA	NA	NA	NA	1.2 E-7	NA	2.1 E-7	1.1 E-6	NA	NA	7.1 E-5	NA	NA	4.4 E-4	NA	6.8 E-4
28E-SP16	40	NA	1.6 E-5	6.3 E-5	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	6.9 E-4	NA	1.2 E-3
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	NA	NA	6.8 E-6	NA	1.3 E-7	NA	NA	7.2 E-6
29E-SP07	20	5.9 E-7	1.6 E-6	1.3 E-6	NA	NA	NA	1.3 E-7	1.7 E-8	NA	6.1 E-8	4.7 E-7	NA	NA	4.2 E-5	NA	5.4 E-8	3.2 E-5	NA	8.3 E-5
29E-SP08	10	NA	NA	5.9 E-7	5.1 E-9	2.7 E-7	2.1 E-8	NA	5.5 E-9	NA	4.4 E-7	1.0 E-6	5.4 E-7	2.5 E-7	NA	8.2 E-7	1.1 E-6	2.8 E-6	NA	5.7 E-5
29E-SP08	20	NA	3.1 E-6	9.2 E-5	NA	NA	NA	NA	2.6 E-8	NA	NA	2.8 E-7	NA	NA	9.0 E-5	NA	NA	2.3 E-4	NA	4.1 E-4
29E-SP08	30	1.5 E-6	2.3 E-6	1.3 E-5	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	9.4 E-5	NA	NA	1.0 E-4	NA	2.2 E-4
29E-SP08	40	1.1 E-6	2.0 E-6	6.9 E-6	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	9.3 E-5	NA	NA	7.4 E-5	NA	1.8 E-4
29E-SP09	10	2.3 E-4	1.2 E-4	3.8 E-5	NA	NA	NA	NA	1.7 E-8	2.7 E-7	5.9 E-8	2.3 E-7	NA	NA	NA	NA	3.2 E-7	1.3 E-4	NA	5.3 E-4
29E-SP09	20	3.7 E-4	1.5 E-4	8.1 E-5	NA	NA	NA	NA	4.1 E-8	6.8 E-7	NA	NA	NA	NA	NA	NA	3.2 E-7	2.2 E-4	NA	8.3 E-4
29E-SP09	30	1.0 E-5	8.8 E-6	1.3 E-5	NA	NA	NA	1.4 E-6	1.8 E-7	6.1 E-7	1.6 E-7	8.3 E-7	NA	NA	5.3 E-5	1.7 E-7	1.5 E-7	5.6 E-5	NA	1.7 E-4
29E-SP09	40	1.1 E-5	8.1 E-6	1.0 E-5	NA	3.2 E-8	NA	1.3 E-6	1.5 E-7	4.1 E-7	7.8 E-8	5.1 E-7	NA	NA	2.4 E-5	1.6 E-7	1.2 E-7	3.3 E-5	NA	1.1 E-4
29E-SP10	10	1.1 E-6	NA	5.5 E-7	3.2 E-9	7.8 E-8	NA	NA	NA	NA	4.6 E-8	6.9 E-7	3.0 E-7	NA	NA	NA	1.6 E-7	2.5 E-6	NA	1.1 E-5
29E-SP10	20	5.3 E-6	2.2 E-6	5.8 E-6	4.0 E-9	NA	NA	NA	6.5 E-9	5.1 E-8	1.5 E-7	1.0 E-6	1.8 E-7	NA	NA	NA	3.0 E-7	2.8 E-6	NA	2.1 E-5
29E-SP11	10	NA	NA	NA	7.1 E-9	9.3 E-8	NA	NA	1.4 E-8	NA	2.5 E-7	3.1 E-7	5.0 E-7	NA	NA	1.5 E-6	1.3 E-6	8.7 E-8	NA	5.5 E-5
29E-SP11	20	1.5 E-6	7.5 E-6	1.9 E-5	5.9 E-9	NA	NA	3.7 E-7	3.4 E-8	NA	8.6 E-8	2.0 E-6	NA	NA	1.4 E-5	7.1 E-7	2.9 E-7	5.4 E-5	1.6 E-7	1.1 E-4
59E-SP08	10	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	NA	NA	NA	2.3 E-6	NA	3.1 E-6
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	1.1 E-4	NA	NA	4.3 E-5	NA	1.6 E-4
59E-SP10	20	NA	NA	NA	NA	2.5 E-8	NA	NA	4.5 E-9	NA	8.8 E-8	4.7 E-7	1.3 E-7	NA	7.3 E-7	1.3 E-7	3.0 E-7	3.0 E-7	NA	3.2 E-6
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	1.0 E-6	5.4 E-8	4.3 E-8	2.5 E-8	NA	1.2 E-6
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	2.0 E-5
DSA-SP04	20	9.6 E-6	2.9 E-5	1.2 E-5	NA	NA	NA	5.0 E-5	7.8 E-6	5.2 E-7	2.6 E-7	2.9 E-6	NA	NA	1.6 E-5	1.0 E-6	4.1 E-7	3.6 E-4	NA	5.9 E-4
DSA-SP04	30	1.1 E-5	3.2 E-5	7.7 E-6	NA	NA	NA	2.9 E-5	4.7 E-6	NA	NA	3.9 E-7	NA	NA	5.3 E-5	3.2 E-7	NA	3.9 E-4	NA	6.2 E-4
DSA-SP04	40	6.7 E-6	1.8 E-5	4.6 E-6	NA	NA	NA	1.6 E-5	2.6 E-6	NA	NA	3.3 E-7	NA	NA	3.4 E-5	2.2 E-7	NA	2.4 E-4	NA	3.7 E-4
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	5.0 E-5
DSA-SP05	20	NA	2.9 E-6	NA	NA	4.2 E-8	NA	NA	3.4 E-8	NA	1.1 E-7	1.3 E-6	1.1 E-7	NA	4.4 E-7	1.0 E-6	2.8 E-7	1.7 E-5	NA	4.0 E-5
DSA-SP06	10	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	NA	3.7 E-8	1.4 E-7	2.2 E-7	NA	NA	1.1 E-7	1.2 E-7	5.0 E-6	NA	8.4 E-6
DSA-SP06	20	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	6.7 E-8	1.6 E-7	NA	NA	NA	9.5 E-8	NA	NA	4.3 E-6
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	1.6 E-5
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	4.4 E-8
DSA-SP08	10	NA	2.6 E-5	NA	1.5 E-8	9.8 E-8	NA	NA	2.4 E-8	NA	NA	8.9 E-7	NA	NA	NA	9.2 E-8	2.7 E-7	1.7 E-6	NA	3.5 E-5
DSA-SP08	20	NA	3.3 E-5	NA	1.8 E-9	8.1 E-8	NA	NA	1.1 E-8	NA	1.3 E-7	1.9 E-6	1.7 E-7	NA	NA	1.2 E-6	3.6 E-7	3.0 E-6	NA	5.2 E-5
DSA-SP09	10	NA	NA	NA	NA	4.9 E-8	NA	NA	1.3 E-8	NA	NA	NA	2.4 E-7	NA	NA	7.1 E-8	9.2 E-8	1.2 E-6	NA	1.9 E-6
DSA-SP09	20	NA	4.1 E-7	NA	6.6 E-9	2.2 E-7	NA	NA	5.1 E-8	NA	5.6 E-8	7.4 E-7	NA	NA	NA	4.2 E-8	5.8 E-8	7.6 E-6	NA	2.0 E-5
DSA-SP10	10	NA	NA	NA	NA	1.1 E-7	NA	NA	2.8 E-8	NA	4.2 E-7	3.6 E-6	NA	NA	NA	2.3 E-7	5.7 E-7	4.8 E-7	NA	2.8 E-5
DSA-SP10	20	8.0 E-7	5.8 E-6	NA	NA	3.2 E-8	1.4 E-8	2.4 E-6	7.8 E-7	6.7 E-8	4.8 E-7	3.5 E-6	1.6 E-7	NA	NA	4.5 E-7	5.0 E-7	7.3 E-6	NA	4.1 E-5
DSA-SP10	30	2.8 E-6	6.7 E-6	NA	NA	NA	NA	8.7 E-6	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	4.8 E-5
DSA-SP10	40	NA	2.7 E-6	NA	2.9 E-9	NA	NA	4.4 E-6	1.6 E-6	1.2 E-7	NA	3.0 E-7	NA	NA	NA	7.2 E-8	NA	5.3 E-6	NA	1.7 E-5
DSA-SP11	10	NA	NA	NA	7.2 E-9	NA	NA	4.8 E-7	2.0 E-7	NA	4.1 E-7	3.8 E-6	NA	NA	NA	NA	3.2 E-7	4.3 E-7	NA	1.9 E-5
DSA-SP11	20	NA	3.1 E-6	NA	NA	NA	NA	9.1 E-8	3.8 E-8	NA	9.1 E-8	4.5 E-7	2.1 E-7	1.2 E-7	NA	5.0 E-8	8.7 E-8	1.1 E-7	NA	6.0 E-6
DSA-SP12	10	NA	9.0 E-7	NA	8.1 E-9	NA	NA	5.0 E-7	1.0 E-7	1.2 E-7	4.9 E-7	2.7 E-6	NA	NA	NA	NA	2.1 E-7	1.7 E-7	NA	1.9 E-5
DSA-SP12	20	2.7 E-6	1.1 E-5	NA	NA	NA	NA	4.8 E-7	7.8 E-8	6.6 E-8	1.3 E-8	5.4 E-8	NA	NA	1.1 E-5	3.5 E-8	8.7 E-8	2.0 E-6	NA	3.2 E-5
DSA-SP13	10	NA	NA	NA	3.0 E-8	NA	5.7 E-8	1.8 E-6	8.8 E-7	1.1 E-7	4.3 E-6	2.5 E-5	4.6 E-7	2.5 E-7	2.0 E-6	NA	1.9 E-6	8.7 E-7	NA	6.7 E-5
DSA-SP13	20	NA	NA	NA	8.8 E-9	NA	NA	2.4 E-6	7.1 E-7	NA	1.4 E-6	6.8 E-6	NA	NA	NA	NA	3.9 E-7	1.5 E-6	NA	1.7 E-5
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	NA	1.9 E-6	NA	9.6 E-6
DSA-SP15	20	NA	4.6 E-7	NA	1.5 E-9	3.2 E-8	NA	NA	2.8 E-9	NA	NA	6.5 E-8	NA	NA	2.9 E-6	3.4 E-8	4.0 E-8	6.2 E-7	NA	7.6 E-6
DSA-SP15	30	NA	7.9 E-7	NA	3.4 E-9	2.1 E-8	NA	4.7 E-7	6.6 E-7	4.4 E-8	NA	6.3 E-7	NA	NA	1.4 E-6	4.6 E-8	5.1 E-8	3.1 E-7	NA	8.8 E-6
DSA-SP16	10	NA	3.4 E-5	NA	NA	NA	NA	1.7 E-5	1.3 E-5	NA	4.7 E-7	1.5 E-6	NA	NA	NA	NA	5.7 E-7	6.1 E-6	NA	7.5 E-5
DSA-SP16	20	NA	6.3 E-5	NA	NA	NA	NA	1.4 E-5	1.1 E-5	NA	1.8 E-7	8.6 E-7	NA	NA	NA	NA	NA	7.3 E-6	NA	1.0 E-4
DSA-SP16	30	NA	5.8 E-5	NA	NA	NA	NA	1.4 E-5	9.0 E-6	NA	2.0 E-7	1.4 E-6	NA	NA	NA	4.3 E-7	NA	4.6 E-6	NA	8.9 E-5
DSA-SP16	40	NA	5.0 E-5	NA	NA	NA	NA	1.2 E-5	7.8 E-6	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	6.4 E-6	NA	7.7 E-5
DSA-SP17	10	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	1.0 E-7	1.7 E-5	NA	1.9 E-5
DSA-SP17	20	NA	2.8 E-6	NA	1.8 E-9	NA	NA	NA	6.6 E-10	NA	NA	2.3 E-7	NA	NA	NA	NA	2.0 E-7	4.7 E-6	NA	8.6 E-6
DSA-SP17	30	NA	6.3 E-6	NA	NA	1.6 E-8	NA	NA	5.2 E-10	NA	1.5 E-8	7.8 E-8	NA	NA	NA	5.2 E-8	1.3 E-7	2.2 E-6	NA	9.0 E-6
DSA-SP18	10	NA	NA	NA	2.0 E-8	4.9 E-7	1.8 E-7	NA	NA	NA	2.9 E-7	1.6 E-6	5.7 E-6	1.6 E-6	NA	2.1 E-7	6.0 E-6	NA	NA	3.4 E-5
DSA-SP18	20	NA	NA	NA	2.5 E-8	1.7 E-7	3.3 E-7	NA	NA	NA	4.3 E-7	2.7 E-6	9.8 E-6	2.6 E-6	NA	NA	1.2 E-5	NA	NA	5.5 E-5
DSA-SP19	10	NA	NA	NA	1.8 E-8	1.6 E-7	5.7 E-7	NA	NA	NA	4.3 E-7	1.5 E-6	2.0 E-5	5.7 E-6	NA	NA	1.4 E-5	NA	NA	9.0 E-5

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	9.0 E-2	NA	9.3 E-5	7.3 E-2	NA	1.7 E-1
DSA-SP19	20	NA	NA	NA	5.5 E-9	5.9 E-7	2.1 E-8	NA	NA	NA	5.9 E-8	3.9 E-7	5.7 E-7	1.7 E-7	NA	1.1 E-7	9.5 E-7	NA	NA	9.1 E-6
DSA-SP20	10	NA	8.4 E-7	NA	NA	NA	2.7 E-8	1.1 E-6	1.1 E-6	NA	1.1 E-7	7.2 E-7	3.8 E-7	NA	8.8 E-7	1.6 E-7	7.4 E-7	2.2 E-5	NA	3.4 E-5
DSA-SP20	20	NA	6.2 E-6	NA	1.8 E-8	NA	5.5 E-8	2.9 E-6	2.5 E-6	NA	5.1 E-7	4.5 E-6	1.2 E-6	3.8 E-7	NA	2.0 E-7	7.7 E-7	8.7 E-5	NA	1.3 E-4
DSA-SP21	10	NA	2.0 E-6	NA	NA	NA	5.7 E-8	NA	1.4 E-7	NA	5.3 E-7	4.2 E-6	1.7 E-6	8.6 E-7	NA	NA	7.4 E-7	1.0 E-7	NA	2.8 E-5
DSA-SP21	20	NA	1.9 E-6	NA	NA	2.4 E-8	2.7 E-8	2.9 E-7	2.8 E-7	NA	2.0 E-7	2.0 E-6	8.2 E-7	4.5 E-7	NA	NA	3.6 E-7	1.2 E-7	NA	2.1 E-5
DSA-SP22	10	NA	NA	NA	NA	NA	6.2 E-8	3.1 E-7	2.1 E-7	NA	8.6 E-7	9.5 E-6	1.7 E-6	9.0 E-7	NA	NA	1.2 E-6	6.0 E-7	NA	3.9 E-5
DSA-SP22	20	NA	NA	NA	NA	NA	2.5 E-8	3.9 E-7	3.8 E-7	NA	6.4 E-7	6.6 E-6	7.3 E-7	4.0 E-7	NA	NA	2.8 E-7	6.2 E-7	NA	2.1 E-5
DSA-SP23	10	NA	NA	NA	NA	NA	NA	2.9 E-6	3.4 E-6	NA	3.6 E-7	2.2 E-6	7.7 E-7	NA	NA	NA	NA	9.4 E-7	NA	1.5 E-5
DSA-SP23	20	NA	NA	NA	NA	NA	NA	2.1 E-6	2.1 E-6	NA	6.7 E-8	2.8 E-7	5.7 E-7	3.3 E-7	NA	NA	NA	1.3 E-6	NA	1.5 E-5
DSA-SP23	30	NA	NA	NA	NA	NA	NA	1.4 E-6	1.3 E-6	NA	2.1 E-8	1.1 E-7	4.3 E-7	2.4 E-7	8.3 E-7	NA	NA	2.9 E-6	NA	1.2 E-5
DSA-SP24	10	NA	2.4 E-6	NA	NA	NA	1.4 E-7	1.6 E-6	1.2 E-6	1.2 E-7	6.4 E-7	4.1 E-6	4.2 E-6	2.0 E-6	NA	NA	2.5 E-6	1.3 E-6	NA	5.4 E-5
DSA-SP24	20	NA	NA	NA	NA	2.5 E-7	4.5 E-8	2.4 E-6	1.7 E-6	1.3 E-7	5.1 E-7	2.8 E-6	1.1 E-6	5.9 E-7	NA	NA	9.5 E-7	1.6 E-6	NA	2.8 E-5
DSA-SP24	30	NA	4.6 E-6	NA	NA	2.6 E-8	2.3 E-8	1.6 E-6	1.1 E-6	8.5 E-8	3.9 E-7	2.7 E-6	5.5 E-7	2.9 E-7	NA	NA	8.4 E-7	4.1 E-6	NA	2.9 E-5
DSA-SP25	10	NA	3.3 E-6	NA	NA	NA	NA	1.6 E-6	1.3 E-6	NA	1.8 E-7	6.1 E-7	2.0 E-7	NA	3.6 E-6	NA	1.6 E-7	NA	NA	1.3 E-5
DSA-SP25	20	NA	NA	NA	NA	NA	NA	3.8 E-6	3.2 E-6	NA	3.7 E-7	3.3 E-6	NA	NA	3.9 E-6	NA	1.8 E-7	NA	NA	1.8 E-5
DSA-SP26	10	NA	NA	NA	4.5 E-8	NA	NA	7.4 E-6	3.4 E-6	NA	1.3 E-6	2.5 E-5	3.8 E-7	NA	3.6 E-6	NA	4.0 E-7	NA	NA	5.2 E-5
DSA-SP26	20	NA	NA	NA	NA	NA	NA	1.4 E-5	8.5 E-6	NA	3.2 E-6	2.5 E-5	NA	NA	1.7 E-5	NA	1.4 E-6	NA	NA	9.3 E-5
DSA-SP27	10	NA	2.5 E-6	NA	NA	NA	NA	1.5 E-6	1.0 E-6	NA	1.4 E-7	1.9 E-6	NA	NA	2.5 E-6	NA	8.4 E-8	3.8 E-6	NA	1.5 E-5
DSA-SP27	20	NA	3.8 E-7	NA	NA	NA	NA	9.7 E-7	6.1 E-7	NA	1.4 E-7	6.1 E-7	1.1 E-7	NA	6.8 E-7	3.4 E-8	1.3 E-7	8.0 E-6	NA	1.3 E-5
DSA-SP28	10	NA	NA	NA	4.4 E-9	2.8 E-7	2.6 E-8	NA	NA	NA	2.9 E-7	1.0 E-6	3.4 E-7	NA	NA	NA	5.7 E-7	1.5 E-7	NA	8.4 E-6
DSA-SP28	20	NA	NA	NA	1.5 E-9	2.9 E-7	NA	NA	NA	NA	1.3 E-7	3.8 E-7	1.4 E-7	NA	NA	NA	2.9 E-7	NA	NA	1.3 E-5
DSA-SP29	10	NA	1.9 E-6	NA	NA	5.9 E-8	NA	NA	5.0 E-9	NA	NA	6.3 E-8	7.7 E-7	7.1 E-7	NA	NA	1.1 E-7	NA	NA	2.8 E-5
DSA-SP30	10	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	3.8 E-8	1.1 E-7	NA	NA	NA	NA	2.2 E-7	NA	NA	2.7 E-6
DSA-SP30	20	NA	NA	NA	3.3 E-9	2.0 E-7	1.5 E-8	NA	NA	NA	1.7 E-7	7.8 E-7	1.2 E-7	NA	NA	4.5 E-8	5.3 E-7	NA	NA	7.5 E-6
DSA-SP31	10	NA	NA	NA	7.4 E-9	1.9 E-7	3.0 E-8	NA	NA	NA	3.6 E-7	1.6 E-6	7.3 E-7	3.1 E-7	NA	8.2 E-8	1.2 E-6	NA	NA	5.2 E-5
DSA-SP31	20	NA	NA	NA	2.7 E-9	2.7 E-8	NA	NA	2.4 E-8	NA	1.1 E-7	5.8 E-7	2.5 E-7	NA	NA	NA	2.5 E-7	NA	NA	5.0 E-6
DSA-SP32	10	NA	NA	NA	NA	5.4 E-8	3.0 E-8	2.3 E-6	3.1 E-7	1.2 E-7	1.2 E-7	4.7 E-7	6.1 E-7	3.1 E-7	NA	NA	7.7 E-7	NA	NA	2.0 E-5
DSA-SP32	20	NA	5.1 E-7	NA	1.3 E-8	9.1 E-7	5.3 E-8	1.8 E-7	2.1 E-8	NA	6.7 E-7	1.9 E-6	7.3 E-7	3.8 E-7	NA	NA	2.7 E-6	NA	NA	8.8 E-5
E(d)-SP02	10	NA	NA	NA	1.6 E-8	NA	NA	2.1 E-6	5.4 E-7	NA	4.2 E-8	4.4 E-7	3.0 E-7	NA	1.5 E-6	NA	2.2 E-7	2.0 E-7	NA	7.9 E-6
E(d)-SP02	20	NA	NA	NA	2.9 E-9	7.1 E-8	NA	5.0 E-7	1.5 E-7	NA	1.4 E-6	4.8 E-6	1.7 E-7	NA	NA	1.5 E-6	4.6 E-7	3.6 E-7	NA	2.1 E-5
E(d)-SP03	10	NA	NA	NA	7.4 E-8	NA	NA	2.9 E-6	6.8 E-7	2.2 E-7	7.5 E-8	1.9 E-6	NA	NA	NA	NA	2.4 E-7	3.2 E-7	NA	1.4 E-5
E(m)-SP08	10	NA	NA	NA	3.5 E-9	2.1 E-7	2.9 E-8	NA	NA	NA	6.9 E-8	3.0 E-7	7.3 E-7	3.5 E-7	1.8 E-6	NA	2.1 E-6	NA	NA	1.7 E-5
E(m)-SP08	20	NA	NA	NA	2.9 E-9	8.8 E-8	NA	NA	1.1 E-9	NA	1.1 E-7	2.0 E-6	1.8 E-7	NA	1.1 E-6	1.6 E-6	4.5 E-7	3.4 E-7	NA	1.4 E-5
E(M)-SP09	10	NA	NA	NA	3.7 E-9	1.3 E-7	NA	NA	NA	NA	1.2 E-7	7.2 E-7	NA	NA	5.4 E-6	NA	5.7 E-7	NA	NA	1.3 E-5
E(M)-SP09	20	NA	3.4 E-7	NA	3.7 E-9	8.6 E-8	NA	NA	1.1 E-8	NA	1.0 E-7	1.6 E-6	1.4 E-7	NA	4.7 E-6	1.6 E-6	4.9 E-7	4.4 E-7	NA	2.4 E-5
E(m)-SP10	10	2.1 E-6	NA	NA	3.4 E-8	NA	NA	NA	3.1 E-9	NA	5.9 E-8	1.2 E-6	2.6 E-7	NA	4.7 E-5	NA	3.5 E-7	1.2 E-6	NA	6.1 E-5
E(m)-SP10	20	3.3 E-6	NA	NA	NA	NA	NA	NA	3.5 E-9	NA	NA	9.4 E-8	5.4 E-7	3.8 E-7	2.8 E-4	NA	1.8 E-7	2.9 E-6	NA	2.8 E-4
E(m)-SP11	20	NA	NA	NA	NA	7.4 E-8	NA	NA	4.1 E-9	NA	3.2 E-8	1.3 E-7	1.1 E-7	NA	1.1 E-6	4.0 E-8	1.1 E-7	NA	NA	3.4 E-6
E(n)-SP04	10	NA	NA	NA	1.5 E-8	5.4 E-8	NA	NA	2.7 E-9	NA	3.4 E-8	6.1 E-7	2.0 E-7	NA	NA	NA	2.5 E-7	NA	NA	5.6 E-6
E(n)-SP04	20	NA	5.8 E-7	NA	2.3 E-9	NA	NA	NA	1.8 E-8	NA	7.8 E-8	5.2 E-7	1.4 E-7	NA	6.2 E-7	8.1 E-8	1.4 E-7	4.0 E-7	NA	8.5 E-6
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	7.8 E-8	2.3 E-7	NA	7.1 E-5	NA	1.4 E-7	NA	NA	7.3 E-5
E(n)-SP05	20	5.9 E-7	NA	NA	NA	2.4 E-8	1.5 E-8	NA	4.5 E-9	NA	2.0 E-7	1.3 E-6	2.1 E-7	NA	1.1 E-4	1.6 E-7	3.6 E-7	5.8 E-6	NA	1.4 E-4
E(n)-SP05	40	2.1 E-6	1.3 E-6	NA	NA	2.7 E-8	NA	NA	1.7 E-8	NA	NA	5.1 E-8	NA	NA	5.6 E-4	9.5 E-8	8.7 E-8	4.7 E-6	NA	5.7 E-4
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	2.2 E-7	NA	NA	1.2 E-6	NA	1.7 E-7	4.4 E-7	NA	5.9 E-6
E(n)-SP06	20	1.7 E-6	1.1 E-6	NA	2.5 E-9	3.2 E-8	2.3 E-8	1.7 E-7	1.3 E-8	NA	1.4 E-8	2.3 E-7	5.2 E-7	1.7 E-7	8.4 E-7	9.2 E-8	3.3 E-7	5.8 E-7	NA	7.1 E-6
E(n)-SP07	10	NA	1.4 E-6	NA	3.4 E-9	NA	NA	3.1 E-7	3.1 E-8	NA	NA	1.4 E-7	NA	NA	1.9 E-6	NA	1.7 E-7	3.8 E-7	NA	6.9 E-6
E(n)-SP08	10	NA	1.1 E-6	NA	1.3 E-8	5.4 E-8	NA	NA	2.0 E-9	NA	NA	3.9 E-7	3.4 E-7	NA	NA	NA	2.8 E-7	1.7 E-6	NA	8.3 E-6
E(n)-SP08	20	NA	1.3 E-5	NA	NA	NA	NA	NA	9.2 E-10	NA	2.2 E-8	2.1 E-7	NA	NA	NA	1.1 E-7	1.1 E-7	1.7 E-6	NA	1.8 E-5
E(n)-SP09	10	NA	2.0 E-6	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	3.4 E-7	3.3 E-7	NA	NA	NA	2.4 E-7	2.3 E-7	NA	1.1 E-5
E(n)-SP09	20	4.3 E-7	3.4 E-5	NA	6.3 E-9	NA	NA	NA	9.2 E-10	NA	5.6 E-8	4.6 E-7	1.3 E-7	NA	NA	4.2 E-7	2.1 E-7	1.8 E-7	NA	3.7 E-5
E(N)-SP10	10	NA	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	5.1 E-8	6.9 E-7	NA	NA	2.3 E-6	1.0 E-7	2.5 E-7	6.5 E-8	NA	6.0 E-6
E(N)-SP10	20	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	5.3 E-8	7.8 E-7	NA	NA	9.6 E-7	1.9 E-7	2.2 E-7	5.8 E-8	NA	6.7 E-6
E(n)-SP11	15	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	NA	2.6 E-8	1.0 E-7	1.5 E-7	NA	NA	6.6 E-8	2.5 E-7	NA	NA	9.6 E-6
E(n)-SP11	25	NA	9.5 E-6	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	7.5 E-8	1.1 E-7	NA	NA	7.2 E-8	1.1 E-7	1.4 E-7	NA	1.0 E-5
E(n)-SP12	10	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	1.5 E-7	2.2 E-7	NA	NA	4.2 E-6
E(n)-SP12	20	NA	5.9 E-7	NA	NA	2.5 E-7	NA	NA	2.8 E-9	NA	2.0 E-8	1.9 E-7	NA	NA	1.1 E-6	1.9 E-7	2.3 E-7	8.7 E-8	NA	3.6 E-6
L2-ST24-SP03	10	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	1.0 E-7	NA	NA	1.9 E-6
L2-ST24-SP03	20	NA	2.9 E-6	NA	2.1 E-9	4.4 E-8	1.4 E-8	NA	2.0 E-9	NA	1.4 E-7	1.7 E-6	2.5 E-7	NA	1.1 E-5	2.3 E-7	3.1 E-7	7.6 E-7	NA	2.0 E-5

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	9.0 E-2	NA	9.3 E-5	7.3 E-2	NA	1.7 E-1
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	3.4 E-8	1.1 E-8	NA	NA	NA	5.9 E-7	5.8 E-6	2.1 E-7	NA	8.4 E-6	3.8 E-7	3.7 E-7	2.5 E-6	NA	2.1 E-5
L2-ST26-SP05	10	NA	NA	NA	7.4 E-9	6.9 E-8	NA	NA	NA	NA	1.9 E-7	1.1 E-6	4.6 E-7	NA	1.6 E-5	NA	1.7 E-6	NA	NA	3.9 E-5
L2-ST26-SP05	20	NA	NA	6.3 E-7	2.4 E-8	1.2 E-7	2.9 E-8	NA	9.9 E-10	NA	2.4 E-6	1.8 E-5	4.0 E-7	1.5 E-7	2.0 E-5	6.7 E-7	7.9 E-7	1.9 E-6	NA	6.2 E-5
L2-ST26-SP06	10	NA	NA	NA	3.4 E-9	2.6 E-7	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	1.1 E-6	NA	1.9 E-7	NA	NA	2.7 E-6
L2-ST26-SP06	20	NA	NA	NA	NA	6.1 E-8	1.3 E-8	NA	2.8 E-9	NA	1.1 E-7	6.1 E-7	3.4 E-7	NA	1.9 E-5	1.7 E-7	2.2 E-7	1.5 E-6	NA	2.3 E-5
L2-ST26-SP07	18	NA	NA	NA	4.5 E-9	1.3 E-7	5.0 E-8	NA	NA	NA	2.0 E-7	1.2 E-6	1.3 E-6	5.8 E-7	NA	NA	4.9 E-7	3.1 E-8	1.6 E-7	2.2 E-5
L2-ST28_90-SP02	10	NA	NA	NA	3.2 E-8	1.4 E-6	NA	6.7 E-6	1.2 E-6	NA	1.1 E-7	1.1 E-6	6.9 E-7	NA	NA	3.4 E-7	6.6 E-7	5.9 E-7	NA	4.3 E-5
L2-ST28_90-SP02	20	NA	3.3 E-6	5.6 E-7	9.6 E-9	4.9 E-8	2.1 E-8	5.7 E-7	9.2 E-8	NA	1.8 E-6	1.4 E-5	4.0 E-7	NA	7.3 E-6	7.6 E-7	6.0 E-7	8.7 E-6	NA	5.0 E-5

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	30	NA	3.1 E-12	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	5.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA
29E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-11	NA	NA
29E-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA
29E-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-12	NA	NA
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-11	NA	NA
29E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA
29E-SP11	20	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-12	NA	NA
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	2.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	NA
DSA-SP04	30	NA	1.8 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	20	NA	NA	NA	NA	1.6 E-11	NA	9.0 E-12	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	1.8 E-11	NA
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA
DSA-SP08	20	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	4.4 E-11	NA	NA
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA
DSA-SP10	10	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA
DSA-SP10	20	NA	NA	NA	NA	6.8 E-12	NA	6.3 E-12	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA
DSA-SP10	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP11	10	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-12	NA	NA
DSA-SP12	10	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-11	NA	NA
DSA-SP12	20	NA	6.1 E-13	NA	NA	5.6 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-12	NA	NA
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-11	NA	NA
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-12	NA	NA
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-12	NA	NA
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA
DSA-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA
DSA-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-11	NA	NA
DSA-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA
DSA-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA
DSA-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA
DSA-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA
DSA-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-11	NA	NA
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-12	NA	NA
DSA-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-11	NA	NA
DSA-SP24	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-11	NA	NA
DSA-SP24	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-11	NA	NA
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	NA
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-12	NA	NA
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-11	NA	NA
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	NA	NA
DSA-SP29	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-11	NA	NA
DSA-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-11	NA	NA
DSA-SP32	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-11	NA	NA
DSA-SP32	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	NA
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	3.8 E-11	NA	NA
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA
E(m)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-11	NA	NA
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	9.3 E-12	NA	NA	NA	NA	NA	NA	NA	7.6 E-11	NA	NA
E(m)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-12	NA	NA
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	NA
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA
E(n)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-12	NA	NA
E(n)-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA
E(n)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-12	NA	NA
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	7.8 E-12	NA	NA	NA	NA	NA	NA	NA	7.7 E-12	NA	NA
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-12	NA	NA
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-12	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-12	NA	NA
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-12	NA	NA
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	NA

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	9.3 E-12	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	8.4 E-12	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	7.5 E-12	NA	NA	NA	NA	NA	NA	NA	9.8 E-12	NA	NA
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA
L2-ST28_90-SP02	20	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	7.9 E-11	NA	NA

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethyl Benzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Vinyl Chloride	ILCR
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	1.2 E-6	NA	2E-06
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	2.0 E-7	NA	2E-07
28E-SP16	30	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	7.4 E-9	NA	8E-09
28E-SP16	40	NA	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	1.2 E-8	NA	1E-08
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	2E-11
29E-SP07	20	1.4 E-11	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	5.5 E-10	NA	7E-10
29E-SP08	10	NA	NA	NA	NA	NA	7.6 E-13	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-12	NA	4.7 E-11	NA	1E-10
29E-SP08	20	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	3.8 E-9	NA	4E-09
29E-SP08	30	3.7 E-11	3.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	1.7 E-9	NA	2E-09
29E-SP08	40	2.7 E-11	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	1.3 E-9	NA	2E-09
29E-SP09	10	5.7 E-9	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	1E-08
29E-SP09	20	9.1 E-9	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	2E-08
29E-SP09	30	2.4 E-10	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	1.4 E-12	NA	9.5 E-10	NA	1E-09
29E-SP09	40	2.7 E-10	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-11	1.3 E-12	NA	5.6 E-10	NA	1E-09
29E-SP10	10	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-11	NA	1E-10
29E-SP10	20	1.3 E-10	3.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-11	NA	2E-10
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	1.5 E-12	NA	6E-11
29E-SP11	20	3.8 E-11	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-11	5.9 E-12	NA	9.3 E-10	1.8 E-11	1E-09
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-11	NA	4E-11
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	7.3 E-10	NA	1E-09
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	1.1 E-12	NA	5.1 E-12	NA	2E-11
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-12	4.5 E-13	NA	4.3 E-13	NA	4E-12
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	3E-10
DSA-SP04	20	2.4 E-10	4.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	8.8 E-12	NA	6.0 E-9	NA	7E-09
DSA-SP04	30	2.8 E-10	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	2.7 E-12	NA	6.6 E-9	NA	8E-09
DSA-SP04	40	1.6 E-10	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	1.8 E-12	NA	4.0 E-9	NA	5E-09
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-10	NA	8E-10
DSA-SP05	20	NA	4.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-12	8.8 E-12	NA	2.9 E-10	NA	4E-10
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-13	NA	8.5 E-11	NA	1E-10
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	3E-10
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP08	10	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-13	NA	2.8 E-11	NA	4E-10
DSA-SP08	20	NA	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	5.1 E-11	NA	6E-10
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-13	NA	2.1 E-11	NA	2E-11
DSA-SP09	20	NA	6.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-13	NA	1.3 E-10	NA	1E-10
DSA-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-12	NA	8.1 E-12	NA	2E-10
DSA-SP10	20	2.0 E-11	8.7 E-11	NA	NA	NA	4.8 E-13	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-12	NA	1.2 E-10	NA	4E-10
DSA-SP10	30	6.8 E-11	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	5E-10
DSA-SP10	40	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-13	NA	9.0 E-11	NA	1E-10
DSA-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-12	NA	7E-11
DSA-SP11	20	NA	4.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-13	NA	1.9 E-12	NA	6E-11
DSA-SP12	10	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-12	NA	7E-11
DSA-SP12	20	6.7 E-11	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-11	2.9 E-13	NA	3.3 E-11	NA	3E-10
DSA-SP13	10	NA	NA	NA	NA	NA	2.0 E-12	NA	NA	NA	NA	NA	NA	NA	6.1 E-12	NA	NA	1.5 E-11	NA	3E-10
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	NA	6E-11
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	3.2 E-11	NA	6E-11
DSA-SP15	20	NA	6.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-12	2.9 E-13	NA	1.0 E-11	NA	3E-11
DSA-SP15	30	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-12	3.9 E-13	NA	5.4 E-12	NA	3E-11
DSA-SP16	10	NA	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	6E-10
DSA-SP16	20	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	1E-09
DSA-SP16	30	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-12	NA	7.8 E-11	NA	1E-09
DSA-SP16	40	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	9E-10
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	3E-10
DSA-SP17	20	NA	4.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-11	NA	1E-10
DSA-SP17	30	NA	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-13	NA	3.7 E-11	NA	1E-10
DSA-SP18	10	NA	NA	NA	NA	NA	6.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-12	NA	NA	NA	1E-10
DSA-SP18	20	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-10
DSA-SP19	10	NA	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-10

Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethyl Benzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Vinyl Chloride	ILCR
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	1.2 E-6	NA	2E-06
DSA-SP19	20	NA	NA	NA	NA	NA	7.3 E-13	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-13	NA	NA	NA	3E-11
DSA-SP20	10	NA	1.3 E-11	NA	NA	NA	9.8 E-13	NA	NA	NA	NA	NA	NA	NA	2.6 E-12	1.3 E-12	NA	3.7 E-10	NA	5E-10
DSA-SP20	20	NA	9.3 E-11	NA	NA	NA	2.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-12	NA	1.5 E-9	NA	2E-09
DSA-SP21	10	NA	3.0 E-11	NA	NA	NA	2.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-12	NA	6E-11
DSA-SP21	20	NA	2.9 E-11	NA	NA	NA	9.5 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-12	NA	6E-11
DSA-SP22	10	NA	NA	NA	NA	NA	2.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	1E-10
DSA-SP22	20	NA	NA	NA	NA	NA	8.7 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	4E-11
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	6E-11
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	3E-11
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-12	NA	NA	4.9 E-11	NA	6E-11
DSA-SP24	10	NA	3.6 E-11	NA	NA	NA	5.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	2E-10
DSA-SP24	20	NA	NA	NA	NA	NA	1.6 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	1E-10
DSA-SP24	30	NA	6.9 E-11	NA	NA	NA	8.3 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-11	NA	2E-10
DSA-SP25	10	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	8E-11
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	3E-11
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	1E-10
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-11	NA	NA	NA	NA	3E-10
DSA-SP27	10	NA	3.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-12	NA	NA	6.5 E-11	NA	1E-10
DSA-SP27	20	NA	5.6 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-12	2.9 E-13	NA	1.4 E-10	NA	2E-10
DSA-SP28	10	NA	NA	NA	NA	NA	9.2 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-12	NA	6E-11
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-11
DSA-SP29	10	NA	2.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-11
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-11
DSA-SP30	20	NA	NA	NA	NA	NA	5.5 E-13	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-13	NA	NA	NA	7E-11
DSA-SP31	10	NA	NA	NA	NA	NA	1.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-13	NA	NA	NA	1E-10
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-11
DSA-SP32	10	NA	NA	NA	NA	NA	1.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6E-11
DSA-SP32	20	NA	7.6 E-12	NA	NA	NA	1.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-10
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-12	NA	NA	3.3 E-12	NA	3E-11
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	6.2 E-12	NA	7E-11
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-12	NA	4E-11
E(m)-SP08	10	NA	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	NA	NA	NA	NA	5.4 E-12	NA	NA	NA	NA	5E-11
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-12	1.4 E-11	NA	5.8 E-12	NA	7E-11
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	7E-11
E(M)-SP09	20	NA	5.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	1.4 E-11	NA	7.4 E-12	NA	1E-10
E(m)-SP10	10	5.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	2.0 E-11	NA	2E-10
E(m)-SP10	20	8.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-10	NA	NA	4.9 E-11	NA	1E-09
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-12	3.3 E-13	NA	NA	NA	2E-11
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-11
E(n)-SP04	20	NA	8.6 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-12	6.8 E-13	NA	6.8 E-12	NA	3E-11
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	NA	2E-10
E(n)-SP05	20	1.4 E-11	NA	NA	NA	NA	5.2 E-13	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	1.4 E-12	NA	9.9 E-11	NA	5E-10
E(n)-SP05	40	5.0 E-11	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	8.0 E-13	NA	8.0 E-11	NA	2E-09
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-12	NA	NA	7.4 E-12	NA	3E-11
E(n)-SP06	20	4.2 E-11	1.7 E-11	NA	NA	NA	8.0 E-13	NA	NA	NA	NA	NA	NA	NA	2.5 E-12	7.7 E-13	NA	9.9 E-12	NA	8E-11
E(n)-SP07	10	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-12	NA	NA	6.5 E-12	NA	5E-11
E(n)-SP08	10	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-11	NA	6E-11
E(n)-SP08	20	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-13	NA	2.8 E-11	NA	2E-10
E(n)-SP09	10	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-12	NA	8E-11
E(n)-SP09	20	1.1 E-11	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-12	NA	3.0 E-12	NA	5E-10
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-12	8.8 E-13	NA	1.1 E-12	NA	3E-11
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-12	1.6 E-12	NA	9.9 E-13	NA	3E-11
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-13	NA	NA	NA	1E-11
E(n)-SP11	25	NA	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-13	NA	2.3 E-12	NA	1E-10
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-12	NA	NA	NA	1E-11
E(n)-SP12	20	NA	8.8 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-12	1.6 E-12	NA	1.5 E-12	NA	2E-11
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8E-12
L2-ST24-SP03	20	NA	4.4 E-11	NA	NA	NA	5.0 E-13	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	1.9 E-12	NA	1.3 E-11	NA	1E-10

Table 5.3-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethyl Benzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Vinyl Chloride	ILCR
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	1.2 E-6	NA	2E-06
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
L2-ST26-SP04	20	NA	NA	NA	NA	NA	3.9 E-13	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	3.2 E-12	NA	4.3 E-11	NA	1E-10
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	2E-10
L2-ST26-SP05	20	NA	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	NA	NA	NA	NA	6.1 E-11	5.6 E-12	NA	3.1 E-11	NA	2E-10
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-12	NA	NA	NA	NA	1E-11
L2-ST26-SP06	20	NA	NA	NA	NA	NA	4.7 E-13	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	1.4 E-12	NA	2.6 E-11	NA	1E-10
L2-ST26-SP07	18	NA	NA	NA	NA	NA	1.8 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-13	1.8 E-11	1E-10
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-12	NA	1.0 E-11	NA	6E-11
L2-ST28_90-SP02	20	NA	5.0 E-11	NA	NA	NA	7.3 E-13	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	6.4 E-12	NA	1.5 E-10	NA	3E-10

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.3-7) x the unit hazard or unit risk for the chemical).

Table 5.3-17 *Outdoor Commercial Worker Unit Hazard and Unit Cancer Risk Results*
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Aluminum	1.0 E+0	9.8 E-7	0.0 E+0	1 E-7	1.1 E-6	NA	NA	NA	NA
Antimony	1.0 E+0	2.4 E-3	0.0 E+0	4 E-7	2.4 E-3	NA	NA	NA	NA
Iron	1.0 E+0	1.4 E-6	0.0 E+0	NA	1.4 E-6	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.0 E-4	0.0 E+0	3 E-8	2.0 E-4	NA	NA	NA	NA
Nickel	1.0 E+0	4.9 E-5	0.0 E+0	1 E-5	5.9 E-5	NA	NA	NA	NA
Perchlorate	1.0 E+0	1.4 E-3	0.0 E+0	NA	1.4 E-3	NA	NA	NA	NA
Zinc	1.0 E+0	3.3 E-6	0.0 E+0	5 E-10	3.3 E-6	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	3 E-7	2 E-7	4 E-11	5 E-7
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	4 E-6	4 E-6	2 E-10	8 E-6
Benzo (b & k) fluoranthene (total	1.0 E+0	NA	NA	NA	NA	4 E-7	4 E-7	2 E-11	8 E-7
Benzo (ghi) perylene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Chrysene	1.0 E+0	NA	NA	NA	NA	4 E-8	4 E-8	2 E-12	8 E-8
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	3 E-6	2 E-6	2 E-10	5 E-6
Di-n-butyl phthalate	1.0 E+0	9.8 E-6	6.5 E-6	1 E-9	1.6 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	4 E-9	4.5 E-5	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	4 E-7	4 E-7	2 E-11	8 E-7
Pentachlorophenol	1.0 E+0	3.3 E-5	2.2 E-5	5 E-9	5.4 E-5	4 E-8	3 E-8	9 E-13	7 E-8
Phenanthrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	3 E-9	5.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.3-18 Commercial Worker Inhalation Hazard and Unit Cancer Risk Results
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1,1-Trichloroethane	1.0 E+0	1.4 E-1	NA
1,1-Dichloroethane	1.0 E+0	9.8 E-1	4 E-4
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6 E-3
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
1,4-Dioxane	1.0 E+0	2.3 E-1	2 E-3
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
2-Hexanone	1.0 E+0	2.3 E-1	NA
2-Propanol	1.0 E+0	7.5 E+1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Benzene	1.0 E+0	2.3 E+1	7 E-3
Bromodichloromethane	1.0 E+0	9.8 E+0	9 E-3
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Carbon Tetrachloride	1.0 E+0	1.7 E+1	1 E-2
Chloroform	1.0 E+0	1.5 E+1	6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Cyclohexane	1.0 E+0	1.2 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Ethylbenzene	1.0 E+0	6.8 E-1	6 E-4
Freon 11	1.0 E+0	3.4 E+0	NA
Freon 113	1.0 E+0	2.3 E-2	NA
Freon 12	1.0 E+0	3.4 E+0	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	1 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	5 E-4
Toluene	1.0 E+0	2.3 E+0	NA
Trichloroethylene	1.0 E+0	1.2 E+0	5 E-4
Vinyl Chloride	1.0 E+0	6.8 E+0	2 E-2

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h)anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**
Unit Hazard		1.1 E-6	2.4 E-3	NA	NA	NA	6.1 E-5	NA	NA	1.6 E-5	4.5 E-5	NA	1.4 E-6	2.0 E-4	5.9 E-5	5.4 E-5	1.4 E-3	6.1 E-5	5.4 E-6	6.1 E-5	3.3 E-6
Unit Risk		NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	NA	7.8 E-8	4.7 E-6	NA	NA	7.8 E-7	NA	NA	NA	7.0 E-8	NA	NA	NA	NA	NA
28E-SB01-1.5	1.5	27000	1.9											1.6	33		0.02				43
28E-SB01-11.5	11.5	17000	1.1												130		0.05				23
28E-SB01-5.5	5.5	20000	2.0											0.85	32		0.017				47
28E-SB02-1	1	13000									0.0017			1.4	22						34
28E-SB02-11	11	28000												0.80	40		1.4				59
28E-SB02-5	5	14000												0.79	16						29
28E-SB03-1.0	1													5.2			0.026				
28E-SB03-1.0-T	1	41000													40						46
28E-SB03-11	11	27000												0.98	69		0.069				57
28E-SB03-5.0	5	19000												0.22	31		0.024				42
28E-SB04-1.0	1																				
28E-SB04-10	10																0.0065				
28E-SB04-5.0	5																				
28E-SB05-1.0	1																0.67				
28E-SB05-10-T	10																0.069				
28E-SB05-5.0	5																0.026				
28E-SB06-1.0	1																0.11				
28E-SB06-10	10																4.3				
28E-SB06-5.0	5																5.1				
28E-SB07-1.0	1																				
28E-SB07-10	10																				
28E-SB07-5.0	5																				
28E-SPB01	0	30400											43600		49						66
28E-SPB01	3	37200											38500		51						63
28E-SPB02	0	21300											28700		36						55
28E-SPB02	3	15900											26800		28						40
29E-SB01	1									4.4											
29E-SB01	3																				
29E-SB01	5									5.4											
29E-SB01	10									0.39											
29E-SB02	1																				
29E-SB02	3									0.67											
29E-SB02	5									2.9											
29E-SB02	10									3.4											
29E-SB03-1	1	19000	0.72											3.0	29		0.033				39
29E-SB03-11	11	34000	0.21											1.5	43		0.021				46
29E-SB03-5	5	40000	0.24											0.67	45						53
29E-SB05-11.5	11.5	17000												0.85	36				0.37		32
29E-SB05-2.0	2	10000	9.0			0.031	0.061	0.0080			0.0090	0.033		0.53	30			0.0052	0.17	0.015	210
29E-SB05-6.0	6	14000	4.3											1.3	44				0.17		170
29E-SB06-11.5	11.5	20000												0.58	44				0.24		46
29E-SB06-2.0	2	11000	0.49												27						64
29E-SB06-5.5	5.5	21000												0.63	36						41
29E-SB07-1.5	1.5	16000	0.57											0.25	32						49
29E-SB07-11.5	11.5	14000	0.59											0.37	29						32
29E-SB07-5.5	5.5	18000												0.59	30						42
29E-SB08-1.5	1.5	17000	0.11											0.39	26		0.0060				36
29E-SB08-11.5	11.5	23000	0.081											0.42	69		0.0061				49
29E-SB08-5.5	5.5	19000	0.13											0.20	19		0.0068				26
29E-SB09-1.0	1													0.92	48						46
29E-SB09-1.0-T	1	47000	0.36																		
29E-SB09-11	11	20000	0.070												34						32
29E-SB09-5.0	5	45000	0.25												43						53
29E-SB10-1	1	6990													23						79
29E-SB11-1	1	17600													31						55
29E-SB12-1	1	31000													50						63
29E-SNS03-0.5	0.5	14000	0.89	0.0049	0.0069	0.020	0.022	0.013			0.014	0.012		0.24	23			0.0045		0.014	120
29E-SNS04-0.5	0.5	18000									0.0036				27		0.038				41
29E-SNS05-0.5	0.5		0.35	0.0041		0.013		0.0068			0.0095				30			0.0027		0.0095	70
29E-SNS05-0.5-T	0.5	16000												0.38							
29E-SNS06-0.5	0.5			0.0083	0.0087	0.015		0.011			0.013			0.60				0.0045		0.015	
29E-SNS06-0.5-T	0.5	15000	0.23												24						100
29E-SNS06-2.5	2.5	26000	0.14											0.21	38						31

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a)pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h)anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc
29E-SNS07-0.5	0.5	24000	0.38											0.73	40						130
29E-SNS07-0.5-T	0.5																				
29E-SNS07-2.5	2.5	19000	0.28											0.60	27				0.47		49
59E-SB01	1	16300								0.50			23600		26						37
59E-SB02-10.5	10.5	48000	1.9												53		0.0079				66
59E-SB02-2.0	2	12000	0.93											6.1	18				0.19		29
59E-SB02-5.0	5	34000	1.6											0.66	52						45
59E-SB03-11	11	79000	3.8												130		0.050				94
59E-SB03-2.0	2	40000	3.5								0.0034				51			0.0052		0.0071	69
59E-SB03-6.0	6	18000	1.4											2.8	30						37
59E-SB04-11	11	37000	1.6												210						55
59E-SB04-2.5	2.5	48000	2.5												94						83
59E-SB04-6.0	6	16000	1.7											0.73	25			0.0024			31
DSA-SB01-1.0	1	32000	0.28											7.5	42		0.059				36
DSA-SB01-11	11	13000	0.75											2.4	31						32
DSA-SB01-5.0	5	26000	0.24											5.2	45		0.013				38
DSA-SB02-1.5	1.5	17000	1.5											1.1	28		0.014				41
DSA-SB02-10.5	10.5	19000													49		0.014				37
DSA-SB02-4.5	4.5	14000	1.2											1.4	26		0.016				34
DSA-SB03-12	12	21000	1.3											6.0	22		0.010				33
DSA-SB03-2.0	2	27000	1.9											93	24		0.011				44
DSA-SB03-4.5	4.5	17000	1.2											0.26	31		0.0060				51
DSA-SB04-1.0	1	40000	0.36											0.73	49						47
DSA-SB04-11	11	33000	0.20											0.44	43						48
DSA-SB04-5.0	5	32000	0.24											0.58	34						37
E(D)-SB01	1																				
E(D)-SB01	5																				
E(D)-SB01	10																				
E(D)-SB02	1																				
E(D)-SB02	5																				
E(D)-SB02	10																				
E(d)-SNS01-0.5	0.5	18000	0.54	0.026	0.036	0.088	0.031	0.043			0.062	0.031		0.67	29		0.027	0.025		0.11	98
E(d)-SNS01-2.5	2.5	24000	0.82	0.0046		0.012		0.0076			0.013			0.32	32			0.0042		0.011	110
E(d)-SNS02-0.5	0.5	33000	0.31					0.019			0.0064			0.40	38					0.013	74
E(d)-SNS02-2.5	2.5	31000												0.38	32						44
E(d)-SNS03-0.5	0.5	6600	0.34					0.013			0.0043			0.66	28		0.21	0.0089		0.014	37
E(d)-SNS03-10	10																0.068				
E(d)-SNS03-2.5	2.5	20000	0.27											0.50	39		0.16				92
E(E)-SB01	1																				
E(E)-SB01	5																				
E(E)-SB01	6																				
E(e)-SB02-1.0	1	22000												3.2	25						29
E(e)-SB02-11	11	41000													29		0.29				73
E(e)-SB02-5.0	5	25000												2.4	38		0.021				44
E(E)-SB03-1.0	1																0.14				
E(E)-SB03-10	10																0.057				
E(E)-SB03-5.0	5																0.14				
E(e)-SNS01-0.5	0.5	12000	2.2					0.013			0.0061			0.79	22		0.14			0.0093	62
E(e)-SNS01-2.5	2.5	15000	0.20											0.30	21		0.074				33
E(e)-SNS02-0.5	0.5	19000	0.24											0.33	30						54
E(e)-SNS02-0.5-T	0.5										0.0025										
E(e)-SNS02-2.5	2.5	20000	0.29											0.32	27						37
E(m)-SD01-0.25	0.25	24000	0.75											0.38	37						49
E(m)-SD01-1.5	1.5	17000	0.34											0.29	34						50
E(m)-SD01-5.0	5	15000												0.29	24						34
E(m)-SD02-0.25	0.25	19000	0.61											0.40	29	0.34					93
E(m)-SD02-1.5	1.5	23000												0.33	40						53
E(m)-SD02-5.0	5	27000												0.38	39						52
E(N)-SB01-1.0	1	16000	0.25					0.0049			0.0071			0.44	31			0.0032		0.0060	84
E(N)-SB01-5.0	5	13000	0.12											0.33	38						36
E(N)-SB01-9.5	9.5	12000	0.13											0.68	48						36
E(N)-SB02-1.0	1		0.27								0.0025										
E(N)-SB02-1.0-T	1	15000												0.62	33						56
E(N)-SB02-11	11	8700												2.2	20						41
E(N)-SB02-5.0	5	10000												0.95	35						57
E(n)-SB03-1.0	1	21000												0.74	27						31

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a)pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h)anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc
E(n)-SB03-11	11	18000												3.9	44						28
E(n)-SB03-5.0	5	19000												1.2	51						33
E(N)-SD01-0.25	0.25	13000	0.34								0.0039			0.74	23						93
E(N)-SD01-1.5	1.5	15000	0.14											0.66	42						88
E(N)-SD01-5.0	5	16000	0.086											0.53	62						36
E(n)-SNS01-0.5	0.5	11000	0.23											0.28	22						2800
E(n)-SNS01-2.5	2.5	15000	0.17											0.38	39						40
E(n)-SNS02-0.5	0.5	18000	0.42			0.021		0.0087			0.019			0.14	30		0.039	0.0044		0.014	62
E(n)-SNS02-2.5	2.5		0.24												40						55
E(n)-SNS02-2.5-T	2.5	27000												0.53							
E(n)-SNS03-0.5	0.5	20000	0.15											0.21	50		0.55				55
E(n)-SNS03-2.5	2.5	20000	0.18											0.31	48		0.25				57
L2-ST24-SB01-11.5	11.5	45000												0.71	25				1.2		70
L2-ST24-SB01-2.0	2	34000												0.87	49				1.0		43
L2-ST24-SB01-6.0	6	4800													8.7		0.054		0.29		17
L2-ST26-SB01-11.5	11.5	21000	1.0											0.26	42						34
L2-ST26-SB01-2.0	2	14000	1.1	0.41	0.32	0.74	0.088	0.55	0.031		0.82	0.085		0.42	24			0.14		1.1	27
L2-ST26-SB01-5.0	5	17000	1.4											0.23	25						39
L2-ST26-SB02-10	10	14000	1.0											0.35	29						32
L2-ST26-SB02-2.0	2	24000	1.5											0.20	41						41
L2-ST26-SB02-4.5	4.5	17000	1.1											0.19	24						31
L2-ST26-SB03-11.5	11.5	18000	1.2											0.24	28						37
L2-ST26-SB03-2.0	2	15000	1.4					0.0056						0.28	26				0.26		35
L2-ST26-SB03-5.0	5	43000													57						53
L2-ST26-SB04-1.0	1	16000		0.0075										0.82	28						34
L2-ST26-SB04-11	11	19000												0.44	35						41
L2-ST26-SB04-5.0	5	17000												0.29	28						39
L2-ST26-SNS01-0.5	0.5																				
L2-ST26-SNS01-2.5	2.5																				
L2-ST26-SNS02-0.5	0.5				0.055		0.048	0.082			0.013									0.099	
L2-ST26-SNS02-2.5	2.5																				
L2-ST26-SNS03-0.5	0.5				0.0062			0.0080			0.0044							0.0033		0.010	
L2-ST26-SNS03-2.5	2.5																				
L2-ST28/90-SB01-1(	10.5	19000	0.73											0.44	43						41
L2-ST28/90-SB01-2.	2.5	38000	1.8											0.42	34		0.075		0.36		44
L2-ST28/90-SB01-4.	4.5	30000												0.41	30		0.14		0.66		54

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																				Non-Cancer Hazard Index
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	HI
Unit Hazard																						
Unit Risk																						
28E-SB01-1.5	1.5	2.9 E-2	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	1.9 E-3	NA	2.8 E-5	NA	NA	NA	1.4 E-4	3.6 E-2
28E-SB01-11.5	11.5	1.8 E-2	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	7.0 E-5	NA	NA	NA	7.5 E-5	2.9 E-2
28E-SB01-5.5	5.5	2.2 E-2	4.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	1.9 E-3	NA	2.4 E-5	NA	NA	NA	1.5 E-4	2.9 E-2
28E-SB02-1	1	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	NA	2.7 E-4	1.3 E-3	NA	NA	NA	NA	NA	1.1 E-4	1.6 E-2
28E-SB02-11	11	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.4 E-3	NA	2.0 E-3	NA	NA	NA	1.9 E-4	3.5 E-2
28E-SB02-5	5	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	9.4 E-4	NA	NA	NA	NA	NA	9.5 E-5	1.6 E-2
28E-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	3.6 E-5	NA	NA	NA	NA	1.1 E-3
28E-SB03-1.0-T	1	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	1.5 E-4	4.7 E-2
28E-SB03-11	11	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.1 E-3	NA	9.6 E-5	NA	NA	NA	1.9 E-4	3.4 E-2
28E-SB03-5.0	5	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	1.8 E-3	NA	3.4 E-5	NA	NA	NA	1.4 E-4	2.3 E-2
28E-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-6	NA	NA	NA	NA	9.1 E-6
28E-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	9.4 E-4
28E-SB05-10-T	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	NA	NA	9.6 E-5
28E-SB05-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	NA	3.6 E-5
28E-SB06-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	1.5 E-4
28E-SB06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA	NA	NA	6.0 E-3
28E-SB06-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3	NA	NA	NA	NA	7.1 E-3
28E-SB07-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	0	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2	NA	2.9 E-3	NA	NA	NA	NA	NA	2.1 E-4	9.7 E-2
28E-SPB01	3	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	3.0 E-3	NA	NA	NA	NA	NA	2.0 E-4	9.7 E-2
28E-SPB02	0	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	2.1 E-3	NA	NA	NA	NA	NA	1.8 E-4	6.5 E-2
28E-SPB02	3	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	1.7 E-3	NA	NA	NA	NA	NA	1.3 E-4	5.6 E-2
29E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5
29E-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5
29E-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-6
29E-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5
29E-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5
29E-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5
29E-SB03-1	1	2.1 E-2	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	1.7 E-3	NA	4.6 E-5	NA	NA	NA	1.3 E-4	2.5 E-2
29E-SB03-11	11	3.7 E-2	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	2.5 E-3	NA	2.9 E-5	NA	NA	NA	1.5 E-4	4.0 E-2
29E-SB03-5	5	4.3 E-2	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.7 E-3	NA	NA	NA	NA	NA	1.7 E-4	4.7 E-2
29E-SB05-11.5	11.5	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.1 E-3	NA	NA	NA	2.0 E-6	NA	1.0 E-4	2.1 E-2
29E-SB05-2.0	2	1.1 E-2	2.2 E-2	NA	NA	NA	3.7 E-6	NA	NA	NA	4.1 E-7	NA	NA	1.0 E-4	1.8 E-3	NA	NA	3.2 E-7	9.2 E-7	9.1 E-7	6.9 E-4	3.5 E-2
29E-SB05-6.0	6	1.5 E-2	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	2.6 E-3	NA	NA	NA	9.2 E-7	NA	5.5 E-4	2.9 E-2
29E-SB06-11.5	11.5	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.6 E-3	NA	NA	NA	1.3 E-6	NA	1.5 E-4	2.4 E-2
29E-SB06-2.0	2	1.2 E-2	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	2.1 E-4	1.5 E-2
29E-SB06-5.5	5.5	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.1 E-3	NA	NA	NA	NA	NA	1.3 E-4	2.5 E-2
29E-SB07-1.5	1.5	1.7 E-2	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	1.9 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.1 E-2
29E-SB07-11.5	11.5	1.5 E-2	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	1.7 E-3	NA	NA	NA	NA	NA	1.0 E-4	1.8 E-2
29E-SB07-5.5	5.5	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.8 E-3	NA	NA	NA	NA	NA	1.4 E-4	2.1 E-2
29E-SB08-1.5	1.5	1.8 E-2	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-5	1.5 E-3	NA	8.4 E-6	NA	NA	NA	1.2 E-4	2.0 E-2
29E-SB08-11.5	11.5	2.5 E-2	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	4.1 E-3	NA	8.5 E-6	NA	NA	NA	1.6 E-4	2.9 E-2
29E-SB08-5.5	5.5	2.1 E-2	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	1.1 E-3	NA	9.5 E-6	NA	NA	NA	8.5 E-5	2.2 E-2
29E-SB09-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	2.8 E-3	NA	NA	NA	NA	NA	1.5 E-4	3.2 E-3
29E-SB09-1.0-T	1	5.1 E-2	8.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-2
29E-SB09-11	11	2.2 E-2	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	1.0 E-4	2.4 E-2
29E-SB09-5.0	5	4.9 E-2	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	1.7 E-4	5.2 E-2
29E-SB10-1	1	7.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	2.6 E-4	9.1 E-3
29E-SB11-1	1	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	1.8 E-4	2.1 E-2
29E-SB12-1	1	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	2.1 E-4	3.7 E-2
29E-SNS03-0.5	0.5	1.5 E-2	2.2 E-3	NA	NA	NA	1.3 E-6	NA	NA	NA	6.4 E-7	NA	NA	4.7 E-5	1.4 E-3	NA	NA	2.7 E-7	NA	8.5 E-7	3.9 E-4	1.9 E-2
29E-SNS04-0.5	0.5	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	1.6 E-3	NA	5.3 E-5	NA	NA	NA	1.3 E-4	2.1 E-2
29E-SNS05-0.5	0.5	NA	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	1.8 E-3	NA	NA	1.6 E-7	NA	5.8 E-7	2.3 E-4	2.9 E-3
29E-SNS05-0.5-T	0.5	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
29E-SNS06-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	1.2 E-4	NA	NA	NA	2.7 E-7	NA	9.1 E-7	NA	1.2 E-4
29E-SNS06-0.5-T	0.5	1.6 E-2	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	3.3 E-4	1.9 E-2
29E-SNS06-2.5	2.5	2.8 E-2	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	2.2 E-3	NA	NA	NA	NA	NA	1.0 E-4	3.1 E-2

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																				Non-Cancer Hazard Index
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	HI
29E-SNS07-0.5	0.5	2.6 E-2	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	2.4 E-3	NA	NA	NA	NA	NA	4.2 E-4	3.0 E-2
29E-SNS07-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-2.5	2.5	2.1 E-2	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.6 E-3	NA	NA	NA	2.5 E-6	NA	1.6 E-4	2.3 E-2
59E-SB01	1	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	8.2 E-6	NA	NA	3.3 E-2	NA	1.6 E-3	NA	NA	NA	NA	NA	1.2 E-4	5.2 E-2
59E-SB02-10.5	10.5	5.2 E-2	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	1.1 E-5	NA	NA	NA	2.2 E-4	6.0 E-2
59E-SB02-2.0	2	1.3 E-2	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.1 E-3	NA	NA	NA	1.0 E-6	NA	9.5 E-5	1.8 E-2
59E-SB02-5.0	5	3.7 E-2	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	3.1 E-3	NA	NA	NA	NA	NA	1.5 E-4	4.4 E-2
59E-SB03-11	11	8.5 E-2	9.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	7.0 E-5	NA	NA	NA	3.1 E-4	1.0 E-1
59E-SB03-2.0	2	4.3 E-2	8.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	3.0 E-3	NA	NA	3.2 E-7	NA	4.3 E-7	2.3 E-4	5.5 E-2
59E-SB03-6.0	6	1.9 E-2	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	1.8 E-3	NA	NA	NA	NA	NA	1.2 E-4	2.5 E-2
59E-SB04-11	11	4.0 E-2	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	1.8 E-4	5.6 E-2
59E-SB04-2.5	2.5	5.2 E-2	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	NA	2.7 E-4	6.4 E-2
59E-SB04-6.0	6	1.7 E-2	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	1.5 E-3	NA	NA	1.5 E-7	NA	NA	1.0 E-4	2.3 E-2
DSA-SB01-1.0	1	3.5 E-2	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	2.5 E-3	NA	8.2 E-5	NA	NA	NA	1.2 E-4	3.9 E-2
DSA-SB01-11	11	1.4 E-2	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	1.8 E-3	NA	NA	NA	NA	NA	1.0 E-4	1.8 E-2
DSA-SB01-5.0	5	2.8 E-2	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.7 E-3	NA	1.8 E-5	NA	NA	NA	1.2 E-4	3.3 E-2
DSA-SB02-1.5	1.5	1.8 E-2	3.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	1.7 E-3	NA	2.0 E-5	NA	NA	NA	1.3 E-4	2.4 E-2
DSA-SB02-10.5	10.5	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	2.0 E-5	NA	NA	NA	1.2 E-4	2.4 E-2
DSA-SB02-4.5	4.5	1.5 E-2	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	1.5 E-3	NA	2.2 E-5	NA	NA	NA	1.1 E-4	2.0 E-2
DSA-SB03-12	12	2.3 E-2	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.3 E-3	NA	1.4 E-5	NA	NA	NA	1.1 E-4	2.8 E-2
DSA-SB03-2.0	2	2.9 E-2	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	1.4 E-3	NA	1.5 E-5	NA	NA	NA	1.4 E-4	5.4 E-2
DSA-SB03-4.5	4.5	1.8 E-2	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	1.8 E-3	NA	8.4 E-6	NA	NA	NA	1.7 E-4	2.3 E-2
DSA-SB04-1.0	1	4.3 E-2	8.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	2.9 E-3	NA	NA	NA	NA	NA	1.5 E-4	4.7 E-2
DSA-SB04-11	11	3.6 E-2	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	2.5 E-3	NA	NA	NA	NA	NA	1.6 E-4	3.9 E-2
DSA-SB04-5.0	5	3.5 E-2	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.0 E-3	NA	NA	NA	NA	NA	1.2 E-4	3.7 E-2
E(D)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS01-0.5	0.5	1.9 E-2	1.3 E-3	NA	NA	NA	1.9 E-6	NA	NA	NA	2.8 E-6	NA	NA	1.3 E-4	1.7 E-3	NA	3.8 E-5	1.5 E-6	NA	6.7 E-6	3.2 E-4	2.3 E-2
E(d)-SNS01-2.5	2.5	2.6 E-2	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	6.3 E-5	1.9 E-3	NA	NA	2.5 E-7	NA	6.7 E-7	3.6 E-4	3.0 E-2
E(d)-SNS02-0.5	0.5	3.6 E-2	7.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	7.8 E-5	2.2 E-3	NA	NA	NA	NA	7.9 E-7	2.4 E-4	3.9 E-2
E(d)-SNS02-2.5	2.5	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	1.9 E-3	NA	NA	NA	NA	NA	1.4 E-4	3.6 E-2
E(d)-SNS03-0.5	0.5	7.1 E-3	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	1.3 E-4	1.7 E-3	NA	2.9 E-4	5.4 E-7	NA	8.5 E-7	1.2 E-4	1.0 E-2
E(d)-SNS03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-5	NA	NA	NA	NA	9.5 E-5
E(d)-SNS03-2.5	2.5	2.2 E-2	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-5	2.3 E-3	NA	2.2 E-4	NA	NA	NA	3.0 E-4	2.5 E-2
E(E)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-1.0	1	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	1.5 E-3	NA	NA	NA	NA	NA	9.5 E-5	2.6 E-2
E(e)-SB02-11	11	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	4.1 E-4	NA	NA	NA	2.4 E-4	4.7 E-2
E(e)-SB02-5.0	5	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	2.2 E-3	NA	2.9 E-5	NA	NA	NA	1.4 E-4	3.0 E-2
E(E)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	2.0 E-4
E(E)-SB03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-5	NA	NA	NA	NA	8.0 E-5
E(E)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	2.0 E-4
E(e)-SNS01-0.5	0.5	1.3 E-2	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	1.5 E-4	1.3 E-3	NA	2.0 E-4	NA	NA	5.6 E-7	2.0 E-4	2.0 E-2
E(e)-SNS01-2.5	2.5	1.6 E-2	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.2 E-3	NA	1.0 E-4	NA	NA	NA	1.1 E-4	1.8 E-2
E(e)-SNS02-0.5	0.5	2.1 E-2	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	1.8 E-3	NA	NA	NA	NA	NA	1.8 E-4	2.3 E-2
E(e)-SNS02-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7
E(e)-SNS02-2.5	2.5	2.2 E-2	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	1.6 E-3	NA	NA	NA	NA	NA	1.2 E-4	2.4 E-2
E(m)-SD01-0.25	0.25	2.6 E-2	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	2.2 E-3	NA	NA	NA	NA	NA	1.6 E-4	3.0 E-2
E(m)-SD01-1.5	1.5	1.8 E-2	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	2.0 E-3	NA	NA	NA	NA	NA	1.6 E-4	2.1 E-2
E(m)-SD01-5.0	5	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	1.4 E-3	NA	NA	NA	NA	NA	1.1 E-4	1.8 E-2
E(m)-SD02-0.25	0.25	2.1 E-2	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	1.7 E-3	1.8 E-5	NA	NA	NA	NA	3.0 E-4	2.4 E-2
E(m)-SD02-1.5	1.5	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	2.4 E-3	NA	NA	NA	NA	NA	1.7 E-4	2.7 E-2
E(m)-SD02-5.0	5	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	2.3 E-3	NA	NA	NA	NA	NA	1.7 E-4	3.2 E-2
E(N)-SB01-1.0	1	1.7 E-2	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	8.6 E-5	1.8 E-3	NA	NA	1.9 E-7	NA	3.6 E-7	2.7 E-4	2.0 E-2
E(N)-SB01-5.0	5	1.4 E-2	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	2.2 E-3	NA	NA	NA	NA	NA	1.2 E-4	1.7 E-2
E(N)-SB01-9.5	9.5	1.3 E-2	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.8 E-3	NA	NA	NA	NA	NA	1.2 E-4	1.6 E-2
E(N)-SB02-1.0	1	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4
E(N)-SB02-1.0-T	1	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.9 E-3	NA	NA	NA	NA	NA	1.8 E-4	1.8 E-2
E(N)-SB02-11	11	9.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	1.2 E-3	NA	NA	NA	NA	NA	1.3 E-4	1.1 E-2
E(N)-SB02-5.0	5	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	2.1 E-3	NA	NA	NA	NA	NA	1.9 E-4	1.3 E-2
E(n)-SB03-1.0	1	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	1.6 E-3	NA	NA	NA	NA	NA	1.0 E-4	2.5 E-2

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																Non-Cancer Hazard Index				
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	HI
E(n)-SB03-11	11	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-4	2.6 E-3	NA	NA	NA	NA	NA	9.1 E-5	2.3 E-2
E(n)-SB03-5.0	5	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	3.0 E-3	NA	NA	NA	NA	NA	1.1 E-4	2.4 E-2
E(N)-SD01-0.25	0.25	1.4 E-2	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	1.4 E-4	1.4 E-3	NA	NA	NA	NA	NA	3.0 E-4	1.7 E-2
E(N)-SD01-1.5	1.5	1.6 E-2	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.5 E-3	NA	NA	NA	NA	NA	2.9 E-4	1.9 E-2
E(N)-SD01-5.0	5	1.7 E-2	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	3.7 E-3	NA	NA	NA	NA	NA	1.2 E-4	2.1 E-2
E(n)-SNS01-0.5	0.5	1.2 E-2	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	1.3 E-3	NA	NA	NA	NA	NA	9.1 E-3	2.3 E-2
E(n)-SNS01-2.5	2.5	1.6 E-2	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	2.3 E-3	NA	NA	NA	NA	NA	1.3 E-4	1.9 E-2
E(n)-SNS02-0.5	0.5	1.9 E-2	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	8.6 E-7	NA	NA	2.7 E-5	1.8 E-3	NA	5.5 E-5	2.7 E-7	NA	8.5 E-7	2.0 E-4	2.3 E-2
E(n)-SNS02-2.5	2.5	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	1.8 E-4	3.1 E-3
E(n)-SNS02-2.5-T	2.5	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
E(n)-SNS03-0.5	0.5	2.2 E-2	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	2.9 E-3	NA	7.7 E-4	NA	NA	NA	1.8 E-4	2.6 E-2
E(n)-SNS03-2.5	2.5	2.2 E-2	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5	2.8 E-3	NA	3.5 E-4	NA	NA	NA	1.9 E-4	2.5 E-2
L2-ST24-SB01-11.5	11.5	4.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	1.5 E-3	NA	NA	NA	6.5 E-6	NA	2.3 E-4	5.1 E-2
L2-ST24-SB01-2.0	2	3.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.9 E-3	NA	NA	NA	5.4 E-6	NA	1.4 E-4	4.0 E-2
L2-ST24-SB01-6.0	6	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	7.5 E-5	NA	1.6 E-6	NA	5.5 E-5	5.8 E-3
L2-ST26-SB01-11.5	11.5	2.3 E-2	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	2.5 E-3	NA	NA	NA	NA	NA	1.1 E-4	2.8 E-2
L2-ST26-SB01-2.0	2	1.5 E-2	2.7 E-3	NA	NA	NA	5.3 E-6	NA	NA	NA	3.7 E-5	NA	NA	8.2 E-5	1.4 E-3	NA	NA	8.5 E-6	NA	6.7 E-5	8.8 E-5	2.0 E-2
L2-ST26-SB01-5.0	5	1.8 E-2	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	1.5 E-3	NA	NA	NA	NA	NA	1.3 E-4	2.3 E-2
L2-ST26-SB02-10	10	1.5 E-2	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	1.7 E-3	NA	NA	NA	NA	NA	1.0 E-4	1.9 E-2
L2-ST26-SB02-2.0	2	2.6 E-2	3.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	2.4 E-3	NA	NA	NA	NA	NA	1.3 E-4	3.2 E-2
L2-ST26-SB02-4.5	4.5	1.8 E-2	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	1.4 E-3	NA	NA	NA	NA	NA	1.0 E-4	2.3 E-2
L2-ST26-SB03-11.5	11.5	1.9 E-2	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	1.7 E-3	NA	NA	NA	NA	NA	1.2 E-4	2.4 E-2
L2-ST26-SB03-2.0	2	1.6 E-2	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	1.5 E-3	NA	NA	NA	1.4 E-6	NA	1.1 E-4	2.1 E-2
L2-ST26-SB03-5.0	5	4.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA	NA	1.7 E-4	5.0 E-2
L2-ST26-SB04-1.0	1	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	1.7 E-3	NA	NA	NA	NA	NA	1.1 E-4	1.9 E-2
L2-ST26-SB04-11	11	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	2.1 E-3	NA	NA	NA	NA	NA	1.3 E-4	2.3 E-2
L2-ST26-SB04-5.0	5	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	1.7 E-3	NA	NA	NA	NA	NA	1.3 E-4	2.0 E-2
L2-ST26-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS02-0.5	0.5	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	9.5 E-6
L2-ST26-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	6.1 E-7	NA	1.0 E-6
L2-ST26-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-1(	10.5	2.1 E-2	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	2.5 E-3	NA	NA	NA	NA	NA	1.3 E-4	2.5 E-2
L2-ST28/90-SB01-2.	2.5	4.1 E-2	4.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	2.0 E-3	NA	1.0 E-4	NA	2.0 E-6	NA	1.4 E-4	4.8 E-2
L2-ST28/90-SB01-4.	4.5	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-5	1.8 E-3	NA	2.0 E-4	NA	3.6 E-6	NA	1.8 E-4	3.5 E-2

		Incremental Lifetime Cancer Risk																				Incremental Lifetime Cancer Risk
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Di-n-butyl phthalate**	**Fluoranthene**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Molybdenum**	**Nickel**	**Pentachlorophenol**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Zinc**	**ILCR**
Unit Hazard																						
Unit Risk																						
28E-SB01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB01-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB02-5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-10-T	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB05-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB06-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SB07-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SPB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB03-5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB05-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB05-2.0	2	NA	NA	NA	NA	2 E-8	NA	6 E-10	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
29E-SB05-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB06-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB07-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB08-5.5	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB09-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB10-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB11-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SB12-1	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS03-0.5	0.5	NA	NA	2 E-9	5 E-8	2 E-8	NA	1 E-9	NA	NA	NA	9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
29E-SNS04-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS05-0.5	0.5	NA	NA	2 E-9	NA	1 E-8	NA	5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
29E-SNS05-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS06-0.5	0.5	NA	NA	4 E-9	7 E-8	1 E-8	NA	9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8
29E-SNS06-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS06-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk															Incremental Lifetime Cancer Risk					
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	ILCR
29E-SNS07-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SNS07-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB03-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SB04-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-10.5	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB02-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-12	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB03-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(D)-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS01-0.5	0.5	NA	NA	1 E-8	3 E-7	7 E-8	NA	3 E-9	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
E(d)-SNS01-2.5	2.5	NA	NA	2 E-9	NA	9 E-9	NA	6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
E(d)-SNS02-0.5	0.5	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
E(d)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
E(d)-SNS03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(d)-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(E)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
E(e)-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-0.5-T	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(e)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD02-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	2 E-8
E(m)-SD02-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SD02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB01-1.0	1	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
E(N)-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB01-9.5	9.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-1.0-T	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SB02-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-1.0	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.3-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk															Incremental Lifetime Cancer Risk					
Sample Name	Depth	Aluminum	Antimony	Benzo(a)anthracene	Benzo(a) pyrene	Benzo (b & k) fluoranthene (total)	Benzo (ghi) perylene	Chrysene	Dibenz(a,h) anthracene	Di-n-butyl phthalate	Fluoranthene	Indeno(1,2,3-cd)pyrene	Iron	Molybdenum	Nickel	Pentachlorophenol	Perchlorate	Phenanthrene	Phenol	Pyrene	Zinc	ILCR
E(n)-SB03-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-0.25	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-1.5	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(N)-SD01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS02-0.5	0.5	NA	NA	NA	NA	2 E-8	NA	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
E(n)-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS02-2.5-T	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS03-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST24-SB01-6.0	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB01-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB01-2.0	2	NA	NA	2 E-7	2 E-6	6 E-7	NA	4 E-8	1 E-7	NA	NA	7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
L2-ST26-SB01-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-2.0	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB02-4.5	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB03-11.5	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB03-2.0	2	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
L2-ST26-SB03-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB04-1.0	1	NA	NA	4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
L2-ST26-SB04-11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SB04-5.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-0.5	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS01-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS02-0.5	0.5	NA	NA	NA	4 E-7	NA	NA	6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7
L2-ST26-SNS02-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SNS03-0.5	0.5	NA	NA	NA	5 E-8	NA	NA	6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
L2-ST26-SNS03-2.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-1(	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-2.	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST28/90-SB01-4.	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	2.3 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1
Unit Risk		NA	4.0 E-4	NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA
28E-SP16	10	43000		20000														
28E-SP16	20			9100								28000						8500
28E-SP16	30		97	1500		190												
28E-SP16	40		210	3700														
29E-SP07	10														95			12
29E-SP07	20			110												13		98
29E-SP08	10				7.9					94		71	6.7	25	380	43		120
29E-SP08	20			110														
29E-SP08	30			240														
29E-SP08	40			230														
29E-SP09	10	15		18												9.6		
29E-SP09	20	40		88														
29E-SP09	30			1000														33
29E-SP09	40			1300											130	9.4		29
29E-SP10	10									34					180	31		4.7
29E-SP10	20			4.4						20					90	36		18
29E-SP11	10									57		90		44	240	22		37
29E-SP11	20			210				56								16		46
59E-SP08	10																	
59E-SP09	10								72									250
59E-SP10	20														120	8.9		34
59E-SP13	20																	10
DSA-SP04	10																	
DSA-SP04	20		42	3000												32		140
DSA-SP04	30		58	4100														71
DSA-SP04	40			3000														100
DSA-SP05	10																	190
DSA-SP05	20	14		21		15		30		11		12		5.0	88	20	41	360
DSA-SP06	10														230	5.4		160
DSA-SP06	20									45		12			680			
DSA-SP07	10																	41
DSA-SP07	20																	
DSA-SP08	10								40							14		150
DSA-SP08	20							37		56		23		8.9	240	45		440
DSA-SP09	10																	27
DSA-SP09	20	21		33						35		27			650	14		190
DSA-SP10	10					6.2				93					600	77		160
DSA-SP10	20			64		6.4		21		22					110	110		1000
DSA-SP10	30			340														48
DSA-SP10	40			150											290			93
DSA-SP11	10					7.2										22		190
DSA-SP11	20															7.4		270
DSA-SP12	10					7.8										20		150
DSA-SP12	20	13	13	18		5.3									60	6.3		15
DSA-SP13	10									38		12			110	130		210
DSA-SP13	20															40		260
DSA-SP15	10																	3.8
DSA-SP15	20											12			150			63
DSA-SP15	30											16			220	13		280
DSA-SP16	10														410			170
DSA-SP16	20																	750
DSA-SP16	30																	430
DSA-SP16	40																	150
DSA-SP17	10																	66
DSA-SP17	20															4.7		78
DSA-SP17	30														220			24
DSA-SP18	10				14				15	320			20		130	56		
DSA-SP18	20				33		9.9		60	520	60		56		250	170		11
DSA-SP19	10				49		14		18				75	8.5	64	81		31
DSA-SP19	20								9.1	330		15			110	24		
DSA-SP20	10									55					220	32		19
DSA-SP20	20				24					97			16		310	190		120
DSA-SP21	10				22		7.5						19		82	12		32
DSA-SP21	20				29		8.3		6.8	54			21	5.9	370	24		680
DSA-SP22	10				19		6.2		13	39			18	8.3	230	59		23
DSA-SP22	20				24		6.9		15	46			18	5.4	240	26		58

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
DSA-SP23	10									44					180	20		82
DSA-SP23	20				20								14		340	12		490
DSA-SP23	30				22								16		200	12		190
DSA-SP24	10				29		12		60	21			43		120	48		53
DSA-SP24	20				23				100	30			24		190	78		160
DSA-SP24	30	13			17				130	77			16		660	140		54
DSA-SP25	10															11		53
DSA-SP25	20															23		340
DSA-SP26	10															58		120
DSA-SP26	20															280		140
DSA-SP27	10															7.1		70
DSA-SP27	20									22						6.9		170
DSA-SP28	10									68				7.7	260	30		38
DSA-SP28	20									110	26	34		43	350	25		31
DSA-SP29	10				36		12						13					10
DSA-SP30	10														160	7.5		74
DSA-SP30	20									68					290	66		7.0
DSA-SP31	10				6.3					150		62	5.7	35	650	62		30
DSA-SP31	20									63					220	40		69
DSA-SP32	10				6.0					55		13			190	31		19
DSA-SP32	20				8.3					510	52	200	6.9	31	2000	290		21
E(d)-SP02	10								12							10		56
E(d)-SP02	20			26				50		47		19		9.8	210	39		480
E(d)-SP03	10			14					73							18		29
E(m)-SP08	10				14					27			8.6		110	22		140
E(m)-SP08	20							53		33		19		10	160	30		110
E(M)-SP09	10									30					140	29		100
E(M)-SP09	20							31		90		23		10	380	77		340
E(m)-SP10	10	8.8							99						68	18		80
E(m)-SP10	20																	91
E(m)-SP11	20									66				7.8	400	15		19
E(n)-SP04	10								33	22					120	13		67
E(n)-SP04	20															8.2		1300
E(n)-SP05	10								11							6.8		4.8
E(n)-SP05	20							46		58					220	34		3700
E(n)-SP05	40														140			
E(n)-SP06	10								8.0						73	9.2		230
E(n)-SP06	20			21											66	3.9		44
E(n)-SP07	10			6.4											63	6.8		110
E(n)-SP08	10								26						93	9.0		190
E(n)-SP08	20	8.7														4.8		510
E(n)-SP09	10								76						91	22		26
E(n)-SP09	20							26	11							7.8		46
E(N)-SP10	10														58	11		76
E(N)-SP10	20									22					110	22		620
E(n)-SP11	15									55		22			240	8.9		
E(n)-SP11	25															4.3		14
E(n)-SP12	10									24					130	4.3		
E(n)-SP12	20									43					210	7.3		13
L2-ST24-SP03	10								7.2						54	4.1		63
L2-ST24-SP03	20							55							89	27		80
L2-ST26-SP04	10																	
L2-ST26-SP04	20							31						5.6		24		170
L2-ST26-SP05	10				11					43			7.0		180	67		420
L2-ST26-SP05	20							28		200		22		14	540	120		220
L2-ST26-SP06	10													10		5.2		22
L2-ST26-SP06	20							25		18					59	10		180
L2-ST26-SP07	18									78		15			3000	100		160
L2-ST28_90-SP02	10			25					80	140		34			1200	22		42
L2-ST28_90-SP02	20			56				37		82					260	80		760

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+1	1.5 E+1	2.0 E+1	1.2 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		1.0 E-2	5.6 E-3	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
28E-SP16	10			55000							2600				800000		5900	10000000	
28E-SP16	20											3600			97000			3200000	
28E-SP16	30		310	1400					2500		120	220			1900			180000	
28E-SP16	40		510	2200					4900						13000			380000	
29E-SP07	10								24						60		8.4		
29E-SP07	20	11	25	22				11	240		23	60			740		6.8	8900	
29E-SP08	10			5.1	6.9	55	5.2		39		82	66	14	5.3		43	71	380	
29E-SP08	20		50	1600					360			36			1600			62000	
29E-SP08	30	42	54	330					400						2500			42000	
29E-SP08	40	41	64	240					360						3300			41000	
29E-SP09	10	2200	990	330					120	15	11	15					20	18000	
29E-SP09	20	7000	2400	1400					580	75							40	60000	
29E-SP09	30	280	210	330				170	3800	100	90	160			1400	26	29	23000	
29E-SP09	40	410	260	360		26		210	4200	91	58	130			840	33	30	18000	
29E-SP10	10	10		4.8	4.4	16					8.6	44	7.8				10	340	
29E-SP10	20	100	35	100	11				92	5.6	56	130	9.4				38	780	
29E-SP11	10				9.6	19			96		47	20	13			76	84	12	
29E-SP11	20	29	120	330	16			31	480		32	260			240	74	37	15000	7.6
59E-SP08	10				42							51						310	
59E-SP09	10											100			950			5900	
59E-SP10	20					10			64		33	60	6.8		13	14	38	82	
59E-SP13	20											4.6			18	5.7	5.5	6.9	
DSA-SP04	10																	2700	
DSA-SP04	20	180	470	210				4200	110000	57	96	370			280	110	52	98000	
DSA-SP04	30	320	770	200				3700	100000			74			1400	51		160000	
DSA-SP04	40	250	580	160				2600	72000			84			1200	46		130000	
DSA-SP05	10								360									6700	
DSA-SP05	20		47			17			480		40	160	5.9		7.8	110	36	4700	
DSA-SP06	10					12					7.0	8.9	5.8			5.7	7.5	690	
DSA-SP06	20					47						8.6	8.4				12		
DSA-SP07	10																	2200	
DSA-SP07	20																5.6		
DSA-SP08	10		210		21	20			170			57				4.8	17	230	
DSA-SP08	20		530		4.8	33			150		48	240	8.8			130	45	820	
DSA-SP09	10					10			90				6.2			3.7	5.8	170	
DSA-SP09	20		6.5		18	88			720		21	95				4.4	7.4	2100	
DSA-SP10	10					22			200		78	230				12	36	66	
DSA-SP10	20	15	93			13	6.6	200	11000	7.4	180	450	8.1			47	63	2000	
DSA-SP10	30	78	160					1100	62000									7700	
DSA-SP10	40		85		16			730	44000	26		76				15		2900	
DSA-SP11	10				9.8			20	1400		76	240					20	59	
DSA-SP11	20		49					7.6	540		34	57	11	5.0		5.2	11	31	
DSA-SP12	10		7.2		11			21	720	6.5	92	170					13	24	
DSA-SP12	20	51	180					40	1100	7.2	5.0	6.9			200	3.7	11	540	
DSA-SP13	10				41		14	75	6200	6.3	800	1600	12	5.2	18		120	120	
DSA-SP13	20				24			200	10000		520	870					49	410	
DSA-SP15	10														68			260	
DSA-SP15	20		7.4		4.1	13			40			8.3			51	3.6	5.0	170	
DSA-SP15	30		19		14	13		59	14000	7.2		120			37	7.3	9.6	130	
DSA-SP16	10		270					720	90000		88	98					36	840	
DSA-SP16	20		1000					1200	160000		67	110						2000	
DSA-SP16	30		1400					1700	190000		110	270				67		1900	
DSA-SP16	40		1600					2000	220000			83						3500	
DSA-SP17	10				9.2							49					6.3	2400	
DSA-SP17	20		44		5.0				9.3			29					25	1300	
DSA-SP17	30		150			9.7			11		8.2	15				8.2	24	910	
DSA-SP18	10				27	100	43				54	100	150	34		11	380		
DSA-SP18	20				67	71	160				160	340	510	110			1500		
DSA-SP19	10				24	32	140				80	93	510	120			870		
DSA-SP19	20				15	240	10				22	50	30	7.0		12	120		
DSA-SP20	10		6.7				6.7	48	7900		21	46	9.9		7.8	8.2	47	3000	
DSA-SP20	20		99		50		27	240	35000		190	570	61	16		21	97	24000	
DSA-SP21	10		16				14		1000		100	270	44	18			47	14	
DSA-SP21	20		31			9.8	13	24	4000		74	260	43	19			46	34	
DSA-SP22	10						15	13	1500		160	610	44	19			73	82	
DSA-SP22	20						12	33	5400		240	840	38	17			36	170	

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride
DSA-SP23	10							120	24000		68	140	20					130	
DSA-SP23	20							180	29000		25	36	30	14				360	
DSA-SP23	30							180	28000		12	22	34	15	22			1200	
DSA-SP24	10		19				34	65	8200	6.8	120	260	110	43			160	180	
DSA-SP24	20					100	22	200	24000	14	190	360	60	25			120	450	
DSA-SP24	30		110			16	17	200	24000	14	220	520	43	18			160	1700	
DSA-SP25	10		26					66	9500		34	39	5.3		32		9.9		
DSA-SP25	20							320	45000		140	420			70		23		
DSA-SP26	10				61			310	24000		240	1600	10		32		25		
DSA-SP26	20							1200	120000		1200	3200			310		180		
DSA-SP27	10		20					64	7100		27	120			22		5.3	530	
DSA-SP27	20		6.0					81	8600		52	78	5.6		12	3.6	16	2200	
DSA-SP28	10				6.0	57	6.3				54	66	8.9				36	20	
DSA-SP28	20				4.2	120					47	48	7.4				37		
DSA-SP29	10		15			12			35			4.0	20	15			7.0		
DSA-SP30	10					39					7.2	7.1					14		
DSA-SP30	20				8.9	83	7.5				65	100	6.2			4.7	67		
DSA-SP31	10				10	39	7.3				67	100	19	6.6		4.3	76		
DSA-SP31	20				7.3	11			340		43	74	13				31		
DSA-SP32	10					11	7.4	96	2200	6.6	22	30	16	6.6			49		
DSA-SP32	20		8.1		36	370	26	15	300		250	240	38	16			340		
E(d)-SP02	10				22			88	3800		7.9	28	7.9		13		14	27	
E(d)-SP02	20				8.0	29		42	2100		530	620	8.8			160	58	100	
E(d)-SP03	10				100			120	4800	12	14	120					15	44	
E(m)-SP08	10				4.8	42	7.1				13	19	19	7.4	16		130		
E(m)-SP08	20				7.8	36			16		41	250	9.3		19	170	57	94	
E(M)-SP09	10				5.0	26					22	46			48		36		
E(M)-SP09	20		5.4		10	35			160		39	210	7.3		83	170	62	120	
E(m)-SP10	10	20			46				22		11	77	6.8		420		22	160	
E(m)-SP10	20	62							49			12	28	16	4900		23	790	
E(m)-SP11	20					30			58		12	16	5.5		20	4.2	14		
E(n)-SP04	10				21	11			19		6.4	39	5.3				16		
E(n)-SP04	20		9.2		6.2				260		29	67	7.2		11	8.5	18	110	
E(n)-SP05	10								28			5.0	5.9		630		8.9		
E(n)-SP05	20	11				9.8	7.1		63		76	160	11		2000	17	46	1600	
E(n)-SP05	40	77	40			22			490			13			20000	20	22	2600	
E(n)-SP06	10								21			14			11		11	60	
E(n)-SP06	20	32	18		6.8	13	11	14	180		5.4	29	27	7.3	15	9.6	42	160	
E(n)-SP07	10		11		4.6			13	220			8.8			17		11	53	
E(n)-SP08	10		8.4		17	11			14			25	9.0				18	240	
E(n)-SP08	20		210						13		8.1	27				12	14	460	
E(n)-SP09	10		16		29							22	8.5				15	32	
E(n)-SP09	20	8.1	540		17				13		21	59	7.0			44	27	49	
E(N)-SP10	10					10					9.6	44			20	5.5	16	8.9	
E(N)-SP10	20					11					20	100			17	20	28	16	
E(n)-SP11	15					28					7.4	9.9	6.0			5.2	24		
E(n)-SP11	25		190						240			12	7.3			9.4	18	47	
E(n)-SP12	10					560						7.8				8.0	14		
E(n)-SP12	20		9.4			100			40		7.3	24			20	20	29	24	
L2-ST24-SP03	10				20							11					6.3		
L2-ST24-SP03	20		47		5.6	18	6.9		28		51	220	13		190	24	39	210	
L2-ST26-SP04	10																		
L2-ST26-SP04	20					14	5.4				220	740	11		150	40	47	690	
L2-ST26-SP05	10				10	14					35	72	12		140		110		
L2-ST26-SP05	20			11	65	47	14		14		900	2300	21	6.3	360	70	100	510	
L2-ST26-SP06	10				4.6	52						6.1			9.9		12		
L2-ST26-SP06	20					25	6.4		39		40	78	18		330	18	28	420	
L2-ST26-SP07	18				11	49	22				66	140	59	22			56	7.6	6.7
L2-ST28_90-SP02	10				43	290		280	8800		20	72	18			18	42	81	
L2-ST28_90-SP02	20		53	9.8	26	20	10	48	1300		670	1800	21		130	80	76	2400	

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																	
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride
Unit Hazard																			
Unit Risk																			
28E-SP16	10	1.4 E-3	NA	5.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	3.2 E-1	NA	NA	NA	NA	NA	1.4 E-3	NA
28E-SP16	30	NA	7.9 E-6	1.5 E-3	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	1.3 E-5	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	3.5 E-6	NA
29E-SP07	20	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	1.6 E-5	2.4 E-5
29E-SP08	10	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	3.2 E-6	NA	1.4 E-3	1.2 E-5	1.3 E-6	2.8 E-5	2.5 E-4	NA	3.5 E-5	NA
29E-SP08	20	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5
29E-SP08	40	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5
29E-SP09	10	4.8 E-7	NA	4.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	8.9 E-3
29E-SP09	20	7.3 E-7	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
29E-SP09	30	NA	NA	9.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	4.2 E-4
29E-SP09	40	NA	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	1.6 E-5	NA	2.5 E-6	4.6 E-4
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	1.3 E-5	1.8 E-4	NA	1.4 E-6	4.0 E-5
29E-SP10	20	NA	NA	6.2 E-6	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	3.9 E-6	1.2 E-4	NA	3.0 E-6	2.2 E-4
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	1.8 E-3	NA	2.3 E-6	1.8 E-5	1.3 E-4	NA	1.1 E-5	NA
29E-SP11	20	NA	NA	3.0 E-4	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	7.7 E-6	6.3 E-5
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	NA
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	2.9 E-5	NA	5.7 E-6	NA
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	5.0 E-6	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	2.3 E-5	3.9 E-4
DSA-SP04	30	NA	4.7 E-6	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-6	4.8 E-4
DSA-SP04	40	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-6	2.8 E-4
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	NA
DSA-SP05	20	2.6 E-7	NA	3.0 E-5	NA	3.4 E-4	NA	1.2 E-6	NA	2.1 E-7	NA	1.4 E-4	NA	1.5 E-7	3.8 E-6	6.4 E-5	2.1 E-5	6.0 E-5	NA
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	3.2 E-5	NA	4.6 E-5	NA
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-7	NA	1.4 E-4	NA	NA	3.0 E-5	NA	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	7.0 E-5	NA	NA	NA	NA	NA	NA	8.3 E-5	NA	4.3 E-5	NA
DSA-SP08	20	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	1.1 E-6	NA	2.6 E-4	NA	2.6 E-7	1.0 E-5	1.4 E-4	NA	7.4 E-5	NA
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-6	NA
DSA-SP09	20	3.8 E-7	NA	4.7 E-5	NA	NA	NA	NA	NA	6.8 E-7	NA	3.1 E-4	NA	NA	2.8 E-5	4.5 E-5	NA	3.2 E-5	NA
DSA-SP10	10	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	4.4 E-5	4.5 E-4	NA	4.6 E-5	NA
DSA-SP10	20	NA	NA	9.0 E-5	NA	1.5 E-4	NA	8.2 E-7	NA	4.3 E-7	NA	NA	NA	NA	4.8 E-6	3.5 E-4	NA	1.7 E-4	3.3 E-5
DSA-SP10	30	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-6	1.2 E-4
DSA-SP10	40	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	7.9 E-6	NA
DSA-SP11	10	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	5.5 E-5	NA
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	4.5 E-5	NA
DSA-SP12	10	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	4.3 E-5	NA
DSA-SP12	20	2.4 E-7	1.5 E-6	2.5 E-5	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	2.0 E-5	NA	2.5 E-6	1.1 E-4
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	2.4 E-4	NA	NA	8.1 E-6	7.7 E-4	NA	6.1 E-5	NA
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	4.4 E-5	NA
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	6.5 E-6	NA	NA	1.1 E-5	NA
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	6.4 E-6	2.9 E-5	NA	3.1 E-5	NA
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	4.9 E-5	NA
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	1.3 E-5	NA
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	2.7 E-6	NA
DSA-SP18	10	NA	NA	NA	2.6 E-4	NA	NA	NA	2.6 E-5	1.1 E-5	NA	NA	3.5 E-5	NA	9.6 E-6	3.3 E-4	NA	NA	NA
DSA-SP18	20	NA	NA	NA	3.4 E-4	NA	1.2 E-4	NA	6.0 E-5	1.0 E-5	1.8 E-6	NA	5.6 E-5	NA	1.1 E-5	5.5 E-4	NA	1.8 E-6	NA
DSA-SP19	10	NA	NA	NA	9.2 E-4	NA	3.1 E-4	NA	3.2 E-5	NA	NA	NA	1.3 E-4	4.4 E-7	4.7 E-6	4.8 E-4	NA	8.9 E-6	NA
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	9.1 E-6	6.4 E-6	NA	1.7 E-4	NA	NA	4.8 E-6	7.7 E-5	NA	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	1.6 E-5	1.9 E-4	NA	5.5 E-6	NA
DSA-SP20	20	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	1.9 E-6	NA	NA	1.6 E-5	NA	1.4 E-5	6.1 E-4	NA	2.0 E-5	NA
DSA-SP21	10	NA	NA	NA	4.1 E-4	NA	1.6 E-4	NA	NA	NA	NA	NA	3.3 E-5	NA	6.0 E-6	7.1 E-5	NA	9.2 E-6	NA
DSA-SP21	20	NA	NA	NA	3.0 E-4	NA	1.0 E-4	NA	6.8 E-6	1.0 E-6	NA	NA	2.1 E-5	1.7 E-7	1.6 E-5	7.7 E-5	NA	1.1 E-4	NA
DSA-SP22	10	NA	NA	NA	3.5 E-4	NA	1.4 E-4	NA	2.3 E-5	1.3 E-6	NA	NA	3.2 E-5	4.3 E-7	1.7 E-5	3.5 E-4	NA	6.6 E-6	NA
DSA-SP22	20	NA	NA	NA	2.5 E-4	NA	8.4 E-5	NA	1.5 E-5	8.9 E-7	NA	NA	1.8 E-5	1.6 E-7	1.0 E-5	8.4 E-5	NA	9.7 E-6	NA

		Non-Cancer Hazard Index																	
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	1.3 E-5	1.2 E-4	NA	2.4 E-5	NA
DSA-SP23	20	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	1.5 E-5	3.9 E-5	NA	8.2 E-5	NA
DSA-SP23	30	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	5.8 E-6	2.7 E-5	NA	2.1 E-5	NA
DSA-SP24	10	NA	NA	NA	5.4 E-4	NA	2.6 E-4	NA	1.1 E-4	7.2 E-7	NA	NA	7.6 E-5	NA	8.8 E-6	2.8 E-4	NA	1.5 E-5	NA
DSA-SP24	20	NA	NA	NA	2.4 E-4	NA	NA	NA	1.0 E-4	5.8 E-7	NA	NA	2.4 E-5	NA	8.3 E-6	2.5 E-4	NA	2.7 E-5	NA
DSA-SP24	30	1.6 E-7	NA	NA	1.1 E-4	NA	NA	NA	8.6 E-5	9.8 E-7	NA	NA	1.1 E-5	NA	1.9 E-5	3.1 E-4	NA	6.0 E-6	NA
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	1.5 E-5	NA
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	5.7 E-5	NA
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	3.5 E-5	NA
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	2.3 E-5	NA
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	2.0 E-5	NA
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	NA	2.2 E-5	NA	2.9 E-5	NA
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	4.0 E-7	1.9 E-5	1.8 E-4	NA	1.1 E-5	NA
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	7.7 E-7	3.8 E-4	NA	1.3 E-6	1.5 E-5	8.1 E-5	NA	5.2 E-6	NA
DSA-SP29	10	NA	NA	NA	6.7 E-4	NA	2.6 E-4	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	2.9 E-6	NA
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	4.4 E-5	NA	2.1 E-5	NA
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	1.3 E-5	2.1 E-4	NA	1.2 E-6	NA
DSA-SP31	10	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	5.1 E-6	NA	1.2 E-3	1.0 E-5	1.8 E-6	4.8 E-5	3.7 E-4	NA	8.7 E-6	NA
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	9.6 E-6	1.3 E-4	NA	1.2 E-5	NA
DSA-SP32	10	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	1.9 E-6	NA	2.6 E-4	NA	NA	1.4 E-5	1.8 E-4	NA	5.5 E-6	NA
DSA-SP32	20	NA	NA	NA	8.6 E-5	NA	NA	NA	NA	9.9 E-6	1.5 E-6	2.3 E-3	6.9 E-6	9.1 E-7	8.7 E-5	9.3 E-4	NA	3.5 E-6	NA
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	5.9 E-5	NA	1.6 E-5	NA
E(d)-SP02	20	NA	NA	3.7 E-5	NA	NA	NA	2.0 E-6	NA	9.1 E-7	NA	2.1 E-4	NA	2.9 E-7	9.2 E-6	1.3 E-4	NA	8.1 E-5	NA
E(d)-SP03	10	NA	NA	3.6 E-5	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	8.4 E-6	NA
E(m)-SP08	10	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	9.2 E-7	NA	NA	1.5 E-5	NA	8.1 E-6	1.3 E-4	NA	4.0 E-5	NA
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	6.4 E-7	NA	2.1 E-4	NA	2.9 E-7	7.0 E-6	9.7 E-5	NA	1.8 E-5	NA
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	1.0 E-5	1.7 E-4	NA	2.9 E-5	NA
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	1.7 E-6	NA	2.6 E-4	NA	2.9 E-7	1.7 E-5	2.5 E-4	NA	5.7 E-5	NA
E(m)-SP10	10	2.8 E-7	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	5.0 E-6	1.1 E-4	NA	2.3 E-5	8.1 E-5
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	1.3 E-4
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	2.3 E-7	1.7 E-5	4.8 E-5	NA	3.2 E-6	NA
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	7.5 E-7	NA	NA	NA	NA	8.8 E-6	7.7 E-5	NA	1.9 E-5	NA
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	2.2 E-4	NA
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	1.4 E-6	NA
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	1.1 E-6	NA	NA	NA	NA	9.6 E-6	1.1 E-4	NA	6.2 E-4	2.4 E-5
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	8.7 E-5
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	5.4 E-6	5.4 E-5	NA	6.6 E-5	NA
E(n)-SP06	20	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	1.3 E-5	NA	7.4 E-6	7.0 E-5
E(n)-SP07	10	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-6	4.0 E-5	NA	3.2 E-5	NA
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	NA	NA	NA	6.8 E-6	5.3 E-5	NA	5.5 E-5	NA
E(n)-SP08	20	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	8.6 E-5	NA
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	6.7 E-6	1.3 E-4	NA	7.5 E-6	NA
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	1.0 E-6	1.1 E-5	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	7.7 E-6	1.8 E-5
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-6	6.5 E-5	NA	2.2 E-5	NA
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	4.8 E-6	7.1 E-5	NA	1.0 E-4	NA
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	3.1 E-4	NA	NA	1.3 E-5	3.7 E-5	NA	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	1.8 E-6	NA
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-7	NA	NA	NA	NA	9.6 E-6	2.5 E-5	NA	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	NA	NA	9.2 E-6	2.4 E-5	NA	2.2 E-6	NA
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	4.0 E-6	2.4 E-5	NA	1.8 E-5	NA
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	3.9 E-6	8.7 E-5	NA	1.3 E-5	NA
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	1.6 E-7	NA	7.7 E-5	NA	2.9 E-5	NA
L2-ST26-SP05	10	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	1.5 E-6	NA	NA	1.2 E-5	NA	1.3 E-5	3.9 E-4	NA	1.2 E-4	NA
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	3.9 E-6	NA	2.5 E-4	NA	4.1 E-7	2.4 E-5	3.9 E-4	NA	3.7 E-5	NA
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	3.1 E-5	NA	6.3 E-6	NA
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	9.8 E-7	NA	3.5 E-7	NA	NA	NA	NA	2.6 E-6	3.2 E-5	NA	3.0 E-5	NA
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	1.8 E-4	NA	NA	1.4 E-4	3.5 E-4	NA	2.8 E-5	NA
L2-ST28_90-SP02	10	NA	NA	6.4 E-5	NA	NA	NA	NA	1.4 E-4	4.8 E-6	NA	6.7 E-4	NA	NA	8.8 E-5	1.3 E-4	NA	1.2 E-5	NA
L2-ST28_90-SP02	20	NA	NA	7.9 E-5	NA	NA	NA	1.5 E-6	NA	1.6 E-6	NA	NA	NA	NA	1.1 E-5	2.6 E-4	NA	1.3 E-4	NA

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																	
Sample Name	Depth	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																			
Unit Risk																			
28E-SP16	10	NA	2.4 E-1	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	3.4 E+0	NA	3.4 E-3	2.7 E+0	NA	6.5 E+0
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	2.2 E-1	NA	NA	4.7 E-1	NA	1.0 E+0
28E-SP16	30	5.3 E-4	2.3 E-3	NA	NA	NA	NA	5.0 E-6	NA	2.4 E-5	4.3 E-5	NA	NA	3.0 E-3	NA	NA	1.8 E-2	NA	2.9 E-2
28E-SP16	40	6.7 E-4	2.7 E-3	NA	NA	NA	NA	7.4 E-6	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	2.9 E-2	NA	5.1 E-2
29E-SP07	10	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	2.6 E-4	NA	4.9 E-6	NA	NA	2.7 E-4
29E-SP07	20	6.2 E-5	5.2 E-5	NA	NA	NA	5.3 E-6	6.9 E-7	NA	6.6 E-6	1.7 E-5	NA	NA	1.7 E-3	NA	2.3 E-6	1.3 E-3	NA	3.4 E-3
29E-SP08	10	NA	2.2 E-5	1.9 E-7	7.6 E-6	8.1 E-7	NA	2.1 E-7	NA	3.7 E-5	3.0 E-5	2.2 E-5	9.3 E-6	NA	2.9 E-5	4.1 E-5	1.0 E-4	NA	2.2 E-3
29E-SP08	20	1.2 E-4	3.8 E-3	NA	NA	NA	NA	1.0 E-6	NA	NA	1.0 E-5	NA	NA	3.7 E-3	NA	NA	9.2 E-3	NA	1.7 E-2
29E-SP08	30	9.2 E-5	5.3 E-4	NA	NA	NA	NA	7.9 E-7	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	4.3 E-3	NA	9.1 E-3
29E-SP08	40	8.4 E-5	2.9 E-4	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	3.2 E-3	NA	7.7 E-3
29E-SP09	10	4.4 E-3	1.4 E-3	NA	NA	NA	NA	6.4 E-7	1.1 E-5	5.0 E-6	6.8 E-6	NA	NA	NA	NA	1.2 E-5	4.9 E-3	NA	2.0 E-2
29E-SP09	20	5.9 E-3	3.3 E-3	NA	NA	NA	NA	1.7 E-6	3.0 E-5	NA	NA	NA	NA	NA	NA	1.3 E-5	8.9 E-3	NA	3.4 E-2
29E-SP09	30	3.6 E-4	5.3 E-4	NA	NA	NA	5.6 E-5	7.5 E-6	2.6 E-5	1.8 E-5	3.1 E-5	NA	NA	2.2 E-3	6.8 E-6	6.4 E-6	2.3 E-3	NA	7.0 E-3
29E-SP09	40	3.4 E-4	4.4 E-4	NA	1.4 E-6	NA	5.3 E-5	6.3 E-6	1.8 E-5	1.1 E-5	2.0 E-5	NA	NA	1.0 E-3	8.6 E-6	5.0 E-6	1.4 E-3	NA	4.8 E-3
29E-SP10	10	NA	2.1 E-5	1.2 E-7	2.2 E-6	NA	NA	NA	NA	3.9 E-6	2.0 E-5	1.2 E-5	NA	NA	NA	5.8 E-6	9.3 E-5	NA	4.0 E-4
29E-SP10	20	8.6 E-5	2.4 E-4	1.7 E-7	NA	NA	NA	2.7 E-7	2.2 E-6	1.6 E-5	3.7 E-5	8.5 E-6	NA	NA	NA	1.3 E-5	1.2 E-4	NA	8.6 E-4
29E-SP11	10	NA	NA	2.7 E-7	2.6 E-6	NA	NA	5.1 E-7	NA	2.1 E-5	9.1 E-6	2.1 E-5	NA	NA	5.2 E-5	4.9 E-5	3.3 E-6	NA	2.1 E-3
29E-SP11	20	3.0 E-4	7.8 E-4	2.5 E-7	NA	NA	1.5 E-5	1.4 E-6	NA	9.1 E-6	7.4 E-5	NA	NA	5.6 E-4	2.9 E-5	1.2 E-5	2.2 E-3	8.7 E-6	4.4 E-3
59E-SP08	10	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	8.5 E-5	NA	1.1 E-4
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	4.1 E-3	NA	NA	1.6 E-3	NA	6.0 E-3
59E-SP10	20	NA	NA	NA	8.2 E-7	NA	NA	1.9 E-7	NA	9.4 E-6	1.7 E-5	6.1 E-6	NA	3.0 E-5	5.5 E-6	1.3 E-5	1.2 E-5	NA	1.3 E-4
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	4.2 E-5	2.3 E-6	1.8 E-6	1.0 E-6	NA	5.0 E-5
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	NA	7.4 E-4
DSA-SP04	20	1.2 E-3	5.0 E-4	NA	NA	NA	2.0 E-3	3.2 E-4	2.3 E-5	2.7 E-5	1.1 E-4	NA	NA	6.5 E-4	4.3 E-5	1.7 E-5	1.5 E-2	NA	2.4 E-2
DSA-SP04	30	1.3 E-3	3.2 E-4	NA	NA	NA	1.2 E-3	2.0 E-4	NA	NA	1.5 E-5	NA	NA	2.2 E-3	1.3 E-5	NA	1.6 E-2	NA	2.6 E-2
DSA-SP04	40	7.6 E-4	2.0 E-4	NA	NA	NA	6.6 E-4	1.1 E-4	NA	NA	1.3 E-5	NA	NA	1.4 E-3	1.2 E-5	NA	1.0 E-2	NA	1.6 E-2
DSA-SP05	10	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	1.9 E-3
DSA-SP05	20	1.2 E-4	NA	NA	1.4 E-6	NA	NA	1.4 E-6	NA	1.1 E-5	4.6 E-5	5.3 E-6	NA	1.8 E-5	4.3 E-5	1.2 E-5	7.0 E-4	NA	1.6 E-3
DSA-SP06	10	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	3.2 E-6	4.0 E-6	9.2 E-6	NA	NA	3.9 E-6	4.4 E-6	1.9 E-4	NA	3.1 E-4
DSA-SP06	20	NA	NA	NA	3.8 E-6	NA	NA	NA	NA	NA	2.5 E-6	7.6 E-6	NA	NA	NA	4.0 E-6	NA	NA	1.8 E-4
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	6.1 E-4
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	1.9 E-6
DSA-SP08	10	9.3 E-4	NA	5.8 E-7	2.7 E-6	NA	NA	9.1 E-7	NA	NA	2.6 E-5	NA	NA	NA	3.3 E-6	9.9 E-6	6.3 E-5	NA	1.2 E-3
DSA-SP08	20	1.3 E-3	NA	7.5 E-8	2.7 E-6	NA	NA	4.3 E-7	NA	1.4 E-5	6.9 E-5	7.9 E-6	NA	NA	5.1 E-5	1.5 E-5	1.2 E-4	NA	2.1 E-3
DSA-SP09	10	NA	NA	NA	1.4 E-6	NA	NA	4.8 E-7	NA	NA	NA	9.9 E-6	NA	NA	2.5 E-6	3.4 E-6	4.6 E-5	NA	7.2 E-5
DSA-SP09	20	1.6 E-5	NA	2.8 E-7	7.2 E-6	NA	NA	2.1 E-6	NA	6.0 E-6	2.7 E-5	NA	NA	NA	1.7 E-6	2.5 E-6	3.1 E-4	NA	8.3 E-4
DSA-SP10	10	NA	NA	NA	3.0 E-6	NA	NA	1.1 E-6	NA	3.5 E-5	1.0 E-4	NA	NA	NA	8.1 E-6	2.1 E-5	1.8 E-5	NA	9.9 E-4
DSA-SP10	20	2.3 E-4	NA	NA	1.1 E-6	5.5 E-7	9.6 E-5	3.2 E-5	2.9 E-6	5.1 E-5	1.3 E-4	7.3 E-6	NA	NA	1.9 E-5	2.1 E-5	3.0 E-4	NA	1.7 E-3
DSA-SP10	30	2.7 E-4	NA	NA	NA	NA	3.6 E-4	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	2.0 E-3
DSA-SP10	40	1.1 E-4	NA	1.6 E-7	NA	NA	1.8 E-4	6.6 E-5	5.1 E-6	NA	1.2 E-5	NA	NA	NA	3.9 E-6	NA	2.2 E-4	NA	7.3 E-4
DSA-SP11	10	NA	NA	2.7 E-7	NA	NA	1.8 E-5	7.5 E-6	NA	3.5 E-5	1.1 E-4	NA	NA	NA	NA	1.2 E-5	1.6 E-5	NA	6.8 E-4
DSA-SP11	20	1.2 E-4	NA	NA	NA	NA	3.7 E-6	1.6 E-6	NA	9.7 E-6	1.6 E-5	9.9 E-6	5.0 E-6	NA	2.1 E-6	3.7 E-6	4.6 E-6	NA	2.5 E-4
DSA-SP12	10	3.2 E-5	NA	3.0 E-7	NA	NA	1.9 E-5	3.9 E-6	4.6 E-6	4.2 E-5	7.7 E-5	NA	NA	NA	NA	7.6 E-6	6.6 E-6	NA	6.7 E-4
DSA-SP12	20	4.4 E-4	NA	NA	NA	NA	1.9 E-5	3.2 E-6	2.9 E-6	1.4 E-6	2.0 E-6	NA	NA	4.6 E-4	1.5 E-6	3.7 E-6	8.0 E-5	NA	1.3 E-3
DSA-SP13	10	NA	NA	1.1 E-6	NA	2.2 E-6	6.6 E-5	3.3 E-5	4.5 E-6	3.6 E-4	7.3 E-4	1.9 E-5	9.1 E-6	7.8 E-5	NA	7.0 E-5	3.3 E-5	NA	2.5 E-3
DSA-SP13	20	NA	NA	3.8 E-7	NA	NA	9.6 E-5	2.9 E-5	NA	1.5 E-4	2.5 E-4	NA	NA	NA	NA	1.6 E-5	6.1 E-5	NA	7.7 E-4
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	7.1 E-5	NA	3.7 E-4
DSA-SP15	20	1.8 E-5	NA	6.4 E-8	1.1 E-6	NA	NA	1.2 E-7	NA	NA	2.4 E-6	NA	NA	1.2 E-4	1.4 E-6	1.7 E-6	2.5 E-5	NA	3.2 E-4
DSA-SP15	30	3.2 E-5	NA	1.4 E-7	7.1 E-7	NA	2.0 E-5	2.8 E-5	1.9 E-6	NA	2.4 E-5	NA	NA	5.9 E-5	1.9 E-6	2.1 E-6	1.3 E-5	NA	3.7 E-4
DSA-SP16	10	1.2 E-3	NA	NA	NA	NA	6.3 E-4	4.8 E-4	NA	4.0 E-5	4.5 E-5	NA	NA	NA	NA	2.1 E-5	2.3 E-4	NA	2.7 E-3
DSA-SP16	20	2.5 E-3	NA	NA	NA	NA	5.8 E-4	4.6 E-4	NA	1.9 E-5	3.1 E-5	NA	NA	NA	NA	NA	3.0 E-4	NA	4.0 E-3
DSA-SP16	30	2.4 E-3	NA	NA	NA	NA	5.6 E-4	3.8 E-4	NA	2.2 E-5	5.3 E-5	NA	NA	NA	1.8 E-5	NA	1.9 E-4	NA	3.7 E-3
DSA-SP16	40	2.1 E-3	NA	NA	NA	NA	5.0 E-4	3.3 E-4	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	2.7 E-4	NA	3.2 E-3
DSA-SP17	10	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	3.7 E-6	6.6 E-4	NA	7.0 E-4
DSA-SP17	20	1.1 E-4	NA	7.8 E-8	NA	NA	NA	2.7 E-8	NA	NA	8.3 E-6	NA	NA	NA	NA	8.3 E-6	1.9 E-4	NA	3.5 E-4
DSA-SP17	30	2.6 E-4	NA	NA	5.3 E-7	NA	NA	2.2 E-8	NA	1.6 E-6	2.9 E-6	NA	NA	NA	2.1 E-6	5.3 E-6	9.2 E-5	NA	3.7 E-4
DSA-SP18	10	NA	NA	7.5 E-7	1.4 E-5	6.7 E-6	NA	NA	NA	2.5 E-5	4.5 E-5	2.4 E-4	6.0 E-5	NA	7.5 E-6	2.2 E-4	NA	NA	1.3 E-3
DSA-SP18	20	NA	NA	1.1 E-6	5.8 E-6	1.3 E-5	NA	NA	NA	4.6 E-5	9.7 E-5	4.6 E-4	1.1 E-4	NA	NA	5.0 E-4	NA	NA	2.4 E-3
DSA-SP19	10	NA	NA	6.6 E-7	4.4 E-6	2.2 E-5	NA	NA	NA	3.6 E-5	4.2 E-5	8.1 E-4	2.1 E-4	NA	NA	5.1 E-4	NA	NA	3.5 E-3
DSA-SP19	20	NA	NA	2.4 E-7	2.0 E-5	8.4 E-7	NA	NA	NA	6.3 E-6	1.4 E-5	2.7 E-5	7.0 E-6	NA	4.7 E-6	4.0 E-5	NA	NA	3.9 E-4
DSA-SP20	10	3.0 E-5	NA	NA	NA	1.0 E-6	4.2 E-5	4.2 E-5	NA	9.5 E-6	2.1 E-5	1.6 E-5	NA	3.4 E-5	5.6 E-6	2.7 E-5	8.2 E-4	NA	1.3 E-3
DSA-SP20	20	2.4 E-4	NA	7.8 E-7	NA	2.3 E-6	1.2 E-4	1.0 E-4	NA	5.4 E-5	1.6 E-4	5.5 E-5	1.6 E-5	NA	8.3 E-6	3.2 E-5	3.6 E-3	NA	5.3 E-3
DSA-SP21	10	7.1 E-5	NA	NA	NA	2.2 E-6	NA	5.4 E-6	NA	4.5 E-5	1.2 E-4	7.0 E-5	3.2 E-5	NA	NA	2.7 E-5	3.8 E-6	NA	1.1 E-3
DSA-SP21	20	7.6 E-5	NA	NA	8.0 E-7	1.1 E-6	1.2 E-5	1.2 E-5	NA	2.1 E-5	7.4 E-5	3.9 E-5	1.9 E-5	NA	NA	1.5 E-5	5.0 E-6	NA	9.1 E-4
DSA-SP22	10	NA	NA	NA	NA	2.3 E-6	1.1 E-5	8.0 E-6	NA	7.3 E-5	2.8 E-4	7.0 E-5	3.3 E-5	NA	NA	4.3 E-5	2.2 E-5	NA	1.5 E-3
DSA-SP22	20	NA	NA	NA	NA	1.0 E-6	1.6 E-5	1.6 E-5	NA	6.9 E-5	2.4 E-4	3.4 E-5	1.7 E-5	NA	NA	1.2 E-5	2.5 E-5	NA	9.0 E-4

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																	
Sample Name	Depth	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
DSA-SP23	10	NA	NA	NA	NA	NA	1.1 E-4	1.3 E-4	NA	3.1 E-5	6.4 E-5	3.2 E-5	NA	NA	NA	NA	3.6 E-5	NA	5.5 E-4
DSA-SP23	20	NA	NA	NA	NA	NA	8.7 E-5	8.4 E-5	NA	7.1 E-6	1.0 E-5	2.7 E-5	1.4 E-5	NA	NA	NA	5.3 E-5	NA	6.4 E-4
DSA-SP23	30	NA	NA	NA	NA	NA	6.0 E-5	5.5 E-5	NA	2.4 E-6	4.3 E-6	2.0 E-5	9.9 E-6	3.5 E-5	NA	NA	1.2 E-4	NA	5.2 E-4
DSA-SP24	10	8.4 E-5	NA	NA	NA	5.3 E-6	5.7 E-5	4.4 E-5	4.8 E-6	5.4 E-5	1.2 E-4	1.8 E-4	7.6 E-5	NA	NA	9.3 E-5	4.9 E-5	NA	2.1 E-3
DSA-SP24	20	NA	NA	NA	8.2 E-6	1.8 E-6	9.6 E-5	6.9 E-5	5.5 E-6	5.4 E-5	1.0 E-4	5.4 E-5	2.5 E-5	NA	NA	4.0 E-5	6.7 E-5	NA	1.2 E-3
DSA-SP24	30	1.9 E-4	NA	NA	8.8 E-7	9.8 E-7	6.6 E-5	4.8 E-5	3.6 E-6	4.3 E-5	1.0 E-4	2.5 E-5	1.2 E-5	NA	NA	3.5 E-5	1.7 E-4	NA	1.2 E-3
DSA-SP25	10	1.2 E-4	NA	NA	NA	NA	5.8 E-5	5.1 E-5	NA	1.5 E-5	1.8 E-5	8.4 E-6	NA	1.4 E-4	NA	5.8 E-6	NA	NA	4.9 E-4
DSA-SP25	20	NA	NA	NA	NA	NA	1.5 E-4	1.3 E-4	NA	4.0 E-5	1.2 E-4	NA	NA	1.6 E-4	NA	7.7 E-6	NA	NA	7.4 E-4
DSA-SP26	10	NA	NA	1.7 E-6	NA	NA	2.7 E-4	1.3 E-4	NA	1.1 E-4	7.3 E-4	1.6 E-5	NA	1.4 E-4	NA	1.5 E-5	NA	NA	1.8 E-3
DSA-SP26	20	NA	NA	NA	NA	NA	5.8 E-4	3.5 E-4	NA	3.4 E-4	9.1 E-4	NA	NA	7.2 E-4	NA	6.0 E-5	NA	NA	3.9 E-3
DSA-SP27	10	8.9 E-5	NA	NA	NA	NA	5.6 E-5	3.8 E-5	NA	1.2 E-5	5.4 E-5	NA	NA	9.5 E-5	NA	3.1 E-6	1.4 E-4	NA	5.5 E-4
DSA-SP27	20	1.5 E-5	NA	NA	NA	NA	3.9 E-5	2.5 E-5	NA	1.5 E-5	2.2 E-5	5.0 E-6	NA	2.8 E-5	1.4 E-6	5.3 E-6	3.3 E-4	NA	5.3 E-4
DSA-SP28	10	NA	NA	1.7 E-7	7.8 E-6	9.8 E-7	NA	NA	NA	2.5 E-5	3.0 E-5	1.4 E-5	NA	NA	NA	2.1 E-5	5.5 E-6	NA	3.1 E-4
DSA-SP28	20	NA	NA	6.6 E-8	9.8 E-6	NA	NA	NA	NA	1.3 E-5	1.4 E-5	6.7 E-6	NA	NA	NA	1.2 E-5	NA	NA	5.5 E-4
DSA-SP29	10	6.7 E-5	NA	NA	1.6 E-6	NA	NA	1.9 E-7	NA	NA	1.8 E-6	3.2 E-5	2.6 E-5	NA	NA	4.1 E-6	NA	NA	1.1 E-3
DSA-SP30	10	NA	NA	NA	5.4 E-6	NA	NA	NA	NA	3.3 E-6	3.2 E-6	NA	NA	NA	NA	8.2 E-6	NA	NA	9.7 E-5
DSA-SP30	20	NA	NA	1.4 E-7	6.8 E-6	6.3 E-7	NA	NA	NA	1.9 E-5	2.9 E-5	5.6 E-6	NA	NA	1.9 E-6	2.2 E-5	NA	NA	3.1 E-4
DSA-SP31	10	NA	NA	2.8 E-7	5.4 E-6	1.1 E-6	NA	NA	NA	3.0 E-5	4.5 E-5	3.0 E-5	1.2 E-5	NA	2.9 E-6	4.4 E-5	NA	NA	2.0 E-3
DSA-SP31	20	NA	NA	1.1 E-7	9.0 E-7	NA	NA	9.8 E-7	NA	1.2 E-5	2.1 E-5	1.2 E-5	NA	NA	NA	1.0 E-5	NA	NA	2.1 E-4
DSA-SP32	10	NA	NA	NA	1.5 E-6	1.2 E-6	8.5 E-5	1.2 E-5	4.7 E-6	1.0 E-5	1.4 E-5	2.5 E-5	1.2 E-5	NA	NA	2.9 E-5	NA	NA	7.7 E-4
DSA-SP32	20	2.0 E-5	NA	5.6 E-7	3.0 E-5	2.2 E-6	7.2 E-6	8.7 E-7	NA	7.1 E-5	6.9 E-5	3.4 E-5	1.6 E-5	NA	NA	1.1 E-4	NA	NA	3.8 E-3
E(d)-SP02	10	NA	NA	6.1 E-7	NA	NA	7.8 E-5	2.0 E-5	NA	3.6 E-6	1.3 E-5	1.3 E-5	NA	5.6 E-5	NA	8.2 E-6	7.4 E-6	NA	3.0 E-4
E(d)-SP02	20	NA	NA	1.3 E-7	2.4 E-6	NA	2.0 E-5	6.1 E-6	NA	1.5 E-4	1.8 E-4	7.9 E-6	NA	NA	6.3 E-5	1.9 E-5	1.5 E-5	NA	9.3 E-4
E(d)-SP03	10	NA	NA	2.8 E-6	NA	NA	1.1 E-4	2.6 E-5	8.5 E-6	6.4 E-6	5.4 E-5	NA	NA	NA	NA	8.8 E-6	1.2 E-5	NA	5.0 E-4
E(m)-SP08	10	NA	NA	1.3 E-7	5.8 E-6	1.1 E-6	NA	NA	NA	5.9 E-6	8.6 E-6	3.0 E-5	1.3 E-5	6.9 E-5	NA	7.6 E-5	NA	NA	6.7 E-4
E(m)-SP08	20	NA	NA	1.2 E-7	2.9 E-6	NA	NA	4.6 E-8	NA	1.2 E-5	7.1 E-5	8.4 E-6	NA	4.4 E-5	6.7 E-5	1.9 E-5	1.4 E-5	NA	5.8 E-4
E(M)-SP09	10	NA	NA	1.4 E-7	3.6 E-6	NA	NA	NA	NA	1.0 E-5	2.1 E-5	NA	NA	2.1 E-4	NA	2.1 E-5	NA	NA	4.7 E-4
E(M)-SP09	20	1.3 E-5	NA	1.6 E-7	2.9 E-6	NA	NA	4.6 E-7	NA	1.1 E-5	6.0 E-5	6.6 E-6	NA	1.9 E-4	6.7 E-5	2.1 E-5	1.8 E-5	NA	9.8 E-4
E(m)-SP10	10	NA	NA	1.3 E-6	NA	NA	NA	1.2 E-7	NA	5.0 E-6	3.5 E-5	1.1 E-5	NA	1.8 E-3	NA	1.3 E-5	4.4 E-5	NA	2.3 E-3
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	3.4 E-6	2.5 E-5	1.6 E-5	1.1 E-2	NA	7.7 E-6	1.2 E-4	NA	1.2 E-2
E(m)-SP11	20	NA	NA	NA	2.5 E-6	NA	NA	1.7 E-7	NA	3.4 E-6	4.6 E-6	5.0 E-6	NA	4.6 E-5	1.7 E-6	4.7 E-6	NA	NA	1.4 E-4
E(n)-SP04	10	NA	NA	5.8 E-7	1.5 E-6	NA	NA	1.0 E-7	NA	2.9 E-6	1.8 E-5	8.4 E-6	NA	NA	NA	9.3 E-6	NA	NA	2.0 E-4
E(n)-SP04	20	2.3 E-5	NA	9.7 E-8	NA	NA	NA	7.5 E-7	NA	8.3 E-6	1.9 E-5	6.5 E-6	NA	2.5 E-5	3.4 E-6	6.0 E-6	1.6 E-5	NA	3.5 E-4
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	2.3 E-6	9.4 E-6	NA	2.7 E-3	NA	5.2 E-6	NA	NA	2.8 E-3
E(n)-SP05	20	NA	NA	NA	8.0 E-7	6.0 E-7	NA	1.8 E-7	NA	2.2 E-5	4.6 E-5	9.9 E-6	NA	4.6 E-3	6.7 E-6	1.5 E-5	2.4 E-4	NA	5.7 E-3
E(n)-SP05	40	5.2 E-5	NA	NA	1.2 E-6	NA	NA	7.4 E-7	NA	NA	2.0 E-6	NA	NA	2.4 E-2	5.2 E-6	3.7 E-6	2.0 E-4	NA	2.4 E-2
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	6.4 E-6	NA	NA	4.7 E-5	NA	6.4 E-6	1.6 E-5	NA	2.2 E-4
E(n)-SP06	20	4.4 E-5	NA	1.1 E-7	1.1 E-6	9.2 E-7	6.7 E-6	5.2 E-7	NA	1.5 E-6	8.3 E-6	2.4 E-5	7.3 E-6	3.5 E-5	3.8 E-6	1.4 E-5	2.4 E-5	NA	2.9 E-4
E(n)-SP07	10	4.9 E-5	NA	1.3 E-7	NA	NA	1.1 E-5	1.2 E-6	NA	NA	4.0 E-6	NA	NA	7.3 E-5	NA	6.4 E-6	1.4 E-5	NA	2.5 E-4
E(n)-SP08	10	3.7 E-5	NA	4.7 E-7	1.5 E-6	NA	NA	7.5 E-8	NA	NA	1.1 E-5	1.4 E-5	NA	NA	NA	1.1 E-5	6.6 E-5	NA	3.0 E-4
E(n)-SP08	20	5.2 E-4	NA	NA	NA	NA	NA	3.8 E-8	NA	2.3 E-6	7.7 E-6	NA	NA	NA	4.7 E-6	4.7 E-6	6.8 E-5	NA	7.1 E-4
E(n)-SP09	10	7.1 E-5	NA	8.0 E-7	NA	NA	NA	NA	NA	NA	1.0 E-5	1.4 E-5	NA	NA	NA	8.8 E-6	8.8 E-6	NA	3.9 E-4
E(n)-SP09	20	1.3 E-3	NA	2.7 E-7	NA	NA	NA	3.8 E-8	NA	6.0 E-6	1.7 E-5	6.3 E-6	NA	NA	1.7 E-5	9.0 E-6	7.3 E-6	NA	1.5 E-3
E(N)-SP10	10	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	4.4 E-6	2.0 E-5	NA	NA	8.6 E-5	3.7 E-6	9.3 E-6	2.4 E-6	NA	2.2 E-4
E(N)-SP10	20	NA	NA	NA	9.0 E-7	NA	NA	NA	NA	5.7 E-6	2.9 E-5	NA	NA	3.9 E-5	7.9 E-6	9.3 E-6	2.4 E-6	NA	2.7 E-4
E(n)-SP11	15	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	2.5 E-6	3.4 E-6	6.7 E-6	NA	NA	2.5 E-6	9.9 E-6	NA	NA	3.9 E-4
E(n)-SP11	25	3.8 E-4	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	2.7 E-6	5.1 E-6	NA	NA	2.9 E-6	4.7 E-6	5.7 E-6	NA	4.2 E-4
E(n)-SP12	10	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	5.4 E-6	8.2 E-6	NA	NA	1.3 E-4
E(n)-SP12	20	2.3 E-5	NA	NA	8.2 E-6	NA	NA	1.2 E-7	NA	2.1 E-6	6.9 E-6	NA	NA	4.6 E-5	7.9 E-6	9.7 E-6	3.6 E-6	NA	1.4 E-4
L2-ST24-SP03	10	NA	NA	5.5 E-7	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	NA	NA	3.7 E-6	NA	NA	6.8 E-5
L2-ST24-SP03	20	1.2 E-4	NA	8.8 E-8	1.5 E-6	5.8 E-7	NA	8.1 E-8	NA	1.5 E-5	6.3 E-5	1.2 E-5	NA	4.4 E-4	9.5 E-6	1.3 E-5	3.1 E-5	NA	8.1 E-4
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	1.1 E-6	4.5 E-7	NA	NA	NA	6.3 E-5	2.1 E-4	9.9 E-6	NA	3.5 E-4	1.6 E-5	1.6 E-5	1.0 E-4	NA	8.7 E-4
L2-ST26-SP05	10	NA	NA	2.8 E-7	1.9 E-6	NA	NA	NA	NA	1.6 E-5	3.3 E-5	1.9 E-5	NA	6.0 E-4	NA	6.4 E-5	NA	NA	1.5 E-3
L2-ST26-SP05	20	NA	2.6 E-5	1.0 E-6	3.8 E-6	1.2 E-6	NA	4.0 E-8	NA	2.6 E-4	6.6 E-4	1.9 E-5	6.3 E-6	8.3 E-4	2.8 E-5	3.3 E-5	7.5 E-5	NA	2.6 E-3
L2-ST26-SP06	10	NA	NA	1.3 E-7	7.1 E-6	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	4.3 E-5	NA	7.0 E-6	NA	NA	9.7 E-5
L2-ST26-SP06	20	NA	NA	NA	2.0 E-6	5.4 E-7	NA	1.1 E-7	NA	1.1 E-5	2.2 E-5	1.6 E-5	NA	7.6 E-4	7.1 E-6	9.3 E-6	6.2 E-5	NA	9.6 E-4
L2-ST26-SP07	18	NA	NA	1.8 E-7	4.2 E-6	2.0 E-6	NA	NA	NA	2.0 E-5	4.2 E-5	5.6 E-5	2.3 E-5	NA	NA	2.0 E-5	1.2 E-6	8.4 E-6	8.8 E-4
L2-ST28_90-SP02	10	NA	NA	1.2 E-6	4.0 E-5	NA	2.5 E-4	4.7 E-5	NA	9.1 E-6	3.3 E-5	2.9 E-5	NA	NA	1.2 E-5	2.5 E-5	2.2 E-5	NA	1.6 E-3
L2-ST28_90-SP02	20	1.3 E-4	2.3 E-5	4.1 E-7	1.6 E-6	8.4 E-7	2.3 E-5	3.8 E-6	NA	1.9 E-4	5.1 E-4	1.9 E-5	NA	3.0 E-4	3.2 E-5	2.5 E-5	3.6 E-4	NA	2.1 E-3

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
Unit Hazard																		
Unit Risk																		
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	30	NA	3.2 E-9	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA
29E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA
29E-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA
29E-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA
29E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
29E-SP11	20	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-9	NA	NA
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA
DSA-SP04	30	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	20	NA	NA	NA	NA	1.6 E-8	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	1.9 E-8	NA
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-9	NA	NA
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA
DSA-SP08	20	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA
DSA-SP10	10	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA
DSA-SP10	20	NA	NA	NA	NA	6.7 E-9	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
DSA-SP10	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP11	10	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA
DSA-SP12	10	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA
DSA-SP12	20	NA	6.3 E-10	NA	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-9	NA	NA
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-9	NA	NA
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	NA	NA
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
DSA-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
DSA-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA
DSA-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA
DSA-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA
DSA-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
DSA-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
DSA-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Hexanone	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	NA
DSA-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA
DSA-SP24	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	NA
DSA-SP24	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	NA	NA
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	NA
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA
DSA-SP29	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA
DSA-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
DSA-SP32	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA
DSA-SP32	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
E(m)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	7.6 E-8	NA	NA
E(m)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA
E(n)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	NA
E(n)-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
E(n)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-9	NA	NA
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	7.7 E-9	NA	NA
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-9	NA	NA
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-9	NA	NA
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	NA
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
L2-ST28_90-SP02	20	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	7.9 E-8	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	1.2 E-3	NA	1E-03
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	2.0 E-4	NA	2E-04
28E-SP16	30	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	7.8 E-6	NA	8E-06
28E-SP16	40	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	1.2 E-5	NA	1E-05
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	2E-08
29E-SP07	20	1.5 E-8	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	5.6 E-7	NA	7E-07
29E-SP08	10	NA	NA	NA	NA	NA	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	4.4 E-8	NA	1E-07
29E-SP08	20	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	3.9 E-6	NA	4E-06
29E-SP08	30	3.8 E-8	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	1.8 E-6	NA	2E-06
29E-SP08	40	2.8 E-8	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	1.3 E-6	NA	2E-06
29E-SP09	10	5.4 E-6	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	9E-06
29E-SP09	20	9.3 E-6	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6	NA	2E-05
29E-SP09	30	2.6 E-7	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	1.4 E-9	NA	9.9 E-7	NA	2E-06
29E-SP09	40	2.8 E-7	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-8	1.8 E-9	NA	5.9 E-7	NA	1E-06
29E-SP10	10	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	1E-07
29E-SP10	20	1.3 E-7	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	3E-07
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	1.4 E-9	NA	5E-08
29E-SP11	20	3.9 E-8	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	6.1 E-9	NA	9.4 E-7	2.4 E-8	1E-06
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	4E-08
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	6.9 E-7	NA	1E-06
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	1.2 E-9	NA	5.2 E-9	NA	2E-08
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	4.7 E-10	NA	4.3 E-10	NA	4E-09
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	3E-07
DSA-SP04	20	2.4 E-7	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	9.1 E-9	NA	6.2 E-6	NA	7E-06
DSA-SP04	30	2.9 E-7	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	2.8 E-9	NA	6.9 E-6	NA	8E-06
DSA-SP04	40	1.7 E-7	2.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	2.5 E-9	NA	4.3 E-6	NA	5E-06
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-7	NA	8E-07
DSA-SP05	20	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	9.1 E-9	NA	3.0 E-7	NA	4E-07
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-10	NA	8.0 E-8	NA	9E-08
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	3E-07
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP08	10	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-10	NA	2.7 E-8	NA	4E-07
DSA-SP08	20	NA	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	5.2 E-8	NA	6E-07
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	2.0 E-8	NA	2E-08
DSA-SP09	20	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	1.3 E-7	NA	2E-07
DSA-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	7.7 E-9	NA	2E-07
DSA-SP10	20	2.0 E-8	8.6 E-8	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	1.3 E-7	NA	4E-07
DSA-SP10	30	7.1 E-8	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	5E-07
DSA-SP10	40	NA	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	9.5 E-8	NA	1E-07
DSA-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	6E-08
DSA-SP11	20	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	1.9 E-9	NA	5E-08
DSA-SP12	10	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	7E-08
DSA-SP12	20	6.8 E-8	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	3.1 E-10	NA	3.4 E-8	NA	3E-07
DSA-SP13	10	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	5.8 E-9	NA	NA	1.4 E-8	NA	3E-07
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	7E-08
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	3.0 E-8	NA	5E-08
DSA-SP15	20	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	3.0 E-10	NA	1.1 E-8	NA	3E-08
DSA-SP15	30	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-9	4.0 E-10	NA	5.6 E-9	NA	3E-08
DSA-SP16	10	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	5E-07
DSA-SP16	20	NA	9.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	1E-06
DSA-SP16	30	NA	8.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	8.2 E-8	NA	1E-06
DSA-SP16	40	NA	7.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	9E-07
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	3E-07
DSA-SP17	20	NA	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-8	NA	1E-07
DSA-SP17	30	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	3.9 E-8	NA	1E-07
DSA-SP18	10	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	1E-07
DSA-SP18	20	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-07
DSA-SP19	10	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-07
DSA-SP19	20	NA	NA	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	NA	3E-08
DSA-SP20	10	NA	1.1 E-8	NA	NA	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	1.2 E-9	NA	3.5 E-7	NA	4E-07
DSA-SP20	20	NA	9.1 E-8	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	1.5 E-6	NA	2E-06
DSA-SP21	10	NA	2.7 E-8	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	5E-08
DSA-SP21	20	NA	2.9 E-8	NA	NA	NA	9.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	6E-08
DSA-SP22	10	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-9	NA	1E-07
DSA-SP22	20	NA	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	4E-08

Table 5.3-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	ILCR
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	5E-08
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	3E-08
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	5.2 E-8	NA	6E-08
DSA-SP24	10	NA	3.2 E-8	NA	NA	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	1E-07
DSA-SP24	20	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	1E-07
DSA-SP24	30	NA	7.0 E-8	NA	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	2E-07
DSA-SP25	10	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	7E-08
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	3E-08
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	1E-07
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	3E-07
DSA-SP27	10	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA	6.2 E-8	NA	1E-07
DSA-SP27	20	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	3.0 E-10	NA	1.4 E-7	NA	2E-07
DSA-SP28	10	NA	NA	NA	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	6E-08
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-08
DSA-SP29	10	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-08
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-08
DSA-SP30	20	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	7E-08
DSA-SP31	10	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	NA	1E-07
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-08
DSA-SP32	10	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6E-08
DSA-SP32	20	NA	7.5 E-9	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-07
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	3.1 E-9	NA	3E-08
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	6.3 E-9	NA	7E-08
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	4E-08
E(m)-SP08	10	NA	NA	NA	NA	NA	9.8 E-10	NA	NA	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	NA	NA	5E-08
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	1.4 E-8	NA	5.9 E-9	NA	7E-08
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	7E-08
E(M)-SP09	20	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	1.4 E-8	NA	7.5 E-9	NA	1E-07
E(m)-SP10	10	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	1.9 E-8	NA	2E-07
E(m)-SP10	20	8.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-7	NA	NA	5.0 E-8	NA	1E-06
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-9	3.5 E-10	NA	NA	NA	2E-08
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-08
E(n)-SP04	20	NA	8.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	7.0 E-10	NA	6.9 E-9	NA	3E-08
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	2E-07
E(n)-SP05	20	1.5 E-8	NA	NA	NA	NA	5.3 E-10	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	1.4 E-9	NA	1.0 E-7	NA	5E-07
E(n)-SP05	40	5.3 E-8	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	1.1 E-9	NA	8.5 E-8	NA	2E-06
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	7.0 E-9	NA	3E-08
E(n)-SP06	20	4.3 E-8	1.7 E-8	NA	NA	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	7.9 E-10	NA	1.0 E-8	NA	8E-08
E(n)-SP07	10	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	NA	6.2 E-9	NA	4E-08
E(n)-SP08	10	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	6E-08
E(n)-SP08	20	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	2.9 E-8	NA	2E-07
E(n)-SP09	10	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	7E-08
E(n)-SP09	20	1.1 E-8	5.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	3.1 E-9	NA	5E-07
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	7.8 E-10	NA	1.0 E-9	NA	3E-08
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	1.7 E-9	NA	1.0 E-9	NA	3E-08
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	NA	NA	NA	1E-08
E(n)-SP11	25	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	2.4 E-9	NA	1E-07
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	9E-09
E(n)-SP12	20	NA	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-9	1.7 E-9	NA	1.5 E-9	NA	2E-08
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7E-09
L2-ST24-SP03	20	NA	4.3 E-8	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	2.0 E-9	NA	1.3 E-8	NA	1E-07
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
L2-ST26-SP04	20	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	3.3 E-9	NA	4.3 E-8	NA	1E-07
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	2E-07
L2-ST26-SP05	20	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	5.8 E-9	NA	3.2 E-8	NA	2E-07
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA	NA	NA	1E-08
L2-ST26-SP06	20	NA	NA	NA	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	5.7 E-8	1.5 E-9	NA	2.6 E-8	NA	1E-07
L2-ST26-SP07	18	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	2.3 E-8	1E-07
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	9.4 E-9	NA	5E-08
L2-ST28_90-SP02	20	NA	4.9 E-8	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	6.6 E-9	NA	1.5 E-7	NA	3E-07

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.3-6) x the unit hazard or unit risk for the chemical).

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	2.3 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1
Unit Risk		NA	4.0 E-4	NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA
28E-SP16	10	43000		20000														
28E-SP16	20			9100								28000						8500
28E-SP16	30		97	1500		190												
28E-SP16	40		210	3700														
29E-SP07	10														95			12
29E-SP07	20			110												13		98
29E-SP08	10				7.9					94		71	6.7	25	380	43		120
29E-SP08	20			110														
29E-SP08	30			240														
29E-SP08	40			230														
29E-SP09	10	15		18												9.6		
29E-SP09	20	40		88														
29E-SP09	30			1000														33
29E-SP09	40			1300											130	9.4		29
29E-SP10	10									34					180	31		4.7
29E-SP10	20			4.4						20					90	36		18
29E-SP11	10									57		90		44	240	22		37
29E-SP11	20			210				56								16		46
59E-SP08	10																	
59E-SP09	10								72									250
59E-SP10	20														120	8.9		34
59E-SP13	20																	10
DSA-SP04	10																	
DSA-SP04	20		42	3000												32		140
DSA-SP04	30		58	4100														71
DSA-SP04	40			3000														100
DSA-SP05	10																	190
DSA-SP05	20	14		21		15		30		11		12		5.0	88	20	41	360
DSA-SP06	10														230	5.4		160
DSA-SP06	20									45		12			680			
DSA-SP07	10																	41
DSA-SP07	20																	
DSA-SP08	10								40							14		150
DSA-SP08	20							37		56		23		8.9	240	45		440
DSA-SP09	10																	27
DSA-SP09	20	21		33						35		27			650	14		190
DSA-SP10	10					6.2				93					600	77		160
DSA-SP10	20			64		6.4		21		22					110	110		1000
DSA-SP10	30			340														48
DSA-SP10	40			150											290			93
DSA-SP11	10					7.2										22		190
DSA-SP11	20															7.4		270
DSA-SP12	10					7.8										20		150
DSA-SP12	20	13	13	18		5.3									60	6.3		15
DSA-SP13	10									38		12			110	130		210
DSA-SP13	20															40		260
DSA-SP15	10																	3.8
DSA-SP15	20											12			150			63
DSA-SP15	30											16			220	13		280
DSA-SP16	10														410			170
DSA-SP16	20																	750
DSA-SP16	30																	430
DSA-SP16	40																	150
DSA-SP17	10																	66
DSA-SP17	20															4.7		78
DSA-SP17	30														220			24
DSA-SP18	10				14				15	320			20		130	56		
DSA-SP18	20				33		9.9		60	520	60		56		250	170		11
DSA-SP19	10				49		14		18				75	8.5	64	81		31
DSA-SP19	20								9.1	330		15			110	24		
DSA-SP20	10									55					220	32		19
DSA-SP20	20				24					97			16		310	190		120
DSA-SP21	10				22		7.5						19		82	12		32
DSA-SP21	20				29		8.3		6.8	54			21	5.9	370	24		680
DSA-SP22	10				19		6.2		13	39			18	8.3	230	59		23
DSA-SP22	20				24		6.9		15	46			18	5.4	240	26		58
DSA-SP23	10									44					180	20		82
DSA-SP23	20				20								14		340	12		490

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard		1.4 E-1	9.8 E-1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	2.3 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1
Unit Risk		NA	4.0 E-4	NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA
DSA-SP23	30				22								16		200	12		190
DSA-SP24	10				29		12		60	21			43		120	48		53
DSA-SP24	20				23				100	30			24		190	78		160
DSA-SP24	30	13			17				130	77			16		660	140		54
DSA-SP25	10															11		53
DSA-SP25	20															23		340
DSA-SP26	10															58		120
DSA-SP26	20															280		140
DSA-SP27	10															7.1		70
DSA-SP27	20									22						6.9		170
DSA-SP28	10									68				7.7	260	30		38
DSA-SP28	20									110	26	34		43	350	25		31
DSA-SP29	10				36		12						13					10
DSA-SP30	10														160	7.5		74
DSA-SP30	20									68					290	66		7.0
DSA-SP31	10				6.3					150		62	5.7	35	650	62		30
DSA-SP31	20									63					220	40		69
DSA-SP32	10				6.0					55		13			190	31		19
DSA-SP32	20				8.3					510	52	200	6.9	31	2000	290		21
E(d)-SP02	10								12							10		56
E(d)-SP02	20			26				50		47		19		9.8	210	39		480
E(d)-SP03	10			14					73							18		29
E(m)-SP08	10				14					27			8.6		110	22		140
E(m)-SP08	20							53		33		19		10	160	30		110
E(M)-SP09	10									30					140	29		100
E(M)-SP09	20							31		90		23		10	380	77		340
E(m)-SP10	10	8.8							99						68	18		80
E(m)-SP10	20																	91
E(m)-SP11	20									66				7.8	400	15		19
E(n)-SP04	10								33	22					120	13		67
E(n)-SP04	20															8.2		1300
E(n)-SP05	10								11							6.8		4.8
E(n)-SP05	20							46		58					220	34		3700
E(n)-SP05	40														140			
E(n)-SP06	10								8.0						73	9.2		230
E(n)-SP06	20			21											66	3.9		44
E(n)-SP07	10			6.4											63	6.8		110
E(n)-SP08	10								26						93	9.0		190
E(n)-SP08	20	8.7														4.8		510
E(n)-SP09	10								76						91	22		26
E(n)-SP09	20							26	11							7.8		46
E(N)-SP10	10														58	11		76
E(N)-SP10	20									22					110	22		620
E(n)-SP11	15									55		22			240	8.9		
E(n)-SP11	25															4.3		14
E(n)-SP12	10									24					130	4.3		
E(n)-SP12	20									43					210	7.3		13
L2-ST24-SP03	10								7.2						54	4.1		63
L2-ST24-SP03	20							55							89	27		80
L2-ST26-SP04	10																	
L2-ST26-SP04	20							31						5.6		24		170
L2-ST26-SP05	10				11					43			7.0		180	67		420
L2-ST26-SP05	20							28		200		22		14	540	120		220
L2-ST26-SP06	10													10		5.2		22
L2-ST26-SP06	20							25		18					59	10		180
L2-ST26-SP07	18									78		15			3000	100		160
L2-ST28_90-SP02	10			25					80	140		34			1200	22		42
L2-ST28_90-SP02	20			56				37		82					260	80		760

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+1	1.5 E+1	2.0 E+1	1.2 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		1.0 E-2	5.6 E-3	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
28E-SP16	10			55000							2600				800000		5900	10000000	
28E-SP16	20											3600			97000			3200000	
28E-SP16	30		310	1400					2500		120	220			1900			180000	
28E-SP16	40		510	2200					4900						13000			380000	
29E-SP07	10								24						60		8.4		
29E-SP07	20	11	25	22				11	240		23	60			740		6.8	8900	
29E-SP08	10			5.1	6.9	55	5.2		39		82	66	14	5.3		43	71	380	
29E-SP08	20		50	1600					360			36			1600			62000	
29E-SP08	30	42	54	330					400						2500			42000	
29E-SP08	40	41	64	240					360						3300			41000	
29E-SP09	10	2200	990	330					120	15	11	15					20	18000	
29E-SP09	20	7000	2400	1400					580	75							40	60000	
29E-SP09	30	280	210	330				170	3800	100	90	160			1400	26	29	23000	
29E-SP09	40	410	260	360		26		210	4200	91	58	130			840	33	30	18000	
29E-SP10	10	10		4.8	4.4	16					8.6	44	7.8				10	340	
29E-SP10	20	100	35	100	11				92	5.6	56	130	9.4				38	780	
29E-SP11	10				9.6	19			96		47	20	13			76	84	12	
29E-SP11	20	29	120	330	16			31	480		32	260			240	74	37	15000	7.6
59E-SP08	10				42							51						310	
59E-SP09	10											100			950			5900	
59E-SP10	20					10			64		33	60	6.8		13	14	38	82	
59E-SP13	20											4.6			18	5.7	5.5	6.9	
DSA-SP04	10																	2700	
DSA-SP04	20	180	470	210				4200	110000	57	96	370			280	110	52	98000	
DSA-SP04	30	320	770	200				3700	100000			74			1400	51		160000	
DSA-SP04	40	250	580	160				2600	72000			84			1200	46		130000	
DSA-SP05	10								360									6700	
DSA-SP05	20		47			17			480		40	160	5.9		7.8	110	36	4700	
DSA-SP06	10					12					7.0	8.9	5.8			5.7	7.5	690	
DSA-SP06	20					47						8.6	8.4				12		
DSA-SP07	10																	2200	
DSA-SP07	20																5.6		
DSA-SP08	10		210		21	20			170			57				4.8	17	230	
DSA-SP08	20		530		4.8	33			150		48	240	8.8			130	45	820	
DSA-SP09	10					10			90				6.2			3.7	5.8	170	
DSA-SP09	20		6.5		18	88			720		21	95				4.4	7.4	2100	
DSA-SP10	10					22			200		78	230				12	36	66	
DSA-SP10	20	15	93			13	6.6	200	11000	7.4	180	450	8.1			47	63	2000	
DSA-SP10	30	78	160					1100	62000									7700	
DSA-SP10	40		85		16			730	44000	26		76				15		2900	
DSA-SP11	10				9.8			20	1400		76	240					20	59	
DSA-SP11	20		49					7.6	540		34	57	11	5.0		5.2	11	31	
DSA-SP12	10		7.2		11			21	720	6.5	92	170					13	24	
DSA-SP12	20	51	180					40	1100	7.2	5.0	6.9			200	3.7	11	540	
DSA-SP13	10				41		14	75	6200	6.3	800	1600	12	5.2	18		120	120	
DSA-SP13	20				24			200	10000		520	870					49	410	
DSA-SP15	10														68			260	
DSA-SP15	20		7.4		4.1	13			40			8.3			51	3.6	5.0	170	
DSA-SP15	30		19		14	13		59	14000	7.2		120			37	7.3	9.6	130	
DSA-SP16	10		270					720	90000		88	98					36	840	
DSA-SP16	20		1000					1200	160000		67	110						2000	
DSA-SP16	30		1400					1700	190000		110	270				67		1900	
DSA-SP16	40		1600					2000	220000			83						3500	
DSA-SP17	10				9.2							49					6.3	2400	
DSA-SP17	20		44		5.0				9.3			29					25	1300	
DSA-SP17	30		150			9.7			11		8.2	15				8.2	24	910	
DSA-SP18	10				27	100	43				54	100	150	34		11	380		
DSA-SP18	20				67	71	160				160	340	510	110			1500		
DSA-SP19	10				24	32	140				80	93	510	120			870		
DSA-SP19	20				15	240	10				22	50	30	7.0		12	120		
DSA-SP20	10		6.7				6.7	48	7900		21	46	9.9		7.8	8.2	47	3000	
DSA-SP20	20		99		50		27	240	35000		190	570	61	16		21	97	24000	
DSA-SP21	10		16				14		1000		100	270	44	18			47	14	
DSA-SP21	20		31			9.8	13	24	4000		74	260	43	19			46	34	
DSA-SP22	10						15	13	1500		160	610	44	19			73	82	
DSA-SP22	20						12	33	5400		240	840	38	17			36	170	
DSA-SP23	10							120	24000		68	140	20					130	
DSA-SP23	20							180	29000		25	36	30	14				360	

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+1	1.5 E+1	2.0 E+1	1.2 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	3.4 E+0	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		1.0 E-2	5.6 E-3	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
DSA-SP23	30							180	28000		12	22	34	15	22			1200	
DSA-SP24	10		19				34	65	8200	6.8	120	260	110	43			160	180	
DSA-SP24	20					100	22	200	24000	14	190	360	60	25			120	450	
DSA-SP24	30		110			16	17	200	24000	14	220	520	43	18			160	1700	
DSA-SP25	10		26					66	9500		34	39	5.3		32		9.9		
DSA-SP25	20							320	45000		140	420			70		23		
DSA-SP26	10				61			310	24000		240	1600	10		32		25		
DSA-SP26	20							1200	120000		1200	3200			310		180		
DSA-SP27	10		20					64	7100		27	120			22		5.3	530	
DSA-SP27	20		6.0					81	8600		52	78	5.6		12	3.6	16	2200	
DSA-SP28	10				6.0	57	6.3				54	66	8.9				36	20	
DSA-SP28	20				4.2	120					47	48	7.4				37		
DSA-SP29	10		15			12			35			4.0	20	15			7.0		
DSA-SP30	10					39					7.2	7.1					14		
DSA-SP30	20				8.9	83	7.5				65	100	6.2			4.7	67		
DSA-SP31	10				10	39	7.3				67	100	19	6.6		4.3	76		
DSA-SP31	20				7.3	11			340		43	74	13				31		
DSA-SP32	10					11	7.4	96	2200	6.6	22	30	16	6.6			49		
DSA-SP32	20		8.1		36	370	26	15	300		250	240	38	16			340		
E(d)-SP02	10				22			88	3800		7.9	28	7.9		13		14	27	
E(d)-SP02	20				8.0	29		42	2100		530	620	8.8			160	58	100	
E(d)-SP03	10				100			120	4800	12	14	120					15	44	
E(m)-SP08	10				4.8	42	7.1				13	19	19	7.4	16		130		
E(m)-SP08	20				7.8	36			16		41	250	9.3		19	170	57	94	
E(M)-SP09	10				5.0	26					22	46			48		36		
E(M)-SP09	20		5.4		10	35			160		39	210	7.3		83	170	62	120	
E(m)-SP10	10	20			46				22		11	77	6.8		420		22	160	
E(m)-SP10	20	62							49			12	28	16	4900		23	790	
E(m)-SP11	20					30			58		12	16	5.5		20	4.2	14		
E(n)-SP04	10				21	11			19		6.4	39	5.3				16		
E(n)-SP04	20		9.2		6.2				260		29	67	7.2		11	8.5	18	110	
E(n)-SP05	10								28			5.0	5.9		630		8.9		
E(n)-SP05	20	11				9.8	7.1		63		76	160	11		2000	17	46	1600	
E(n)-SP05	40	77	40			22			490			13			20000	20	22	2600	
E(n)-SP06	10								21			14			11		11	60	
E(n)-SP06	20	32	18		6.8	13	11	14	180		5.4	29	27	7.3	15	9.6	42	160	
E(n)-SP07	10		11		4.6			13	220			8.8			17		11	53	
E(n)-SP08	10		8.4		17	11			14			25	9.0				18	240	
E(n)-SP08	20		210						13		8.1	27				12	14	460	
E(n)-SP09	10		16		29							22	8.5				15	32	
E(n)-SP09	20	8.1	540		17				13		21	59	7.0			44	27	49	
E(N)-SP10	10					10					9.6	44			20	5.5	16	8.9	
E(N)-SP10	20					11					20	100			17	20	28	16	
E(n)-SP11	15					28					7.4	9.9	6.0			5.2	24		
E(n)-SP11	25		190						240			12	7.3			9.4	18	47	
E(n)-SP12	10					560						7.8				8.0	14		
E(n)-SP12	20		9.4			100			40		7.3	24			20	20	29	24	
L2-ST24-SP03	10				20							11					6.3		
L2-ST24-SP03	20		47		5.6	18	6.9		28		51	220	13		190	24	39	210	
L2-ST26-SP04	10																		
L2-ST26-SP04	20					14	5.4				220	740	11		150	40	47	690	
L2-ST26-SP05	10				10	14					35	72	12		140		110		
L2-ST26-SP05	20			11	65	47	14		14		900	2300	21	6.3	360	70	100	510	
L2-ST26-SP06	10				4.6	52						6.1			9.9		12		
L2-ST26-SP06	20					25	6.4		39		40	78	18		330	18	28	420	
L2-ST26-SP07	18				11	49	22				66	140	59	22			56	7.6	6.7
L2-ST28_90-SP02	10				43	290		280	8800		20	72	18			18	42	81	
L2-ST28_90-SP02	20		53	9.8	26	20	10	48	1300		670	1800	21		130	80	76	2400	

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
28E-SP16	10	3.7 E-5	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	7.2 E-3	NA	NA	NA	NA	NA	3.5 E-5
28E-SP16	30	NA	1.9 E-7	3.5 E-5	NA	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	3.0 E-7	6.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	9.8 E-8
29E-SP07	20	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	4.0 E-7
29E-SP08	10	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	8.5 E-8	NA	3.7 E-5	3.2 E-7	3.4 E-8	8.2 E-7	6.9 E-6	NA	9.8 E-7
29E-SP08	20	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	5.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	1.3 E-8	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA
29E-SP09	20	1.7 E-8	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8
29E-SP09	40	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-8	3.8 E-7	NA	5.9 E-8
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	3.9 E-7	5.0 E-6	NA	3.8 E-8
29E-SP10	20	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	9.0 E-9	NA	NA	NA	NA	9.7 E-8	2.9 E-6	NA	7.3 E-8
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	4.7 E-5	NA	6.0 E-8	5.2 E-7	3.5 E-6	NA	3.0 E-7
29E-SP11	20	NA	NA	7.4 E-6	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	1.9 E-7
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-6
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	7.1 E-7	NA	1.4 E-7
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	1.2 E-7	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	5.7 E-7
DSA-SP04	30	NA	1.1 E-7	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7
DSA-SP04	40	NA	NA	5.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6
DSA-SP05	20	6.0 E-9	NA	7.4 E-7	NA	8.7 E-6	NA	2.7 E-8	NA	5.0 E-9	NA	3.1 E-6	NA	3.4 E-9	9.5 E-8	1.6 E-6	4.8 E-7	1.5 E-6
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	8.6 E-7	NA	1.3 E-6
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	3.1 E-6	NA	NA	7.3 E-7	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	1.2 E-6
DSA-SP08	20	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	2.5 E-8	NA	5.9 E-6	NA	6.1 E-9	2.6 E-7	3.6 E-6	NA	1.8 E-6
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7
DSA-SP09	20	9.0 E-9	NA	1.2 E-6	NA	NA	NA	NA	NA	1.6 E-8	NA	7.0 E-6	NA	NA	7.0 E-7	1.1 E-6	NA	7.7 E-7
DSA-SP10	10	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	8.4 E-8	NA	NA	NA	NA	1.3 E-6	1.2 E-5	NA	1.3 E-6
DSA-SP10	20	NA	NA	2.3 E-6	NA	3.7 E-6	NA	1.9 E-8	NA	9.9 E-9	NA	NA	NA	NA	1.2 E-7	8.8 E-6	NA	4.1 E-6
DSA-SP10	30	NA	NA	8.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7
DSA-SP10	40	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	1.9 E-7
DSA-SP11	10	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	1.5 E-6
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	1.1 E-6
DSA-SP12	10	NA	NA	NA	NA	9.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	1.2 E-6
DSA-SP12	20	5.5 E-9	3.8 E-8	6.3 E-7	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	5.0 E-7	NA	6.1 E-8
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	6.2 E-6	NA	NA	2.4 E-7	2.1 E-5	NA	1.7 E-6
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	1.1 E-6
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	1.6 E-7	NA	NA	2.6 E-7
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	1.6 E-7	6.9 E-7	NA	7.6 E-7
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	1.4 E-6
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-6
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	3.2 E-7
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	6.5 E-8
DSA-SP18	10	NA	NA	NA	6.6 E-6	NA	NA	NA	7.1 E-7	2.9 E-7	NA	NA	9.5 E-7	NA	2.8 E-7	9.0 E-6	NA	NA
DSA-SP18	20	NA	NA	NA	7.8 E-6	NA	2.7 E-6	NA	1.4 E-6	2.3 E-7	4.0 E-8	NA	1.3 E-6	NA	2.7 E-7	1.4 E-5	NA	4.5 E-8
DSA-SP19	10	NA	NA	NA	2.3 E-5	NA	7.7 E-6	NA	8.6 E-7	NA	NA	NA	3.6 E-6	1.2 E-8	1.4 E-7	1.3 E-5	NA	2.5 E-7
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	1.5 E-7	NA	3.9 E-6	NA	NA	1.2 E-7	1.9 E-6	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	4.7 E-7	5.1 E-6	NA	1.5 E-7
DSA-SP20	20	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	4.4 E-8	NA	NA	3.8 E-7	NA	3.3 E-7	1.5 E-5	NA	4.9 E-7
DSA-SP21	10	NA	NA	NA	1.0 E-5	NA	4.2 E-6	NA	NA	NA	NA	NA	9.0 E-7	NA	1.8 E-7	1.9 E-6	NA	2.6 E-7
DSA-SP21	20	NA	NA	NA	6.9 E-6	NA	2.3 E-6	NA	1.6 E-7	2.4 E-8	NA	NA	5.0 E-7	4.0 E-9	4.0 E-7	1.9 E-6	NA	2.8 E-6
DSA-SP22	10	NA	NA	NA	9.0 E-6	NA	3.4 E-6	NA	6.2 E-7	3.5 E-8	NA	NA	8.6 E-7	1.1 E-8	5.0 E-7	9.4 E-6	NA	1.9 E-7
DSA-SP22	20	NA	NA	NA	5.7 E-6	NA	1.9 E-6	NA	3.6 E-7	2.1 E-8	NA	NA	4.3 E-7	3.7 E-9	2.6 E-7	2.1 E-6	NA	2.4 E-7
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	3.9 E-7	3.2 E-6	NA	6.7 E-7
DSA-SP23	20	NA	NA	NA	4.7 E-6	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	3.7 E-7	9.6 E-7	NA	2.0 E-6

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
DSA-SP23	30	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	1.4 E-7	6.4 E-7	NA	5.1 E-7
DSA-SP24	10	NA	NA	NA	1.4 E-5	NA	6.6 E-6	NA	2.9 E-6	1.9 E-8	NA	NA	2.0 E-6	NA	2.6 E-7	7.7 E-6	NA	4.3 E-7
DSA-SP24	20	NA	NA	NA	5.4 E-6	NA	NA	NA	2.4 E-6	1.4 E-8	NA	NA	5.7 E-7	NA	2.0 E-7	6.2 E-6	NA	6.5 E-7
DSA-SP24	30	3.7 E-9	NA	NA	2.7 E-6	NA	NA	NA	2.1 E-6	2.3 E-8	NA	NA	2.5 E-7	NA	4.7 E-7	7.5 E-6	NA	1.5 E-7
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	4.3 E-7
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	1.4 E-6
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	9.8 E-7
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	5.7 E-7
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	5.7 E-7
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	5.5 E-7	NA	6.9 E-7
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	NA	1.0 E-8	5.6 E-7	4.8 E-6	NA	3.1 E-7
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	1.7 E-8	8.8 E-6	NA	2.9 E-8	3.8 E-7	2.0 E-6	NA	1.3 E-7
DSA-SP29	10	NA	NA	NA	1.7 E-5	NA	6.6 E-6	NA	NA	NA	NA	NA	6.2 E-7	NA	NA	NA	NA	8.1 E-8
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	1.2 E-6	NA	6.0 E-7
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	3.1 E-7	5.3 E-6	NA	2.8 E-8
DSA-SP31	10	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	1.4 E-7	NA	3.2 E-5	2.7 E-7	4.8 E-8	1.4 E-6	9.9 E-6	NA	2.4 E-7
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	2.4 E-7	3.2 E-6	NA	2.8 E-7
DSA-SP32	10	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	5.0 E-8	NA	6.7 E-6	NA	NA	4.1 E-7	5.0 E-6	NA	1.5 E-7
DSA-SP32	20	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	2.3 E-7	3.4 E-8	5.2 E-5	1.6 E-7	2.1 E-8	2.2 E-6	2.3 E-5	NA	8.5 E-8
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	4.6 E-7
E(d)-SP02	20	NA	NA	9.1 E-7	NA	NA	NA	4.5 E-8	NA	2.1 E-8	NA	4.9 E-6	NA	6.7 E-9	2.3 E-7	3.1 E-6	NA	2.0 E-6
E(d)-SP03	10	NA	NA	9.8 E-7	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	2.4 E-7
E(m)-SP08	10	NA	NA	NA	6.6 E-6	NA	NA	NA	NA	2.4 E-8	NA	NA	4.1 E-7	NA	2.4 E-7	3.5 E-6	NA	1.1 E-6
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	1.5 E-8	NA	4.9 E-6	NA	6.8 E-9	1.7 E-7	2.4 E-6	NA	4.5 E-7
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	3.0 E-7	4.6 E-6	NA	8.1 E-7
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	4.1 E-8	NA	5.9 E-6	NA	6.8 E-9	4.1 E-7	6.2 E-6	NA	1.4 E-6
E(m)-SP10	10	7.5 E-9	NA	NA	NA	NA	NA	NA	4.7 E-6	NA	NA	NA	NA	NA	1.5 E-7	2.9 E-6	NA	6.5 E-7
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	5.3 E-9	4.3 E-7	1.2 E-6	NA	7.7 E-8
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	2.0 E-8	NA	NA	NA	NA	2.6 E-7	2.1 E-6	NA	5.4 E-7
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-7	NA	5.3 E-6
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	3.9 E-8
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	2.6 E-8	NA	NA	NA	NA	2.4 E-7	2.7 E-6	NA	1.5 E-5
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	1.6 E-7	1.5 E-6	NA	1.9 E-6
E(n)-SP06	20	NA	NA	7.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	3.1 E-7	NA	1.8 E-7
E(n)-SP07	10	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	1.1 E-6	NA	8.9 E-7
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	2.0 E-7	1.4 E-6	NA	1.5 E-6
E(n)-SP08	20	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	2.1 E-6
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	NA	NA	NA	2.0 E-7	3.5 E-6	NA	2.1 E-7
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	2.3 E-8	2.6 E-7	NA	NA	NA	NA	NA	NA	6.2 E-7	NA	1.9 E-7
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	1.8 E-6	NA	6.2 E-7
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	1.2 E-7	1.8 E-6	NA	2.5 E-6
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	7.6 E-6	NA	NA	3.4 E-7	9.5 E-7	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	4.6 E-8
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	2.8 E-7	6.9 E-7	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	2.3 E-7	5.8 E-7	NA	5.3 E-8
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	1.2 E-7	6.6 E-7	NA	5.1 E-7
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	9.6 E-8	2.2 E-6	NA	3.3 E-7
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	3.8 E-9	NA	1.9 E-6	NA	6.9 E-7
L2-ST26-SP05	10	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	3.9 E-8	NA	NA	3.3 E-7	NA	3.9 E-7	1.1 E-5	NA	3.4 E-6
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	9.0 E-8	NA	5.7 E-6	NA	9.5 E-9	5.8 E-7	9.6 E-6	NA	8.9 E-7
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	8.3 E-7	NA	1.8 E-7
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	8.1 E-9	NA	NA	NA	NA	6.4 E-8	8.0 E-7	NA	7.3 E-7
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	4.3 E-6	NA	NA	3.6 E-6	8.9 E-6	NA	7.2 E-7
L2-ST28_90-SP02	10	NA	NA	1.8 E-6	NA	NA	NA	NA	3.8 E-6	1.3 E-7	NA	1.8 E-5	NA	NA	2.6 E-6	3.5 E-6	NA	3.4 E-7
L2-ST28_90-SP02	20	NA	NA	2.0 E-6	NA	NA	NA	3.3 E-8	NA	3.7 E-8	NA	NA	NA	NA	2.8 E-7	6.4 E-6	NA	3.1 E-6

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	9.0 E-2	NA	9.3 E-5	7.3 E-2	NA	1.7 E-1
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	5.5 E-3	NA	NA	1.2 E-2	NA	2.5 E-2
28E-SP16	30	NA	1.3 E-5	5.4 E-5	NA	NA	NA	NA	1.2 E-7	NA	2.1 E-7	1.1 E-6	NA	NA	7.1 E-5	NA	NA	4.4 E-4	NA	6.8 E-4
28E-SP16	40	NA	1.6 E-5	6.3 E-5	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	6.9 E-4	NA	1.2 E-3
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	NA	NA	6.8 E-6	NA	1.3 E-7	NA	NA	7.2 E-6
29E-SP07	20	5.9 E-7	1.6 E-6	1.3 E-6	NA	NA	NA	1.3 E-7	1.7 E-8	NA	6.1 E-8	4.7 E-7	NA	NA	4.2 E-5	NA	5.4 E-8	3.2 E-5	NA	8.3 E-5
29E-SP08	10	NA	NA	5.9 E-7	5.1 E-9	2.7 E-7	2.1 E-8	NA	5.5 E-9	NA	4.4 E-7	1.0 E-6	5.4 E-7	2.5 E-7	NA	8.2 E-7	1.1 E-6	2.8 E-6	NA	5.7 E-5
29E-SP08	20	NA	3.1 E-6	9.2 E-5	NA	NA	NA	NA	2.6 E-8	NA	NA	2.8 E-7	NA	NA	9.0 E-5	NA	NA	2.3 E-4	NA	4.1 E-4
29E-SP08	30	1.5 E-6	2.3 E-6	1.3 E-5	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	9.4 E-5	NA	NA	1.0 E-4	NA	2.2 E-4
29E-SP08	40	1.1 E-6	2.0 E-6	6.9 E-6	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	9.3 E-5	NA	NA	7.4 E-5	NA	1.8 E-4
29E-SP09	10	2.3 E-4	1.2 E-4	3.8 E-5	NA	NA	NA	NA	1.7 E-8	2.7 E-7	5.9 E-8	2.3 E-7	NA	NA	NA	NA	3.2 E-7	1.3 E-4	NA	5.3 E-4
29E-SP09	20	3.7 E-4	1.5 E-4	8.1 E-5	NA	NA	NA	NA	4.1 E-8	6.8 E-7	NA	NA	NA	NA	NA	NA	3.2 E-7	2.2 E-4	NA	8.3 E-4
29E-SP09	30	1.0 E-5	8.8 E-6	1.3 E-5	NA	NA	NA	1.4 E-6	1.8 E-7	6.1 E-7	1.6 E-7	8.3 E-7	NA	NA	5.3 E-5	1.7 E-7	1.5 E-7	5.6 E-5	NA	1.7 E-4
29E-SP09	40	1.1 E-5	8.1 E-6	1.0 E-5	NA	3.2 E-8	NA	1.3 E-6	1.5 E-7	4.1 E-7	7.8 E-8	5.1 E-7	NA	NA	2.4 E-5	1.6 E-7	1.2 E-7	3.3 E-5	NA	1.1 E-4
29E-SP10	10	1.1 E-6	NA	5.5 E-7	3.2 E-9	7.8 E-8	NA	NA	NA	NA	4.6 E-8	6.9 E-7	3.0 E-7	NA	NA	NA	1.6 E-7	2.5 E-6	NA	1.1 E-5
29E-SP10	20	5.3 E-6	2.2 E-6	5.8 E-6	4.0 E-9	NA	NA	NA	6.5 E-9	5.1 E-8	1.5 E-7	1.0 E-6	1.8 E-7	NA	NA	NA	3.0 E-7	2.8 E-6	NA	2.1 E-5
29E-SP11	10	NA	NA	NA	7.1 E-9	9.3 E-8	NA	NA	1.4 E-8	NA	2.5 E-7	3.1 E-7	5.0 E-7	NA	NA	1.5 E-6	1.3 E-6	8.7 E-8	NA	5.5 E-5
29E-SP11	20	1.5 E-6	7.5 E-6	1.9 E-5	5.9 E-9	NA	NA	3.7 E-7	3.4 E-8	NA	8.6 E-8	2.0 E-6	NA	NA	1.4 E-5	7.1 E-7	2.9 E-7	5.4 E-5	1.6 E-7	1.1 E-4
59E-SP08	10	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	NA	NA	NA	2.3 E-6	NA	3.1 E-6
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	1.1 E-4	NA	NA	4.3 E-5	NA	1.6 E-4
59E-SP10	20	NA	NA	NA	NA	2.5 E-8	NA	NA	4.5 E-9	NA	8.8 E-8	4.7 E-7	1.3 E-7	NA	7.3 E-7	1.3 E-7	3.0 E-7	3.0 E-7	NA	3.2 E-6
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	1.0 E-6	5.4 E-8	4.3 E-8	2.5 E-8	NA	1.2 E-6
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	2.0 E-5
DSA-SP04	20	9.6 E-6	2.9 E-5	1.2 E-5	NA	NA	NA	5.0 E-5	7.8 E-6	5.2 E-7	2.6 E-7	2.9 E-6	NA	NA	1.6 E-5	1.0 E-6	4.1 E-7	3.6 E-4	NA	5.9 E-4
DSA-SP04	30	1.1 E-5	3.2 E-5	7.7 E-6	NA	NA	NA	2.9 E-5	4.7 E-6	NA	NA	3.9 E-7	NA	NA	5.3 E-5	3.2 E-7	NA	3.9 E-4	NA	6.2 E-4
DSA-SP04	40	6.7 E-6	1.8 E-5	4.6 E-6	NA	NA	NA	1.6 E-5	2.6 E-6	NA	NA	3.3 E-7	NA	NA	3.4 E-5	2.2 E-7	NA	2.4 E-4	NA	3.7 E-4
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	5.0 E-5
DSA-SP05	20	NA	2.9 E-6	NA	NA	4.2 E-8	NA	NA	3.4 E-8	NA	1.1 E-7	1.3 E-6	1.1 E-7	NA	4.4 E-7	1.0 E-6	2.8 E-7	1.7 E-5	NA	4.0 E-5
DSA-SP06	10	NA	NA	NA	NA	5.9 E-8	NA	NA	NA	NA	3.7 E-8	1.4 E-7	2.2 E-7	NA	NA	1.1 E-7	1.2 E-7	5.0 E-6	NA	8.4 E-6
DSA-SP06	20	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	6.7 E-8	1.6 E-7	NA	NA	NA	9.5 E-8	NA	NA	4.3 E-6
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	1.6 E-5
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	4.4 E-8
DSA-SP08	10	NA	2.6 E-5	NA	1.5 E-8	9.8 E-8	NA	NA	2.4 E-8	NA	NA	8.9 E-7	NA	NA	NA	9.2 E-8	2.7 E-7	1.7 E-6	NA	3.5 E-5
DSA-SP08	20	NA	3.3 E-5	NA	1.8 E-9	8.1 E-8	NA	NA	1.1 E-8	NA	1.3 E-7	1.9 E-6	1.7 E-7	NA	NA	1.2 E-6	3.6 E-7	3.0 E-6	NA	5.2 E-5
DSA-SP09	10	NA	NA	NA	NA	4.9 E-8	NA	NA	1.3 E-8	NA	NA	NA	2.4 E-7	NA	NA	7.1 E-8	9.2 E-8	1.2 E-6	NA	1.9 E-6
DSA-SP09	20	NA	4.1 E-7	NA	6.6 E-9	2.2 E-7	NA	NA	5.1 E-8	NA	5.6 E-8	7.4 E-7	NA	NA	NA	4.2 E-8	5.8 E-8	7.6 E-6	NA	2.0 E-5
DSA-SP10	10	NA	NA	NA	NA	1.1 E-7	NA	NA	2.8 E-8	NA	4.2 E-7	3.6 E-6	NA	NA	NA	2.3 E-7	5.7 E-7	4.8 E-7	NA	2.8 E-5
DSA-SP10	20	8.0 E-7	5.8 E-6	NA	NA	3.2 E-8	1.4 E-8	2.4 E-6	7.8 E-7	6.7 E-8	4.8 E-7	3.5 E-6	1.6 E-7	NA	NA	4.5 E-7	5.0 E-7	7.3 E-6	NA	4.1 E-5
DSA-SP10	30	2.8 E-6	6.7 E-6	NA	NA	NA	NA	8.7 E-6	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	4.8 E-5
DSA-SP10	40	NA	2.7 E-6	NA	2.9 E-9	NA	NA	4.4 E-6	1.6 E-6	1.2 E-7	NA	3.0 E-7	NA	NA	NA	7.2 E-8	NA	5.3 E-6	NA	1.7 E-5
DSA-SP11	10	NA	NA	NA	7.2 E-9	NA	NA	4.8 E-7	2.0 E-7	NA	4.1 E-7	3.8 E-6	NA	NA	NA	NA	3.2 E-7	4.3 E-7	NA	1.9 E-5
DSA-SP11	20	NA	3.1 E-6	NA	NA	NA	NA	9.1 E-8	3.8 E-8	NA	9.1 E-8	4.5 E-7	2.1 E-7	1.2 E-7	NA	5.0 E-8	8.7 E-8	1.1 E-7	NA	6.0 E-6
DSA-SP12	10	NA	9.0 E-7	NA	8.1 E-9	NA	NA	5.0 E-7	1.0 E-7	1.2 E-7	4.9 E-7	2.7 E-6	NA	NA	NA	NA	2.1 E-7	1.7 E-7	NA	1.9 E-5
DSA-SP12	20	2.7 E-6	1.1 E-5	NA	NA	NA	NA	4.8 E-7	7.8 E-8	6.6 E-8	1.3 E-8	5.4 E-8	NA	NA	1.1 E-5	3.5 E-8	8.7 E-8	2.0 E-6	NA	3.2 E-5
DSA-SP13	10	NA	NA	NA	3.0 E-8	NA	5.7 E-8	1.8 E-6	8.8 E-7	1.1 E-7	4.3 E-6	2.5 E-5	4.6 E-7	2.5 E-7	2.0 E-6	NA	1.9 E-6	8.7 E-7	NA	6.7 E-5
DSA-SP13	20	NA	NA	NA	8.8 E-9	NA	NA	2.4 E-6	7.1 E-7	NA	1.4 E-6	6.8 E-6	NA	NA	NA	NA	3.9 E-7	1.5 E-6	NA	1.7 E-5
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	NA	1.9 E-6	NA	9.6 E-6
DSA-SP15	20	NA	4.6 E-7	NA	1.5 E-9	3.2 E-8	NA	NA	2.8 E-9	NA	NA	6.5 E-8	NA	NA	2.9 E-6	3.4 E-8	4.0 E-8	6.2 E-7	NA	7.6 E-6
DSA-SP15	30	NA	7.9 E-7	NA	3.4 E-9	2.1 E-8	NA	4.7 E-7	6.6 E-7	4.4 E-8	NA	6.3 E-7	NA	NA	1.4 E-6	4.6 E-8	5.1 E-8	3.1 E-7	NA	8.8 E-6
DSA-SP16	10	NA	3.4 E-5	NA	NA	NA	NA	1.7 E-5	1.3 E-5	NA	4.7 E-7	1.5 E-6	NA	NA	NA	NA	5.7 E-7	6.1 E-6	NA	7.5 E-5
DSA-SP16	20	NA	6.3 E-5	NA	NA	NA	NA	1.4 E-5	1.1 E-5	NA	1.8 E-7	8.6 E-7	NA	NA	NA	NA	NA	7.3 E-6	NA	1.0 E-4
DSA-SP16	30	NA	5.8 E-5	NA	NA	NA	NA	1.4 E-5	9.0 E-6	NA	2.0 E-7	1.4 E-6	NA	NA	NA	4.3 E-7	NA	4.6 E-6	NA	8.9 E-5
DSA-SP16	40	NA	5.0 E-5	NA	NA	NA	NA	1.2 E-5	7.8 E-6	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	6.4 E-6	NA	7.7 E-5
DSA-SP17	10	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	1.0 E-7	1.7 E-5	NA	1.9 E-5
DSA-SP17	20	NA	2.8 E-6	NA	1.8 E-9	NA	NA	NA	6.6 E-10	NA	NA	2.3 E-7	NA	NA	NA	NA	2.0 E-7	4.7 E-6	NA	8.6 E-6
DSA-SP17	30	NA	6.3 E-6	NA	NA	1.6 E-8	NA	NA	5.2 E-10	NA	1.5 E-8	7.8 E-8	NA	NA	NA	5.2 E-8	1.3 E-7	2.2 E-6	NA	9.0 E-6
DSA-SP18	10	NA	NA	NA	2.0 E-8	4.9 E-7	1.8 E-7	NA	NA	NA	2.9 E-7	1.6 E-6	5.7 E-6	1.6 E-6	NA	2.1 E-7	6.0 E-6	NA	NA	3.4 E-5
DSA-SP18	20	NA	NA	NA	2.5 E-8	1.7 E-7	3.3 E-7	NA	NA	NA	4.3 E-7	2.7 E-6	9.8 E-6	2.6 E-6	NA	NA	1.2 E-5	NA	NA	5.5 E-5
DSA-SP19	10	NA	NA	NA	1.8 E-8	1.6 E-7	5.7 E-7	NA	NA	NA	4.3 E-7	1.5 E-6	2.0 E-5	5.7 E-6	NA	NA	1.4 E-5	NA	NA	9.0 E-5
DSA-SP19	20	NA	NA	NA	5.5 E-9	5.9 E-7	2.1 E-8	NA	NA	NA	5.9 E-8	3.9 E-7	5.7 E-7	1.7 E-7	NA	1.1 E-7	9.5 E-7	NA	NA	9.1 E-6
DSA-SP20	10	NA	8.4 E-7	NA	NA	NA	2.7 E-8	1.1 E-6	1.1 E-6	NA	1.1 E-7	7.2 E-7	3.8 E-7	NA	8.8 E-7	1.6 E-7	7.4 E-7	2.2 E-5	NA	3.4 E-5
DSA-SP20	20	NA	6.2 E-6	NA	1.8 E-8	NA	5.5 E-8	2.9 E-6	2.5 E-6	NA	5.1 E-7	4.5 E-6	1.2 E-6	3.8 E-7	NA	2.0 E-7	7.7 E-7	8.7 E-5	NA	1.3 E-4
DSA-SP21	10	NA	2.0 E-6	NA	NA	NA	5.7 E-8	NA	1.4 E-7	NA	5.3 E-7	4.2 E-6	1.7 E-6	8.6 E-7	NA	NA	7.4 E-7	1.0 E-7	NA	2.8 E-5
DSA-SP21	20	NA	1.9 E-6	NA	NA	2.4 E-8	2.7 E-8	2.9 E-7	2.8 E-7	NA	2.0 E-7	2.0 E-6	8.2 E-7	4.5 E-7	NA	NA	3.6 E-7	1.2 E-7	NA	2.1 E-5
DSA-SP22	10	NA	NA	NA	NA	NA	6.2 E-8	3.1 E-7	2.1 E-7	NA	8.6 E-7	9.5 E-6	1.7 E-6	9.0 E-7	NA	NA	1.2 E-6	6.0 E-7	NA	3.9 E-5
DSA-SP22	20	NA	NA	NA	NA	NA	2.5 E-8	3.9 E-7	3.8 E-7	NA	6.4 E-7	6.6 E-6	7.3 E-7	4.0 E-7	NA	NA	2.8 E-7	6.2 E-7	NA	2.1 E-5
DSA-SP23	10	NA	NA	NA	NA	NA	NA	2.9 E-6	3.4 E-6	NA	3.6 E-7	2.2 E-6	7.7 E-7	NA	NA	NA	NA	9.4 E-7	NA	1.5 E-5
DSA-SP23	20	NA	NA	NA	NA	NA	NA	2.1 E-6	2.1 E-6	NA	6.7 E-8	2.8 E-7	5.7 E-7	3.3 E-7	NA	NA	NA	1.3 E-6	NA	1.5 E-5

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	Depth	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Freon 12	Heptane	Hexane	m,p-Xylene	o-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																				
Unit Risk																				
DSA-SP23	30	NA	NA	NA	NA	NA	NA	1.4 E-6	1.3 E-6	NA	2.1 E-8	1.1 E-7	4.3 E-7	2.4 E-7	8.3 E-7	NA	NA	2.9 E-6	NA	1.2 E-5
DSA-SP24	10	NA	2.4 E-6	NA	NA	NA	1.4 E-7	1.6 E-6	1.2 E-6	1.2 E-7	6.4 E-7	4.1 E-6	4.2 E-6	2.0 E-6	NA	NA	2.5 E-6	1.3 E-6	NA	5.4 E-5
DSA-SP24	20	NA	NA	NA	NA	2.5 E-7	4.5 E-8	2.4 E-6	1.7 E-6	1.3 E-7	5.1 E-7	2.8 E-6	1.1 E-6	5.9 E-7	NA	NA	9.5 E-7	1.6 E-6	NA	2.8 E-5
DSA-SP24	30	NA	4.6 E-6	NA	NA	2.6 E-8	2.3 E-8	1.6 E-6	1.1 E-6	8.5 E-8	3.9 E-7	2.7 E-6	5.5 E-7	2.9 E-7	NA	NA	8.4 E-7	4.1 E-6	NA	2.9 E-5
DSA-SP25	10	NA	3.3 E-6	NA	NA	NA	NA	1.6 E-6	1.3 E-6	NA	1.8 E-7	6.1 E-7	2.0 E-7	NA	3.6 E-6	NA	1.6 E-7	NA	NA	1.3 E-5
DSA-SP25	20	NA	NA	NA	NA	NA	NA	3.8 E-6	3.2 E-6	NA	3.7 E-7	3.3 E-6	NA	NA	3.9 E-6	NA	1.8 E-7	NA	NA	1.8 E-5
DSA-SP26	10	NA	NA	NA	4.5 E-8	NA	NA	7.4 E-6	3.4 E-6	NA	1.3 E-6	2.5 E-5	3.8 E-7	NA	3.6 E-6	NA	4.0 E-7	NA	NA	5.2 E-5
DSA-SP26	20	NA	NA	NA	NA	NA	NA	1.4 E-5	8.5 E-6	NA	3.2 E-6	2.5 E-5	NA	NA	1.7 E-5	NA	1.4 E-6	NA	NA	9.3 E-5
DSA-SP27	10	NA	2.5 E-6	NA	NA	NA	NA	1.5 E-6	1.0 E-6	NA	1.4 E-7	1.9 E-6	NA	NA	2.5 E-6	NA	8.4 E-8	3.8 E-6	NA	1.5 E-5
DSA-SP27	20	NA	3.8 E-7	NA	NA	NA	NA	9.7 E-7	6.1 E-7	NA	1.4 E-7	6.1 E-7	1.1 E-7	NA	6.8 E-7	3.4 E-8	1.3 E-7	8.0 E-6	NA	1.3 E-5
DSA-SP28	10	NA	NA	NA	4.4 E-9	2.8 E-7	2.6 E-8	NA	NA	NA	2.9 E-7	1.0 E-6	3.4 E-7	NA	NA	NA	5.7 E-7	1.5 E-7	NA	8.4 E-6
DSA-SP28	20	NA	NA	NA	1.5 E-9	2.9 E-7	NA	NA	NA	NA	1.3 E-7	3.8 E-7	1.4 E-7	NA	NA	NA	2.9 E-7	NA	NA	1.3 E-5
DSA-SP29	10	NA	1.9 E-6	NA	NA	5.9 E-8	NA	NA	5.0 E-9	NA	NA	6.3 E-8	7.7 E-7	7.1 E-7	NA	NA	1.1 E-7	NA	NA	2.8 E-5
DSA-SP30	10	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	3.8 E-8	1.1 E-7	NA	NA	NA	NA	2.2 E-7	NA	NA	2.7 E-6
DSA-SP30	20	NA	NA	NA	3.3 E-9	2.0 E-7	1.5 E-8	NA	NA	NA	1.7 E-7	7.8 E-7	1.2 E-7	NA	NA	4.5 E-8	5.3 E-7	NA	NA	7.5 E-6
DSA-SP31	10	NA	NA	NA	7.4 E-9	1.9 E-7	3.0 E-8	NA	NA	NA	3.6 E-7	1.6 E-6	7.3 E-7	3.1 E-7	NA	8.2 E-8	1.2 E-6	NA	NA	5.2 E-5
DSA-SP31	20	NA	NA	NA	2.7 E-9	2.7 E-8	NA	NA	2.4 E-8	NA	1.1 E-7	5.8 E-7	2.5 E-7	NA	NA	NA	2.5 E-7	NA	NA	5.0 E-6
DSA-SP32	10	NA	NA	NA	NA	5.4 E-8	3.0 E-8	2.3 E-6	3.1 E-7	1.2 E-7	1.2 E-7	4.7 E-7	6.1 E-7	3.1 E-7	NA	NA	7.7 E-7	NA	NA	2.0 E-5
DSA-SP32	20	NA	5.1 E-7	NA	1.3 E-8	9.1 E-7	5.3 E-8	1.8 E-7	2.1 E-8	NA	6.7 E-7	1.9 E-6	7.3 E-7	3.8 E-7	NA	NA	2.7 E-6	NA	NA	8.8 E-5
E(d)-SP02	10	NA	NA	NA	1.6 E-8	NA	NA	2.1 E-6	5.4 E-7	NA	4.2 E-8	4.4 E-7	3.0 E-7	NA	1.5 E-6	NA	2.2 E-7	2.0 E-7	NA	7.9 E-6
E(d)-SP02	20	NA	NA	NA	2.9 E-9	7.1 E-8	NA	5.0 E-7	1.5 E-7	NA	1.4 E-6	4.8 E-6	1.7 E-7	NA	NA	1.5 E-6	4.6 E-7	3.6 E-7	NA	2.1 E-5
E(d)-SP03	10	NA	NA	NA	7.4 E-8	NA	NA	2.9 E-6	6.8 E-7	2.2 E-7	7.5 E-8	1.9 E-6	NA	NA	NA	NA	2.4 E-7	3.2 E-7	NA	1.4 E-5
E(m)-SP08	10	NA	NA	NA	3.5 E-9	2.1 E-7	2.9 E-8	NA	NA	NA	6.9 E-8	3.0 E-7	7.3 E-7	3.5 E-7	1.8 E-6	NA	2.1 E-6	NA	NA	1.7 E-5
E(m)-SP08	20	NA	NA	NA	2.9 E-9	8.8 E-8	NA	NA	1.1 E-9	NA	1.1 E-7	2.0 E-6	1.8 E-7	NA	1.1 E-6	1.6 E-6	4.5 E-7	3.4 E-7	NA	1.4 E-5
E(M)-SP09	10	NA	NA	NA	3.7 E-9	1.3 E-7	NA	NA	NA	NA	1.2 E-7	7.2 E-7	NA	NA	5.4 E-6	NA	5.7 E-7	NA	NA	1.3 E-5
E(M)-SP09	20	NA	3.4 E-7	NA	3.7 E-9	8.6 E-8	NA	NA	1.1 E-8	NA	1.0 E-7	1.6 E-6	1.4 E-7	NA	4.7 E-6	1.6 E-6	4.9 E-7	4.4 E-7	NA	2.4 E-5
E(m)-SP10	10	2.1 E-6	NA	NA	3.4 E-8	NA	NA	NA	3.1 E-9	NA	5.9 E-8	1.2 E-6	2.6 E-7	NA	4.7 E-5	NA	3.5 E-7	1.2 E-6	NA	6.1 E-5
E(m)-SP10	20	3.3 E-6	NA	NA	NA	NA	NA	NA	3.5 E-9	NA	NA	9.4 E-8	5.4 E-7	3.8 E-7	2.8 E-4	NA	1.8 E-7	2.9 E-6	NA	2.8 E-4
E(m)-SP11	20	NA	NA	NA	NA	7.4 E-8	NA	NA	4.1 E-9	NA	3.2 E-8	1.3 E-7	1.1 E-7	NA	1.1 E-6	4.0 E-8	1.1 E-7	NA	NA	3.4 E-6
E(n)-SP04	10	NA	NA	NA	1.5 E-8	5.4 E-8	NA	NA	2.7 E-9	NA	3.4 E-8	6.1 E-7	2.0 E-7	NA	NA	NA	2.5 E-7	NA	NA	5.6 E-6
E(n)-SP04	20	NA	5.8 E-7	NA	2.3 E-9	NA	NA	NA	1.8 E-8	NA	7.8 E-8	5.2 E-7	1.4 E-7	NA	6.2 E-7	8.1 E-8	1.4 E-7	4.0 E-7	NA	8.5 E-6
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	7.8 E-8	2.3 E-7	NA	7.1 E-5	NA	1.4 E-7	NA	NA	7.3 E-5
E(n)-SP05	20	5.9 E-7	NA	NA	NA	2.4 E-8	1.5 E-8	NA	4.5 E-9	NA	2.0 E-7	1.3 E-6	2.1 E-7	NA	1.1 E-4	1.6 E-7	3.6 E-7	5.8 E-6	NA	1.4 E-4
E(n)-SP05	40	2.1 E-6	1.3 E-6	NA	NA	2.7 E-8	NA	NA	1.7 E-8	NA	NA	5.1 E-8	NA	NA	5.6 E-4	9.5 E-8	8.7 E-8	4.7 E-6	NA	5.7 E-4
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	2.2 E-7	NA	NA	1.2 E-6	NA	1.7 E-7	4.4 E-7	NA	5.9 E-6
E(n)-SP06	20	1.7 E-6	1.1 E-6	NA	2.5 E-9	3.2 E-8	2.3 E-8	1.7 E-7	1.3 E-8	NA	1.4 E-8	2.3 E-7	5.2 E-7	1.7 E-7	8.4 E-7	9.2 E-8	3.3 E-7	5.8 E-7	NA	7.1 E-6
E(n)-SP07	10	NA	1.4 E-6	NA	3.4 E-9	NA	NA	3.1 E-7	3.1 E-8	NA	NA	1.4 E-7	NA	NA	1.9 E-6	NA	1.7 E-7	3.8 E-7	NA	6.9 E-6
E(n)-SP08	10	NA	1.1 E-6	NA	1.3 E-8	5.4 E-8	NA	NA	2.0 E-9	NA	NA	3.9 E-7	3.4 E-7	NA	NA	NA	2.8 E-7	1.7 E-6	NA	8.3 E-6
E(n)-SP08	20	NA	1.3 E-5	NA	NA	NA	NA	NA	9.2 E-10	NA	2.2 E-8	2.1 E-7	NA	NA	NA	1.1 E-7	1.1 E-7	1.7 E-6	NA	1.8 E-5
E(n)-SP09	10	NA	2.0 E-6	NA	2.1 E-8	NA	NA	NA	NA	NA	NA	3.4 E-7	3.3 E-7	NA	NA	NA	2.4 E-7	2.3 E-7	NA	1.1 E-5
E(n)-SP09	20	4.3 E-7	3.4 E-5	NA	6.3 E-9	NA	NA	NA	9.2 E-10	NA	5.6 E-8	4.6 E-7	1.3 E-7	NA	NA	4.2 E-7	2.1 E-7	1.8 E-7	NA	3.7 E-5
E(N)-SP10	10	NA	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	5.1 E-8	6.9 E-7	NA	NA	2.3 E-6	1.0 E-7	2.5 E-7	6.5 E-8	NA	6.0 E-6
E(N)-SP10	20	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	5.3 E-8	7.8 E-7	NA	NA	9.6 E-7	1.9 E-7	2.2 E-7	5.8 E-8	NA	6.7 E-6
E(n)-SP11	15	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	NA	2.6 E-8	1.0 E-7	1.5 E-7	NA	NA	6.6 E-8	2.5 E-7	NA	NA	9.6 E-6
E(n)-SP11	25	NA	9.5 E-6	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	7.5 E-8	1.1 E-7	NA	NA	7.2 E-8	1.1 E-7	1.4 E-7	NA	1.0 E-5
E(n)-SP12	10	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	1.5 E-7	2.2 E-7	NA	NA	4.2 E-6
E(n)-SP12	20	NA	5.9 E-7	NA	NA	2.5 E-7	NA	NA	2.8 E-9	NA	2.0 E-8	1.9 E-7	NA	NA	1.1 E-6	1.9 E-7	2.3 E-7	8.7 E-8	NA	3.6 E-6
L2-ST24-SP03	10	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	1.0 E-7	NA	NA	1.9 E-6
L2-ST24-SP03	20	NA	2.9 E-6	NA	2.1 E-9	4.4 E-8	1.4 E-8	NA	2.0 E-9	NA	1.4 E-7	1.7 E-6	2.5 E-7	NA	1.1 E-5	2.3 E-7	3.1 E-7	7.6 E-7	NA	2.0 E-5
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	3.4 E-8	1.1 E-8	NA	NA	NA	5.9 E-7	5.8 E-6	2.1 E-7	NA	8.4 E-6	3.8 E-7	3.7 E-7	2.5 E-6	NA	2.1 E-5
L2-ST26-SP05	10	NA	NA	NA	7.4 E-9	6.9 E-8	NA	NA	NA	NA	1.9 E-7	1.1 E-6	4.6 E-7	NA	1.6 E-5	NA	1.7 E-6	NA	NA	3.9 E-5
L2-ST26-SP05	20	NA	NA	6.3 E-7	2.4 E-8	1.2 E-7	2.9 E-8	NA	9.9 E-10	NA	2.4 E-6	1.8 E-5	4.0 E-7	1.5 E-7	2.0 E-5	6.7 E-7	7.9 E-7	1.9 E-6	NA	6.2 E-5
L2-ST26-SP06	10	NA	NA	NA	3.4 E-9	2.6 E-7	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	1.1 E-6	NA	1.9 E-7	NA	NA	2.7 E-6
L2-ST26-SP06	20	NA	NA	NA	NA	6.1 E-8	1.3 E-8	NA	2.8 E-9	NA	1.1 E-7	6.1 E-7	3.4 E-7	NA	1.9 E-5	1.7 E-7	2.2 E-7	1.5 E-6	NA	2.3 E-5
L2-ST26-SP07	18	NA	NA	NA	4.5 E-9	1.3 E-7	5.0 E-8	NA	NA	NA	2.0 E-7	1.2 E-6	1.3 E-6	5.8 E-7	NA	NA	4.9 E-7	3.1 E-8	1.6 E-7	2.2 E-5
L2-ST28_90-SP02	10	NA	NA	NA	3.2 E-8	1.4 E-6	NA	6.7 E-6	1.2 E-6	NA	1.1 E-7	1.1 E-6	6.9 E-7	NA	NA	3.4 E-7	6.6 E-7	5.9 E-7	NA	4.3 E-5
L2-ST28_90-SP02	20	NA	3.3 E-6	5.6 E-7	9.6 E-9	4.9 E-8	2.1 E-8	5.7 E-7	9.2 E-8	NA	1.8 E-6	1.4 E-5	4.0 E-7	NA	7.3 E-6	7.6 E-7	6.0 E-7	8.7 E-6	NA	5.0 E-5

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	30	NA	7.6 E-11	NA	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
28E-SP16	40	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA
29E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA
29E-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA
29E-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29E-SP09	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA
29E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
29E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-10	NA	NA
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
29E-SP11	20	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	20	NA	5.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA
DSA-SP04	30	NA	4.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP04	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP05	20	NA	NA	NA	NA	4.0 E-10	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	4.4 E-10	NA
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA
DSA-SP08	20	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA
DSA-SP10	10	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	NA
DSA-SP10	20	NA	NA	NA	NA	1.7 E-10	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA
DSA-SP10	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP11	10	NA	NA	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
DSA-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA
DSA-SP12	10	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA
DSA-SP12	20	NA	1.5 E-11	NA	NA	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA
DSA-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-9	NA	NA
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP15	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA
DSA-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP16	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA
DSA-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA
DSA-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA
DSA-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA
DSA-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA
DSA-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA
DSA-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-9	NA	NA
DSA-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA
DSA-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA
DSA-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA
DSA-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	NA
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1,1-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**
Unit Hazard																		
Unit Risk																		
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA
DSA-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA
DSA-SP24	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA
DSA-SP24	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA
DSA-SP25	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA
DSA-SP27	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	NA	NA
DSA-SP27	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA
DSA-SP28	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-10	NA	NA
DSA-SP29	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA
DSA-SP30	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA
DSA-SP31	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA
DSA-SP32	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA
DSA-SP32	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	NA	NA	NA	NA	9.6 E-10	NA	NA
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-10	NA	NA
E(m)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA
E(M)-SP09	20	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA
E(m)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-10	NA	NA
E(m)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	NA
E(n)-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA
E(n)-SP05	20	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA
E(n)-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	NA
E(n)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-11	NA	NA
E(n)-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA
E(n)-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA
E(n)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA
E(n)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
E(n)-SP09	20	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA
E(n)-SP11	25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-11	NA	NA
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA
E(n)-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA
L2-ST24-SP03	20	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	NA
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L2-ST26-SP04	20	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA
L2-ST26-SP05	20	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA
L2-ST26-SP06	20	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA
L2-ST26-SP07	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA
L2-ST28_90-SP02	20	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethyl Benzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																				
Unit Risk																				
28E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	NA	NA	3.1 E-5	NA	4E-05
28E-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	4.9 E-6	NA	5E-06
28E-SP16	30	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-9	NA	NA	1.9 E-7	NA	2E-07
28E-SP16	40	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	2.9 E-7	NA	3E-07
29E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	5E-10
29E-SP07	20	3.6 E-10	5.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	1.4 E-8	NA	2E-08
29E-SP08	10	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	1.2 E-9	NA	3E-09
29E-SP08	20	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	9.6 E-8	NA	1E-07
29E-SP08	30	9.1 E-10	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-9	NA	NA	4.3 E-8	NA	5E-08
29E-SP08	40	6.7 E-10	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-9	NA	NA	3.2 E-8	NA	4E-08
29E-SP09	10	1.4 E-7	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	2E-07
29E-SP09	20	2.3 E-7	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	4E-07
29E-SP09	30	6.1 E-9	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	3.5 E-11	NA	2.4 E-8	NA	4E-08
29E-SP09	40	6.7 E-9	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	3.3 E-11	NA	1.4 E-8	NA	3E-08
29E-SP10	10	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	3E-09
29E-SP10	20	3.3 E-9	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	6E-09
29E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	3.7 E-11	NA	1E-09
29E-SP11	20	9.5 E-10	2.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	1.5 E-10	NA	2.3 E-8	4.5 E-10	3E-08
59E-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-10	NA	1E-09
59E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	NA	1.8 E-8	NA	3E-08
59E-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	2.8 E-11	NA	1.3 E-10	NA	4E-10
59E-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-11	1.1 E-11	NA	1.1 E-11	NA	1E-10
DSA-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-9	NA	8E-09
DSA-SP04	20	5.9 E-9	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	2.2 E-10	NA	1.5 E-7	NA	2E-07
DSA-SP04	30	7.0 E-9	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	6.8 E-11	NA	1.6 E-7	NA	2E-07
DSA-SP04	40	4.1 E-9	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	4.6 E-11	NA	1.0 E-7	NA	1E-07
DSA-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	2E-08
DSA-SP05	20	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	2.2 E-10	NA	7.3 E-9	NA	1E-08
DSA-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	2.1 E-9	NA	2E-09
DSA-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	7E-09
DSA-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
DSA-SP08	10	NA	9.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	7.1 E-10	NA	1E-08
DSA-SP08	20	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	1.3 E-9	NA	2E-08
DSA-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	5.2 E-10	NA	5E-10
DSA-SP09	20	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-12	NA	3.2 E-9	NA	4E-09
DSA-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-11	NA	2.0 E-10	NA	4E-09
DSA-SP10	20	4.9 E-10	2.2 E-9	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-11	NA	3.1 E-9	NA	9E-09
DSA-SP10	30	1.7 E-9	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	NA	1E-08
DSA-SP10	40	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	2.2 E-9	NA	3E-09
DSA-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	2E-09
DSA-SP11	20	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	4.8 E-11	NA	1E-09
DSA-SP12	10	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-11	NA	2E-09
DSA-SP12	20	1.7 E-9	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	7.4 E-12	NA	8.3 E-10	NA	8E-09
DSA-SP13	10	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	3.7 E-10	NA	7E-09
DSA-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	2E-09
DSA-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	8.0 E-10	NA	1E-09
DSA-SP15	20	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	7.2 E-12	NA	2.6 E-10	NA	7E-10
DSA-SP15	30	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	9.7 E-12	NA	1.3 E-10	NA	8E-10
DSA-SP16	10	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	2E-08
DSA-SP16	20	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	3E-08
DSA-SP16	30	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-11	NA	2.0 E-9	NA	2E-08
DSA-SP16	40	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	2E-08
DSA-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	7E-09
DSA-SP17	20	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	3E-09
DSA-SP17	30	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	9.4 E-10	NA	3E-09
DSA-SP18	10	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-11	NA	NA	NA	3E-09
DSA-SP18	20	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-09
DSA-SP19	10	NA	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-09
DSA-SP19	20	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	NA	6E-10
DSA-SP20	10	NA	3.1 E-10	NA	NA	NA	2.4 E-11	NA	NA	NA	NA	NA	NA	NA	6.6 E-11	3.3 E-11	NA	9.3 E-9	NA	1E-08
DSA-SP20	20	NA	2.3 E-9	NA	NA	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-11	NA	3.7 E-8	NA	4E-08
DSA-SP21	10	NA	7.5 E-10	NA	NA	NA	5.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	1E-09
DSA-SP21	20	NA	7.2 E-10	NA	NA	NA	2.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-11	NA	1E-09
DSA-SP22	10	NA	NA	NA	NA	NA	5.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	3E-09
DSA-SP22	20	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	9E-10
DSA-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	1E-09
DSA-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	9E-10

Table 5.3-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Carbon Tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cyclohexane**	**Ethanol**	**Ethyl Benzene**	**Freon 11**	**Freon 113**	**Freon 12**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																				
Unit Risk																				
DSA-SP23	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-11	NA	NA	1.2 E-9	NA	1E-09
DSA-SP24	10	NA	8.9 E-10	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	4E-09
DSA-SP24	20	NA	NA	NA	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	3E-09
DSA-SP24	30	NA	1.7 E-9	NA	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	6E-09
DSA-SP25	10	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	2E-09
DSA-SP25	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	9E-10
DSA-SP26	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	3E-09
DSA-SP26	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	8E-09
DSA-SP27	10	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	1.6 E-9	NA	3E-09
DSA-SP27	20	NA	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	7.2 E-12	NA	3.4 E-9	NA	4E-09
DSA-SP28	10	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-11	NA	2E-09
DSA-SP28	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6E-10
DSA-SP29	10	NA	7.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7E-10
DSA-SP30	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-10
DSA-SP30	20	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-12	NA	NA	NA	2E-09
DSA-SP31	10	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	3E-09
DSA-SP31	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-09
DSA-SP32	10	NA	NA	NA	NA	NA	2.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-09
DSA-SP32	20	NA	1.9 E-10	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7E-09
E(d)-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	8.3 E-11	NA	7E-10
E(d)-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	1.5 E-10	NA	2E-09
E(d)-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	1E-09
E(m)-SP08	10	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	NA	1E-09
E(m)-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-11	3.4 E-10	NA	1.5 E-10	NA	2E-09
E(M)-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	2E-09
E(M)-SP09	20	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-10	3.4 E-10	NA	1.9 E-10	NA	3E-09
E(m)-SP10	10	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-9	NA	NA	4.9 E-10	NA	6E-09
E(m)-SP10	20	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	1.2 E-9	NA	2E-08
E(m)-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-11	8.4 E-12	NA	NA	NA	5E-10
E(n)-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6E-10
E(n)-SP04	20	NA	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	1.7 E-11	NA	1.7 E-10	NA	6E-10
E(n)-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-9	NA	NA	NA	NA	6E-09
E(n)-SP05	20	3.6 E-10	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	3.4 E-11	NA	2.5 E-9	NA	1E-08
E(n)-SP05	40	1.3 E-9	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	2.0 E-11	NA	2.0 E-9	NA	5E-08
E(n)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	1.9 E-10	NA	7E-10
E(n)-SP06	20	1.0 E-9	4.2 E-10	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	6.3 E-11	1.9 E-11	NA	2.5 E-10	NA	2E-09
E(n)-SP07	10	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	1.6 E-10	NA	1E-09
E(n)-SP08	10	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	2E-09
E(n)-SP08	20	NA	4.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	7.1 E-10	NA	6E-09
E(n)-SP09	10	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	NA	2E-09
E(n)-SP09	20	2.6 E-10	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-11	NA	7.6 E-11	NA	1E-08
E(N)-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	2.2 E-11	NA	2.7 E-11	NA	8E-10
E(N)-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-11	4.0 E-11	NA	2.5 E-11	NA	7E-10
E(n)-SP11	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	3E-10
E(n)-SP11	25	NA	3.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	5.8 E-11	NA	4E-09
E(n)-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	NA	2E-10
E(n)-SP12	20	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-11	4.0 E-11	NA	3.7 E-11	NA	6E-10
L2-ST24-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-10
L2-ST24-SP03	20	NA	1.1 E-9	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	8.0 E-10	4.8 E-11	NA	3.2 E-10	NA	3E-09
L2-ST26-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+00
L2-ST26-SP04	20	NA	NA	NA	NA	NA	9.8 E-12	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	8.0 E-11	NA	1.1 E-9	NA	3E-09
L2-ST26-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	4E-09
L2-ST26-SP05	20	NA	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	1.4 E-10	NA	7.9 E-10	NA	6E-09
L2-ST26-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-11	NA	NA	NA	NA	3E-10
L2-ST26-SP06	20	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	3.6 E-11	NA	6.5 E-10	NA	3E-09
L2-ST26-SP07	18	NA	NA	NA	NA	NA	4.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	4.4 E-10	3E-09
L2-ST28_90-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-11	NA	2.5 E-10	NA	1E-09
L2-ST28_90-SP02	20	NA	1.2 E-9	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	5.5 E-10	1.6 E-10	NA	3.7 E-9	NA	8E-09

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.3-7) x the unit hazard or unit risk for the chemical).

Table 5.3-22 *Receptors Soil Hazard Index and Cancer Risk Results*
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Summary - Soil						
		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
28E-SB01-1.5	1.5	4.4 E-1	5.1 E-2	9.4 E-1	3.6 E-2	**NA**	**NA**	**NA**
28E-SB01-11.5	11.5	3.5 E-1	4.0 E-2	**1.4 E+0**	2.9 E-2	**NA**	**NA**	**NA**
28E-SB01-5.5	5.5	3.5 E-1	4.0 E-2	7.5 E-1	2.9 E-2	**NA**	**NA**	**NA**
28E-SB02-1	1	1.9 E-1	2.2 E-2	4.9 E-1	1.6 E-2	**NA**	**NA**	**NA**
28E-SB02-11	11	4.2 E-1	4.9 E-2	**1.0 E+0**	3.5 E-2	**NA**	**NA**	**NA**
28E-SB02-5	5	2.0 E-1	2.3 E-2	4.7 E-1	1.6 E-2	**NA**	**NA**	**NA**
28E-SB03-1.0	1	1.4 E-2	1.5 E-3	3.6 E-3	1.1 E-3	**NA**	**NA**	**NA**
28E-SB03-1.0-T	1	5.7 E-1	6.6 E-2	**1.3 E+0**	4.7 E-2	**NA**	**NA**	**NA**
28E-SB03-11	11	4.1 E-1	4.7 E-2	**1.2 E+0**	3.4 E-2	**NA**	**NA**	**NA**
28E-SB03-5.0	5	2.7 E-1	3.2 E-2	7.0 E-1	2.3 E-2	**NA**	**NA**	**NA**
28E-SB04-1.0	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
28E-SB04-10	10	1.2 E-4	1.3 E-5	3.0 E-5	9.1 E-6	**NA**	**NA**	**NA**
28E-SB04-5.0	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
28E-SB05-1.0	1	1.2 E-2	1.3 E-3	3.1 E-3	9.4 E-4	**NA**	**NA**	**NA**
28E-SB05-10-T	10	1.3 E-3	1.4 E-4	3.2 E-4	9.6 E-5	**NA**	**NA**	**NA**
28E-SB05-5.0	5	4.7 E-4	5.1 E-5	1.2 E-4	3.6 E-5	**NA**	**NA**	**NA**
28E-SB06-1.0	1	2.0 E-3	2.2 E-4	5.1 E-4	1.5 E-4	**NA**	**NA**	**NA**
28E-SB06-10	10	7.9 E-2	8.4 E-3	2.0 E-2	6.0 E-3	**NA**	**NA**	**NA**
28E-SB06-5.0	5	9.3 E-2	1.0 E-2	2.4 E-2	7.1 E-3	**NA**	**NA**	**NA**
28E-SB07-1.0	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
28E-SB07-10	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
28E-SB07-5.0	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
28E-SPB01	0	**1.2 E+0**	1.4 E-1	**1.3 E+0**	9.7 E-2	**NA**	**NA**	**NA**
28E-SPB01	3	**1.2 E+0**	1.4 E-1	**1.5 E+0**	9.7 E-2	**NA**	**NA**	**NA**
28E-SPB02	0	8.3 E-1	9.2 E-2	9.3 E-1	6.5 E-2	**NA**	**NA**	**NA**
28E-SPB02	3	7.2 E-1	7.9 E-2	7.3 E-1	5.6 E-2	**NA**	**NA**	**NA**
29E-SB01	1	7.2 E-4	8.5 E-5	1.9 E-4	7.2 E-5	**NA**	**NA**	**NA**
29E-SB01	3	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
29E-SB01	5	8.8 E-4	1.0 E-4	2.3 E-4	8.7 E-5	**NA**	**NA**	**NA**
29E-SB01	10	6.4 E-5	7.5 E-6	1.7 E-5	6.3 E-6	**NA**	**NA**	**NA**
29E-SB02	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
29E-SB02	3	1.1 E-4	1.3 E-5	2.9 E-5	1.1 E-5	**NA**	**NA**	**NA**
29E-SB02	5	4.8 E-4	5.6 E-5	1.3 E-4	4.8 E-5	**NA**	**NA**	**NA**
29E-SB02	10	5.6 E-4	6.5 E-5	1.5 E-4	5.5 E-5	**NA**	**NA**	**NA**
29E-SB03-1	1	3.0 E-1	3.5 E-2	7.0 E-1	2.5 E-2	**NA**	**NA**	**NA**
29E-SB03-11	11	4.9 E-1	5.6 E-2	**1.2 E+0**	4.0 E-2	**NA**	**NA**	**NA**
29E-SB03-5	5	5.7 E-1	6.6 E-2	**1.3 E+0**	4.7 E-2	**NA**	**NA**	**NA**
29E-SB05-11.5	11.5	2.5 E-1	2.9 E-2	6.9 E-1	2.1 E-2	**NA**	**NA**	**NA**
29E-SB05-2.0	2	4.5 E-1	5.0 E-2	5.4 E-1	3.5 E-2	2 E-7	5 E-9	5 E-8
29E-SB05-6.0	6	3.6 E-1	4.1 E-2	7.0 E-1	2.9 E-2	**NA**	**NA**	**NA**
29E-SB06-11.5	11.5	3.0 E-1	3.4 E-2	8.2 E-1	2.4 E-2	**NA**	**NA**	**NA**
29E-SB06-2.0	2	1.8 E-1	2.1 E-2	4.8 E-1	1.5 E-2	**NA**	**NA**	**NA**
29E-SB06-5.5	5.5	3.0 E-1	3.5 E-2	7.9 E-1	2.5 E-2	**NA**	**NA**	**NA**
29E-SB07-1.5	1.5	2.5 E-1	2.9 E-2	6.4 E-1	2.1 E-2	**NA**	**NA**	**NA**
29E-SB07-11.5	11.5	2.2 E-1	2.6 E-2	5.7 E-1	1.8 E-2	**NA**	**NA**	**NA**
29E-SB07-5.5	5.5	2.6 E-1	3.0 E-2	6.7 E-1	2.1 E-2	**NA**	**NA**	**NA**
29E-SB08-1.5	1.5	2.5 E-1	2.9 E-2	6.2 E-1	2.0 E-2	**NA**	**NA**	**NA**
29E-SB08-11.5	11.5	3.5 E-1	4.1 E-2	**1.1 E+0**	2.9 E-2	**NA**	**NA**	**NA**
29E-SB08-5.5	5.5	2.7 E-1	3.1 E-2	6.2 E-1	2.2 E-2	**NA**	**NA**	**NA**
29E-SB09-1.0	1	3.7 E-2	4.4 E-3	3.4 E-1	3.2 E-3	**NA**	**NA**	**NA**
29E-SB09-1.0-T	1	6.3 E-1	7.2 E-2	**1.2 E+0**	5.2 E-2	**NA**	**NA**	**NA**
29E-SB09-11	11	2.9 E-1	3.3 E-2	7.5 E-1	2.4 E-2	**NA**	**NA**	**NA**
29E-SB09-5.0	5	6.3 E-1	7.3 E-2	**1.5 E+0**	5.2 E-2	**NA**	**NA**	**NA**
29E-SB10-1	1	1.1 E-1	1.3 E-2	3.4 E-1	9.1 E-3	**NA**	**NA**	**NA**
29E-SB11-1	1	2.5 E-1	2.9 E-2	6.7 E-1	2.1 E-2	**NA**	**NA**	**NA**
29E-SB12-1	1	4.4 E-1	5.1 E-2	**1.1 E+0**	3.7 E-2	**NA**	**NA**	**NA**
29E-SNS03-0.5	0.5	2.3 E-1	2.7 E-2	5.3 E-1	1.9 E-2	3 E-7	8 E-9	8 E-8
29E-SNS04-0.5	0.5	2.6 E-1	3.0 E-2	6.5 E-1	2.1 E-2	**NA**	**NA**	**NA**
29E-SNS05-0.5	0.5	3.4 E-2	4.0 E-3	2.1 E-1	2.9 E-3	4 E-8	1 E-9	1 E-8
29E-SNS05-0.5-T	0.5	2.1 E-1	2.4 E-2	4.1 E-1	1.7 E-2	**NA**	**NA**	**NA**
29E-SNS06-0.5	0.5	1.6 E-3	1.7 E-4	4.0 E-4	1.2 E-4	3 E-7	8 E-9	8 E-8

Table 5.3-22 *Receptors Soil Hazard Index and Cancer Risk Results*
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Summary - Soil						
		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
29E-SNS06-0.5-T	0.5	2.2 E-1	2.6 E-2	5.5 E-1	1.9 E-2	**NA**	**NA**	**NA**
29E-SNS06-2.5	2.5	3.7 E-1	4.3 E-2	9.3 E-1	3.1 E-2	**NA**	**NA**	**NA**
29E-SNS07-0.5	0.5	3.6 E-1	4.2 E-2	9.0 E-1	3.0 E-2	**NA**	**NA**	**NA**
29E-SNS07-0.5-T	0.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
29E-SNS07-2.5	2.5	2.8 E-1	3.2 E-2	6.8 E-1	2.3 E-2	**NA**	**NA**	**NA**
59E-SB01	1	6.6 E-1	7.3 E-2	7.1 E-1	5.2 E-2	**NA**	**NA**	**NA**
59E-SB02-10.5	10.5	7.3 E-1	8.4 E-2	**1.6 E+0**	6.0 E-2	**NA**	**NA**	**NA**
59E-SB02-2.0	2	2.2 E-1	2.5 E-2	4.5 E-1	1.8 E-2	**NA**	**NA**	**NA**
59E-SB02-5.0	5	5.4 E-1	6.2 E-2	**1.2 E+0**	4.4 E-2	**NA**	**NA**	**NA**
59E-SB03-11	11	**1.3 E+0**	1.4 E-1	**3.0 E+0**	1.0 E-1	**NA**	**NA**	**NA**
59E-SB03-2.0	2	6.7 E-1	7.7 E-2	**1.4 E+0**	5.5 E-2	**NA**	**NA**	**NA**
59E-SB03-6.0	6	3.1 E-1	3.5 E-2	6.8 E-1	2.5 E-2	**NA**	**NA**	**NA**
59E-SB04-11	11	6.8 E-1	7.9 E-2	**2.4 E+0**	5.6 E-2	**NA**	**NA**	**NA**
59E-SB04-2.5	2.5	7.8 E-1	8.9 E-2	**1.9 E+0**	6.4 E-2	**NA**	**NA**	**NA**
59E-SB04-6.0	6	2.8 E-1	3.2 E-2	6.0 E-1	2.3 E-2	**NA**	**NA**	**NA**
DSA-SB01-1.0	1	4.8 E-1	5.5 E-2	**1.1 E+0**	3.9 E-2	**NA**	**NA**	**NA**
DSA-SB01-11	11	2.2 E-1	2.6 E-2	5.6 E-1	1.8 E-2	**NA**	**NA**	**NA**
DSA-SB01-5.0	5	3.9 E-1	4.6 E-2	9.9 E-1	3.3 E-2	**NA**	**NA**	**NA**
DSA-SB02-1.5	1.5	2.9 E-1	3.4 E-2	6.4 E-1	2.4 E-2	**NA**	**NA**	**NA**
DSA-SB02-10.5	10.5	2.8 E-1	3.3 E-2	8.3 E-1	2.4 E-2	**NA**	**NA**	**NA**
DSA-SB02-4.5	4.5	2.4 E-1	2.8 E-2	5.5 E-1	2.0 E-2	**NA**	**NA**	**NA**
DSA-SB03-12	12	3.5 E-1	4.0 E-2	7.1 E-1	2.8 E-2	**NA**	**NA**	**NA**
DSA-SB03-2.0	2	6.7 E-1	7.5 E-2	9.4 E-1	5.4 E-2	**NA**	**NA**	**NA**
DSA-SB03-4.5	4.5	2.9 E-1	3.3 E-2	6.6 E-1	2.3 E-2	**NA**	**NA**	**NA**
DSA-SB04-1.0	1	5.7 E-1	6.6 E-2	**1.4 E+0**	4.7 E-2	**NA**	**NA**	**NA**
DSA-SB04-11	11	4.7 E-1	5.5 E-2	**1.1 E+0**	3.9 E-2	**NA**	**NA**	**NA**
DSA-SB04-5.0	5	4.5 E-1	5.2 E-2	**1.1 E+0**	3.7 E-2	**NA**	**NA**	**NA**
E(D)-SB01	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(D)-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(D)-SB01	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(D)-SB02	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(D)-SB02	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(D)-SB02	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(d)-SNS01-0.5	0.5	2.8 E-1	3.2 E-2	6.7 E-1	2.3 E-2	1 E-6	4 E-8	4 E-7
E(d)-SNS01-2.5	2.5	3.7 E-1	4.2 E-2	8.5 E-1	3.0 E-2	4 E-8	1 E-9	1 E-8
E(d)-SNS02-0.5	0.5	4.7 E-1	5.5 E-2	**1.1 E+0**	3.9 E-2	5 E-9	1 E-10	1 E-9
E(d)-SNS02-2.5	2.5	4.3 E-1	5.0 E-2	**1.0 E+0**	3.6 E-2	**NA**	**NA**	**NA**
E(d)-SNS03-0.5	0.5	1.2 E-1	1.4 E-2	3.7 E-1	1.0 E-2	3 E-9	1 E-10	1 E-9
E(d)-SNS03-10	10	1.2 E-3	1.3 E-4	3.1 E-4	9.5 E-5	**NA**	**NA**	**NA**
E(d)-SNS03-2.5	2.5	3.1 E-1	3.5 E-2	7.9 E-1	2.5 E-2	**NA**	**NA**	**NA**
E(E)-SB01	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(E)-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(E)-SB01	6	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
E(e)-SB02-1.0	1	3.1 E-1	3.6 E-2	7.4 E-1	2.6 E-2	**NA**	**NA**	**NA**
E(e)-SB02-11	11	5.7 E-1	6.5 E-2	**1.3 E+0**	4.7 E-2	**NA**	**NA**	**NA**
E(e)-SB02-5.0	5	3.6 E-1	4.2 E-2	9.1 E-1	3.0 E-2	**NA**	**NA**	**NA**
E(E)-SB03-1.0	1	2.6 E-3	2.7 E-4	6.5 E-4	2.0 E-4	**NA**	**NA**	**NA**
E(E)-SB03-10	10	1.0 E-3	1.1 E-4	2.6 E-4	8.0 E-5	**NA**	**NA**	**NA**
E(E)-SB03-5.0	5	2.6 E-3	2.7 E-4	6.5 E-4	2.0 E-4	**NA**	**NA**	**NA**
E(e)-SNS01-0.5	0.5	2.5 E-1	2.8 E-2	4.8 E-1	2.0 E-2	3 E-9	1 E-10	1 E-9
E(e)-SNS01-2.5	2.5	2.2 E-1	2.6 E-2	5.3 E-1	1.8 E-2	**NA**	**NA**	**NA**
E(e)-SNS02-0.5	0.5	2.8 E-1	3.2 E-2	7.0 E-1	2.3 E-2	**NA**	**NA**	**NA**
E(e)-SNS02-0.5-T	0.5	1.1 E-6	1.3 E-7	2.9 E-7	1.1 E-7	**NA**	**NA**	**NA**
E(e)-SNS02-2.5	2.5	2.9 E-1	3.4 E-2	7.0 E-1	2.4 E-2	**NA**	**NA**	**NA**
E(m)-SD01-0.25	0.25	3.7 E-1	4.2 E-2	8.8 E-1	3.0 E-2	**NA**	**NA**	**NA**
E(m)-SD01-1.5	1.5	2.6 E-1	3.0 E-2	6.8 E-1	2.1 E-2	**NA**	**NA**	**NA**
E(m)-SD01-5.0	5	2.2 E-1	2.5 E-2	5.5 E-1	1.8 E-2	**NA**	**NA**	**NA**
E(m)-SD02-0.25	0.25	2.9 E-1	3.4 E-2	7.0 E-1	2.4 E-2	8 E-8	2 E-9	2 E-8
E(m)-SD02-1.5	1.5	3.3 E-1	3.8 E-2	8.7 E-1	2.7 E-2	**NA**	**NA**	**NA**
E(m)-SD02-5.0	5	3.8 E-1	4.4 E-2	9.6 E-1	3.2 E-2	**NA**	**NA**	**NA**
E(N)-SB01-1.0	1	2.4 E-1	2.8 E-2	6.3 E-1	2.0 E-2	1 E-9	4 E-11	4 E-10

Table 5.3-22 *Receptors Soil Hazard Index and Cancer Risk Results*
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Summary - Soil						
		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
E(N)-SB01-5.0	5	2.0 E-1	2.3 E-2	6.0 E-1	1.7 E-2	**NA**	**NA**	**NA**
E(N)-SB01-9.5	9.5	2.0 E-1	2.3 E-2	6.5 E-1	1.6 E-2	**NA**	**NA**	**NA**
E(N)-SB02-1.0	1	8.6 E-3	9.2 E-4	2.2 E-3	6.6 E-4	**NA**	**NA**	**NA**
E(N)-SB02-1.0-T	1	2.2 E-1	2.6 E-2	6.2 E-1	1.8 E-2	**NA**	**NA**	**NA**
E(N)-SB02-11	11	1.3 E-1	1.6 E-2	3.6 E-1	1.1 E-2	**NA**	**NA**	**NA**
E(N)-SB02-5.0	5	1.6 E-1	1.9 E-2	5.0 E-1	1.3 E-2	**NA**	**NA**	**NA**
E(n)-SB03-1.0	1	3.0 E-1	3.4 E-2	7.3 E-1	2.5 E-2	**NA**	**NA**	**NA**
E(n)-SB03-11	11	2.8 E-1	3.2 E-2	7.7 E-1	2.3 E-2	**NA**	**NA**	**NA**
E(n)-SB03-5.0	5	2.9 E-1	3.3 E-2	8.4 E-1	2.4 E-2	**NA**	**NA**	**NA**
E(N)-SD01-0.25	0.25	2.0 E-1	2.3 E-2	5.0 E-1	1.7 E-2	**NA**	**NA**	**NA**
E(N)-SD01-1.5	1.5	2.3 E-1	2.7 E-2	6.8 E-1	1.9 E-2	**NA**	**NA**	**NA**
E(N)-SD01-5.0	5	2.6 E-1	3.0 E-2	8.5 E-1	2.1 E-2	**NA**	**NA**	**NA**
E(n)-SNS01-0.5	0.5	2.9 E-1	3.2 E-2	4.7 E-1	2.3 E-2	**NA**	**NA**	**NA**
E(n)-SNS01-2.5	2.5	2.3 E-1	2.7 E-2	6.6 E-1	1.9 E-2	**NA**	**NA**	**NA**
E(n)-SNS02-0.5	0.5	2.7 E-1	3.2 E-2	6.7 E-1	2.3 E-2	6 E-8	2 E-9	2 E-8
E(n)-SNS02-2.5	2.5	3.7 E-2	4.4 E-3	2.8 E-1	3.1 E-3	**NA**	**NA**	**NA**
E(n)-SNS02-2.5-T	2.5	3.6 E-1	4.1 E-2	6.9 E-1	2.9 E-2	**NA**	**NA**	**NA**
E(n)-SNS03-0.5	0.5	3.1 E-1	3.6 E-2	8.7 E-1	2.6 E-2	**NA**	**NA**	**NA**
E(n)-SNS03-2.5	2.5	3.1 E-1	3.6 E-2	8.5 E-1	2.5 E-2	**NA**	**NA**	**NA**
L2-ST24-SB01-11.5	11.5	6.1 E-1	7.1 E-2	**1.3 E+0**	5.1 E-2	**NA**	**NA**	**NA**
L2-ST24-SB01-2.0	2	4.8 E-1	5.6 E-2	**1.2 E+0**	4.0 E-2	**NA**	**NA**	**NA**
L2-ST24-SB01-6.0	6	7.1 E-2	8.2 E-3	1.8 E-1	5.8 E-3	**NA**	**NA**	**NA**
L2-ST26-SB01-11.5	11.5	3.4 E-1	3.9 E-2	8.4 E-1	2.8 E-2	**NA**	**NA**	**NA**
L2-ST26-SB01-2.0	2	2.4 E-1	2.7 E-2	5.4 E-1	2.0 E-2	**1 E-5**	4 E-7	**4 E-6**
L2-ST26-SB01-5.0	5	2.9 E-1	3.3 E-2	6.2 E-1	2.3 E-2	**NA**	**NA**	**NA**
L2-ST26-SB02-10	10	2.4 E-1	2.7 E-2	5.7 E-1	1.9 E-2	**NA**	**NA**	**NA**
L2-ST26-SB02-2.0	2	3.9 E-1	4.5 E-2	9.1 E-1	3.2 E-2	**NA**	**NA**	**NA**
L2-ST26-SB02-4.5	4.5	2.8 E-1	3.2 E-2	6.1 E-1	2.3 E-2	**NA**	**NA**	**NA**
L2-ST26-SB03-11.5	11.5	3.0 E-1	3.4 E-2	6.7 E-1	2.4 E-2	**NA**	**NA**	**NA**
L2-ST26-SB03-2.0	2	2.6 E-1	3.0 E-2	5.8 E-1	2.1 E-2	1 E-9	4 E-11	4 E-10
L2-ST26-SB03-5.0	5	6.0 E-1	7.0 E-2	**1.5 E+0**	5.0 E-2	**NA**	**NA**	**NA**
L2-ST26-SB04-1.0	1	2.3 E-1	2.7 E-2	6.1 E-1	1.9 E-2	1 E-8	4 E-10	4 E-9
L2-ST26-SB04-11	11	2.8 E-1	3.2 E-2	7.3 E-1	2.3 E-2	**NA**	**NA**	**NA**
L2-ST26-SB04-5.0	5	2.4 E-1	2.8 E-2	6.3 E-1	2.0 E-2	**NA**	**NA**	**NA**
L2-ST26-SNS01-0.5	0.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
L2-ST26-SNS01-2.5	2.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
L2-ST26-SNS02-0.5	0.5	9.1 E-5	1.1 E-5	2.4 E-5	9.5 E-6	1 E-6	4 E-8	4 E-7
L2-ST26-SNS02-2.5	2.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
L2-ST26-SNS03-0.5	0.5	9.6 E-6	1.2 E-6	2.5 E-6	1.0 E-6	2 E-7	5 E-9	5 E-8
L2-ST26-SNS03-2.5	2.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
L2-ST28/90-SB01-10.5	10.5	3.0 E-1	3.5 E-2	7.9 E-1	2.5 E-2	**NA**	**NA**	**NA**
L2-ST28/90-SB01-2.5	2.5	5.8 E-1	6.7 E-2	**1.2 E+0**	4.8 E-2	**NA**	**NA**	**NA**
L2-ST28/90-SB01-4.5	4.5	4.2 E-1	4.9 E-2	9.8 E-1	3.5 E-2	**NA**	**NA**	**NA**
Minimum		1.1 E-6	1.3 E-7	2.9 E-7	1.1 E-7	1 E-9	4 E-11	4 E-10
Median		2.8 E-1	3.2 E-2	6.8 E-1	2.3 E-2	6 E-8	2 E-9	2 E-8
Maximum		**1.3 E+0**	1.4 E-1	**3.0 E+0**	1.0 E-1	**1 E-5**	4 E-7	**4 E-6**

Key:
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.3-23 Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil Vapor		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
28E-SP16	10	**4.3 E+1**	**1.8 E+1**	1.7 E-1	**6.7 E+0**	**6 E-3**	**2 E-6**	**1 E-3**
28E-SP16	20	**6.8 E+0**	**2.9 E+0**	2.5 E-2	**1.1 E+0**	**9 E-4**	2 E-7	**2 E-4**
28E-SP16	30	1.9 E-1	8.1 E-2	6.8 E-4	2.9 E-2	**4 E-5**	8 E-9	**9 E-6**
28E-SP16	40	3.4 E-1	1.4 E-1	1.2 E-3	5.2 E-2	**6 E-5**	1 E-8	**1 E-5**
29E-SP07	10	1.8 E-3	7.8 E-4	7.2 E-6	2.8 E-4	8 E-8	2 E-11	2 E-8
29E-SP07	20	2.3 E-2	9.7 E-3	8.3 E-5	3.5 E-3	**3 E-6**	7 E-10	8 E-7
29E-SP08	10	1.4 E-2	6.2 E-3	5.7 E-5	2.2 E-3	6 E-7	1 E-10	1 E-7
29E-SP08	20	1.1 E-1	4.8 E-2	4.1 E-4	1.7 E-2	**2 E-5**	4 E-9	**4 E-6**
29E-SP08	30	6.0 E-2	2.6 E-2	2.2 E-4	9.4 E-3	**9 E-6**	2 E-9	**2 E-6**
29E-SP08	40	5.1 E-2	2.2 E-2	1.8 E-4	7.9 E-3	**7 E-6**	2 E-9	**2 E-6**
29E-SP09	10	1.3 E-1	5.6 E-2	5.3 E-4	2.0 E-2	**4 E-5**	1 E-8	**9 E-6**
29E-SP09	20	2.2 E-1	9.5 E-2	8.3 E-4	3.4 E-2	**7 E-5**	2 E-8	**2 E-5**
29E-SP09	30	4.6 E-2	2.0 E-2	1.7 E-4	7.1 E-3	**7 E-6**	1 E-9	**2 E-6**
29E-SP09	40	3.1 E-2	1.3 E-2	1.1 E-4	4.9 E-3	**5 E-6**	1 E-9	1 E-6
29E-SP10	10	2.6 E-3	1.1 E-3	1.1 E-5	4.1 E-4	5 E-7	1 E-10	1 E-7
29E-SP10	20	5.7 E-3	2.4 E-3	2.1 E-5	8.8 E-4	1 E-6	2 E-10	3 E-7
29E-SP11	10	1.4 E-2	5.9 E-3	5.5 E-5	2.2 E-3	2 E-7	6 E-11	5 E-8
29E-SP11	20	2.9 E-2	1.3 E-2	1.1 E-4	4.5 E-3	**5 E-6**	1 E-9	1 E-6
59E-SP08	10	7.2 E-4	3.1 E-4	3.1 E-6	1.1 E-4	2 E-7	4 E-11	4 E-8
59E-SP09	10	3.9 E-2	1.7 E-2	1.6 E-4	6.1 E-3	**4 E-6**	1 E-9	1 E-6
59E-SP10	20	8.8 E-4	3.8 E-4	3.2 E-6	1.4 E-4	7 E-8	2 E-11	2 E-8
59E-SP13	20	3.3 E-4	1.4 E-4	1.2 E-6	5.1 E-5	2 E-8	4 E-12	4 E-9
DSA-SP04	10	4.9 E-3	2.1 E-3	2.0 E-5	7.6 E-4	1 E-6	3 E-10	3 E-7
DSA-SP04	20	1.6 E-1	6.8 E-2	5.9 E-4	2.5 E-2	**3 E-5**	7 E-9	**7 E-6**
DSA-SP04	30	1.7 E-1	7.4 E-2	6.2 E-4	2.7 E-2	**3 E-5**	8 E-9	**8 E-6**
DSA-SP04	40	1.0 E-1	4.5 E-2	3.7 E-4	1.6 E-2	**2 E-5**	5 E-9	**5 E-6**
DSA-SP05	10	1.3 E-2	5.4 E-3	5.0 E-5	1.9 E-3	**3 E-6**	8 E-10	8 E-7
DSA-SP05	20	1.1 E-2	4.6 E-3	4.0 E-5	1.6 E-3	**2 E-6**	4 E-10	4 E-7
DSA-SP06	10	2.1 E-3	8.8 E-4	8.4 E-6	3.2 E-4	4 E-7	1 E-10	9 E-8
DSA-SP06	20	1.2 E-3	5.2 E-4	4.3 E-6	1.9 E-4	0 E+0	0 E+0	0 E+0
DSA-SP07	10	4.1 E-3	1.7 E-3	1.6 E-5	6.3 E-4	1 E-6	3 E-10	3 E-7
DSA-SP07	20	1.2 E-5	5.3 E-6	4.4 E-8	1.9 E-6	0 E+0	0 E+0	0 E+0
DSA-SP08	10	8.2 E-3	3.5 E-3	3.5 E-5	1.3 E-3	**2 E-6**	4 E-10	4 E-7
DSA-SP08	20	1.4 E-2	5.9 E-3	5.2 E-5	2.1 E-3	**3 E-6**	6 E-10	6 E-7
DSA-SP09	10	4.8 E-4	2.0 E-4	1.9 E-6	7.4 E-5	9 E-8	2 E-11	2 E-8
DSA-SP09	20	5.5 E-3	2.4 E-3	2.0 E-5	8.5 E-4	7 E-7	1 E-10	2 E-7
DSA-SP10	10	6.6 E-3	2.8 E-3	2.8 E-5	1.0 E-3	7 E-7	2 E-10	2 E-7
DSA-SP10	20	1.1 E-2	4.8 E-3	4.1 E-5	1.7 E-3	**2 E-6**	4 E-10	4 E-7
DSA-SP10	30	1.3 E-2	5.6 E-3	4.8 E-5	2.0 E-3	**2 E-6**	5 E-10	5 E-7
DSA-SP10	40	4.8 E-3	2.1 E-3	1.7 E-5	7.5 E-4	6 E-7	1 E-10	1 E-7
DSA-SP11	10	4.5 E-3	1.9 E-3	1.9 E-5	7.0 E-4	3 E-7	7 E-11	6 E-8
DSA-SP11	20	1.6 E-3	7.0 E-4	6.0 E-6	2.5 E-4	2 E-7	6 E-11	6 E-8
DSA-SP12	10	4.5 E-3	1.9 E-3	1.9 E-5	6.9 E-4	3 E-7	7 E-11	7 E-8
DSA-SP12	20	8.6 E-3	3.7 E-3	3.2 E-5	1.3 E-3	1 E-6	3 E-10	3 E-7
DSA-SP13	10	1.6 E-2	7.0 E-3	6.7 E-5	2.5 E-3	1 E-6	3 E-10	3 E-7
DSA-SP13	20	5.1 E-3	2.2 E-3	1.7 E-5	7.9 E-4	3 E-7	6 E-11	7 E-8
DSA-SP15	10	2.4 E-3	1.0 E-3	9.6 E-6	3.7 E-4	2 E-7	6 E-11	5 E-8
DSA-SP15	20	2.1 E-3	9.1 E-4	7.6 E-6	3.3 E-4	1 E-7	3 E-11	3 E-8
DSA-SP15	30	2.4 E-3	1.0 E-3	8.8 E-6	3.8 E-4	1 E-7	3 E-11	3 E-8
DSA-SP16	10	1.8 E-2	7.7 E-3	7.5 E-5	2.8 E-3	**2 E-6**	6 E-10	6 E-7
DSA-SP16	20	2.6 E-2	1.1 E-2	1.0 E-4	4.1 E-3	**5 E-6**	1 E-9	1 E-6
DSA-SP16	30	2.4 E-2	1.0 E-2	8.9 E-5	3.8 E-3	**4 E-6**	1 E-9	1 E-6

Table 5.3-23 Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil Vapor		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
DSA-SP16	40	2.1 E-2	9.1 E-3	7.7 E-5	3.3 E-3	**4 E-6**	9 E-10	9 E-7
DSA-SP17	10	4.6 E-3	2.0 E-3	1.9 E-5	7.2 E-4	1 E-6	3 E-10	3 E-7
DSA-SP17	20	2.3 E-3	9.8 E-4	8.6 E-6	3.5 E-4	5 E-7	1 E-10	1 E-7
DSA-SP17	30	2.4 E-3	1.0 E-3	9.0 E-6	3.8 E-4	6 E-7	1 E-10	1 E-7
DSA-SP18	10	8.6 E-3	3.7 E-3	3.4 E-5	1.3 E-3	5 E-7	1 E-10	1 E-7
DSA-SP18	20	1.6 E-2	6.8 E-3	5.5 E-5	2.4 E-3	8 E-7	2 E-10	2 E-7
DSA-SP19	10	2.3 E-2	1.0 E-2	9.0 E-5	3.6 E-3	7 E-7	2 E-10	2 E-7
DSA-SP19	20	2.6 E-3	1.1 E-3	9.1 E-6	4.0 E-4	1 E-7	3 E-11	3 E-8
DSA-SP20	10	8.3 E-3	3.6 E-3	3.4 E-5	1.3 E-3	**2 E-6**	5 E-10	4 E-7
DSA-SP20	20	3.5 E-2	1.5 E-2	1.3 E-4	5.4 E-3	**8 E-6**	2 E-9	**2 E-6**
DSA-SP21	10	7.1 E-3	3.0 E-3	2.8 E-5	1.1 E-3	2 E-7	6 E-11	5 E-8
DSA-SP21	20	6.0 E-3	2.6 E-3	2.1 E-5	9.3 E-4	2 E-7	6 E-11	6 E-8
DSA-SP22	10	9.7 E-3	4.1 E-3	3.9 E-5	1.5 E-3	5 E-7	1 E-10	1 E-7
DSA-SP22	20	6.0 E-3	2.6 E-3	2.1 E-5	9.2 E-4	2 E-7	4 E-11	4 E-8
DSA-SP23	10	3.7 E-3	1.6 E-3	1.5 E-5	5.7 E-4	2 E-7	6 E-11	5 E-8
DSA-SP23	20	4.2 E-3	1.8 E-3	1.5 E-5	6.5 E-4	1 E-7	3 E-11	4 E-8
DSA-SP23	30	3.4 E-3	1.5 E-3	1.2 E-5	5.3 E-4	3 E-7	6 E-11	6 E-8
DSA-SP24	10	1.4 E-2	5.8 E-3	5.4 E-5	2.1 E-3	6 E-7	2 E-10	1 E-7
DSA-SP24	20	7.8 E-3	3.3 E-3	2.8 E-5	1.2 E-3	5 E-7	1 E-10	1 E-7
DSA-SP24	30	8.2 E-3	3.5 E-3	2.9 E-5	1.3 E-3	1 E-6	2 E-10	2 E-7
DSA-SP25	10	3.2 E-3	1.4 E-3	1.3 E-5	5.0 E-4	3 E-7	8 E-11	8 E-8
DSA-SP25	20	4.9 E-3	2.1 E-3	1.8 E-5	7.6 E-4	2 E-7	3 E-11	4 E-8
DSA-SP26	10	1.2 E-2	5.1 E-3	5.2 E-5	1.8 E-3	5 E-7	1 E-10	1 E-7
DSA-SP26	20	2.6 E-2	1.1 E-2	9.3 E-5	4.0 E-3	1 E-6	3 E-10	3 E-7
DSA-SP27	10	3.7 E-3	1.6 E-3	1.5 E-5	5.7 E-4	5 E-7	1 E-10	1 E-7
DSA-SP27	20	3.5 E-3	1.5 E-3	1.3 E-5	5.4 E-4	7 E-7	2 E-10	2 E-7
DSA-SP28	10	2.1 E-3	8.9 E-4	8.4 E-6	3.2 E-4	2 E-7	6 E-11	6 E-8
DSA-SP28	20	3.6 E-3	1.5 E-3	1.3 E-5	5.6 E-4	1 E-7	2 E-11	3 E-8
DSA-SP29	10	7.2 E-3	3.1 E-3	2.8 E-5	1.1 E-3	1 E-7	3 E-11	3 E-8
DSA-SP30	10	6.4 E-4	2.8 E-4	2.7 E-6	1.0 E-4	6 E-8	1 E-11	1 E-8
DSA-SP30	20	2.1 E-3	8.8 E-4	7.5 E-6	3.2 E-4	3 E-7	7 E-11	7 E-8
DSA-SP31	10	1.3 E-2	5.5 E-3	5.2 E-5	2.0 E-3	5 E-7	1 E-10	1 E-7
DSA-SP31	20	1.4 E-3	5.9 E-4	5.0 E-6	2.1 E-4	2 E-7	4 E-11	4 E-8
DSA-SP32	10	5.1 E-3	2.2 E-3	2.0 E-5	7.9 E-4	2 E-7	6 E-11	6 E-8
DSA-SP32	20	2.5 E-2	1.1 E-2	8.8 E-5	3.8 E-3	1 E-6	3 E-10	3 E-7
E(d)-SP02	10	2.0 E-3	8.4 E-4	7.9 E-6	3.0 E-4	1 E-7	3 E-11	3 E-8
E(d)-SP02	20	6.2 E-3	2.6 E-3	2.1 E-5	9.5 E-4	3 E-7	7 E-11	8 E-8
E(d)-SP03	10	3.3 E-3	1.4 E-3	1.4 E-5	5.2 E-4	2 E-7	4 E-11	4 E-8
E(m)-SP08	10	4.4 E-3	1.9 E-3	1.7 E-5	6.8 E-4	2 E-7	5 E-11	5 E-8
E(m)-SP08	20	3.8 E-3	1.6 E-3	1.4 E-5	5.9 E-4	3 E-7	7 E-11	7 E-8
E(M)-SP09	10	3.1 E-3	1.3 E-3	1.3 E-5	4.9 E-4	3 E-7	7 E-11	7 E-8
E(M)-SP09	20	6.5 E-3	2.8 E-3	2.4 E-5	1.0 E-3	5 E-7	1 E-10	1 E-7
E(m)-SP10	10	1.5 E-2	6.5 E-3	6.1 E-5	2.4 E-3	1 E-6	2 E-10	2 E-7
E(m)-SP10	20	7.7 E-2	3.3 E-2	2.8 E-4	1.2 E-2	**4 E-6**	1 E-9	1 E-6
E(m)-SP11	20	9.2 E-4	3.9 E-4	3.4 E-6	1.4 E-4	8 E-8	2 E-11	2 E-8
E(n)-SP04	10	1.4 E-3	5.8 E-4	5.6 E-6	2.1 E-4	1 E-7	3 E-11	2 E-8
E(n)-SP04	20	2.3 E-3	1.0 E-3	8.5 E-6	3.6 E-4	1 E-7	3 E-11	3 E-8
E(n)-SP05	10	1.8 E-2	7.9 E-3	7.3 E-5	2.9 E-3	9 E-7	2 E-10	2 E-7
E(n)-SP05	20	3.8 E-2	1.6 E-2	1.4 E-4	5.9 E-3	**2 E-6**	5 E-10	5 E-7
E(n)-SP05	40	1.6 E-1	6.9 E-2	5.7 E-4	2.5 E-2	**8 E-6**	2 E-9	**2 E-6**
E(n)-SP06	10	1.4 E-3	6.2 E-4	5.9 E-6	2.2 E-4	1 E-7	3 E-11	3 E-8
E(n)-SP06	20	1.9 E-3	8.3 E-4	7.1 E-6	3.0 E-4	3 E-7	8 E-11	8 E-8

Table 5.3-23 *Receptors Hazard Index and Cancer Risk Results - Soil Vapor*
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil Vapor		
Sample Name	**Depth**	**Resident Child**	**Adult**	**Construction Worker**	**Commercial Worker**	**Resident**	**Construction Worker**	**Commercial Worker**
E(n)-SP07	10	1.7 E-3	7.2 E-4	6.9 E-6	2.6 E-4	2 E-7	5 E-11	4 E-8
E(n)-SP08	10	2.0 E-3	8.6 E-4	8.3 E-6	3.1 E-4	3 E-7	6 E-11	6 E-8
E(n)-SP08	20	4.7 E-3	2.0 E-3	1.8 E-5	7.2 E-4	1 E-6	2 E-10	2 E-7
E(n)-SP09	10	2.6 E-3	1.1 E-3	1.1 E-5	4.0 E-4	3 E-7	8 E-11	7 E-8
E(n)-SP09	20	9.6 E-3	4.1 E-3	3.7 E-5	1.5 E-3	**2 E-6**	5 E-10	5 E-7
E(N)-SP10	10	1.4 E-3	6.2 E-4	6.0 E-6	2.2 E-4	1 E-7	3 E-11	3 E-8
E(N)-SP10	20	1.8 E-3	7.8 E-4	6.7 E-6	2.8 E-4	1 E-7	3 E-11	3 E-8
E(n)-SP11	15	2.6 E-3	1.1 E-3	9.6 E-6	4.0 E-4	5 E-8	1 E-11	1 E-8
E(n)-SP11	25	2.8 E-3	1.2 E-3	1.0 E-5	4.3 E-4	6 E-7	1 E-10	2 E-7
E(n)-SP12	10	8.6 E-4	3.7 E-4	4.2 E-6	1.3 E-4	4 E-8	1 E-11	9 E-9
E(n)-SP12	20	9.5 E-4	4.1 E-4	3.6 E-6	1.5 E-4	1 E-7	2 E-11	2 E-8
L2-ST24-SP03	10	4.5 E-4	1.9 E-4	1.9 E-6	7.0 E-5	3 E-8	8 E-12	8 E-9
L2-ST24-SP03	20	5.3 E-3	2.3 E-3	2.0 E-5	8.3 E-4	6 E-7	1 E-10	1 E-7
L2-ST26-SP04	10	0.0 E+0	0.0 E+0	**NA**	0.0 E+0	0 E+0	0 E+0	0 E+0
L2-ST26-SP04	20	5.8 E-3	2.5 E-3	2.1 E-5	8.9 E-4	5 E-7	1 E-10	1 E-7
L2-ST26-SP05	10	9.8 E-3	4.2 E-3	3.9 E-5	1.5 E-3	7 E-7	2 E-10	2 E-7
L2-ST26-SP05	20	1.7 E-2	7.5 E-3	6.2 E-5	2.7 E-3	1 E-6	2 E-10	2 E-7
L2-ST26-SP06	10	6.4 E-4	2.8 E-4	2.7 E-6	1.0 E-4	5 E-8	1 E-11	1 E-8
L2-ST26-SP06	20	6.4 E-3	2.7 E-3	2.3 E-5	9.8 E-4	4 E-7	1 E-10	1 E-7
L2-ST26-SP07	18	5.8 E-3	2.5 E-3	2.2 E-5	9.0 E-4	6 E-7	1 E-10	1 E-7
L2-ST28_90-SP02	10	1.0 E-2	4.5 E-3	4.3 E-5	1.6 E-3	2 E-7	6 E-11	5 E-8
L2-ST28_90-SP02	20	1.4 E-2	5.9 E-3	5.0 E-5	2.1 E-3	1 E-6	3 E-10	3 E-7
Minimum		1.2 E-5	5.3 E-6	4.4 E-8	1.9 E-6	0 E+0	0 E+0	0 E+0
Median		5.8 E-3	2.5 E-3	2.1 E-5	9.0 E-4	5 E-7	1 E-10	1 E-7
Maximum		**4.3 E+1**	**1.8 E+1**	1.7 E-1	**6.7 E+0**	**6 E-3**	**2 E-6**	**1 E-3**

Key:
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

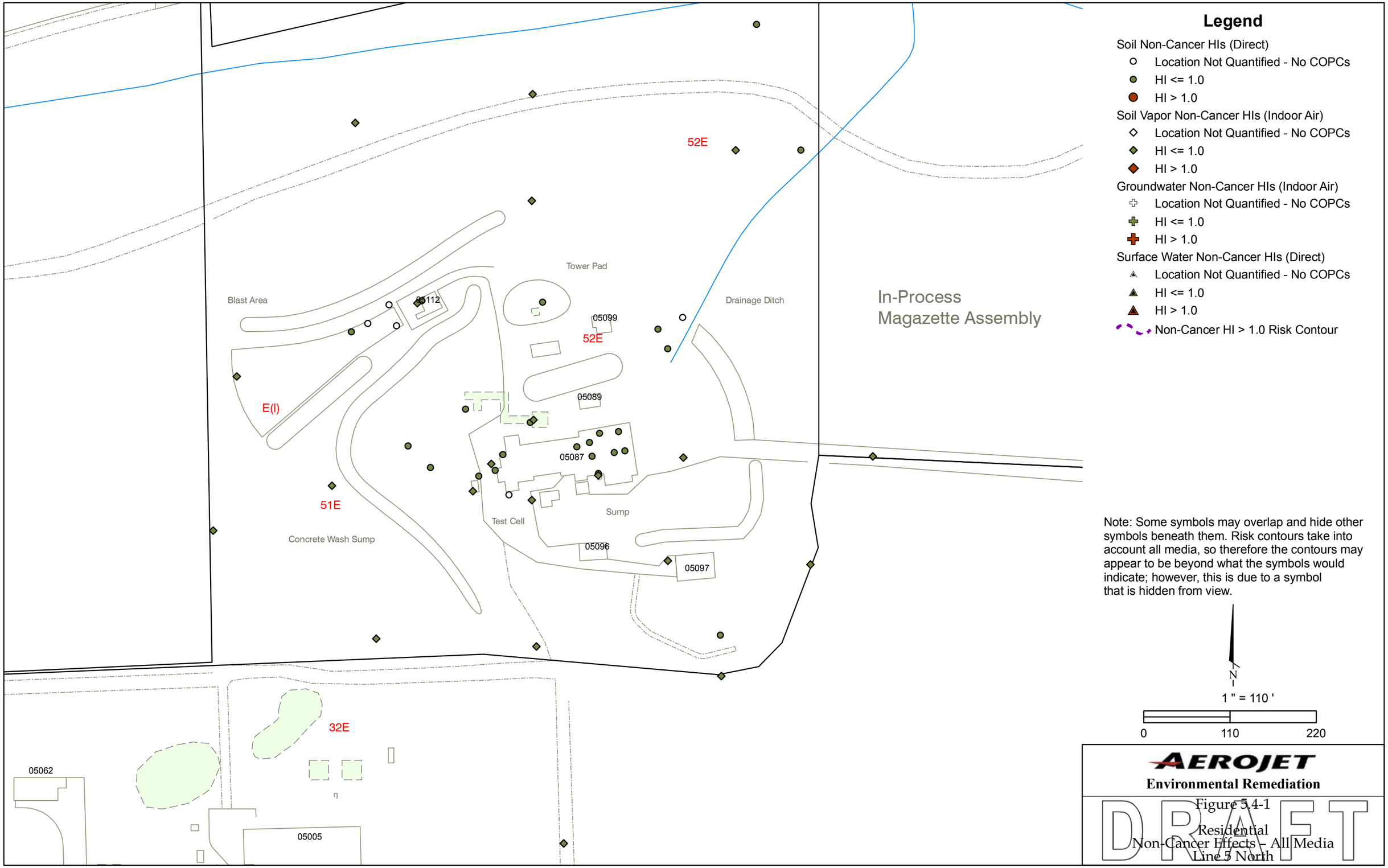

Figure 5.4-1

Residential
Non-Cancer Effects – All Media
Line 5 North

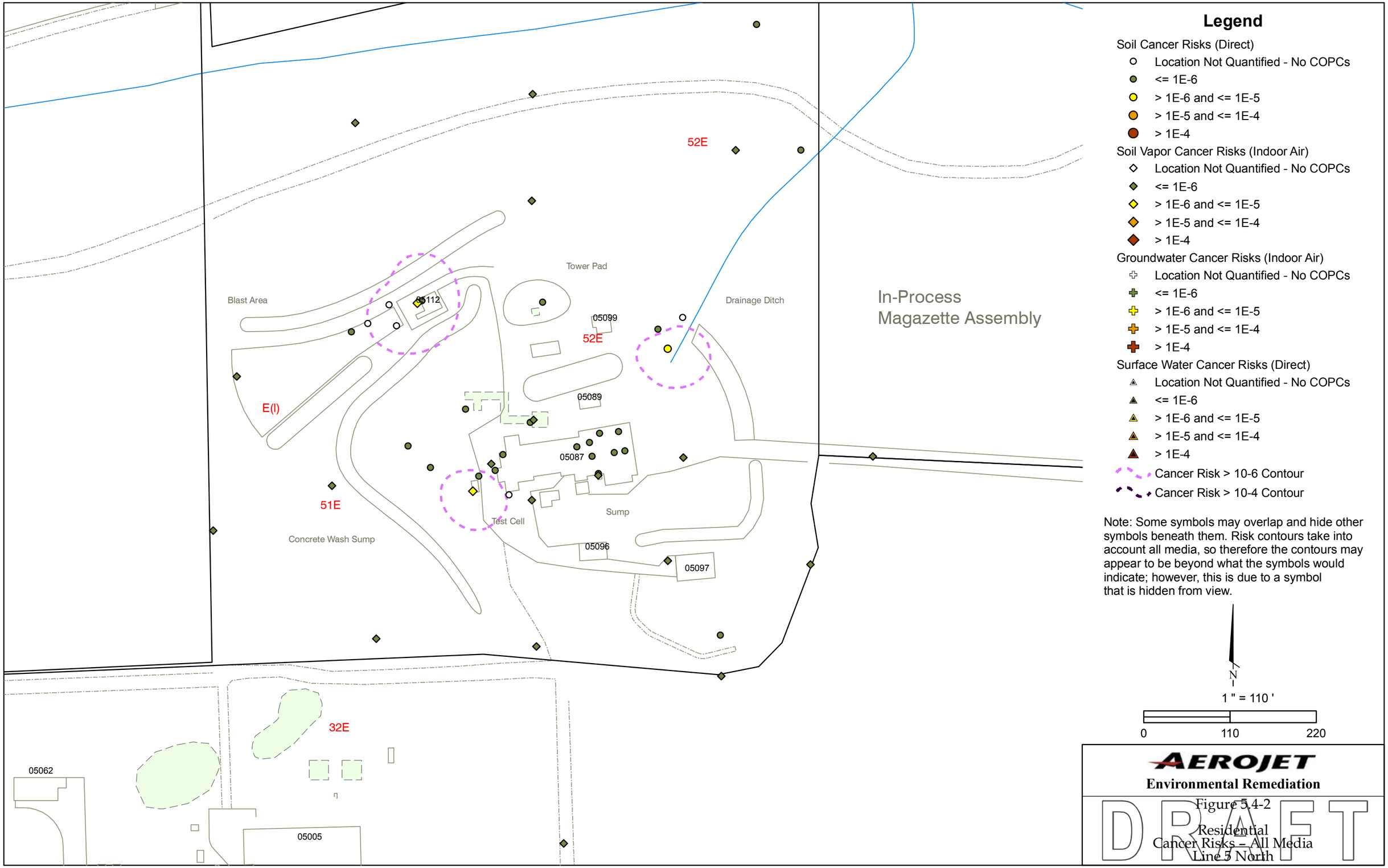

Figure 5.4-2

Residential
Cancer Risks – All Media
Line 5 North

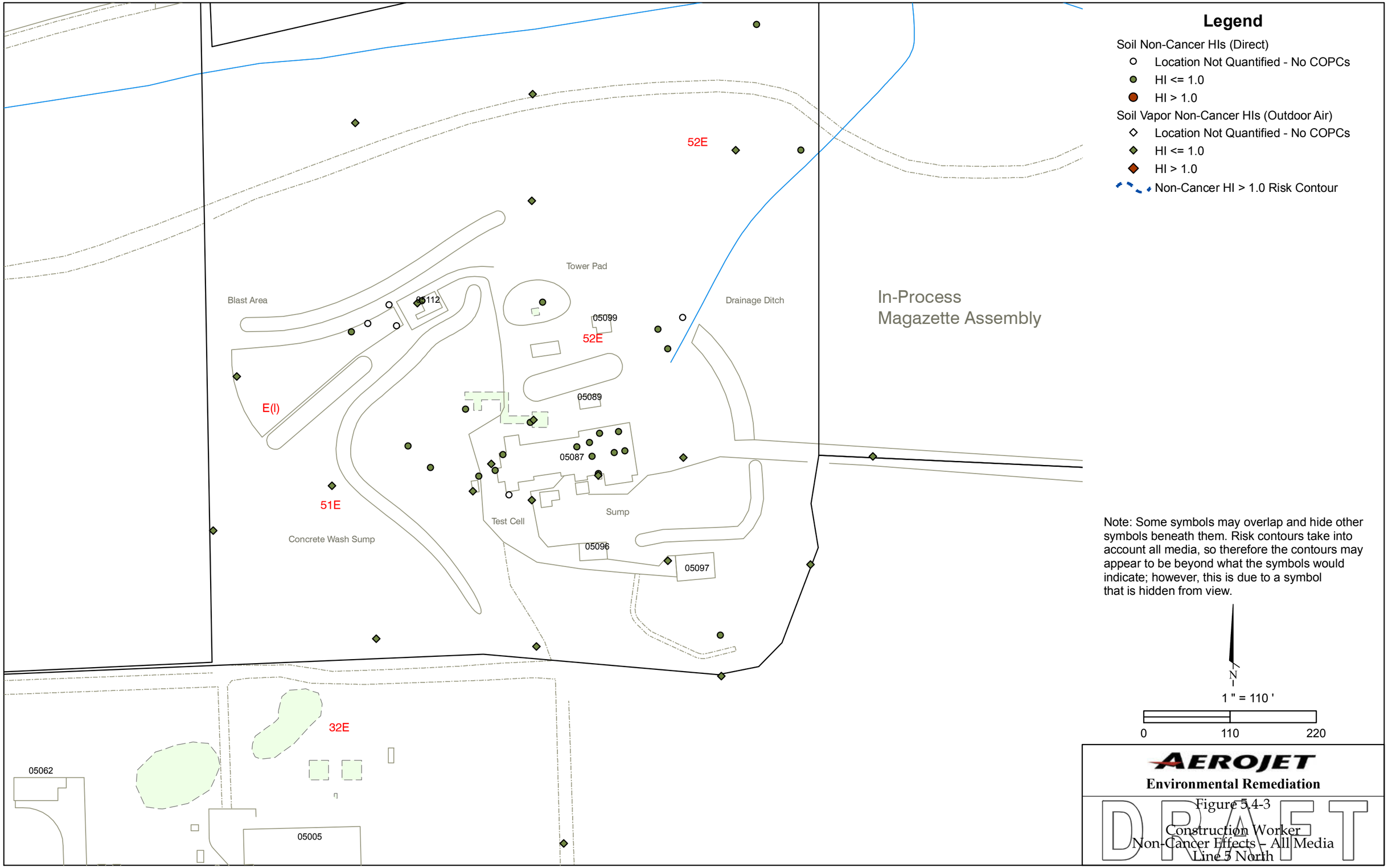

Figure 5.4-3
Construction Worker
Non-Cancer Effects – All Media
Line 5 North

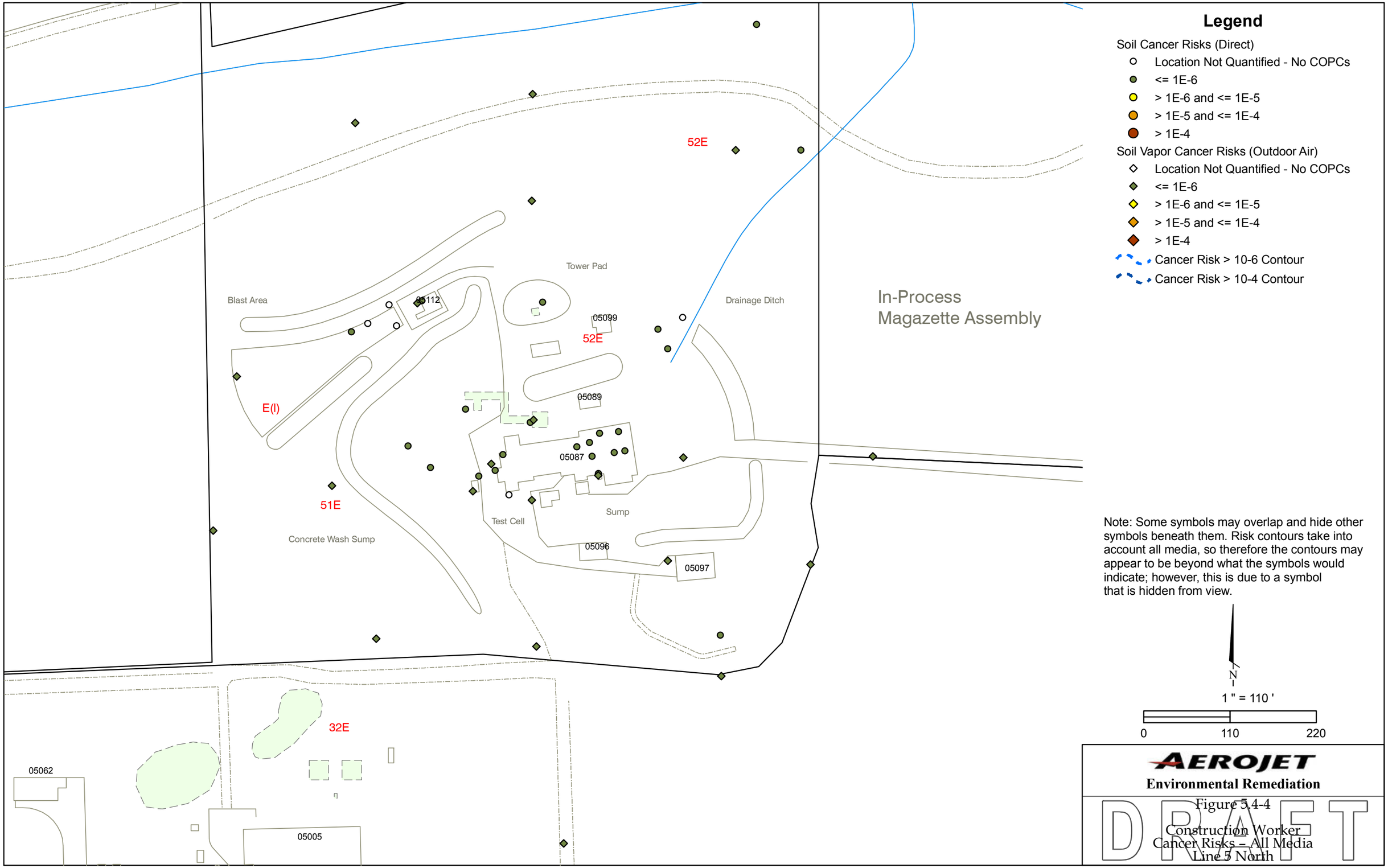

Figure 5.4-4
Construction Worker
Cancer Risks – All Media
Line 5 North

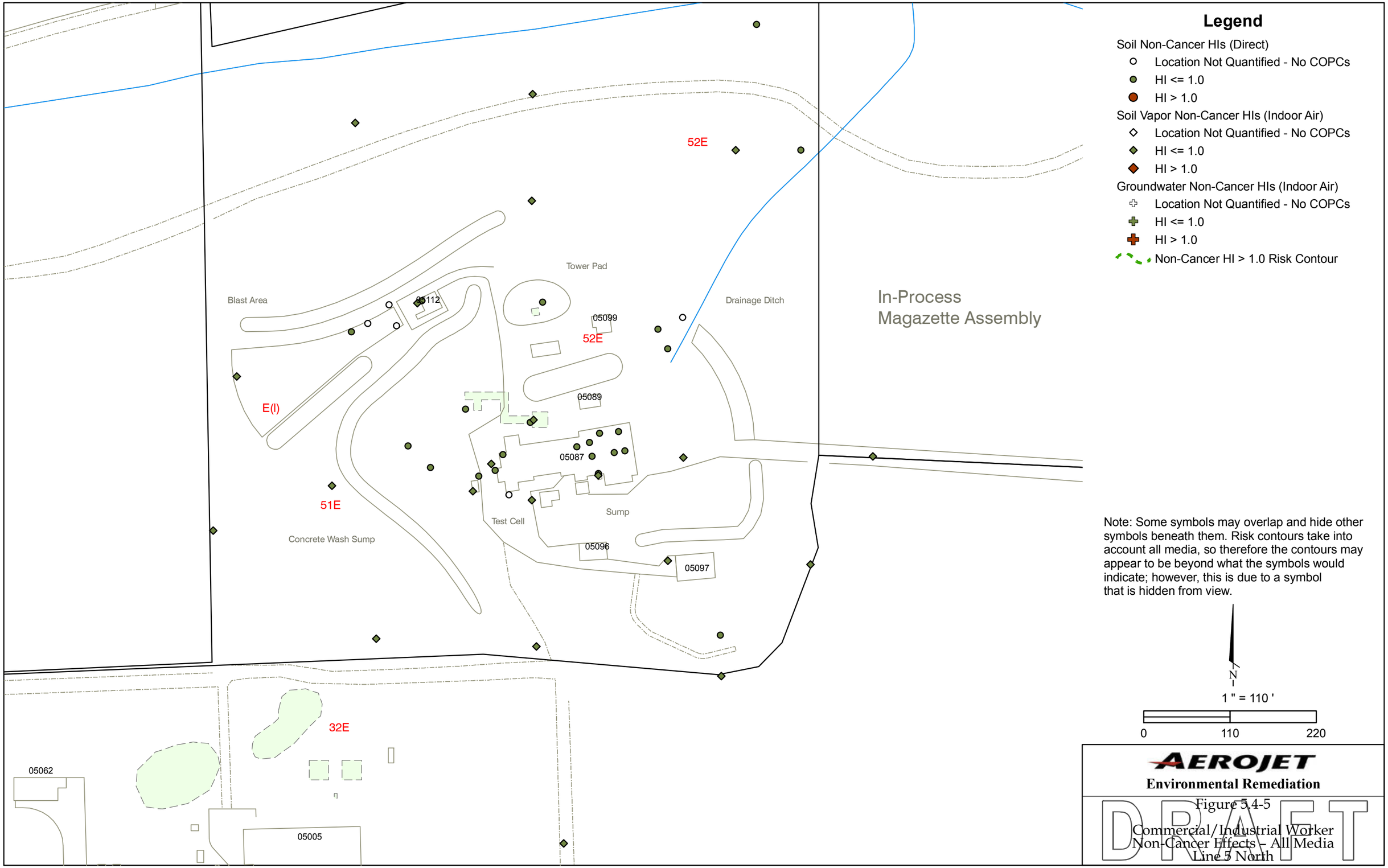

Figure 5.4-5

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Line 5 North

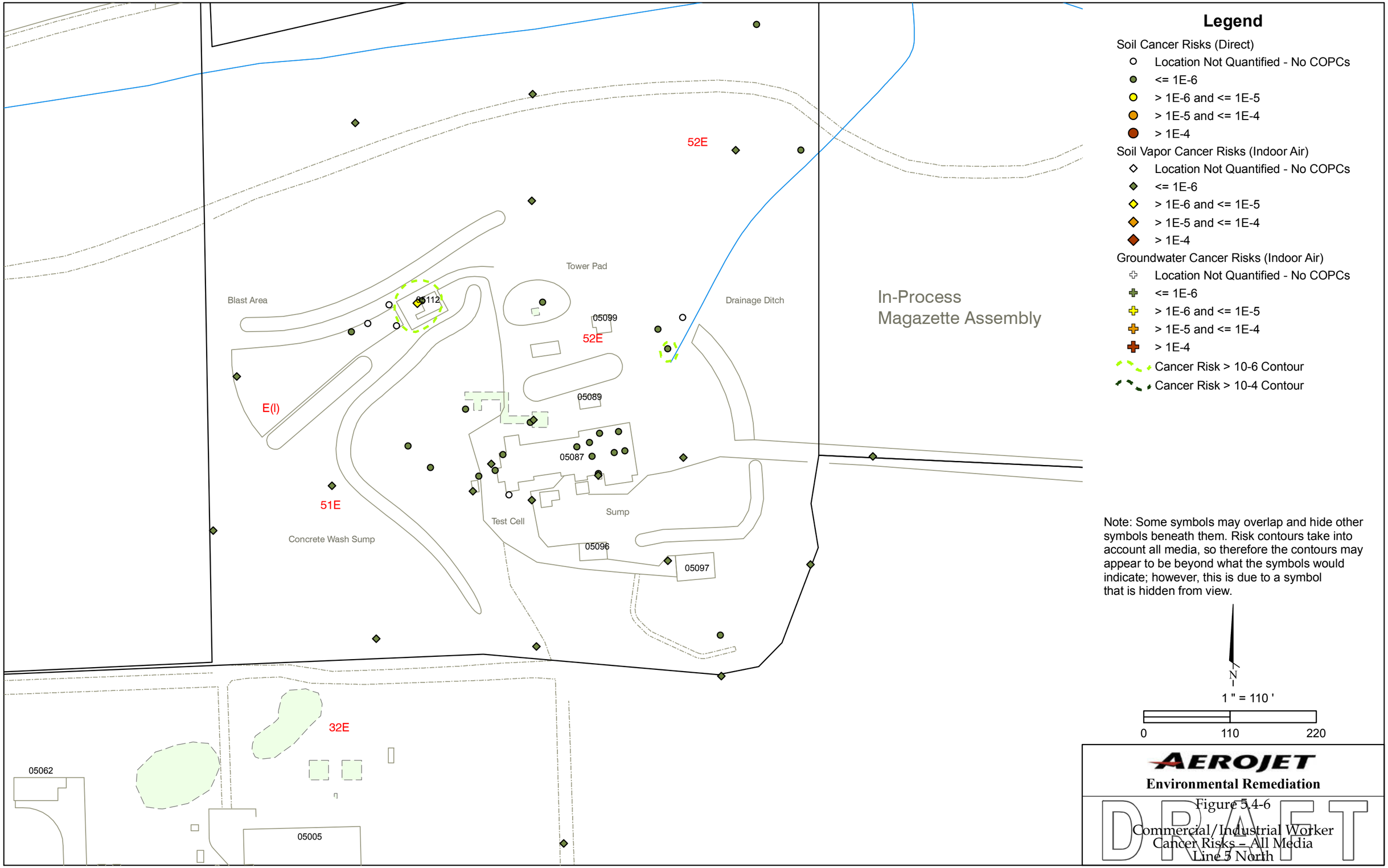

Figure 5.4-6

Commercial/Industrial Worker
Cancer Risks – All Media
Line 5 North

Table 5.4-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 5	71-55-6	1,1,1-Trichloroethane	14	14	µg/m^3	52E-SP04	10	29	1	3.4%	5.8 - 12	9.9E+04	nc	N	BSL	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/m^3			29	0	0.0%	7.3 - 15	1.8E+00	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/m^3			29	0	0.0%	5.8 - 12	6.6E+00	ca	N	ND	NA
	75-34-3	1,1-Dichloroethane	ND	ND	µg/m^3			29	0	0.0%	4.3 - 8.9	6.6E+01	ca	N	ND	NA
	75-35-4	1,1-Dichloroethene	15	15	µg/m^3	52E-SP07	20	29	1	3.4%	4.2 - 8.7	3.1E+03	nc	N	BSL	NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/m^3			29	0	0.0%	19 - 230	6.7E+00	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/m^3			29	0	0.0%	32 - 65	9.9E+03	nc	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	7.3	17	µg/m^3	52E-SP24	10	29	4	13.8%	5.2 - 11	2.7E+02	nc	Y		NA
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/m^3			29	0	0.0%	8.2 - 17	1.7E+00	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/m^3			29	0	0.0%	6.4 - 13	9.1E+03	nc	N	ND	NA
	107-06-2	1,2-Dichloroethane	ND	ND	µg/m^3			29	0	0.0%	4.3 - 8.9	5.0E+00	ca*	N	ND	NA
	78-87-5	1,2-Dichloropropane	ND	ND	µg/m^3			29	0	0.0%	4.9 - 10	1.1E+01	ca*	N	ND	NA
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/m^3			29	0	0.0%	5.2 - 11	2.7E+02	nc	N	ND	NA
	106-99-0	1,3-Butadiene	3.1	120	µg/m^3	51E-SP11	20	29	13	44.8%	2.4 - 4.9	5.9E-01	ca*	N	NR	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/m^3			29	0	0.0%	6.4 - 13	4.8E+03	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/m^3			29	0	0.0%	6.4 - 13	9.7E+00	ca	N	ND	NA
	123-91-1	1,4-Dioxane	34	34	µg/m^3	51E-SP11	20	29	1	3.4%	15 - 32	1.4E+01	ca	Y		NA
	540-84-1	2,2,4-Trimethylpentane	5.5	580	µg/m^3	52E-SP12	10	29	2	6.9%	5 - 10	3.2E+04	nc	Y		NA
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	19	70	µg/m^3	52E-SP23	10	29	5	17.2%	3.4 - 16	2.3E+05	nc	Y		NA
	591-78-6	2-Hexanone	ND	ND	µg/m^3			29	0	0.0%	17 - 36	3.6E+03	nc	N	ND	NA
	67-63-0	2-Propanol	14	84	µg/m^3	51E-SP11	20	29	5	17.2%	10 - 22	4.6E+02	nc	Y		NA
	107-05-1	3-Chloropropene	ND	ND	µg/m^3			29	0	0.0%	13 - 28	1.7E+01	nc	N	ND	NA
	622-96-8	4-Ethyltoluene	7.7	8.8	µg/m^3	52E-SP24	10	29	2	6.9%	5.2 - 11	3.2E+04	nc	Y		NA
	108-10-1	4-Methyl-2-pentanone	5.7	8.6	µg/m^3	52E-SP21	20	29	3	10.3%	4.4 - 9	3.6E+03	nc	Y		NA
	67-64-1	Acetone	56	890	µg/m^3	52E-SP19	30	29	19	65.5%	11 - 49	1.5E+04	nc	Y		NA
	100-44-7	alpha-Chlorotoluene	ND	ND	µg/m^3			29	0	0.0%	5.5 - 11	2.2E+00	ca	N	ND*	100%
	71-43-2	Benzene	4.9	34	µg/m^3	51E-SP11	20	29	13	44.8%	3.4 - 7	3.6E+00	ca	Y		NA
	75-27-4	Bromodichloromethane	ND	ND	µg/m^3			29	0	0.0%	7.1 - 15	3.1E+00	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	µg/m^3			29	0	0.0%	11 - 23	1.2E+02	nc	N	ND	NA
	74-83-9	Bromomethane	ND	ND	µg/m^3			29	0	0.0%	4.1 - 8.5	2.3E+02	nc	N	ND	NA
	104-51-8	Butylbenzene	ND	ND	µg/m^3			29	0	0.0%	23 - 280	6.5E+03	nc	N	ND	NA
	75-15-0	Carbon Disulfide	3.7	93	µg/m^3	51E-SP11	20	29	20	69.0%	3.3 - 6.8	3.1E+04	nc	Y		NA
	56-23-5	Carbon Tetrachloride	ND	ND	µg/m^3			29	0	0.0%	6.7 - 14	2.5E+00	ca*	N	ND*	100%
	108-90-7	Chlorobenzene	24	24	µg/m^3	52E-SP07	20	29	1	3.4%	4.9 - 10	4.5E+04	nc	N	BSL	NA
	75-00-3	Chloroethane	ND	ND	µg/m^3			29	0	0.0%	2.8 - 5.8	1.2E+02	ca	N	ND	NA
	67-66-3	Chloroform	6.0	48	µg/m^3	52E-SP14	10	29	6	20.7%	5.2 - 11	2.0E+01	ca	Y		NA
	74-87-3	Chloromethane	ND	ND	µg/m^3			29	0	0.0%	8.8 - 18	1.0E+02	nc	N	ND	NA

Table 5.4-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 5	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/m^3			29	0	0.0%	4.2 - 8.7	1.6E+03	nc	N	ND	NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/m^3			29	0	0.0%	4.8 - 10	6.7E+00	ca	N	ND	NA
	98-82-8	Cumene	ND	ND	µg/m^3			29	0	0.0%	5.2 - 11	1.8E+04	nc	N	ND	NA
	110-82-7	Cyclohexane	5.4	44	µg/m^3	52E-SP12	10	29	3	10.3%	3.7 - 7.6	2.7E+05	nc	Y		NA
	124-48-1	Dibromochloromethane	ND	ND	µg/m^3			29	0	0.0%	9.1 - 19	4.6E+00	ca	N	ND*	100%
	64-17-5	Ethanol	9.1	52	µg/m^3	52E-SP19	30	29	15	51.7%	8.4 - 16	7.9E+04	nc	Y		NA
	100-41-4	Ethyl Benzene	6.6	6.6	µg/m^3	51E-SP11	20	29	1	3.4%	4.6 - 9.6	4.2E+01	nc	N	BSL	NA
	75-69-4	Freon 11	ND	ND	µg/m^3			29	0	0.0%	6 - 12	3.1E+04	nc	N	ND	NA
	76-13-1	Freon 113	9.5	73	µg/m^3	52E-SP19	30	29	2	6.9%	8.2 - 17	1.4E+06	nc	Y		NA
	76-14-2	Freon 114	ND	ND	µg/m^3			29	0	0.0%	7.4 - 15	1.4E+06	nc	N	ND	NA
	75-71-8	Freon 12	ND	ND	µg/m^3			29	0	0.0%	5.3 - 11	9.1E+03	nc	N	ND	NA
	142-82-5	Heptane	5.7	51	µg/m^3	51E-SP11	20	29	8	27.6%	4.4 - 9	8.7E+03	nc	Y		NA
	87-68-3	Hexachlorobutadiene	ND	ND	µg/m^3			29	0	0.0%	45 - 94	4.9E+00	ca*	N	ND*	100%
	110-54-3	Hexane	4.5	150	µg/m^3	51E-SP11	20	29	16	55.2%	3.8 - 7.8	8.7E+03	nc	Y		NA
	136777-61-2	m,p-Xylene	5.3	14	µg/m^3	52E-SP24	10	29	9	31.0%	4.6 - 9.6	3.2E+04	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/m^3			29	0	0.0%	3.8 - 7.9	4.0E+02	ca	N	ND	NA
	75-09-2	Methylene Chloride	ND	ND	µg/m^3			29	0	0.0%	3.7 - 7.6	1.0E+02	ca	N	ND	NA
	95-47-6	o-Xylene	5.9	5.9	µg/m^3	52E-SP24	10	29	1	3.4%	4.6 - 9.6	3.2E+04	nc	N	BSL	NA
	99-87-6	p-Cymene	ND	ND	µg/m^3			29	0	0.0%	23 - 280	3.2E+04	nc	N	ND	NA
	103-65-1	Propylbenzene	ND	ND	µg/m^3			29	0	0.0%	5.2 - 11	6.4E+03	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/m^3			29	0	0.0%	23 - 280	6.5E+03	nc	N	ND	NA
	100-42-5	Styrene	ND	ND	µg/m^3			29	0	0.0%	4.5 - 9.4	4.1E+04	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/m^3			29	0	0.0%	23 - 280	6.5E+03	nc	N	ND	NA
	127-18-4	Tetrachloroethene	12	2300	µg/m^3	52E-SP07	20	29	10	34.5%	7.2 - 15	1.8E+01	ca	Y		NA
	109-99-9	Tetrahydrofuran	4.4	93	µg/m^3	51E-SP11	20	29	10	34.5%	3.3 - 6.5	5.3E+01	ca	Y		NA
	108-88-3	Toluene	5.3	56	µg/m^3	51E-SP11	20	29	16	55.2%	4 - 21	1.4E+04	nc	Y		NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/m^3			29	0	0.0%	4.2 - 8.7	3.2E+03	nc	N	ND	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/m^3			29	0	0.0%	4.8 - 10	6.7E+00	ca	N	ND	NA
	79-01-6	Trichloroethene	6.6	27000	µg/m^3	52E-SP07	20	29	26	89.7%	5.7 - 120	5.3E+01	ca	Y		NA
	75-01-4	Vinyl Chloride	ND	ND	µg/m^3			29	0	0.0%	2.7 - 5.6	1.3E+00	ca	N	ND*	100%

Footnotes:

(1) See Table 1

(2) FOD = Frequency of detection screening

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level).

NA = Not applicable

ND = Not detected above the reporting limit.

NR = Research has shown that 1,3-butadiene is not reproducible.

Key:

bgs = Below ground surface

ca = Cancer

COPC = Chemical of potential concern

µg/L = Micrograms per liter

nc = Noncancer

Table 5.4-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 5	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	6.2	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	60	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	38	0	0%	0.2-6.1	0.061	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	53	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.35	ca	N	ND*	5%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.61	nc**	N	ND*	3%
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	18	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.51-15	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	6.3	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.17	nc	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	310	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	39	0	0%	0.51-15	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	1.8	nc	N	ND*	3%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.61	nc	N	ND*	5%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	24	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	39	0	0%	0.51-15	2.3	ca**	N	ND*	3%
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	NA		N	ND	NA
	83-32-9	Acenaphthene	0.0030	0.0030	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	370	nc	N	BSL	NA
	208-96-8	Acenaphthylene	0.036	0.036	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	230	nc	N	BSL	NA
	7429-90-5	Aluminum	8300	51000	mg/kg	52E-SB11	5	65	65	100%	NA	7600	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	38	0	0%	0.2-6.1	8.5	ca**	N	ND	NA
	120-12-7	Anthracene	0.021	0.021	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	2200	nc	N	BSL	NA
	7440-36-0	Antimony	0.042	1.9	mg/kg	52E-SB05	1.5	63	40	63%	1-9.1	3	nc	N	BSL	NA
	7440-38-2	Arsenic	2.1	9.3	mg/kg	52E-SB09	11.5	64	64	100%	NA	0.0062	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	38	0	0%	0.2-6.1	0.44	ca	N	ND*	3%
	7440-39-3	Barium	49	340	mg/kg	52E-SB15	5	64	64	100%	NA	520	nc	N	BSL	NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	38	0	0%	0.36-11	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.088	0.088	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	0.062	ca	Y		NA
	50-32-8	Benzo (a) pyrene	0.13	0.13	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	0.0038	ca	Y		NA
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.18	0.35	mg/kg	52E-SNS01	0.5	39	2	5%	0.013-0.14	0.038	ca	Y		NA
	205-99-2	Benzo (b) fluoranthene	ND	ND	mg/kg	ND	ND	1	0	0%	0.36-0.36	0.062	ca	N	ND*	100%

Table 5.4-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 5	191-24-2	Benzo (ghi) perylene	0.058	0.058	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	230	nc	N	BSL	NA
	207-08-9	Benzo (k) fluoranthene	ND	ND	mg/kg	ND	ND	1	0	0%	0.36-0.36	0.038	ca	N	ND*	100%
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	38	0	0%	0.51-15	10000	max	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	38	0	0%	0.2-6.1	1800	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.15	1.1	mg/kg	L5-ST87-SB02	11	64	60	94%	0.2-0.57	15	nc	N	BSL	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.022	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	78	0	0%	0.2-6.1	0.29	ca	N	ND*	8%
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	39	0	0%	0.36-15	3.5	ca*	N	ND*	3%
	7440-42-8	Boron	1.3	12	mg/kg	52E-SB12	1	64	14	22%	4-11	1600	nc	N	BSL	NA
	7440-43-9	Cadmium	0.10	4.8	mg/kg	52E-SNS01	0.5	68	55	81%	0.11-1.1	0.17	nc	Y		NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	38	0	0%	0.2-6.1	2.4	ca	N	ND*	3%
	7440-47-3	Chromium	13	140	mg/kg	52E-SB12	1	65	65	100%	NA	10000	max	N	BSL	NA
	18540-29-9	Chromium VI	0.19	1.6	mg/kg	52E-SB12	1	3	3	100%	NA	1.7	ca**	N	BSL	NA
	218-01-9	Chrysene	0.0061	0.28	mg/kg	52E-SB05	1.5	40	7	18%	0.0067-0.36	0.38	ca	Y		NA
	7440-48-4	Cobalt	3.6	35	mg/kg	52E-SB09	3.75	64	64	100%	NA	66	ca**	N	BSL	NA
	7440-50-8	Copper	7.3	640	mg/kg	52E-SNS01	0.5	65	65	100%	NA	300	nc	N	BG	NA
	53-70-3	Dibenz (a,h) anthracene	0.014	0.014	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	0.0062	ca	Y		NA
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	15	nc	N	ND	NA
	68334-30-5	Diesel Range Organics (C10-C28)	0.90	2200	mg/kg	52E-SB05	1.5	51	32	63%	2-400	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	4900	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	39	0	0%	0.36-12	610	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	1.2	1.2	mg/kg	52E-SNS01	0.5	39	1	3%	0.2-6.1	240	nc	N	BSL	NA
	206-44-0	Fluoranthene	0.0022	0.20	mg/kg	52E-SNS01	0.5	40	5	13%	0.0067-0.36	230	nc	Y		NA
	86-73-7	Fluorene	0.0030	0.0030	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	270	nc	N	BSL	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.62	ca**	N	ND*	3%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	39	0	0%	0.72-21	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	3.5	ca**	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.057	0.057	mg/kg	52E-SNS01	0.5	40	1	3%	0.0067-0.36	0.062	ca	N	BSL	NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	51	ca*	N	ND	NA
	7439-92-1	Lead	2.3	170	mg/kg	52E-SNS01	0.5	65	65	100%	NA	15	nc	N	BG	NA
	7439-93-2	Lithium	4.2	23	mg/kg	E(L)-SB01	5	64	64	100%	NA	160	nc	N	BSL	NA
	7439-96-5	Manganese	140	1600	mg/kg	52E-SB15	5	64	64	100%	NA	180	nc	N	BG	NA
	7439-97-6	Mercury	0.0057	2.4	mg/kg	52E-SNS01	0.5	65	62	95%	0.02-0.22	1.8	nc	N	BG	NA
	7439-98-7	Molybdenum	0.11	4.4	mg/kg	E(L)-SB01	0.25	64	55	86%	1-3.9	38	nc	N	BSL	NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.3	5700	mg/kg	52E-SB05	1.5	53	36	68%	4.1-810	NA		N	ITC	NA
	91-20-3	Naphthalene	0.013	0.015	mg/kg	52E-SB12	1	40	2	5%	0.0067-0.36	0.17	ca	Y		NA

Table 5.4-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Line 5 North Management Area
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Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Line 5	7440-02-0	Nickel	10	130	mg/kg	E(L)-SB01	11	65	65	100%	NA	160	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	2	nc	N	ND*	3%
	556887	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	51	0	0%	0.032-0.25	NA		N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	39	0	0%	0.0031-0.74	0.00095	ca*	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	39	0	0%	0.2-6.1	0.007	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	1	0	0%	0.36-0.36	9.9	ca*	N	ND	NA
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	38	0	0%	0.2-6.1	150	nc	N	ND	NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	39	0	0%	0.72-21	0.3	ca	N	ND*	100%
	14797-73-0	Perchlorate	0.0077	0.52	mg/kg	52E-SB14	5	64	18	28%	0.005-0.088	0.78	ca/nc	Y		NA
	85-01-8	Phenanthrene	0.0036	0.14	mg/kg	52E-SB04	1	40	8	20%	0.0067-0.36	230	nc	Y		NA
	108-95-2	Phenol	0.17	4.2	mg/kg	52E-SB06	5	39	10	26%	0.2-6.1	1800	nc	Y		NA
	129-00-0	Pyrene	0.0062	0.22	mg/kg	52E-SB05, 52E-SNS01	1.5 0.5	40	5	13%	0.0067-0.36	230	nc	Y		NA
	7782-49-2	Selenium	0.21	1.9	mg/kg	52E-SB12	1	64	11	17%	1-2.7	38	nc	N	BSL	NA
	7440-22-4	Silver	0.047	14	mg/kg	52E-SNS01	0.5	65	12	18%	0.52-2.2	38	nc	N	BSL	NA
	7440-24-6	Strontium	12	87	mg/kg	52E-SB12	1	64	64	100%	NA	4700	nc	N	BSL	NA
	7440-28-0	Thallium	0.12	3.9	mg/kg	52E-SB14	5	64	48	75%	0.51-9.8	0.5	nc	N	BG	NA
	7440-32-6	Titanium	420	1800	mg/kg	52E-SB11	5	64	64	100%	NA	10000	nc	N	BSL	NA
	57-12-5	Total Cyanide	ND	ND	mg/kg	ND	ND	1	0	0%	0.54-0.54	120	nc	N	ND	NA
	7440-62-2	Vanadium	26	110	mg/kg	52E-SB15, E(L)-SB01, E(L)-SB01	5 11 5	64	64	100%	NA	0.53	nc	N	BG	NA
	7440-66-6	Zinc	23	680	mg/kg	52E-SNS01	0.5	65	65	100%	NA	2300	nc	N	BSL	NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening

BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit.
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level).

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
NA = Not applicable
ITC = Individual toxic compounds associated with the mixture are assessed separately.

Table 5.4-3 Chemical of Potential Concern Summary
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
1,1,2,2-Tetrachloroethane	N	ND*	NA	NA
1,1,1-Trichloroethane	N	BSL	NA	NA
1,1,2-Trichloroethane	N	ND	NA	NA
1,1-Dichloroethane	N	ND	NA	NA
1,1-Dichloroethene	N	BSL	NA	NA
1,1-Dichloropropene	N	ND*	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	N	ND	N	ND
1,2,4-Trimethylbenzene	Y		NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	N	ND*	NA	NA
1,2-Dichlorobenzene	N	ND	N	ND
1,2-Dichloroethane	N	ND	NA	NA
cis-1,2-Dichloroethene	N	ND	NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA
1,2-Dichloropropane	N	ND	NA	NA
1,2-Diphenylhydrazine	NA	NA	NA	NA
1,3,5-Trimethylbenzene	N	ND	NA	NA
1,3-Butadiene	N	NR	NA	NA
1,3-Dichlorobenzene	N	ND	N	ND
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	N	ND	N	ND*
1,4-Dioxane	Y		NA	NA
2,2,4-Trimethylpentane	Y		NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	N	ND
2,4,6-Trichlorophenol	NA	NA	N	ND*
2,4-Dichlorophenol	NA	NA	N	ND
2,4-Dimethylphenol	NA	NA	N	ND
2,4-Dinitrophenol	NA	NA	N	ND
2,4-Dinitrotoluene	NA	NA	N	ND
2,6-Dinitrotoluene	NA	NA	N	ND
2-Butanone (Methyl Ethyl Ketone)	Y		NA	NA
2-Chloronaphthalene	NA	NA	N	ND
2-Chlorophenol	NA	NA	N	ND
2-Chlorotoluene	NA	NA	NA	NA
2-Hexanone	N	ND	NA	NA
2-Methylnaphthalene	NA	NA	N	ND*
2-Methylphenol	NA	NA	N	ND
2-Nitroaniline	NA	NA	N	ND
2-Nitrophenol	NA	NA	N	ND
2-Propanol	Y		NA	NA
3,3'-Dichlorobenzidine	NA	NA	N	ND*
3-Chloropropene	N	ND	NA	NA
3-Nitroaniline	NA	NA	N	ND*
4,6-Dinitro-2-methylphenol	NA	NA	N	ND*
4-Bromophenyl phenyl ether	NA	NA	N	ND
4-Chloro-3-methylphenol	NA	NA	N	ND
4-Chloroaniline	NA	NA	N	ND
4-Chlorophenyl phenyl ether	NA	NA	N	ND
4-Chlorotoluene	NA	NA	NA	NA
4-Ethyltoluene	Y		NA	NA
4-Methyl-2-pentanone	Y		NA	NA
4-Methylphenol	NA	NA	N	ND
4-Nitroaniline	NA	NA	N	ND*
4-Nitrophenol	NA	NA	N	ND
Acenaphthene	NA	NA	N	BSL
Acenaphthylene	NA	NA	N	BSL
Acetone	Y		NA	NA
alpha-Chlorotoluene	N	ND*	NA	NA
Aluminum	NA	NA	N	BG
Aniline	NA	NA	N	ND
Anthracene	NA	NA	N	BSL

Table 5.4-3 Chemical of Potential Concern Summary
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Antimony	NA	NA	N	BSL
PCB-1016	NA	NA	NA	NA
PCB-1221	NA	NA	NA	NA
PCB-1232	NA	NA	NA	NA
PCB-1242	NA	NA	NA	NA
PCB-1248	NA	NA	NA	NA
PCB-1254	NA	NA	NA	NA
PCB-1260	NA	NA	NA	NA
Arsenic	NA	NA	N	BG
Azobenzene	NA	NA	N	ND*
Barium	NA	NA	N	BSL
Benzene	Y		NA	NA
Benzidine	NA	NA	N	ND*
Benzo (a) anthracene	NA	NA	Y	
Benzo (a) pyrene	NA	NA	Y	
Benzo (b & k) fluoranthene (total)	NA	NA	Y	
Benzo (ghi) perylene	NA	NA	N	BSL
Benzo (b) fluoranthene	NA	NA	N	ND*
Benzo (k) fluoranthene	NA	NA	N	ND*
Benzoic acid	NA	NA	N	ND
Benzyl alcohol	NA	NA	N	ND
Benzyl butyl phthalate	NA	NA	N	ND
Beryllium	NA	NA	N	BSL
Bis(2-Chloroethoxy)methane	NA	NA	N	ND
Bis(2-Chloroethyl)ether	NA	NA	N	ND*
Bis(2-Chloroisopropyl)ether	NA	NA	N	ND*
Bis(2-Ethylhexyl)phthalate	NA	NA	N	ND*
Boron	NA	NA	N	BSL
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	NA
Bromodichloromethane	N	ND*	NA	NA
Bromoform	N	ND	NA	NA
Bromomethane	N	ND	NA	NA
Butylbenzene	N	ND	NA	NA
Cadmium	NA	NA	Y	
Calcium	NA	NA	NA	NA
Carbazole	NA	NA	N	ND*
Carbon Disulfide	Y		NA	NA
Carbon Tetrachloride	N	ND*	NA	NA
Chlorobenzene	N	BSL	NA	NA
Chloroethane	N	ND	NA	NA
Chloroform	Y		NA	NA
Chloromethane	N	ND	NA	NA
Chromium	NA	NA	N	BSL
Chrysene	NA	NA	Y	
cis-1,2-Dichloroethene	N	ND	NA	NA
cis-1,3-Dichloropropene	N	ND	NA	NA
Cobalt	NA	NA	N	BSL
Copper	NA	NA	N	BG
Cyclohexane	Y		NA	NA
Dibenz (a,h) anthracene	NA	NA	Y	
Dibenzofuran	NA	NA	N	ND
Dibromochloromethane	N	ND*	NA	NA
Dibromomethane	NA	NA	NA	NA
Freon 12	N	ND	NA	NA
Diesel Range Organics (C10-C28)	NA	NA	N	ITC
Diethyl phthalate	NA	NA	N	ND
Dimethyl phthalate	NA	NA	N	ND
Di-n-butyl phthalate	NA	NA	N	ND
Di-n-octyl phthalate	NA	NA	N	BSL
Ethanol	Y		NA	NA
Ethyl benzene	N	BSL	NA	NA

Table 5.4-3 Chemical of Potential Concern Summary
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Fluoranthene	NA	NA	Y	
Fluorene	NA	NA	N	BSL
Freon 113	Y		NA	NA
Freon 114	N	ND	NA	NA
Heptane	Y		NA	NA
Hexachlorobenzene	NA	NA	N	ND*
Hexachlorobutadiene	N	ND*	N	ND*
Hexachlorocyclopentadiene	NA	NA	N	ND
Hexachloroethane	NA	NA	N	ND
Hexane	Y		NA	NA
Chromium VI	NA	NA	N	BSL
Indeno (1,2,3-cd) pyrene	NA	NA	N	BSL
Iron	NA	NA	NA	NA
Isophorone	NA	NA	N	ND
Cumene	N	ND	NA	NA
Lead	NA	NA	N	BG
Lithium	NA	NA	N	BSL
m,p-Xylene	Y		NA	NA
Magnesium	NA	NA	NA	NA
Manganese	NA	NA	N	BG
Mercury	NA	NA	N	BG
Methyl tert-butyl ether	N	ND	NA	NA
Methylene Chloride	N	ND	NA	NA
Molybdenum	NA	NA	N	BSL
Motor Oil Range Organics (C16-C36)	NA	NA	N	ITC
Naphthalene	NA	NA	Y	
Butylbenzene	N	ND	NA	NA
Nickel	NA	NA	N	BSL
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	NA	NA	N	ND*
N-Nitrosodimethylamine	NA	NA	N	ND*
N-Nitrosodi-n-propylamine	NA	NA	N	ND*
N-Nitrosodiphenylamine	NA	NA	N	ND
Propylbenzene	N	ND	NA	NA
o-Xylene	N	BSL	NA	NA
Pentachlorophenol	NA	NA	N	ND*
Perchlorate	NA	NA	Y	
Phenanthrene	NA	NA	Y	
Phenol	NA	NA	Y	
p-Cymene	N	ND	NA	NA
Polychlorinated biphenyl	NA	NA	NA	NA
Potassium	NA	NA	NA	NA
Pyrene	NA	NA	Y	
sec-Butylbenzene	N	ND	NA	NA
Selenium	NA	NA	N	BSL
Silver	NA	NA	N	BSL
Sodium	NA	NA	NA	NA
Strontium	NA	NA	N	BSL
Styrene	N	ND	NA	NA
tert-Butylbenzene	N	ND	NA	NA
Tetrachloroethene	Y		NA	NA
Tetrahydrofuran	Y		NA	NA
Thallium	NA	NA	N	BG
Tin	NA	NA	NA	NA
Titanium	NA	NA	N	BSL
Toluene	Y		NA	NA

Table 5.4-3 Chemical of Potential Concern Summary
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Total Cyanide	NA	NA	N	ND
trans-1,2-Dichloroethene	N	ND	NA	NA
trans-1,3-Dichloropropene	N	ND	NA	NA
Trichloroethene	Y		NA	NA
Freon 11	N	ND	NA	NA
Vanadium	NA	NA	N	BG
Vinyl Chloride	N	ND*	NA	NA
Xylenes (total)	NA	NA	NA	NA
Zinc	NA	NA	N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of potential concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential nutrient
ND = Not detected above the reporting limit.
NR = Research has shown that 1,3-butadiene is not reproducible.
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level).

Table 5.4-4 *Outdoor Air Exposure Point Concentration Results*
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Inorganics									
Cadmium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Perchlorate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(b&k)fluoranthene (total)	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(a)pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Chrysene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Dibenz(a,h)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Naphthalene	1.0 E+0	2.3 E-5	2.3 E-5	1.0 E+0	2.3 E-5	2.3 E-5	1.0 E+0	2.3 E-5	2.3 E-5
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenanthrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg,
Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.4-5 Residential Soil Vapor to Indoor Air Attenuation Factors
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors		
	Feet bgs		
Chemical/Feet bgs	**10**	**20**	**30**
1,4-Dioxane	5.9 E-4	3.4 E-4	2.3 E-4
2-Propanol	5.2 E-4	3.0 E-4	2.0 E-4
Benzene	5.2 E-4	2.8 E-4	1.9 E-4
Chloroform	5.9 E-4	3.3 E-4	2.3 E-4
Freon 113	4.7 E-4	2.7 E-4	1.7 E-4
Heptane	9.3 E-4	5.8 E-4	4.0 E-4
Hexane	9.3 E-4	5.6 E-4	4.0 E-4
Tetrachloroethylene	4.4 E-4	2.4 E-4	1.6 E-4
Tetrahydrofuran	6.0 E-4	3.5 E-4	2.3 E-4
Trichloroethylene	4.8 E-4	2.7 E-4	1.8 E-4
1,2,4-Trimethylbenzene	3.8 E-4	2.1 E-4	1.4 E-4
2,2,4-Trimethylpentane	5.1 E-4	2.9 E-4	1.9 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	2.8 E-4	1.8 E-4
4-Ethyltoluene	9.3 E-4	2.9 E-4	1.9 E-4
4-Methyl-2-pentanone	4.6 E-4	2.6 E-4	1.7 E-4
Acetone	6.8 E-4	4.0 E-4	2.7 E-4
Carbon Disulfide	5.9 E-4	3.4 E-4	2.3 E-4
Cyclohexane	4.8 E-4	2.7 E-4	1.8 E-4
Ethanol	8.4 E-4	5.2 E-4	3.5 E-4
m,p-Xylene	4.6 E-4	2.6 E-4	1.7 E-4
Toluene	5.1 E-4	2.9 E-4	1.9 E-4

Key:
bgs = Below ground surface

Table 5.4-6 Commercial Soil Vapor to Indoor Air Attenuation Factors
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors		
		Feet bgs	
Chemical/Feet bgs	**10**	**20**	**30**
1,4-Dioxane	3.0 E-4	1.7 E-4	1.1 E-4
2-Propanol	2.6 E-4	1.5 E-4	9.9 E-5
Benzene	2.6 E-4	1.4 E-4	9.7 E-5
Chloroform	2.9 E-4	1.6 E-4	1.1 E-4
Freon 113	2.4 E-4	1.3 E-4	8.7 E-5
Heptane	4.6 E-4	2.9 E-4	2.0 E-4
Hexane	4.6 E-4	2.8 E-4	2.0 E-4
Tetrachloroethylene	2.2 E-4	1.2 E-4	8.1 E-5
Tetrahydrofuran	3.0 E-4	1.7 E-4	1.2 E-4
Trichloroethylene	2.4 E-4	1.3 E-4	8.8 E-5
1,2,4-Trimethylbenzene	1.9 E-4	1.1 E-4	6.9 E-5
2,2,4-Trimethylpentane	2.6 E-4	1.5 E-4	9.6 E-5
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.4 E-4	9.1 E-5
4-Ethyltoluene	2.6 E-4	1.5 E-4	9.6 E-5
4-Methyl-2-pentanone	2.3 E-4	1.3 E-4	8.4 E-5
Acetone	3.4 E-4	2.0 E-4	1.3 E-4
Carbon Disulfide	2.9 E-4	1.7 E-4	1.1 E-4
Cyclohexane	2.4 E-4	1.4 E-4	8.9 E-5
Ethanol	4.2 E-4	2.6 E-4	1.8 E-4
m,p-Xylene	2.3 E-4	1.3 E-4	8.6 E-5
Toluene	2.6 E-4	1.5 E-4	9.6 E-5

Key:
bgs = Below ground surface

Table 5.4-7 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air*
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical of Potential Concern	Diffusivity in Air (cm^2/s)	Soil to Outdoor Air Attenuation Factors		
		10	20	30
1,4-Dioxane	9.9E-02	7.9E-06	4.0E-06	2.6E-06
2-Propanol	8.6E-02	6.9E-06	3.4E-06	2.3E-06
Benzene	8.8E-02	7.0E-06	3.5E-06	2.3E-06
Chloroform	1.0E-01	8.3E-06	4.2E-06	2.8E-06
Freon 113	7.8E-02	6.2E-06	3.1E-06	2.1E-06
Heptane	6.8E-02	5.5E-06	2.7E-06	1.8E-06
Hexane	2.0E-01	1.6E-05	8.0E-06	5.3E-06
Tetrachloroethylene	7.2E-02	5.8E-06	2.9E-06	1.9E-06
Tetrahydrofuran	1.1E-01	8.4E-06	4.2E-06	2.8E-06
Trichloroethylene	7.9E-02	6.3E-06	3.2E-06	2.1E-06
1,2,4-Trimethylbenzene	6.1E-02	4.8E-06	2.4E-06	1.6E-06
2,2,4-Trimethylpentane	8.7E-02	6.9E-06	3.5E-06	2.3E-06
2-Butanone (Methyl Ethyl Ketone)	8.1E-02	6.5E-06	3.2E-06	2.2E-06
4-Ethyltoluene	8.7E-02	6.9E-06	3.5E-06	2.3E-06
4-Methyl-2-pentanone	7.5E-02	6.0E-06	3.0E-06	2.0E-06
Acetone	1.2E-01	9.9E-06	5.0E-06	3.3E-06
Carbon Disulfide	1.0E-01	8.3E-06	4.2E-06	2.8E-06
Cyclohexane	8.0E-02	6.4E-06	3.2E-06	2.1E-06
Ethanol	1.6E-01	1.3E-05	6.3E-06	4.2E-06
m,p-Xylene	7.7E-02	6.1E-06	3.1E-06	2.0E-06
Toluene	8.7E-02	6.9E-06	3.5E-06	2.3E-06

a = USEPA, 1988, Superfund Exposure Assessment Manual

$$\text{Ambient Air Attenuation Factor} = \frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm3/m3}}$$

Dia =	chemical specific	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	20250000	cm^2	Area (assume 4500 cm x 4500 cm)
d =	304.8	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2	m	Breathing zone height
u =	3	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
cm^2/s = Square Centimeter per second
cm = Centimeter
m = Meter
m/s = Meter per second
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
cm^3 = Cubic centimeter
m^3 = Cubic meter

Table 5.4-8 ***Soil Unit Hazard and Unit Cancer Risk Results - Resident***
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Cadmium	1.0 E+0	1.3 E-2	1.4 E-3	4.7 E-7	1.4 E-2	1.4 E-3	2.2 E-4	2.0 E-7	1.6 E-3	NA	NA	1.6 E-9	1.6 E-9
Perchlorate	1.0 E+0	1.8 E-2	0.0 E+0	NA	1.8 E-2	2.0 E-3	0.0 E+0	NA	2.0 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds													
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	4.7 E-7	8.0 E-11	1.6 E-6
Benzo(b&k)fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	7.7 E-6	4.3 E-10	2.6 E-5
Chrysene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	7.7 E-8	4.3 E-12	2.6 E-7
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	4.7 E-6	4.5 E-10	1.6 E-5
Naphthalene	1.0 E+0	6.4 E-4	2.3 E-4	1.7 E-2	1.8 E-2	6.8 E-5	3.6 E-5	7.4 E-3	7.5 E-3	NA	NA	4.1 E-7	4.1 E-7
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
Phenanthrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI - Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.4-9 *Inhalation Unit Hazard and Unit Cancer Risk Results - Resident*
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	2.2 E+1	9.6 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.5 E-1	1.9 E-1	NA
4-Ethyltoluene	1.0 E+0	2.2 E+1	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Cyclohexane	1.0 E+0	3.7 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Toluene	1.0 E+0	7.5 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.4-10
Location-Specific Soil Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)												Child Non-Cancer Hazard Index												
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard Child		NA	NA	NA	1.4 E-2	NA	NA	4.4 E-4	1.8 E-2	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4													
Unit Hazard Adult		NA	NA	NA	1.6 E-3	NA	NA	5.2 E-5	7.5 E-3	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5													
Unit Risk		1.6 E-6	2.6 E-5	2.6 E-6	1.6 E-9	2.6 E-7	1.6 E-5	NA	4.1 E-7	NA	NA	NA	NA													
51E-SB03	1.5				0.31							2.9		NA	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	4.6 E-3
51E-SB03	5				0.63					0.0077				NA	NA	NA	9.0 E-3	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	9.1 E-3
51E-SB03	11.5				0.50					0.011				NA	NA	NA	7.1 E-3	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	7.3 E-3
51E-SB04	1				0.66	0.0095		0.0036			0.0051		0.0062	NA	NA	NA	9.4 E-3	NA	NA	1.6 E-6	NA	NA	3.0 E-6	NA	3.6 E-6	9.4 E-3
51E-SB04	5				0.36									NA	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3
51E-SB04	11				0.42	0.0061				0.015	0.0038			NA	NA	NA	6.0 E-3	NA	NA	NA	NA	2.7 E-4	2.2 E-6	NA	NA	6.2 E-3
52E-SB04	1			0.18	0.49	0.16		0.028			0.14	1.2	0.12	NA	NA	NA	7.0 E-3	NA	NA	1.2 E-5	NA	NA	8.1 E-5	6.5 E-5	7.0 E-5	7.2 E-3
52E-SB04	5.5									0.015				NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	2.7 E-4
52E-SB04	11				0.36					0.016				NA	NA	NA	5.1 E-3	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	5.4 E-3
52E-SB05	1.5				1.8	0.28		0.027		0.26	0.024		0.22	NA	NA	NA	2.6 E-2	NA	NA	1.2 E-5	NA	4.7 E-3	1.4 E-5	NA	1.3 E-4	3.0 E-2
52E-SB05	5									0.054				NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	NA	NA	9.9 E-4
52E-SB05	11.5				0.53									NA	NA	NA	7.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-3
52E-SB06	1.5				0.44	0.12					0.091	3.0	0.13	NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	5.3 E-5	1.6 E-4	7.6 E-5	6.5 E-3
52E-SB06	5									0.020		4.2		NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	2.3 E-4	NA	5.9 E-4
52E-SB06	11.5				0.10									NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
52E-SB07	1									0.077		0.29		NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	1.6 E-5	NA	1.4 E-3
52E-SB07	5				0.32							0.27		NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	4.6 E-3
52E-SB07	11				0.41							0.45		NA	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	5.9 E-3
52E-SB08	1				0.35					0.011				NA	NA	NA	5.0 E-3	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	5.2 E-3
52E-SB08	5				0.33									NA	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-3
52E-SB08	11				0.34									NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3
52E-SB09	3.75				0.44					0.028				NA	NA	NA	6.3 E-3	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	6.8 E-3
52E-SB09	5.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB09	11.5				0.42									NA	NA	NA	6.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-3
52E-SB10	1.5				0.46							0.64		NA	NA	NA	6.5 E-3	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	6.6 E-3
52E-SB10	5.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB10	11.5				0.32									NA	NA	NA	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-3
52E-SB11	1				0.50					0.018				NA	NA	NA	7.1 E-3	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	7.4 E-3
52E-SB11	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB11	11				0.33									NA	NA	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-3
52E-SB12	1				4.0			0.0022	0.015	0.065				NA	NA	NA	5.7 E-2	NA	NA	9.6 E-7	2.7 E-4	1.2 E-3	NA	NA	NA	5.8 E-2
52E-SB12	5				0.64					0.022				NA	NA	NA	9.1 E-3	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	9.5 E-3
52E-SB13	1				0.46							0.17		NA	NA	NA	6.5 E-3	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	6.5 E-3
52E-SB13	5				0.37									NA	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-3
52E-SB13	11				0.31									NA	NA	NA	4.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-3
52E-SB14	1.5				0.41					0.086		1.2		NA	NA	NA	5.8 E-3	NA	NA	NA	NA	1.6 E-3	NA	6.5 E-5	NA	7.5 E-3
52E-SB14	5				0.49					0.52				NA	NA	NA	7.0 E-3	NA	NA	NA	NA	9.5 E-3	NA	NA	NA	1.6 E-2
52E-SB14	11.5				0.32					0.24				NA	NA	NA	4.5 E-3	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	8.9 E-3
52E-SB15	1				0.47									NA	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-3
52E-SB15	5				0.81									NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
52E-SB15	11				0.37									NA	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-3
52E-SB16	1				0.37									NA	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-3
52E-SB16	5				0.42									NA	NA	NA	6.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-3
52E-SB16	11				0.34									NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3
52E-SB17	1													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB18	5				0.17									NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3
52E-SB18	11				0.19									NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3
52E-SB19	1													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	1													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	1													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	1													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB23	1				0.18									NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3

Table 5.4-10
Location-Specific Soil Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)												Child Non-Cancer Hazard Index												
Sample Name	**Depth**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child		NA	NA	NA	1.4 E-2	NA	NA	4.4 E-4	1.8 E-2	1.8 E-2	5.8 E-4	5.5 E-5	5.8 E-4													
Unit Hazard Adult		NA	NA	NA	1.6 E-3	NA	NA	5.2 E-5	7.5 E-3	2.0 E-3	6.9 E-5	6.4 E-6	6.9 E-5													
Unit Risk		1.6 E-6	2.6 E-5	2.6 E-6	1.6 E-9	2.6 E-7	1.6 E-5	NA	4.1 E-7	NA	NA	NA	NA													
52E-SNS01	0.5	0.088	0.13	0.35	4.8	0.13	0.014	0.20			0.063		0.22	NA	NA	NA	6.8 E-2	NA	NA	8.7 E-5	NA	NA	3.7 E-5	NA	1.3 E-4	6.8 E-2
52E-SNS01	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS01	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS02	0.5				1.1									NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2
E(L)-SB01	0.25				0.90				0.013	0.086	0.0037			NA	NA	NA	1.3 E-2	NA	NA	NA	2.4 E-4	1.6 E-3	2.2 E-6	NA	NA	1.5 E-2
E(L)-SB01	5				0.77									NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
E(L)-SB01	11				0.64									NA	NA	NA	9.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-3
L5-AF1-SB01	1				0.40									NA	NA	NA	5.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3
L5-AF1-SB01	5				0.43									NA	NA	NA	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-3
L5-AF1-SB01	11				0.44									NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-3
L5-ST87-SB01	1				0.41	0.011					0.0036			NA	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	5.8 E-3
L5-ST87-SB01	4				0.45									NA	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-3
L5-ST87-SB01	11				0.46									NA	NA	NA	6.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-3
L5-ST87-SB02	1				0.34									NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3
L5-ST87-SB02	5				0.28									NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3
L5-ST87-SB02	11				0.70									NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2

Table 5.4-10
Location-Specific Soil Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index													Incremental Lifetime Cancer Risk												
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	HI	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	ILCR
Unit Hazard Child																											
Unit Hazard Adult																											
Unit Risk																											
51E-SB03	1.5	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	5.1 E-4	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
51E-SB03	5	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	1.0 E-3	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
51E-SB03	11.5	NA	NA	NA	7.9 E-4	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	8.2 E-4	NA	NA	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
51E-SB04	1	NA	NA	NA	1.0 E-3	NA	NA	1.9 E-7	NA	NA	3.5 E-7	NA	4.3 E-7	1.0 E-3	NA	NA	NA	1.1 E-9	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	4 E-9
51E-SB04	5	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
51E-SB04	11	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	2.9 E-5	2.6 E-7	NA	NA	7.0 E-4	NA	NA	NA	6.9 E-10	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	2 E-9
52E-SB04	1	NA	NA	NA	7.8 E-4	NA	NA	1.5 E-6	NA	NA	9.7 E-6	7.7 E-6	8.3 E-6	8.1 E-4	NA	NA	4.8 E-7	8.0 E-10	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	5 E-7
52E-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB04	11	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	6.0 E-4	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB05	1.5	NA	NA	NA	2.9 E-3	NA	NA	1.4 E-6	NA	5.1 E-4	1.7 E-6	NA	1.5 E-5	3.4 E-3	NA	NA	NA	3.0 E-9	7.4 E-8	NA	NA	NA	NA	NA	NA	NA	8 E-8
52E-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB05	11.5	NA	NA	NA	8.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
52E-SB06	1.5	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	NA	6.3 E-6	1.9 E-5	9.0 E-6	7.3 E-4	NA	NA	NA	7.2 E-10	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	3 E-8
52E-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	2.7 E-5	NA	6.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB06	11.5	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
52E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	1.9 E-6	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB07	5	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	5.1 E-4	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52E-SB07	11	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	6.5 E-4	NA	NA	NA	6.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
52E-SB08	1	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	5.8 E-4	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB08	5	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52E-SB08	11	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB09	3.75	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	7.5 E-4	NA	NA	NA	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
52E-SB09	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB09	11.5	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
52E-SB10	1.5	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	7.3 E-4	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
52E-SB10	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB10	11.5	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52E-SB11	1	NA	NA	NA	7.9 E-4	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	8.3 E-4	NA	NA	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
52E-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB11	11	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52E-SB12	1	NA	NA	NA	6.4 E-3	NA	NA	1.1 E-7	1.1 E-4	1.3 E-4	NA	NA	NA	6.6 E-3	NA	NA	NA	6.6 E-9	NA	NA	NA	6.2 E-9	NA	NA	NA	NA	1 E-8
52E-SB12	5	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	1.1 E-3	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
52E-SB13	1	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	7.3 E-4	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
52E-SB13	5	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB13	11	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52E-SB14	1.5	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	1.7 E-4	NA	7.7 E-6	NA	8.3 E-4	NA	NA	NA	6.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
52E-SB14	5	NA	NA	NA	7.8 E-4	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	1.8 E-3	NA	NA	NA	8.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
52E-SB14	11.5	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	4.7 E-4	NA	NA	NA	9.8 E-4	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52E-SB15	1	NA	NA	NA	7.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-4	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
52E-SB15	5	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
52E-SB15	11	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB16	1	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB16	5	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
52E-SB16	11	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB18	5	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB18	11	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB23	1	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10

Table 5.4-10
Location-Specific Soil Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index													Incremental Lifetime Cancer Risk												
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	HI	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	ILCR
Unit Hazard Child																											
Unit Hazard Adult																											
Unit Risk																											
52E-SNS01	0.5	NA	NA	NA	7.6 E-3	NA	NA	1.0 E-5	NA	NA	4.4 E-6	NA	1.5 E-5	7.7 E-3	1.4 E-7	3.4 E-6	9.3 E-7	7.9 E-9	3.4 E-8	2.3 E-7	NA	NA	NA	NA	NA	NA	5 E-6
52E-SNS01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS02	0.5	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
E(L)-SB01	0.25	NA	NA	NA	1.4 E-3	NA	NA	NA	9.8 E-5	1.7 E-4	2.6 E-7	NA	NA	1.7 E-3	NA	NA	NA	1.5 E-9	NA	NA	NA	5.4 E-9	NA	NA	NA	NA	7 E-9
E(L)-SB01	5	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
E(L)-SB01	11	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
L5-AF1-SB01	1	NA	NA	NA	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	NA	NA	6.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
L5-AF1-SB01	5	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	7.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
L5-AF1-SB01	11	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	NA	NA	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
L5-ST87-SB01	1	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	6.5 E-4	NA	NA	NA	6.7 E-10	2.9 E-9	NA	NA	NA	NA	NA	NA	NA	4 E-9
L5-ST87-SB01	4	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	7.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
L5-ST87-SB01	11	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
L5-ST87-SB02	1	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
L5-ST87-SB02	5	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	4.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
L5-ST87-SB02	11	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incidental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.4-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																				
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard Child		3.2 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+0	4.9 E+1	3.7 E-1	1.3 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0
Unit Hazard Adult		1.4 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+0	2.1 E+1	1.6 E-1	5.5 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0
Unit Risk		NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3
51E-SP11	10								100													130
51E-SP11	20		34			84		6.2		34	93	12	5.4	12		51	150	10	590	93	56	7800
52E-SP04	10			5.5						5.0	8.0			21			4.5				14	420
52E-SP05	10										3.7			16								240
52E-SP06	10	8.8					7.7				7.9							9.3			10	16
52E-SP07	10								63					9.6				5.3			8.6	16
52E-SP07	20									7.2	26					18	68		2300	33	32	27000
52E-SP09	10								60	4.9	11					6.4	15	5.6		14	22	6.6
52E-SP10	10									15	23					16	44			14	22	8.2
52E-SP11	10																		25		5.3	120
52E-SP12	10			580						8.2	9.2		44				7.6	5.3	13			7.4
52E-SP12	20								56	7.0	38	9.7					40		12	7.8	8.8	180
52E-SP14	10											48							170			870
52E-SP15	10								67		5.1	6.0										260
52E-SP15	20								130					15								28
52E-SP16	10								180					13						5.0		180
52E-SP17	10								86										20			28
52E-SP17	30					14			68		30			18			26				5.4	32
52E-SP18	10	12							150		10			9.1			13			10	8.7	
52E-SP19	10								210	6.2				9.2	9.5			9.0	38			160
52E-SP19	20								240		10			10			13		32	6.8	5.6	36
52E-SP19	30				34	49			890					52	73		13		200	13	6.1	450
52E-SP20	10									5.3	9.0						10			4.4	9.2	
52E-SP21	10				23				140		5.1			44								21
52E-SP21	20				27			8.6	190	13	11	13	6.5	12		13	50				11	570
52E-SP22	10				19				120	24	15	11		19		18	22	9.1			28	1600
52E-SP23	10	7.3			70	33		5.7	250	10	12			24		9.6	15	12				
52E-SP24	10	17				54	8.8		91	9.5	48					5.7	7.2	14				67
L5-ST87-SP01	10								81		4.5											130

Table 5.4-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard Child																							
Unit Hazard Adult																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	2.8 E-4
51E-SP11	20	NA	8.7 E-6	NA	NA	6.2 E-3	NA	1.2 E-6	NA	7.2 E-4	1.0 E-4	1.9 E-4	5.5 E-7	8.0 E-6	NA	9.5 E-5	2.7 E-4	5.9 E-5	8.9 E-3	2.4 E-4	1.2 E-4	7.9 E-3	2.5 E-2
52E-SP04	10	NA	NA	6.3 E-5	NA	NA	NA	NA	NA	1.9 E-4	1.5 E-5	NA	NA	2.3 E-5	NA	NA	1.3 E-5	NA	NA	NA	5.4 E-5	7.5 E-4	1.1 E-3
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	4.5 E-4
52E-SP06	10	1.1 E-3	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	9.7 E-5	NA	NA	3.8 E-5	2.9 E-5	1.4 E-3
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	5.5 E-5	NA	NA	3.3 E-5	2.9 E-5	1.6 E-4
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	2.8 E-5	NA	NA	NA	NA	3.4 E-5	1.2 E-4	NA	3.5 E-2	8.5 E-5	7.0 E-5	2.7 E-2	6.3 E-2
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	1.9 E-4	2.1 E-5	NA	NA	NA	NA	1.9 E-5	4.5 E-5	5.8 E-5	NA	6.2 E-5	8.4 E-5	1.2 E-5	5.2 E-4
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4	4.3 E-5	NA	NA	NA	NA	4.7 E-5	1.3 E-4	NA	NA	6.2 E-5	8.4 E-5	1.5 E-5	9.6 E-4
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	2.0 E-5	2.1 E-4	9.4 E-4
52E-SP12	10	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	3.2 E-4	1.7 E-5	NA	7.9 E-6	NA	NA	NA	2.3 E-5	5.5 E-5	3.7 E-4	NA	NA	1.3 E-5	7.5 E-3
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	1.5 E-4	4.2 E-5	1.6 E-4	NA	NA	NA	NA	7.2 E-5	NA	1.8 E-4	2.0 E-5	1.9 E-5	1.8 E-4	8.4 E-4
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	4.8 E-3	NA	NA	1.6 E-3	7.7 E-3
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	9.6 E-6	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	6.8 E-4
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA	9.9 E-6	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	7.5 E-5
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	2.2 E-5	NA	3.2 E-4	4.4 E-4
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	5.0 E-5	6.5 E-4
52E-SP17	30	NA	NA	NA	NA	6.8 E-4	NA	NA	1.3 E-5	NA	2.2 E-5	NA	NA	8.1 E-6	NA	NA	3.3 E-5	NA	NA	NA	7.8 E-6	2.1 E-5	7.9 E-4
52E-SP18	10	1.5 E-3	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	1.9 E-5	NA	NA	9.8 E-6	NA	NA	3.9 E-5	NA	NA	4.4 E-5	3.3 E-5	NA	1.7 E-3
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.4 E-4	NA	NA	NA	9.9 E-6	3.3 E-7	NA	NA	9.4 E-5	1.1 E-3	NA	NA	2.9 E-4	1.8 E-3
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	NA	1.1 E-5	NA	NA	6.6 E-6	NA	NA	2.3 E-5	NA	4.8 E-4	1.8 E-5	1.2 E-5	3.6 E-5	6.6 E-4
52E-SP19	30	NA	NA	NA	2.8 E-6	2.4 E-3	NA	NA	1.7 E-4	NA	NA	NA	NA	2.3 E-5	9.4 E-7	NA	1.7 E-5	NA	2.1 E-3	2.2 E-5	8.8 E-6	3.0 E-4	5.0 E-3
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	1.7 E-5	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	2.0 E-5	3.5 E-5	NA	3.1 E-4
52E-SP21	10	NA	NA	NA	5.0 E-6	NA	NA	NA	6.7 E-5	NA	9.6 E-6	NA	NA	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	1.7 E-4
52E-SP21	20	NA	NA	NA	3.3 E-6	NA	NA	1.7 E-6	5.4 E-5	2.7 E-4	1.2 E-5	2.1 E-4	6.6 E-7	8.0 E-6	NA	2.4 E-5	9.0 E-5	NA	NA	NA	2.4 E-5	5.8 E-4	1.3 E-3
52E-SP22	10	NA	NA	NA	4.1 E-6	NA	NA	NA	5.8 E-5	9.2 E-4	2.8 E-5	3.2 E-4	NA	2.0 E-5	NA	5.3 E-5	6.5 E-5	9.5 E-5	NA	NA	1.1 E-4	2.9 E-3	4.5 E-3
52E-SP23	10	8.9 E-4	NA	NA	1.5 E-5	4.3 E-3	NA	1.9 E-6	1.2 E-4	3.9 E-4	2.3 E-5	NA	NA	2.6 E-5	NA	2.8 E-5	4.5 E-5	1.2 E-4	NA	NA	NA	NA	5.9 E-3
52E-SP24	10	2.1 E-3	NA	NA	NA	7.0 E-3	1.8 E-4	NA	4.4 E-5	3.7 E-4	9.0 E-5	NA	NA	NA	NA	1.7 E-5	2.1 E-5	1.5 E-4	NA	NA	NA	1.2 E-4	1.0 E-2
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	8.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	2.8 E-4

Table 5.4-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																					
Sample Name	Depth	1,2,4-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Carbon Disulfide	Chloroform	Cyclohexane	Ethanol	Freon 113	Heptane	Hexane	m,p-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	HI
Unit Hazard Child																							
Unit Hazard Adult																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	1.2 E-4
51E-SP11	20	NA	3.7 E-6	NA	NA	2.7 E-3	NA	5.1 E-7	NA	3.1 E-4	4.4 E-5	8.3 E-5	2.4 E-7	3.4 E-6	NA	4.1 E-5	1.2 E-4	2.5 E-5	3.8 E-3	1.0 E-4	5.3 E-5	3.4 E-3	1.1 E-2
52E-SP04	10	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	8.3 E-5	6.5 E-6	NA	NA	9.7 E-6	NA	NA	5.7 E-6	NA	NA	NA	2.3 E-5	3.2 E-4	4.8 E-4
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	7.4 E-6	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	1.9 E-4
52E-SP06	10	4.6 E-4	NA	NA	NA	NA	6.9 E-5	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	1.6 E-5	1.2 E-5	6.1 E-4
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	2.4 E-5	NA	NA	1.4 E-5	1.2 E-5	6.7 E-5
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	1.2 E-5	NA	NA	NA	NA	1.4 E-5	5.2 E-5	NA	1.5 E-2	3.7 E-5	3.0 E-5	1.2 E-2	2.7 E-2
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	8.1 E-5	8.9 E-6	NA	NA	NA	NA	8.1 E-6	1.9 E-5	2.5 E-5	NA	2.7 E-5	3.6 E-5	5.1 E-6	2.2 E-4
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	1.9 E-5	NA	NA	NA	NA	2.0 E-5	5.6 E-5	NA	NA	2.7 E-5	3.6 E-5	6.3 E-6	4.1 E-4
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	8.7 E-6	9.2 E-5	4.0 E-4
52E-SP12	10	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	1.4 E-4	7.4 E-6	NA	3.4 E-6	NA	NA	NA	9.7 E-6	2.4 E-5	1.6 E-4	NA	NA	5.7 E-6	3.2 E-3
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	6.8 E-6	6.3 E-5	1.8 E-5	6.7 E-5	NA	NA	NA	NA	3.1 E-5	NA	7.8 E-5	8.6 E-6	8.3 E-6	7.8 E-5	3.6 E-4
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	6.7 E-4	3.3 E-3
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	4.1 E-6	7.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	2.9 E-4
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	3.2 E-5
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA	6.0 E-6	NA	NA	NA	NA	NA	9.5 E-6	NA	1.4 E-4	1.9 E-4
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	2.1 E-5	2.8 E-4
52E-SP17	30	NA	NA	NA	NA	2.9 E-4	NA	NA	5.5 E-6	NA	9.3 E-6	NA	NA	3.5 E-6	NA	NA	1.4 E-5	NA	NA	NA	3.3 E-6	9.1 E-6	3.4 E-4
52E-SP18	10	6.3 E-4	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	8.1 E-6	NA	NA	4.2 E-6	NA	NA	1.7 E-5	NA	NA	1.9 E-5	1.4 E-5	NA	7.2 E-4
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	1.0 E-4	NA	NA	NA	4.2 E-6	1.4 E-7	NA	NA	4.0 E-5	4.6 E-4	NA	NA	1.2 E-4	7.7 E-4
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	4.7 E-6	NA	NA	2.8 E-6	NA	NA	1.0 E-5	NA	2.1 E-4	7.5 E-6	5.3 E-6	1.6 E-5	2.8 E-4
52E-SP19	30	NA	NA	NA	1.2 E-6	1.0 E-3	NA	NA	7.3 E-5	NA	NA	NA	NA	1.0 E-5	4.0 E-7	NA	7.2 E-6	NA	8.9 E-4	9.5 E-6	3.8 E-6	1.3 E-4	2.1 E-3
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	7.3 E-6	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	8.4 E-6	1.5 E-5	NA	1.3 E-4
52E-SP21	10	NA	NA	NA	2.1 E-6	NA	NA	NA	2.9 E-5	NA	4.1 E-6	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	7.1 E-5
52E-SP21	20	NA	NA	NA	1.4 E-6	NA	NA	7.1 E-7	2.3 E-5	1.2 E-4	5.2 E-6	9.0 E-5	2.8 E-7	3.4 E-6	NA	1.0 E-5	3.8 E-5	NA	NA	NA	1.0 E-5	2.5 E-4	5.5 E-4
52E-SP22	10	NA	NA	NA	1.8 E-6	NA	NA	NA	2.5 E-5	4.0 E-4	1.2 E-5	1.4 E-4	NA	8.8 E-6	NA	2.3 E-5	2.8 E-5	4.1 E-5	NA	NA	4.6 E-5	1.2 E-3	1.9 E-3
52E-SP23	10	3.8 E-4	NA	NA	6.5 E-6	1.8 E-3	NA	8.3 E-7	5.2 E-5	1.7 E-4	9.7 E-6	NA	NA	1.1 E-5	NA	1.2 E-5	1.9 E-5	5.4 E-5	NA	NA	NA	NA	2.5 E-3
52E-SP24	10	8.9 E-4	NA	NA	NA	3.0 E-3	7.8 E-5	NA	1.9 E-5	1.6 E-4	3.9 E-5	NA	NA	NA	NA	7.2 E-6	9.2 E-6	6.2 E-5	NA	NA	NA	5.1 E-5	4.3 E-3
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	1.2 E-4

Table 5.4-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard Child																							
Unit Hazard Adult																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	6E-08
51E-SP11	20	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	4.4 E-7	3.3 E-8	NA	2.2 E-6	3E-06
52E-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	2E-07
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	1E-07
52E-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	8E-09
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	8E-09
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	1.2 E-8	NA	7.6 E-6	9E-06
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	3.3 E-9	5E-08
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	4.1 E-9	1E-07
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	5.9 E-8	9E-08
52E-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	3.7 E-9	8E-08
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	8.9 E-9	2.7 E-9	NA	5.0 E-8	1E-07
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	4.3 E-7	1E-06
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	2E-07
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-9	8E-09
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	8.9 E-8	9E-08
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	1.4 E-8	4E-08
52E-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-9	6E-09
52E-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	NA	6E-09
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	7.9 E-8	2E-07
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	2.4 E-9	NA	1.0 E-8	4E-08
52E-SP19	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	3.0 E-9	NA	8.3 E-8	2E-07
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	4E-08
52E-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	1E-08
52E-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	3E-07
52E-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-7	1E-06
52E-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8E-08
52E-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	1E-07
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	6E-08

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incidental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.4-5) x the unit hazard or unit risk for the chemical).

Table 5.4-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																				
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard Child		3.2 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+0	4.9 E+1	3.7 E-1	1.3 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0
Unit Hazard Adult		1.4 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+0	2.1 E+1	1.6 E-1	5.5 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0
Unit Risk		NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3
51E-SP11	10								100													130
51E-SP11	20		34			84		6.2		34	93	12	5.4	12		51	150	10	590	93	56	7800
52E-SP04	10			5.5						5.0	8.0			21			4.5				14	420
52E-SP05	10										3.7			16								240
52E-SP06	10	8.8					7.7				7.9							9.3			10	16
52E-SP07	10								63					9.6				5.3			8.6	16
52E-SP07	20									7.2	26					18	68		2300	33	32	27000
52E-SP09	10								60	4.9	11					6.4	15	5.6		14	22	6.6
52E-SP10	10									15	23					16	44			14	22	8.2
52E-SP11	10																		25		5.3	120
52E-SP12	10			580						8.2	9.2		44				7.6	5.3	13			7.4
52E-SP12	20								56	7.0	38	9.7					40		12	7.8	8.8	180
52E-SP14	10											48							170			870
52E-SP15	10								67		5.1	6.0										260
52E-SP15	20								130					15								28
52E-SP16	10								180					13						5.0		180
52E-SP17	10								86										20			28
52E-SP17	30					14			68		30			18			26				5.4	32
52E-SP18	10	12							150		10			9.1			13			10	8.7	
52E-SP19	10								210	6.2				9.2	9.5			9.0	38			160
52E-SP19	20								240		10			10			13		32	6.8	5.6	36
52E-SP19	30				34	49			890					52	73		13		200	13	6.1	450
52E-SP20	10									5.3	9.0						10			4.4	9.2	
52E-SP21	10				23				140		5.1			44								21
52E-SP21	20				27			8.6	190	13	11	13	6.5	12		13	50				11	570
52E-SP22	10				19				120	24	15	11		19		18	22	9.1			28	1600
52E-SP23	10	7.3			70	33		5.7	250	10	12			24		9.6	15	12				
52E-SP24	10	17				54	8.8		91	9.5	48					5.7	7.2	14				67
L5-ST87-SP01	10								81		4.5											130

Table 5.4-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																					
Sample Name	Depth	1,2,4-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Carbon Disulfide	Chloroform	Cyclohexane	Ethanol	Freon 113	Heptane	Hexane	m,p-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	HI
Unit Hazard Child																							
Unit Hazard Adult																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	7.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	3.8 E-6
51E-SP11	20	NA	1.0 E-7	NA	NA	7.1 E-5	NA	1.4 E-8	NA	8.9 E-6	1.2 E-6	2.5 E-6	6.4 E-9	9.6 E-8	NA	4.5 E-7	3.8 E-6	6.9 E-7	1.1 E-4	2.9 E-6	1.5 E-6	9.3 E-5	2.9 E-4
52E-SP04	10	NA	NA	8.6 E-7	NA	NA	NA	NA	NA	2.6 E-6	2.1 E-7	NA	NA	3.4 E-7	NA	NA	2.3 E-7	NA	NA	NA	7.3 E-7	1.0 E-5	1.5 E-5
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	6.0 E-6
52E-SP06	10	1.4 E-5	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	5.2 E-7	3.8 E-7	1.7 E-5
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	7.3 E-7	NA	NA	4.5 E-7	3.8 E-7	2.2 E-6
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	3.5 E-7	NA	NA	NA	NA	1.6 E-7	1.7 E-6	NA	4.2 E-4	1.0 E-6	8.3 E-7	3.2 E-4	7.5 E-4
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	2.6 E-6	2.9 E-7	NA	NA	NA	NA	1.1 E-7	7.7 E-7	7.7 E-7	NA	8.7 E-7	1.1 E-6	1.6 E-7	7.1 E-6
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-6	6.1 E-7	NA	NA	NA	NA	2.8 E-7	2.2 E-6	NA	NA	8.7 E-7	1.1 E-6	1.9 E-7	1.3 E-5
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-6	NA	2.7 E-7	2.8 E-6	1.2 E-5
52E-SP12	10	NA	NA	9.0 E-5	NA	NA	NA	NA	NA	4.3 E-6	2.4 E-7	NA	1.0 E-7	NA	NA	NA	3.9 E-7	7.3 E-7	4.8 E-6	NA	NA	1.8 E-7	1.0 E-4
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	1.8 E-6	5.0 E-7	2.0 E-6	NA	NA	NA	NA	1.0 E-6	NA	2.2 E-6	2.4 E-7	2.3 E-7	2.1 E-6	1.0 E-5
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	6.2 E-5	NA	NA	2.1 E-5	1.0 E-4
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA	1.4 E-7	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-6	9.2 E-6
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	9.1 E-7
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	3.1 E-7	NA	4.3 E-6	6.1 E-6
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	6.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-6	NA	NA	6.6 E-7	8.6 E-6
52E-SP17	30	NA	NA	NA	NA	7.9 E-6	NA	NA	1.6 E-7	NA	2.7 E-7	NA	NA	9.6 E-8	NA	NA	4.4 E-7	NA	NA	NA	9.3 E-8	2.5 E-7	9.2 E-6
52E-SP18	10	1.9 E-5	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	2.7 E-7	NA	NA	1.5 E-7	NA	NA	6.6 E-7	NA	NA	6.2 E-7	4.5 E-7	NA	2.2 E-5
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	3.2 E-6	NA	NA	NA	1.5 E-7	4.4 E-9	NA	NA	1.2 E-6	1.4 E-5	NA	NA	3.8 E-6	2.4 E-5
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	8.4 E-7	NA	1.3 E-7	NA	NA	8.0 E-8	NA	NA	3.3 E-7	NA	5.9 E-6	2.1 E-7	1.5 E-7	4.3 E-7	8.1 E-6
52E-SP19	30	NA	NA	NA	3.3 E-8	2.8 E-5	NA	NA	2.1 E-6	NA	NA	NA	NA	2.8 E-7	1.1 E-8	NA	2.2 E-7	NA	2.5 E-5	2.7 E-7	1.1 E-7	3.6 E-6	5.9 E-5
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	2.4 E-7	NA	NA	NA	NA	NA	5.1 E-7	NA	NA	2.7 E-7	4.8 E-7	NA	4.3 E-6
52E-SP21	10	NA	NA	NA	6.6 E-8	NA	NA	NA	9.8 E-7	NA	1.4 E-7	NA	NA	7.0 E-7	NA	NA	NA	NA	NA	NA	NA	5.0 E-7	2.4 E-6
52E-SP21	20	NA	NA	NA	3.9 E-8	NA	NA	1.9 E-8	6.7 E-7	3.4 E-6	1.5 E-7	2.7 E-6	7.7 E-9	9.6 E-8	NA	1.1 E-7	1.3 E-6	NA	NA	NA	2.9 E-7	6.8 E-6	1.5 E-5
52E-SP22	10	NA	NA	NA	5.5 E-8	NA	NA	NA	8.4 E-7	1.3 E-5	4.0 E-7	4.5 E-6	NA	3.0 E-7	NA	3.1 E-7	1.1 E-6	1.3 E-6	NA	NA	1.5 E-6	3.8 E-5	6.1 E-5
52E-SP23	10	1.1 E-5	NA	NA	2.0 E-7	5.6 E-5	NA	2.5 E-8	1.8 E-6	5.2 E-6	3.2 E-7	NA	NA	3.8 E-7	NA	1.7 E-7	7.7 E-7	1.6 E-6	NA	NA	NA	NA	7.8 E-5
52E-SP24	10	2.6 E-5	NA	NA	NA	9.1 E-5	1.4 E-6	NA	6.4 E-7	5.0 E-6	1.3 E-6	NA	NA	NA	NA	1.0 E-7	3.7 E-7	1.9 E-6	NA	NA	NA	1.6 E-6	1.3 E-4
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	5.7 E-7	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	3.8 E-6

Table 5.4-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard Child																							
Unit Hazard Adult																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	1.6 E-6
51E-SP11	20	NA	4.3 E-8	NA	NA	3.0 E-5	NA	5.9 E-9	NA	3.8 E-6	5.3 E-7	1.1 E-6	2.8 E-9	4.1 E-8	NA	1.9 E-7	1.6 E-6	2.9 E-7	4.6 E-5	1.2 E-6	6.2 E-7	4.0 E-5	1.3 E-4
52E-SP04	10	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	1.1 E-6	9.1 E-8	NA	NA	1.4 E-7	NA	NA	9.8 E-8	NA	NA	NA	3.1 E-7	4.3 E-6	6.4 E-6
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	2.6 E-6
52E-SP06	10	5.8 E-6	NA	NA	NA	NA	5.1 E-7	NA	NA	NA	9.0 E-8	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	2.2 E-7	1.6 E-7	7.4 E-6
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	3.1 E-7	NA	NA	1.9 E-7	1.6 E-7	9.2 E-7
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-7	1.5 E-7	NA	NA	NA	NA	6.7 E-8	7.4 E-7	NA	1.8 E-4	4.4 E-7	3.6 E-7	1.4 E-4	3.2 E-4
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	1.1 E-6	1.3 E-7	NA	NA	NA	NA	4.8 E-8	3.3 E-7	3.3 E-7	NA	3.7 E-7	4.9 E-7	6.7 E-8	3.0 E-6
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	2.6 E-7	NA	NA	NA	NA	1.2 E-7	9.6 E-7	NA	NA	3.7 E-7	4.9 E-7	8.3 E-8	5.6 E-6
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	NA	1.2 E-7	1.2 E-6	5.3 E-6
52E-SP12	10	NA	NA	3.9 E-5	NA	NA	NA	NA	NA	1.8 E-6	1.0 E-7	NA	4.5 E-8	NA	NA	NA	1.7 E-7	3.1 E-7	2.0 E-6	NA	NA	7.5 E-8	4.3 E-5
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	7.8 E-7	2.2 E-7	8.5 E-7	NA	NA	NA	NA	4.4 E-7	NA	9.5 E-7	1.0 E-7	9.8 E-8	9.2 E-7	4.4 E-6
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	8.8 E-6	4.4 E-5
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	5.8 E-8	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	4.0 E-6
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	3.9 E-7
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	8.9 E-8	NA	NA	NA	NA	NA	1.3 E-7	NA	1.8 E-6	2.6 E-6
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	2.8 E-7	3.7 E-6
52E-SP17	30	NA	NA	NA	NA	3.4 E-6	NA	NA	6.8 E-8	NA	1.1 E-7	NA	NA	4.1 E-8	NA	NA	1.9 E-7	NA	NA	NA	4.0 E-8	1.1 E-7	3.9 E-6
52E-SP18	10	8.0 E-6	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	1.1 E-7	NA	NA	6.2 E-8	NA	NA	2.8 E-7	NA	NA	2.7 E-7	1.9 E-7	NA	9.3 E-6
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	6.3 E-7	1.4 E-6	NA	NA	NA	6.3 E-8	1.9 E-9	NA	NA	5.3 E-7	6.0 E-6	NA	NA	1.6 E-6	1.0 E-5
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	5.7 E-8	NA	NA	3.4 E-8	NA	NA	1.4 E-7	NA	2.5 E-6	9.1 E-8	6.2 E-8	1.8 E-7	3.5 E-6
52E-SP19	30	NA	NA	NA	1.4 E-8	1.2 E-5	NA	NA	8.9 E-7	NA	NA	NA	NA	1.2 E-7	4.8 E-9	NA	9.5 E-8	NA	1.1 E-5	1.2 E-7	4.5 E-8	1.5 E-6	2.5 E-5
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	1.0 E-7	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	1.2 E-7	2.0 E-7	NA	1.8 E-6
52E-SP21	10	NA	NA	NA	2.8 E-8	NA	NA	NA	4.2 E-7	NA	5.8 E-8	NA	NA	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	1.0 E-6
52E-SP21	20	NA	NA	NA	1.7 E-8	NA	NA	8.2 E-9	2.9 E-7	1.5 E-6	6.3 E-8	1.1 E-6	3.3 E-9	4.1 E-8	NA	4.9 E-8	5.5 E-7	NA	NA	NA	1.2 E-7	2.9 E-6	6.6 E-6
52E-SP22	10	NA	NA	NA	2.4 E-8	NA	NA	NA	3.6 E-7	5.4 E-6	1.7 E-7	1.9 E-6	NA	1.3 E-7	NA	1.3 E-7	4.8 E-7	5.4 E-7	NA	NA	6.2 E-7	1.6 E-5	2.6 E-5
52E-SP23	10	4.8 E-6	NA	NA	8.7 E-8	2.4 E-5	NA	1.1 E-8	7.5 E-7	2.2 E-6	1.4 E-7	NA	NA	1.6 E-7	NA	7.2 E-8	3.3 E-7	7.1 E-7	NA	NA	NA	NA	3.3 E-5
52E-SP24	10	1.1 E-5	NA	NA	NA	3.9 E-5	5.9 E-7	NA	2.7 E-7	2.1 E-6	5.5 E-7	NA	NA	NA	NA	4.3 E-8	1.6 E-7	8.2 E-7	NA	NA	NA	6.8 E-7	5.6 E-5
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	1.6 E-6

Table 5.4-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard Child																							
Unit Hazard Adult																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	9E-10
51E-SP11	20	NA	5.4 E-10	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	6.0 E-10	NA	NA	NA	NA	NA	NA	5.3 E-9	3.9 E-10	NA	2.6 E-8	3E-08
52E-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	3E-09
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	2E-09
52E-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	1E-10
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	1E-10
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	1.4 E-10	NA	8.9 E-8	1E-07
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	4.3 E-11	7E-10
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	5.4 E-11	2E-09
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	NA	7.9 E-10	1E-09
52E-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	4.9 E-11	1E-09
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	1.1 E-10	3.3 E-11	NA	5.9 E-10	2E-09
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	5.7 E-9	1E-08
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	2E-09
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-11	9E-11
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-11	NA	1.2 E-9	1E-09
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	NA	1.8 E-10	5E-10
52E-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-11	7E-11
52E-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-11	NA	NA	8E-11
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-10	NA	NA	1.1 E-9	2E-09
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	2.9 E-11	NA	1.2 E-10	4E-10
52E-SP19	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	3.7 E-11	NA	9.9 E-10	2E-09
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-11	NA	NA	6E-10
52E-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	1E-10
52E-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-10	NA	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	3E-09
52E-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	1E-08
52E-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-09
52E-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	1E-09
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	9E-10

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incidental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.4-7) x the unit hazard or unit risk for the chemical).

Table 5.4-13 *Soil Unit Hazard and Unit Cancer Risk Results - Construction Worker*
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Cadmium	1.0 E+0	3.2 E-3	3.9 E-4	9.8 E-5	3.7 E-3	NA	NA	2.1 E-8	2.1 E-8
Perchlorate	1.0 E+0	4.6 E-3	0.0 E+0	NA	4.6 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-8	1.3 E-8	1.0 E-9	4.8 E-8
Benzo(b&k)fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-7	2.2 E-7	5.5 E-9	7.7 E-7
Chrysene	1.0 E+0	NA	NA	NA	NA	5.5 E-9	2.2 E-9	5.5 E-11	7.7 E-9
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-7	1.3 E-7	5.7 E-9	4.7 E-7
Naphthalene	1.0 E+0	1.6 E-4	6.3 E-5	5.3 E-3	5.5 E-3	NA	NA	7.8 E-9	7.8 E-9
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
Phenanthrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Pyrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI - Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.4-14 Inhalation Unit Hazard and Unit Cancer Risk Results - Construction Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,4-Dioxane	1.0 E+0	2.3 E-1	7.5 E-5
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
Chloroform	1.0 E+0	1.5 E+1	2.3 E-4
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
Trichloroethylene	1.0 E+0	1.2 E+0	2.0 E-5
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.4-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)											
Sample Name	**Depth**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		NA	NA	NA	3.7 E-3	NA	NA	1.1 E-4	5.5 E-3	4.6 E-3	1.5 E-4	1.6 E-5	1.5 E-4
Unit Risk		4.8 E-8	7.7 E-7	7.7 E-8	2.1 E-8	7.7 E-9	4.7 E-7	NA	7.8 E-9	NA	NA	NA	NA
51E-SB03	1.5				0.31							2.9	
51E-SB03	5				0.63					0.0077			
51E-SB03	11.5				0.50					0.011			
51E-SB04	1				0.66	0.0095		0.0036			0.0051		0.0062
51E-SB04	5				0.36								
51E-SB04	11				0.42	0.0061				0.015	0.0038		
52E-SB04	1			0.18	0.49	0.16		0.028			0.14	1.2	0.12
52E-SB04	5.5									0.015			
52E-SB04	11				0.36					0.016			
52E-SB05	1.5				1.8	0.28		0.027		0.26	0.024		0.22
52E-SB05	5									0.054			
52E-SB05	11.5				0.53								
52E-SB06	1.5				0.44	0.12					0.091	3.0	0.13
52E-SB06	5									0.020		4.2	
52E-SB06	11.5				0.10								
52E-SB07	1									0.077		0.29	
52E-SB07	5				0.32							0.27	
52E-SB07	11				0.41							0.45	
52E-SB08	1				0.35					0.011			
52E-SB08	5				0.33								
52E-SB08	11				0.34								
52E-SB09	3.75				0.44					0.028			
52E-SB09	5.5												
52E-SB09	11.5				0.42								
52E-SB10	1.5				0.46							0.64	
52E-SB10	5.5												
52E-SB10	11.5				0.32								
52E-SB11	1				0.50					0.018			
52E-SB11	5												
52E-SB11	11				0.33								
52E-SB12	1				4.0			0.0022	0.015	0.065			
52E-SB12	5				0.64					0.022			
52E-SB13	1				0.46							0.17	
52E-SB13	5				0.37								
52E-SB13	11				0.31								
52E-SB14	1.5				0.41					0.086		1.2	
52E-SB14	5				0.49					0.52			
52E-SB14	11.5				0.32					0.24			
52E-SB15	1				0.47								
52E-SB15	5				0.81								
52E-SB15	11				0.37								
52E-SB16	1				0.37								
52E-SB16	5				0.42								
52E-SB16	11				0.34								
52E-SB17	1												
52E-SB17	5												
52E-SB17	11												
52E-SB18	5				0.17								
52E-SB18	11				0.19								
52E-SB19	1												
52E-SB19	5												
52E-SB19	11												

Table 5.4-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)											
Sample Name	Depth	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene
52E-SB20	1												
52E-SB20	5												
52E-SB20	11												
52E-SB21	1												
52E-SB21	5												
52E-SB21	11												
52E-SB22	1												
52E-SB22	5												
52E-SB22	11												
52E-SB23	1				0.18								
52E-SNS01	0.5	0.088	0.13	0.35	4.8	0.13	0.014	0.20			0.063		0.22
52E-SNS01	5												
52E-SNS01	11												
52E-SNS02	0.5				1.1								
E(L)-SB01	0.25				0.90				0.013	0.086	0.0037		
E(L)-SB01	5				0.77								
E(L)-SB01	11				0.64								
L5-AF1-SB01	1				0.40								
L5-AF1-SB01	5				0.43								
L5-AF1-SB01	11				0.44								
L5-ST87-SB01	1				0.41	0.011					0.0036		
L5-ST87-SB01	4				0.45								
L5-ST87-SB01	11				0.46								
L5-ST87-SB02	1				0.34								
L5-ST87-SB02	5				0.28								
L5-ST87-SB02	11				0.70								

Table 5.4-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index												
Sample Name	**Depth**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard														
Unit Risk														
51E-SB03	1.5	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	1.2 E-3
51E-SB03	5	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	2.4 E-3
51E-SB03	11.5	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	1.9 E-3
51E-SB04	1	NA	NA	NA	2.5 E-3	NA	NA	4.1 E-7	NA	NA	7.8 E-7	NA	9.5 E-7	2.5 E-3
51E-SB04	5	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
51E-SB04	11	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	6.9 E-5	5.8 E-7	NA	NA	1.6 E-3
52E-SB04	1	NA	NA	NA	1.8 E-3	NA	NA	3.2 E-6	NA	NA	2.1 E-5	1.9 E-5	1.8 E-5	1.9 E-3
52E-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	NA	NA	6.9 E-5
52E-SB04	11	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	1.4 E-3
52E-SB05	1.5	NA	NA	NA	6.7 E-3	NA	NA	3.1 E-6	NA	1.2 E-3	3.7 E-6	NA	3.4 E-5	7.9 E-3
52E-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	2.5 E-4
52E-SB05	11.5	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
52E-SB06	1.5	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.4 E-5	4.7 E-5	2.0 E-5	1.7 E-3
52E-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	6.6 E-5	NA	1.6 E-4
52E-SB06	11.5	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4
52E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	4.6 E-6	NA	3.6 E-4
52E-SB07	5	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	4.2 E-6	NA	1.2 E-3
52E-SB07	11	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	1.5 E-3
52E-SB08	1	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	1.4 E-3
52E-SB08	5	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
52E-SB08	11	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
52E-SB09	3.75	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	1.8 E-3
52E-SB09	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB09	11.5	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
52E-SB10	1.5	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	1.7 E-3
52E-SB10	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB10	11.5	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
52E-SB11	1	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	8.3 E-5	NA	NA	NA	1.9 E-3
52E-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB11	11	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
52E-SB12	1	NA	NA	NA	1.5 E-2	NA	NA	2.5 E-7	8.3 E-5	3.0 E-4	NA	NA	NA	1.5 E-2
52E-SB12	5	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	2.5 E-3
52E-SB13	1	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	1.7 E-3
52E-SB13	5	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
52E-SB13	11	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
52E-SB14	1.5	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	4.0 E-4	NA	1.9 E-5	NA	1.9 E-3
52E-SB14	5	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	2.4 E-3	NA	NA	NA	4.2 E-3
52E-SB14	11.5	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	2.3 E-3
52E-SB15	1	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
52E-SB15	5	NA	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-3
52E-SB15	11	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
52E-SB16	1	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
52E-SB16	5	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
52E-SB16	11	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
52E-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB18	5	NA	NA	NA	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-4
52E-SB18	11	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4
52E-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.4-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index												
Sample Name	**Depth**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
52E-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB23	1	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4
52E-SNS01	0.5	NA	NA	NA	1.8 E-2	NA	NA	2.3 E-5	NA	NA	9.6 E-6	NA	3.4 E-5	1.8 E-2
52E-SNS01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS02	0.5	NA	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3
E(L)-SB01	0.25	NA	NA	NA	3.3 E-3	NA	NA	NA	7.2 E-5	4.0 E-4	5.7 E-7	NA	NA	3.8 E-3
E(L)-SB01	5	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
E(L)-SB01	11	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3
L5-AF1-SB01	1	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
L5-AF1-SB01	5	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
L5-AF1-SB01	11	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
L5-ST87-SB01	1	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	1.5 E-3
L5-ST87-SB01	4	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
L5-ST87-SB01	11	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
L5-ST87-SB02	1	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
L5-ST87-SB02	5	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
L5-ST87-SB02	11	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3

Table 5.4-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk												
Sample Name	**Depth**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**ILCR**
Unit Hazard														
Unit Risk														
51E-SB03	1.5	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
51E-SB03	5	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
51E-SB03	11.5	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
51E-SB04	1	NA	NA	NA	1.4 E-8	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	1 E-8
51E-SB04	5	NA	NA	NA	7.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
51E-SB04	11	NA	NA	NA	8.8 E-9	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	9 E-9
52E-SB04	1	NA	NA	1.4 E-8	1.0 E-8	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	3 E-8
52E-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB04	11	NA	NA	NA	7.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
52E-SB05	1.5	NA	NA	NA	3.8 E-8	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	4 E-8
52E-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB05	11.5	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB06	1.5	NA	NA	NA	9.2 E-9	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB06	11.5	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
52E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB07	5	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB07	11	NA	NA	NA	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52E-SB08	1	NA	NA	NA	7.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB08	5	NA	NA	NA	6.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB08	11	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB09	3.75	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52E-SB09	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB09	11.5	NA	NA	NA	8.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52E-SB10	1.5	NA	NA	NA	9.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB10	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB10	11.5	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB11	1	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB11	11	NA	NA	NA	6.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB12	1	NA	NA	NA	8.4 E-8	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	8 E-8
52E-SB12	5	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB13	1	NA	NA	NA	9.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB13	5	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
52E-SB13	11	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
52E-SB14	1.5	NA	NA	NA	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52E-SB14	5	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB14	11.5	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB15	1	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB15	5	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
52E-SB15	11	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
52E-SB16	1	NA	NA	NA	7.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
52E-SB16	5	NA	NA	NA	8.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
52E-SB16	11	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
52E-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB18	5	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
52E-SB18	11	NA	NA	NA	4.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
52E-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.4-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk												
Sample Name	**Depth**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h)anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**	**ILCR**
52E-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB23	1	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
52E-SNS01	0.5	4.2 E-9	1.0 E-7	2.7 E-8	1.0 E-7	1.0 E-9	6.6 E-9	NA	NA	NA	NA	NA	NA	2 E-7
52E-SNS01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS02	0.5	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
E(L)-SB01	0.25	NA	NA	NA	1.9 E-8	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	2 E-8
E(L)-SB01	5	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
E(L)-SB01	11	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
L5-AF1-SB01	1	NA	NA	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
L5-AF1-SB01	5	NA	NA	NA	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
L5-AF1-SB01	11	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
L5-ST87-SB01	1	NA	NA	NA	8.6 E-9	8.5 E-11	NA	NA	NA	NA	NA	NA	NA	9 E-9
L5-ST87-SB01	4	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9
L5-ST87-SB01	11	NA	NA	NA	9.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
L5-ST87-SB02	1	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
L5-ST87-SB02	5	NA	NA	NA	5.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
L5-ST87-SB02	11	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incidental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.4-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																				
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard		9.8 E+1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	1.5 E+1	1.1 E-1	3.9 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		NA	7.5 E-5	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5
51E-SP11	10								100													130
51E-SP11	20		34			84		6.2		34	93	12	5.4	12		51	150	10	590	93	56	7800
52E-SP04	10			5.5						5	8			21			4.5				14	420
52E-SP05	10										3.7			16								240
52E-SP06	10	8.8					7.7				7.9							9.3			10	16
52E-SP07	10								63					9.6				5.3			8.6	16
52E-SP07	20									7.2	26					18	68		2300	33	32	27000
52E-SP09	10								60	4.9	11					6.4	15	5.6		14	22	6.6
52E-SP10	10									15	23					16	44			14	22	8.2
52E-SP11	10																		25		5.3	120
52E-SP12	10			580						8.2	9.2		44				7.6	5.3	13			7.4
52E-SP12	20								56	7	38	9.7					40		12	7.8	8.8	180
52E-SP14	10											48							170			870
52E-SP15	10								67		5.1	6										260
52E-SP15	20								130					15								28
52E-SP16	10								180					13						5		180
52E-SP17	10								86										20			28
52E-SP17	30					14			68		30			18			26				5.4	32
52E-SP18	10	12							150		10			9.1			13			10	8.7	
52E-SP19	10								210	6.2				9.2	9.5			9	38			160
52E-SP19	20								240		10			10			13		32	6.8	5.6	36
52E-SP19	30				34	49			890					52	73		13		200	13	6.1	450
52E-SP20	10									5.3	9						10			4.4	9.2	
52E-SP21	10				23				140		5.1			44								21
52E-SP21	20				27			8.6	190	13	11	13	6.5	12		13	50				11	570
52E-SP22	10				19				120	24	15	11		19		18	22	9.1			28	1600
52E-SP23	10	7.3			70	33		5.7	250	10	12			24		9.6	15	12				
52E-SP24	10	17				54	8.8		91	9.5	48					5.7	7.2	14				67
L5-ST87-SP01	10								81		4.5											130

Table 5.4-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																					
Sample Name	Depth	1,2,4-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Carbon Disulfide	Chloroform	Cyclohexane	Ethanol	Freon 113	Heptane	Hexane	m,p-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	HI
Unit Hazard																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-7	1.2 E-6
51E-SP11	20	NA	3.1 E-8	NA	NA	2.2 E-5	NA	4.2 E-9	NA	2.7 E-6	3.8 E-7	7.5 E-7	2.0 E-9	2.9 E-8	NA	1.4 E-7	1.2 E-6	2.1 E-7	3.3 E-5	8.9 E-7	4.4 E-7	2.8 E-5	9.0 E-5
52E-SP04	10	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	8.0 E-7	6.5 E-8	NA	NA	1.0 E-7	NA	NA	7.0 E-8	NA	NA	NA	2.2 E-7	3.1 E-6	4.6 E-6
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	1.9 E-6
52E-SP06	10	4.2 E-6	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	1.6 E-7	1.2 E-7	5.3 E-6
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	2.2 E-7	NA	NA	1.4 E-7	1.2 E-7	6.6 E-7
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	1.1 E-7	NA	NA	NA	NA	4.8 E-8	5.3 E-7	NA	1.3 E-4	3.1 E-7	2.5 E-7	9.8 E-5	2.3 E-4
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	7.8 E-7	8.9 E-8	NA	NA	NA	NA	3.4 E-8	2.3 E-7	2.4 E-7	NA	2.7 E-7	3.5 E-7	4.8 E-8	2.2 E-6
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	1.9 E-7	NA	NA	NA	NA	8.6 E-8	6.9 E-7	NA	NA	2.7 E-7	3.5 E-7	6.0 E-8	4.0 E-6
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	8.4 E-8	8.7 E-7	3.8 E-6
52E-SP12	10	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	1.3 E-6	7.5 E-8	NA	3.2 E-8	NA	NA	NA	1.2 E-7	2.2 E-7	1.5 E-6	NA	NA	5.4 E-8	3.1 E-5
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	5.6 E-7	1.5 E-7	6.1 E-7	NA	NA	NA	NA	3.1 E-7	NA	6.8 E-7	7.4 E-8	7.0 E-8	6.5 E-7	3.2 E-6
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	6.3 E-6	3.1 E-5
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	4.1 E-8	7.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	2.8 E-6
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	2.8 E-7
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	9.5 E-8	NA	1.3 E-6	1.9 E-6
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	2.0 E-7	2.6 E-6
52E-SP17	30	NA	NA	NA	NA	2.4 E-6	NA	NA	4.9 E-8	NA	8.1 E-8	NA	NA	2.9 E-8	NA	NA	1.4 E-7	NA	NA	NA	2.9 E-8	7.7 E-8	2.8 E-6
52E-SP18	10	5.7 E-6	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	8.1 E-8	NA	NA	4.5 E-8	NA	NA	2.0 E-7	NA	NA	1.9 E-7	1.4 E-7	NA	6.7 E-6
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	9.9 E-7	NA	NA	NA	4.5 E-8	1.3 E-9	NA	NA	3.8 E-7	4.3 E-6	NA	NA	1.2 E-6	7.3 E-6
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	4.1 E-8	NA	NA	2.5 E-8	NA	NA	1.0 E-7	NA	1.8 E-6	6.5 E-8	4.4 E-8	1.3 E-7	2.5 E-6
52E-SP19	30	NA	NA	NA	1.0 E-8	8.4 E-6	NA	NA	6.4 E-7	NA	NA	NA	NA	8.5 E-8	3.4 E-9	NA	6.8 E-8	NA	7.5 E-6	8.3 E-8	3.2 E-8	1.1 E-6	1.8 E-5
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-7	7.3 E-8	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	8.4 E-8	1.5 E-7	NA	1.3 E-6
52E-SP21	10	NA	NA	NA	2.0 E-8	NA	NA	NA	3.0 E-7	NA	4.1 E-8	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	7.3 E-7
52E-SP21	20	NA	NA	NA	1.2 E-8	NA	NA	5.9 E-9	2.0 E-7	1.0 E-6	4.5 E-8	8.1 E-7	2.4 E-9	2.9 E-8	NA	3.5 E-8	3.9 E-7	NA	NA	NA	8.7 E-8	2.1 E-6	4.7 E-6
52E-SP22	10	NA	NA	NA	1.7 E-8	NA	NA	NA	2.6 E-7	3.8 E-6	1.2 E-7	1.4 E-6	NA	9.3 E-8	NA	9.6 E-8	3.4 E-7	3.8 E-7	NA	NA	4.4 E-7	1.2 E-5	1.9 E-5
52E-SP23	10	3.5 E-6	NA	NA	6.2 E-8	1.7 E-5	NA	7.8 E-9	5.4 E-7	1.6 E-6	9.8 E-8	NA	NA	1.2 E-7	NA	5.1 E-8	2.3 E-7	5.0 E-7	NA	NA	NA	NA	2.4 E-5
52E-SP24	10	8.1 E-6	NA	NA	NA	2.8 E-5	4.2 E-7	NA	2.0 E-7	1.5 E-6	3.9 E-7	NA	NA	NA	NA	3.0 E-8	1.1 E-7	5.9 E-7	NA	NA	NA	4.9 E-7	4.0 E-5
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-7	1.2 E-6

Table 5.4-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	2E-11
51E-SP11	20	NA	1.0 E-11	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	1.0 E-10	7.4 E-12	NA	4.8 E-10	6E-10
52E-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-11	6E-11
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-11	3E-11
52E-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-12	2E-12
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-12	2E-12
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	2.6 E-12	NA	1.7 E-9	2E-09
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	8.1 E-13	1E-11
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	1.0 E-12	3E-11
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-12	NA	NA	1.5 E-11	2E-11
52E-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-12	NA	NA	9.1 E-13	2E-11
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-12	NA	9.1 E-12	NA	NA	NA	NA	NA	NA	2.0 E-12	6.2 E-13	NA	1.1 E-11	3E-11
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-11	NA	NA	NA	NA	NA	NA	5.7 E-11	NA	NA	1.1 E-10	3E-10
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	4E-11
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-12	2E-12
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-13	NA	2.2 E-11	2E-11
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-12	NA	NA	3.5 E-12	1E-11
52E-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-12	1E-12
52E-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-12	NA	NA	2E-12
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	2.0 E-11	4E-11
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-12	5.4 E-13	NA	2.2 E-12	8E-12
52E-SP19	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	6.9 E-13	NA	1.9 E-11	4E-11
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-13	NA	NA	1E-11
52E-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-12	3E-12
52E-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	6E-11
52E-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	3E-10
52E-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-11
52E-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-12	3E-11
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	2E-11

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incidental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.4-7) x the unit hazard or unit risk for the chemical).

Table 5.4-17 *Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker*
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Cadmium	1.0 E+0	9.8 E-4	2.6 E-4	1 E-7	1.2 E-3	NA	NA	8 E-10	8 E-10
Perchlorate	1.0 E+0	1.4 E-3	0.0 E+0	NA	1.4 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	3 E-7	2 E-7	4 E-11	5 E-7
Benzo(b&k)fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	4 E-7	4 E-7	2 E-11	8 E-7
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	4 E-6	4 E-6	2 E-10	8 E-6
Chrysene	1.0 E+0	NA	NA	NA	NA	4 E-8	4 E-8	2 E-12	8 E-8
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	3 E-6	2 E-6	2 E-10	5 E-6
Naphthalene	1.0 E+0	4.9 E-5	4.2 E-5	5 E-3	5.4 E-3	NA	NA	2 E-7	2 E-7
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	3 E-9	5.4 E-6	NA	NA	NA	NA
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	4 E-9	4.5 E-5	NA	NA	NA	NA
Phenanthrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.4-18 *Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker*
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,4-Dioxane	1.0 E+0	2.3 E-1	2 E-3
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	7 E-3
Chloroform	1.0 E+0	1.5 E+1	6 E-3
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	1 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	5 E-4
Trichloroethylene	1.0 E+0	1.2 E+0	5 E-4
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.4-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)											
Sample Name	**Depth**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b&k)fluoranthene (total)**	**Cadmium**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Naphthalene**	**Perchlorate**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		NA	NA	NA	1.2 E-3	NA	NA	4.5 E-5	5.4 E-3	1.4 E-3	6.1 E-5	5.4 E-6	6.1 E-5
Unit Risk		4.7 E-7	7.8 E-6	7.8 E-7	7.7 E-10	7.8 E-8	4.7 E-6	NA	1.9 E-7	NA	NA	NA	NA
51E-SB03	1.5				0.31							2.9	
51E-SB03	5				0.63					0.0077			
51E-SB03	11.5				0.5					0.011			
51E-SB04	1				0.66	0.0095		0.0036			0.0051		0.0062
51E-SB04	5				0.36								
51E-SB04	11				0.42	0.0061				0.015	0.0038		
52E-SB04	1			0.18	0.49	0.16		0.028			0.14	1.2	0.12
52E-SB04	5.5									0.015			
52E-SB04	11				0.36					0.016			
52E-SB05	1.5				1.8	0.28		0.027		0.26	0.024		0.22
52E-SB05	5									0.054			
52E-SB05	11.5				0.53								
52E-SB06	1.5				0.44	0.12					0.091	3	0.13
52E-SB06	5									0.02		4.2	
52E-SB06	11.5				0.1								
52E-SB07	1									0.077		0.29	
52E-SB07	5				0.32							0.27	
52E-SB07	11				0.41							0.45	
52E-SB08	1				0.35					0.011			
52E-SB08	5				0.33								
52E-SB08	11				0.34								
52E-SB09	3.75				0.44					0.028			
52E-SB09	5.5												
52E-SB09	11.5				0.42								
52E-SB10	1.5				0.46							0.64	
52E-SB10	5.5												
52E-SB10	11.5				0.32								
52E-SB11	1				0.5					0.018			
52E-SB11	5												
52E-SB11	11				0.33								
52E-SB12	1				4			0.0022	0.015	0.065			
52E-SB12	5				0.64					0.022			
52E-SB13	1				0.46							0.17	
52E-SB13	5				0.37								
52E-SB13	11				0.31								
52E-SB14	1.5				0.41					0.086		1.2	
52E-SB14	5				0.49					0.52			
52E-SB14	11.5				0.32					0.24			
52E-SB15	1				0.47								
52E-SB15	5				0.81								
52E-SB15	11				0.37								
52E-SB16	1				0.37								
52E-SB16	5				0.42								

Table 5.4-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)											
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene
52E-SB16	11				0.34								
52E-SB17	1												
52E-SB17	5												
52E-SB17	11												
52E-SB18	5				0.17								
52E-SB18	11				0.19								
52E-SB19	1												
52E-SB19	5												
52E-SB19	11												
52E-SB20	1												
52E-SB20	5												
52E-SB20	11												
52E-SB21	1												
52E-SB21	5												
52E-SB21	11												
52E-SB22	1												
52E-SB22	5												
52E-SB22	11												
52E-SB23	1				0.18								
52E-SNS01	0.5	0.088	0.13	0.35	4.8	0.13	0.014	0.2			0.063		0.22
52E-SNS01	5												
52E-SNS01	11												
52E-SNS02	0.5				1.1								
E(L)-SB01	0.25				0.9				0.013	0.086	0.0037		
E(L)-SB01	5				0.77								
E(L)-SB01	11				0.64								
L5-AF1-SB01	1				0.4								
L5-AF1-SB01	5				0.43								
L5-AF1-SB01	11				0.44								
L5-ST87-SB01	1				0.41	0.011					0.0036		
L5-ST87-SB01	4				0.45								
L5-ST87-SB01	11				0.46								
L5-ST87-SB02	1				0.34								
L5-ST87-SB02	5				0.28								
L5-ST87-SB02	11				0.7								

Table 5.4-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index												
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard														
Unit Risk														
51E-SB03	1.5	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	4.0 E-4
51E-SB03	5	NA	NA	NA	7.8 E-4	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	7.9 E-4
51E-SB03	11.5	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	6.3 E-4
51E-SB04	1	NA	NA	NA	8.2 E-4	NA	NA	1.6 E-7	NA	NA	3.1 E-7	NA	3.8 E-7	8.2 E-4
51E-SB04	5	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4
51E-SB04	11	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	2.1 E-5	2.3 E-7	NA	NA	5.4 E-4
52E-SB04	1	NA	NA	NA	6.1 E-4	NA	NA	1.3 E-6	NA	NA	8.5 E-6	6.5 E-6	7.3 E-6	6.3 E-4
52E-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	2.1 E-5
52E-SB04	11	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	4.7 E-4
52E-SB05	1.5	NA	NA	NA	2.2 E-3	NA	NA	1.2 E-6	NA	3.6 E-4	1.5 E-6	NA	1.3 E-5	2.6 E-3
52E-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	NA	NA	NA	7.5 E-5
52E-SB05	11.5	NA	NA	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4
52E-SB06	1.5	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	5.5 E-6	1.6 E-5	7.9 E-6	5.7 E-4
52E-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	2.3 E-5	NA	5.1 E-5
52E-SB06	11.5	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4
52E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	1.6 E-6	NA	1.1 E-4
52E-SB07	5	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	4.0 E-4
52E-SB07	11	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	5.1 E-4
52E-SB08	1	NA	NA	NA	4.3 E-4	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	4.5 E-4
52E-SB08	5	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4
52E-SB08	11	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4
52E-SB09	3.75	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	5.8 E-4
52E-SB09	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB09	11.5	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4
52E-SB10	1.5	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	5.7 E-4
52E-SB10	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB10	11.5	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4
52E-SB11	1	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	6.4 E-4
52E-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB11	11	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4
52E-SB12	1	NA	NA	NA	4.9 E-3	NA	NA	1.0 E-7	8.1 E-5	9.1 E-5	NA	NA	NA	5.1 E-3
52E-SB12	5	NA	NA	NA	7.9 E-4	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	8.2 E-4
52E-SB13	1	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	NA	NA	9.2 E-7	NA	5.7 E-4
52E-SB13	5	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4
52E-SB13	11	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
52E-SB14	1.5	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	1.2 E-4	NA	6.5 E-6	NA	6.3 E-4
52E-SB14	5	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	1.3 E-3
52E-SB14	11.5	NA	NA	NA	4.0 E-4	NA	NA	NA	NA	3.4 E-4	NA	NA	NA	7.3 E-4
52E-SB15	1	NA	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4
52E-SB15	5	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
52E-SB15	11	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4
52E-SB16	1	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4
52E-SB16	5	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4

Table 5.4-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index												
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	HI
52E-SB16	11	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4
52E-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB18	5	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4
52E-SB18	11	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4
52E-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB23	1	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4
52E-SNS01	0.5	NA	NA	NA	5.9 E-3	NA	NA	9.1 E-6	NA	NA	3.8 E-6	NA	1.3 E-5	6.0 E-3
52E-SNS01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS02	0.5	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
E(L)-SB01	0.25	NA	NA	NA	1.1 E-3	NA	NA	NA	7.0 E-5	1.2 E-4	2.2 E-7	NA	NA	1.3 E-3
E(L)-SB01	5	NA	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-4
E(L)-SB01	11	NA	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-4
L5-AF1-SB01	1	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4
L5-AF1-SB01	5	NA	NA	NA	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4
L5-AF1-SB01	11	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4
L5-ST87-SB01	1	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	5.1 E-4
L5-ST87-SB01	4	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4
L5-ST87-SB01	11	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4
L5-ST87-SB02	1	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4
L5-ST87-SB02	5	NA	NA	NA	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4
L5-ST87-SB02	11	NA	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-4

Table 5.4-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk												
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	ILCR
Unit Hazard														
Unit Risk														
51E-SB03	1.5	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
51E-SB03	5	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
51E-SB03	11.5	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
51E-SB04	1	NA	NA	NA	5 E-10	7 E-10	NA	NA	NA	NA	NA	NA	NA	1 E-9
51E-SB04	5	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
51E-SB04	11	NA	NA	NA	3 E-10	5 E-10	NA	NA	NA	NA	NA	NA	NA	8 E-10
52E-SB04	1	NA	NA	1 E-7	4 E-10	1 E-8	NA	NA	NA	NA	NA	NA	NA	2 E-7
52E-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB04	11	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB05	1.5	NA	NA	NA	1 E-9	2 E-8	NA	NA	NA	NA	NA	NA	NA	2 E-8
52E-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB05	11.5	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
52E-SB06	1.5	NA	NA	NA	3 E-10	9 E-9	NA	NA	NA	NA	NA	NA	NA	1 E-8
52E-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB06	11.5	NA	NA	NA	8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	8 E-11
52E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB07	5	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
52E-SB07	11	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB08	1	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB08	5	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB08	11	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB09	3.75	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB09	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB09	11.5	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB10	1.5	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
52E-SB10	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB10	11.5	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
52E-SB11	1	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
52E-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB11	11	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB12	1	NA	NA	NA	3 E-9	NA	NA	NA	3 E-9	NA	NA	NA	NA	6 E-9
52E-SB12	5	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
52E-SB13	1	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
52E-SB13	5	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB13	11	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
52E-SB14	1.5	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB14	5	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
52E-SB14	11.5	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
52E-SB15	1	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
52E-SB15	5	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
52E-SB15	11	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB16	1	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB16	5	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10

Table 5.4-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk												
Sample Name	Depth	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b&k)fluoranthene (total)	Cadmium	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Naphthalene	Perchlorate	Phenanthrene	Phenol	Pyrene	ILCR
52E-SB16	11	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
52E-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB17	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB18	5	NA	NA	NA	1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
52E-SB18	11	NA	NA	NA	1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
52E-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB19	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB20	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB21	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB22	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SB23	1	NA	NA	NA	1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
52E-SNS01	0.5	4 E-8	1 E-6	3 E-7	4 E-9	1 E-8	7 E-8	NA	NA	NA	NA	NA	NA	1 E-6
52E-SNS01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
52E-SNS02	0.5	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10
E(L)-SB01	0.25	NA	NA	NA	7 E-10	NA	NA	NA	3 E-9	NA	NA	NA	NA	3 E-9
E(L)-SB01	5	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
E(L)-SB01	11	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
L5-AF1-SB01	1	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
L5-AF1-SB01	5	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
L5-AF1-SB01	11	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
L5-ST87-SB01	1	NA	NA	NA	3 E-10	9 E-10	NA	NA	NA	NA	NA	NA	NA	1 E-9
L5-ST87-SB01	4	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
L5-ST87-SB01	11	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
L5-ST87-SB02	1	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
L5-ST87-SB02	5	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
L5-ST87-SB02	11	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.4-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																				
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard		9.8 E+1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	1.5 E+1	1.1 E-1	3.9 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4
51E-SP11	10								100													130
51E-SP11	20		34			84		6.2		34	93	12	5.4	12		51	150	10	590	93	56	7800
52E-SP04	10			5.5						5	8			21			4.5				14	420
52E-SP05	10										3.7			16								240
52E-SP06	10	8.8					7.7				7.9							9.3			10	16
52E-SP07	10								63					9.6				5.3			8.6	16
52E-SP07	20									7.2	26					18	68		2300	33	32	27000
52E-SP09	10								60	4.9	11					6.4	15	5.6		14	22	6.6
52E-SP10	10									15	23					16	44			14	22	8.2
52E-SP11	10																		25		5.3	120
52E-SP12	10			580						8.2	9.2		44				7.6	5.3	13			7.4
52E-SP12	20								56	7	38	9.7					40		12	7.8	8.8	180
52E-SP14	10											48							170			870
52E-SP15	10								67		5.1	6										260
52E-SP15	20								130					15								28
52E-SP16	10								180					13						5		180
52E-SP17	10								86										20			28
52E-SP17	30					14			68		30			18			26				5.4	32
52E-SP18	10	12							150		10			9.1			13			10	8.7	
52E-SP19	10								210	6.2				9.2	9.5			9	38			160
52E-SP19	20								240		10			10			13		32	6.8	5.6	36
52E-SP19	30				34	49			890					52	73		13		200	13	6.1	450
52E-SP20	10									5.3	9						10			4.4	9.2	
52E-SP21	10				23				140		5.1			44								21
52E-SP21	20				27			8.6	190	13	11	13	6.5	12		13	50				11	570
52E-SP22	10				19				120	24	15	11		19		18	22	9.1			28	1600
52E-SP23	10	7.3			70	33		5.7	250	10	12			24		9.6	15	12				
52E-SP24	10	17				54	8.8		91	9.5	48					5.7	7.2	14				67
L5-ST87-SP01	10								81		4.5											130

Table 5.4-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	7.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	4.3 E-5
51E-SP11	20	NA	1.3 E-6	NA	NA	9.5 E-4	NA	1.8 E-7	NA	1.1 E-4	1.6 E-5	3.0 E-5	8.4 E-8	1.2 E-6	NA	1.5 E-5	4.1 E-5	9.0 E-6	1.4 E-3	3.7 E-5	1.9 E-5	1.2 E-3	3.8 E-3
52E-SP04	10	NA	NA	9.7 E-6	NA	NA	NA	NA	NA	2.9 E-5	2.3 E-6	NA	NA	3.5 E-6	NA	NA	2.0 E-6	NA	NA	NA	8.2 E-6	1.1 E-4	1.7 E-4
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	6.9 E-5
52E-SP06	10	1.6 E-4	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	5.9 E-6	4.4 E-6	2.1 E-4
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	4.6 E-6	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	8.4 E-6	NA	NA	5.0 E-6	4.4 E-6	2.4 E-5
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	4.4 E-6	NA	NA	NA	NA	5.1 E-6	1.9 E-5	NA	5.3 E-3	1.3 E-5	1.1 E-5	4.2 E-3	9.6 E-3
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	2.9 E-5	3.2 E-6	NA	NA	NA	NA	2.9 E-6	6.8 E-6	8.9 E-6	NA	9.5 E-6	1.3 E-5	1.8 E-6	7.9 E-5
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	6.6 E-6	NA	NA	NA	NA	7.3 E-6	2.0 E-5	NA	NA	9.5 E-6	1.3 E-5	2.2 E-6	1.5 E-4
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	3.1 E-6	3.3 E-5	1.4 E-4
52E-SP12	10	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	4.8 E-5	2.7 E-6	NA	1.2 E-6	NA	NA	NA	3.5 E-6	8.4 E-6	5.6 E-5	NA	NA	2.0 E-6	1.1 E-3
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	2.3 E-5	6.4 E-6	2.4 E-5	NA	NA	NA	NA	1.1 E-5	NA	2.8 E-5	3.1 E-6	2.9 E-6	2.8 E-5	1.3 E-4
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	2.4 E-4	1.2 E-3
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	1.5 E-6	2.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-5	1.0 E-4
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	4.3 E-6	1.2 E-5
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	3.4 E-6	NA	4.9 E-5	6.8 E-5
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	NA	NA	7.7 E-6	1.0 E-4
52E-SP17	30	NA	NA	NA	NA	1.0 E-4	NA	NA	2.0 E-6	NA	3.3 E-6	NA	NA	1.2 E-6	NA	NA	5.1 E-6	NA	NA	NA	1.2 E-6	3.2 E-6	1.2 E-4
52E-SP18	10	2.2 E-4	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	2.9 E-6	NA	NA	1.5 E-6	NA	NA	5.9 E-6	NA	NA	6.8 E-6	5.1 E-6	NA	2.6 E-4
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	3.7 E-5	NA	NA	NA	1.5 E-6	5.1 E-8	NA	NA	1.4 E-5	1.6 E-4	NA	NA	4.4 E-5	2.8 E-4
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	1.7 E-6	NA	NA	1.0 E-6	NA	NA	3.6 E-6	NA	7.4 E-5	2.7 E-6	1.9 E-6	5.6 E-6	1.0 E-4
52E-SP19	30	NA	NA	NA	4.2 E-7	3.6 E-4	NA	NA	2.6 E-5	NA	NA	NA	NA	3.6 E-6	1.4 E-7	NA	2.6 E-6	NA	3.2 E-4	3.4 E-6	1.3 E-6	4.6 E-5	7.6 E-4
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	2.6 E-6	NA	NA	NA	NA	NA	4.5 E-6	NA	NA	3.0 E-6	5.4 E-6	NA	4.7 E-5
52E-SP21	10	NA	NA	NA	7.7 E-7	NA	NA	NA	1.0 E-5	NA	1.5 E-6	NA	NA	7.2 E-6	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	2.6 E-5
52E-SP21	20	NA	NA	NA	5.1 E-7	NA	NA	2.5 E-7	8.3 E-6	4.2 E-5	1.8 E-6	3.2 E-5	1.0 E-7	1.2 E-6	NA	3.7 E-6	1.4 E-5	NA	NA	NA	3.7 E-6	8.8 E-5	2.0 E-4
52E-SP22	10	NA	NA	NA	6.3 E-7	NA	NA	NA	8.8 E-6	1.4 E-4	4.3 E-6	4.9 E-5	NA	3.1 E-6	NA	8.2 E-6	1.0 E-5	1.4 E-5	NA	NA	1.6 E-5	4.4 E-4	6.9 E-4
52E-SP23	10	1.4 E-4	NA	NA	2.3 E-6	6.5 E-4	NA	3.0 E-7	1.8 E-5	5.9 E-5	3.5 E-6	NA	NA	4.0 E-6	NA	4.4 E-6	6.8 E-6	1.9 E-5	NA	NA	NA	NA	9.1 E-4
52E-SP24	10	3.2 E-4	NA	NA	NA	1.1 E-3	1.5 E-5	NA	6.7 E-6	5.6 E-5	1.4 E-5	NA	NA	NA	NA	2.6 E-6	3.3 E-6	2.2 E-5	NA	NA	NA	1.8 E-5	1.5 E-3
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	4.3 E-5

Table 5.4-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	2E-08
51E-SP11	20	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	1.0 E-7	7.7 E-9	NA	5.1 E-7	7E-07
52E-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	6E-08
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	3E-08
52E-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	2E-09
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	2E-09
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	2.7 E-9	NA	1.8 E-6	2E-06
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	7.7 E-10	1E-08
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	9.5 E-10	3E-08
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	1.4 E-8	2E-08
52E-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	8.6 E-10	2E-08
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	8.9 E-9	NA	NA	NA	NA	NA	NA	2.1 E-9	6.4 E-10	NA	1.2 E-8	3E-08
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA	1.0 E-7	2E-07
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	4E-08
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	2E-09
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-10	NA	2.1 E-8	2E-08
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	3.3 E-9	1E-08
52E-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	1E-09
52E-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	1E-09
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	1.9 E-8	4E-08
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	5.6 E-10	NA	2.4 E-9	8E-09
52E-SP19	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	7.1 E-10	NA	1.9 E-8	4E-08
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	NA	NA	1E-08
52E-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	2E-09
52E-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	6E-08
52E-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	2E-07
52E-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-08
52E-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	2E-08
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	2E-08

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.4-6) x the unit hazard or unit risk for the chemical).

Table 5.4-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																				
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard		9.8 E+1	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	1.5 E+1	1.1 E-1	3.9 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4
51E-SP11	10								100													130
51E-SP11	20		34			84		6.2		34	93	12	5.4	12		51	150	10	590	93	56	7800
52E-SP04	10			5.5						5	8			21			4.5				14	420
52E-SP05	10										3.7			16								240
52E-SP06	10	8.8					7.7				7.9							9.3			10	16
52E-SP07	10								63					9.6				5.3			8.6	16
52E-SP07	20									7.2	26					18	68		2300	33	32	27000
52E-SP09	10								60	4.9	11					6.4	15	5.6		14	22	6.6
52E-SP10	10									15	23					16	44			14	22	8.2
52E-SP11	10																		25		5.3	120
52E-SP12	10			580						8.2	9.2		44				7.6	5.3	13			7.4
52E-SP12	20								56	7	38	9.7					40		12	7.8	8.8	180
52E-SP14	10											48							170			870
52E-SP15	10								67		5.1	6										260
52E-SP15	20								130					15								28
52E-SP16	10								180					13						5		180
52E-SP17	10								86										20			28
52E-SP17	30					14			68		30			18			26				5.4	32
52E-SP18	10	12							150		10			9.1			13			10	8.7	
52E-SP19	10								210	6.2				9.2	9.5			9	38			160
52E-SP19	20								240		10			10			13		32	6.8	5.6	36
52E-SP19	30				34	49			890					52	73		13		200	13	6.1	450
52E-SP20	10									5.3	9						10			4.4	9.2	
52E-SP21	10				23				140		5.1			44								21
52E-SP21	20				27			8.6	190	13	11	13	6.5	12		13	50				11	570
52E-SP22	10				19				120	24	15	11		19		18	22	9.1			28	1600
52E-SP23	10	7.3			70	33		5.7	250	10	12			24		9.6	15	12				
52E-SP24	10	17				54	8.8		91	9.5	48					5.7	7.2	14				67
L5-ST87-SP01	10								81		4.5											130

Table 5.4-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																					
Sample Name	Depth	1,2,4-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Carbon Disulfide	Chloroform	Cyclohexane	Ethanol	Freon 113	Heptane	Hexane	m,p-Xylene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	HI
Unit Hazard																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-7	1.2 E-6
51E-SP11	20	NA	3.1 E-8	NA	NA	2.2 E-5	NA	4.2 E-9	NA	2.7 E-6	3.8 E-7	7.5 E-7	2.0 E-9	2.9 E-8	NA	1.4 E-7	1.2 E-6	2.1 E-7	3.3 E-5	8.9 E-7	4.4 E-7	2.8 E-5	9.0 E-5
52E-SP04	10	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	8.0 E-7	6.5 E-8	NA	NA	1.0 E-7	NA	NA	7.0 E-8	NA	NA	NA	2.2 E-7	3.1 E-6	4.6 E-6
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	1.9 E-6
52E-SP06	10	4.2 E-6	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	1.6 E-7	1.2 E-7	5.3 E-6
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	2.2 E-7	NA	NA	1.4 E-7	1.2 E-7	6.6 E-7
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	1.1 E-7	NA	NA	NA	NA	4.8 E-8	5.3 E-7	NA	1.3 E-4	3.1 E-7	2.5 E-7	9.8 E-5	2.3 E-4
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	7.8 E-7	8.9 E-8	NA	NA	NA	NA	3.4 E-8	2.3 E-7	2.4 E-7	NA	2.7 E-7	3.5 E-7	4.8 E-8	2.2 E-6
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	1.9 E-7	NA	NA	NA	NA	8.6 E-8	6.9 E-7	NA	NA	2.7 E-7	3.5 E-7	6.0 E-8	4.0 E-6
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	8.4 E-8	8.7 E-7	3.8 E-6
52E-SP12	10	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	1.3 E-6	7.5 E-8	NA	3.2 E-8	NA	NA	NA	1.2 E-7	2.2 E-7	1.5 E-6	NA	NA	5.4 E-8	3.1 E-5
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	5.6 E-7	1.5 E-7	6.1 E-7	NA	NA	NA	NA	3.1 E-7	NA	6.8 E-7	7.4 E-8	7.0 E-8	6.5 E-7	3.2 E-6
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	6.3 E-6	3.1 E-5
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	4.1 E-8	7.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	2.8 E-6
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	2.8 E-7
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	9.5 E-8	NA	1.3 E-6	1.9 E-6
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	2.0 E-7	2.6 E-6
52E-SP17	30	NA	NA	NA	NA	2.4 E-6	NA	NA	4.9 E-8	NA	8.1 E-8	NA	NA	2.9 E-8	NA	NA	1.4 E-7	NA	NA	NA	2.9 E-8	7.7 E-8	2.8 E-6
52E-SP18	10	5.7 E-6	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	8.1 E-8	NA	NA	4.5 E-8	NA	NA	2.0 E-7	NA	NA	1.9 E-7	1.4 E-7	NA	6.7 E-6
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	9.9 E-7	NA	NA	NA	4.5 E-8	1.3 E-9	NA	NA	3.8 E-7	4.3 E-6	NA	NA	1.2 E-6	7.3 E-6
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	4.1 E-8	NA	NA	2.5 E-8	NA	NA	1.0 E-7	NA	1.8 E-6	6.5 E-8	4.4 E-8	1.3 E-7	2.5 E-6
52E-SP19	30	NA	NA	NA	1.0 E-8	8.4 E-6	NA	NA	6.4 E-7	NA	NA	NA	NA	8.5 E-8	3.4 E-9	NA	6.8 E-8	NA	7.5 E-6	8.3 E-8	3.2 E-8	1.1 E-6	1.8 E-5
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-7	7.3 E-8	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	8.4 E-8	1.5 E-7	NA	1.3 E-6
52E-SP21	10	NA	NA	NA	2.0 E-8	NA	NA	NA	3.0 E-7	NA	4.1 E-8	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	7.3 E-7
52E-SP21	20	NA	NA	NA	1.2 E-8	NA	NA	5.9 E-9	2.0 E-7	1.0 E-6	4.5 E-8	8.1 E-7	2.4 E-9	2.9 E-8	NA	3.5 E-8	3.9 E-7	NA	NA	NA	8.7 E-8	2.1 E-6	4.7 E-6
52E-SP22	10	NA	NA	NA	1.7 E-8	NA	NA	NA	2.6 E-7	3.8 E-6	1.2 E-7	1.4 E-6	NA	9.3 E-8	NA	9.6 E-8	3.4 E-7	3.8 E-7	NA	NA	4.4 E-7	1.2 E-5	1.9 E-5
52E-SP23	10	3.5 E-6	NA	NA	6.2 E-8	1.7 E-5	NA	7.8 E-9	5.4 E-7	1.6 E-6	9.8 E-8	NA	NA	1.2 E-7	NA	5.1 E-8	2.3 E-7	5.0 E-7	NA	NA	NA	NA	2.4 E-5
52E-SP24	10	8.1 E-6	NA	NA	NA	2.8 E-5	4.2 E-7	NA	2.0 E-7	1.5 E-6	3.9 E-7	NA	NA	NA	NA	3.0 E-8	1.1 E-7	5.9 E-7	NA	NA	NA	4.9 E-7	4.0 E-5
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-7	1.2 E-6

Table 5.4-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																					
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroform**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard																							
Unit Risk																							
51E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	4E-10
51E-SP11	20	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	2.5 E-9	1.9 E-10	NA	1.2 E-8	2E-08
52E-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	2E-09
52E-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	7E-10
52E-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	5E-11
52E-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	5E-11
52E-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	6.6 E-11	NA	4.2 E-8	5E-08
52E-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	2.0 E-11	3E-10
52E-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	2.5 E-11	8E-10
52E-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	3.7 E-10	6E-10
52E-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	2.3 E-11	5E-10
52E-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	2.3 E-10	NA	NA	NA	NA	NA	NA	5.1 E-11	1.6 E-11	NA	2.8 E-10	7E-10
52E-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	2.7 E-9	6E-09
52E-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-10	1E-09
52E-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	4E-11
52E-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-11	NA	5.6 E-10	6E-10
52E-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	8.6 E-11	3E-10
52E-SP17	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	3E-11
52E-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-11	NA	NA	4E-11
52E-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	4.9 E-10	1E-09
52E-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	1.4 E-11	NA	5.6 E-11	2E-10
52E-SP19	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	1.7 E-11	NA	4.6 E-10	1E-09
52E-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	3E-10
52E-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-11	6E-11
52E-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-10	2E-09
52E-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	7E-09
52E-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5E-10
52E-SP24	10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	7E-10
L5-ST87-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	4E-10

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.4-7) x the unit hazard or unit risk for the chemical).

Table 5.4-22 All Receptors Hazard Index and Cancer Risk Results - Soil
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
51E-SB03	1.5	4.6 E-3	5.1 E-4	1.2 E-3	4.0 E-4	5 E-10	6 E-9	2 E-10
51E-SB03	5	9.1 E-3	1.0 E-3	2.4 E-3	7.9 E-4	1 E-9	1 E-8	5 E-10
51E-SB03	11.5	7.3 E-3	8.2 E-4	1.9 E-3	6.3 E-4	8 E-10	1 E-8	4 E-10
51E-SB04	1	9.4 E-3	1.0 E-3	2.5 E-3	8.2 E-4	4 E-9	1 E-8	1 E-9
51E-SB04	5	5.1 E-3	5.7 E-4	1.3 E-3	4.5 E-4	6 E-10	8 E-9	3 E-10
51E-SB04	11	6.2 E-3	7.0 E-4	1.6 E-3	5.4 E-4	2 E-9	9 E-9	8 E-10
52E-SB04	1	7.2 E-3	8.1 E-4	1.9 E-3	6.3 E-4	5 E-7	3 E-8	2 E-7
52E-SB04	5.5	2.7 E-4	2.9 E-5	6.9 E-5	2.1 E-5	**NA**	**NA**	**NA**
52E-SB04	11	5.4 E-3	6.0 E-4	1.4 E-3	4.7 E-4	6 E-10	8 E-9	3 E-10
52E-SB05	1.5	3.0 E-2	3.4 E-3	7.9 E-3	2.6 E-3	8 E-8	4 E-8	2 E-8
52E-SB05	5	9.9 E-4	1.1 E-4	2.5 E-4	7.5 E-5	**NA**	**NA**	**NA**
52E-SB05	11.5	7.5 E-3	8.4 E-4	2.0 E-3	6.6 E-4	9 E-10	1 E-8	4 E-10
52E-SB06	1.5	6.5 E-3	7.3 E-4	1.7 E-3	5.7 E-4	3 E-8	1 E-8	1 E-8
52E-SB06	5	5.9 E-4	6.6 E-5	1.6 E-4	5.1 E-5	**NA**	**NA**	**NA**
52E-SB06	11.5	1.4 E-3	1.6 E-4	3.7 E-4	1.2 E-4	2 E-10	2 E-9	8 E-11
52E-SB07	1	1.4 E-3	1.5 E-4	3.6 E-4	1.1 E-4	**NA**	**NA**	**NA**
52E-SB07	5	4.6 E-3	5.1 E-4	1.2 E-3	4.0 E-4	5 E-10	7 E-9	2 E-10
52E-SB07	11	5.9 E-3	6.5 E-4	1.5 E-3	5.1 E-4	7 E-10	9 E-9	3 E-10
52E-SB08	1	5.2 E-3	5.8 E-4	1.4 E-3	4.5 E-4	6 E-10	7 E-9	3 E-10
52E-SB08	5	4.7 E-3	5.2 E-4	1.2 E-3	4.1 E-4	5 E-10	7 E-9	3 E-10
52E-SB08	11	4.8 E-3	5.4 E-4	1.3 E-3	4.2 E-4	6 E-10	7 E-9	3 E-10
52E-SB09	3.75	6.8 E-3	7.5 E-4	1.8 E-3	5.8 E-4	7 E-10	9 E-9	3 E-10
52E-SB09	5.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB09	11.5	6.0 E-3	6.7 E-4	1.6 E-3	5.2 E-4	7 E-10	9 E-9	3 E-10
52E-SB10	1.5	6.6 E-3	7.3 E-4	1.7 E-3	5.7 E-4	8 E-10	1 E-8	4 E-10
52E-SB10	5.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB10	11.5	4.5 E-3	5.1 E-4	1.2 E-3	4.0 E-4	5 E-10	7 E-9	2 E-10
52E-SB11	1	7.4 E-3	8.3 E-4	1.9 E-3	6.4 E-4	8 E-10	1 E-8	4 E-10
52E-SB11	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB11	11	4.7 E-3	5.2 E-4	1.2 E-3	4.1 E-4	5 E-10	7 E-9	3 E-10
52E-SB12	1	5.8 E-2	6.6 E-3	1.5 E-2	5.1 E-3	1 E-8	8 E-8	6 E-9
52E-SB12	5	9.5 E-3	1.1 E-3	2.5 E-3	8.2 E-4	1 E-9	1 E-8	5 E-10
52E-SB13	1	6.5 E-3	7.3 E-4	1.7 E-3	5.7 E-4	8 E-10	1 E-8	4 E-10
52E-SB13	5	5.3 E-3	5.9 E-4	1.4 E-3	4.6 E-4	6 E-10	8 E-9	3 E-10
52E-SB13	11	4.4 E-3	4.9 E-4	1.2 E-3	3.8 E-4	5 E-10	6 E-9	2 E-10
52E-SB14	1.5	7.5 E-3	8.3 E-4	1.9 E-3	6.3 E-4	7 E-10	9 E-9	3 E-10
52E-SB14	5	1.6 E-2	1.8 E-3	4.2 E-3	1.3 E-3	8 E-10	1 E-8	4 E-10
52E-SB14	11.5	8.9 E-3	9.8 E-4	2.3 E-3	7.3 E-4	5 E-10	7 E-9	2 E-10
52E-SB15	1	6.7 E-3	7.5 E-4	1.7 E-3	5.8 E-4	8 E-10	1 E-8	4 E-10
52E-SB15	5	1.2 E-2	1.3 E-3	3.0 E-3	1.0 E-3	1 E-9	2 E-8	6 E-10
52E-SB15	11	5.3 E-3	5.9 E-4	1.4 E-3	4.6 E-4	6 E-10	8 E-9	3 E-10
52E-SB16	1	5.3 E-3	5.9 E-4	1.4 E-3	4.6 E-4	6 E-10	8 E-9	3 E-10
52E-SB16	5	6.0 E-3	6.7 E-4	1.6 E-3	5.2 E-4	7 E-10	9 E-9	3 E-10
52E-SB16	11	4.8 E-3	5.4 E-4	1.3 E-3	4.2 E-4	6 E-10	7 E-9	3 E-10
52E-SB17	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB17	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB17	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB18	5	2.4 E-3	2.7 E-4	6.3 E-4	2.1 E-4	3 E-10	4 E-9	1 E-10
52E-SB18	11	2.7 E-3	3.0 E-4	7.1 E-4	2.4 E-4	3 E-10	4 E-9	1 E-10
52E-SB19	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB19	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB19	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB20	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB20	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB20	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB21	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 5.4-22 All Receptors Hazard Index and Cancer Risk Results-Soil
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

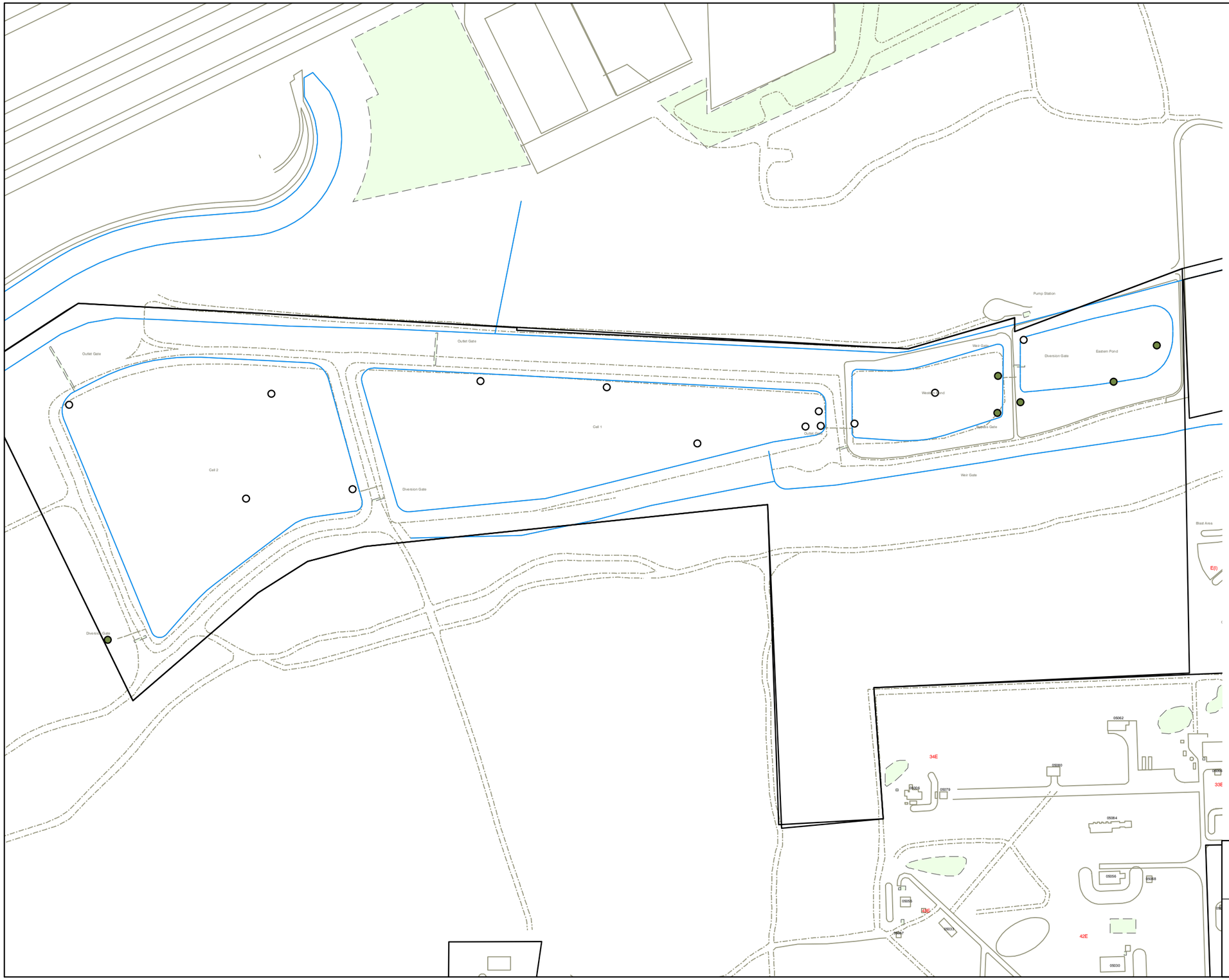
		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	**Depth**	**Resident Child**	**Adult**	**Construction Worker**	**Commercial Worker**	**Resident**	**Construction Worker**	**Commercial Worker**
52E-SB21	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB21	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB22	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB22	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB22	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SB23	1	2.6 E-3	2.9 E-4	6.7 E-4	2.2 E-4	3 E-10	4 E-9	1 E-10
52E-SNS01	0.5	6.8 E-2	7.7 E-3	1.8 E-2	6.0 E-3	**5 E-6**	2 E-7	1 E-6
52E-SNS01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SNS01	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
52E-SNS02	0.5	1.6 E-2	1.7 E-3	4.1 E-3	1.4 E-3	2 E-9	2 E-8	8 E-10
E(L)-SB01	0.25	1.5 E-2	1.7 E-3	3.8 E-3	1.3 E-3	7 E-9	2 E-8	3 E-9
E(L)-SB01	5	1.1 E-2	1.2 E-3	2.9 E-3	9.5 E-4	1 E-9	2 E-8	6 E-10
E(L)-SB01	11	9.1 E-3	1.0 E-3	2.4 E-3	7.9 E-4	1 E-9	1 E-8	5 E-10
L5-AF1-SB01	1	5.7 E-3	6.4 E-4	1.5 E-3	4.9 E-4	7 E-10	8 E-9	3 E-10
L5-AF1-SB01	5	6.1 E-3	6.8 E-4	1.6 E-3	5.3 E-4	7 E-10	9 E-9	3 E-10
L5-AF1-SB01	11	6.3 E-3	7.0 E-4	1.6 E-3	5.4 E-4	7 E-10	9 E-9	3 E-10
L5-ST87-SB01	1	5.8 E-3	6.5 E-4	1.5 E-3	5.1 E-4	4 E-9	9 E-9	1 E-9
L5-ST87-SB01	4	6.4 E-3	7.1 E-4	1.7 E-3	5.6 E-4	7 E-10	9 E-9	3 E-10
L5-ST87-SB01	11	6.5 E-3	7.3 E-4	1.7 E-3	5.7 E-4	8 E-10	1 E-8	4 E-10
L5-ST87-SB02	1	4.8 E-3	5.4 E-4	1.3 E-3	4.2 E-4	6 E-10	7 E-9	3 E-10
L5-ST87-SB02	5	4.0 E-3	4.4 E-4	1.0 E-3	3.5 E-4	5 E-10	6 E-9	2 E-10
L5-ST87-SB02	11	1.0 E-2	1.1 E-3	2.6 E-3	8.7 E-4	1 E-9	1 E-8	5 E-10
Minimum		2.7 E-4	2.9 E-5	6.9 E-5	2.1 E-5	2 E-10	2 E-9	8 E-11
Median		6.0 E-3	6.8 E-4	1.6 E-3	5.3 E-4	7 E-10	9 E-9	3 E-10
Maximum		6.8 E-2	7.7 E-3	1.8 E-2	6.0 E-3	**5 E-6**	2 E-7	1 E-6

Notes and Key:
NA = Not applicable

Table 5.4-23 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	**Depth**	**Resident Child**	**Adult**	**Construction Worker**	**Commercial Worker**	**Resident**	**Construction Worker**	**Commercial Worker**
51E-SP11	10	2.8 E-4	1.2 E-4	1.2 E-6	4.4 E-5	7 E-8	2 E-11	2 E-8
51E-SP11	20	2.5 E-2	1.1 E-2	9.0 E-5	3.9 E-3	**3 E-6**	6 E-10	7 E-7
52E-SP04	10	1.1 E-3	4.8 E-4	4.6 E-6	1.7 E-4	2 E-7	6 E-11	6 E-8
52E-SP05	10	4.6 E-4	2.0 E-4	1.9 E-6	7.1 E-5	1 E-7	3 E-11	3 E-8
52E-SP06	10	1.4 E-3	6.1 E-4	5.3 E-6	2.1 E-4	8 E-9	2 E-12	2 E-9
52E-SP07	10	1.6 E-4	6.8 E-5	6.6 E-7	2.5 E-5	8 E-9	2 E-12	2 E-9
52E-SP07	20	6.3 E-2	2.7 E-2	2.3 E-4	9.8 E-3	**9 E-6**	2 E-9	**2 E-6**
52E-SP09	10	5.3 E-4	2.3 E-4	2.2 E-6	8.1 E-5	5 E-8	1 E-11	1 E-8
52E-SP10	10	9.7 E-4	4.2 E-4	4.0 E-6	1.5 E-4	1 E-7	3 E-11	3 E-8
52E-SP11	10	9.5 E-4	4.1 E-4	3.8 E-6	1.5 E-4	1 E-7	2 E-11	2 E-8
52E-SP12	10	7.6 E-3	3.2 E-3	3.1 E-5	1.2 E-3	9 E-8	2 E-11	2 E-8
52E-SP12	20	8.5 E-4	3.6 E-4	3.2 E-6	1.3 E-4	1 E-7	3 E-11	3 E-8
52E-SP14	10	7.8 E-3	3.4 E-3	3.1 E-5	1.2 E-3	1 E-6	3 E-10	2 E-7
52E-SP15	10	6.9 E-4	3.0 E-4	2.8 E-6	1.1 E-4	2 E-7	4 E-11	4 E-8
52E-SP15	20	7.6 E-5	3.3 E-5	2.8 E-7	1.2 E-5	8 E-9	2 E-12	2 E-9
52E-SP16	10	4.5 E-4	1.9 E-4	1.9 E-6	7.0 E-5	9 E-8	2 E-11	2 E-8
52E-SP17	10	6.6 E-4	2.8 E-4	2.6 E-6	1.0 E-4	4 E-8	1 E-11	1 E-8
52E-SP17	30	7.9 E-4	3.4 E-4	2.8 E-6	1.2 E-4	6 E-9	1 E-12	1 E-9
52E-SP18	10	1.7 E-3	7.3 E-4	6.7 E-6	2.6 E-4	6 E-9	2 E-12	1 E-9
52E-SP19	10	1.8 E-3	7.8 E-4	7.3 E-6	2.8 E-4	2 E-7	4 E-11	4 E-8
52E-SP19	20	6.7 E-4	2.9 E-4	2.5 E-6	1.0 E-4	4 E-8	8 E-12	9 E-9
52E-SP19	30	5.0 E-3	2.2 E-3	1.8 E-5	7.8 E-4	2 E-7	4 E-11	4 E-8
52E-SP20	10	3.1 E-4	1.3 E-4	1.3 E-6	4.8 E-5	4 E-8	1 E-11	1 E-8
52E-SP21	10	1.7 E-4	7.3 E-5	7.3 E-7	2.6 E-5	1 E-8	3 E-12	3 E-9
52E-SP21	20	1.3 E-3	5.5 E-4	4.7 E-6	2.0 E-4	3 E-7	6 E-11	6 E-8
52E-SP22	10	4.6 E-3	2.0 E-3	1.9 E-5	7.1 E-4	1 E-6	3 E-10	3 E-7
52E-SP23	10	6.0 E-3	2.6 E-3	2.4 E-5	9.3 E-4	8 E-8	2 E-11	2 E-8
52E-SP24	10	1.0 E-2	4.4 E-3	4.0 E-5	1.6 E-3	1 E-7	3 E-11	3 E-8
L5-ST87-SP01	10	2.8 E-4	1.2 E-4	1.2 E-6	4.4 E-5	7 E-8	2 E-11	2 E-8
Minimum		7.6 E-5	3.3 E-5	2.8 E-7	1.2 E-5	6 E-9	1 E-12	1 E-9
Median		9.5 E-4	4.1 E-4	3.8 E-6	1.5 E-4	9 E-8	2 E-11	2 E-8
Maximum		6.3 E-2	2.7 E-2	2.3 E-4	9.8 E-3	**9 E-6**	2 E-9	**2 E-6**

Notes and Key:
NA = Not applicable



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Surface Water Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 300 '

0 300 600

AEROJET

Environmental Remediation

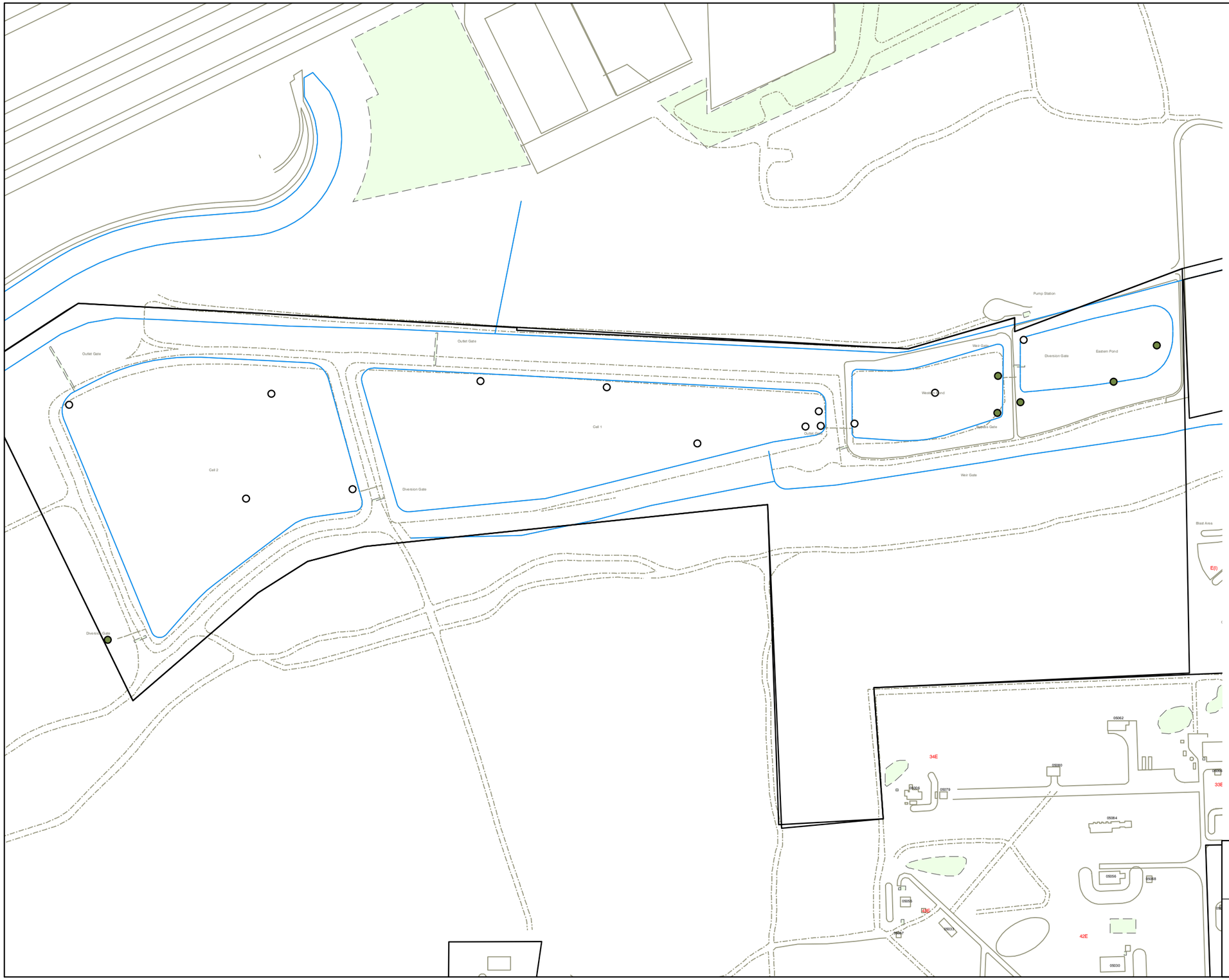
Figure 5.5-1

Residential

Non-Cancer Effects – All Media

Westlakes

DRAFT



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 300 '

0 300 600

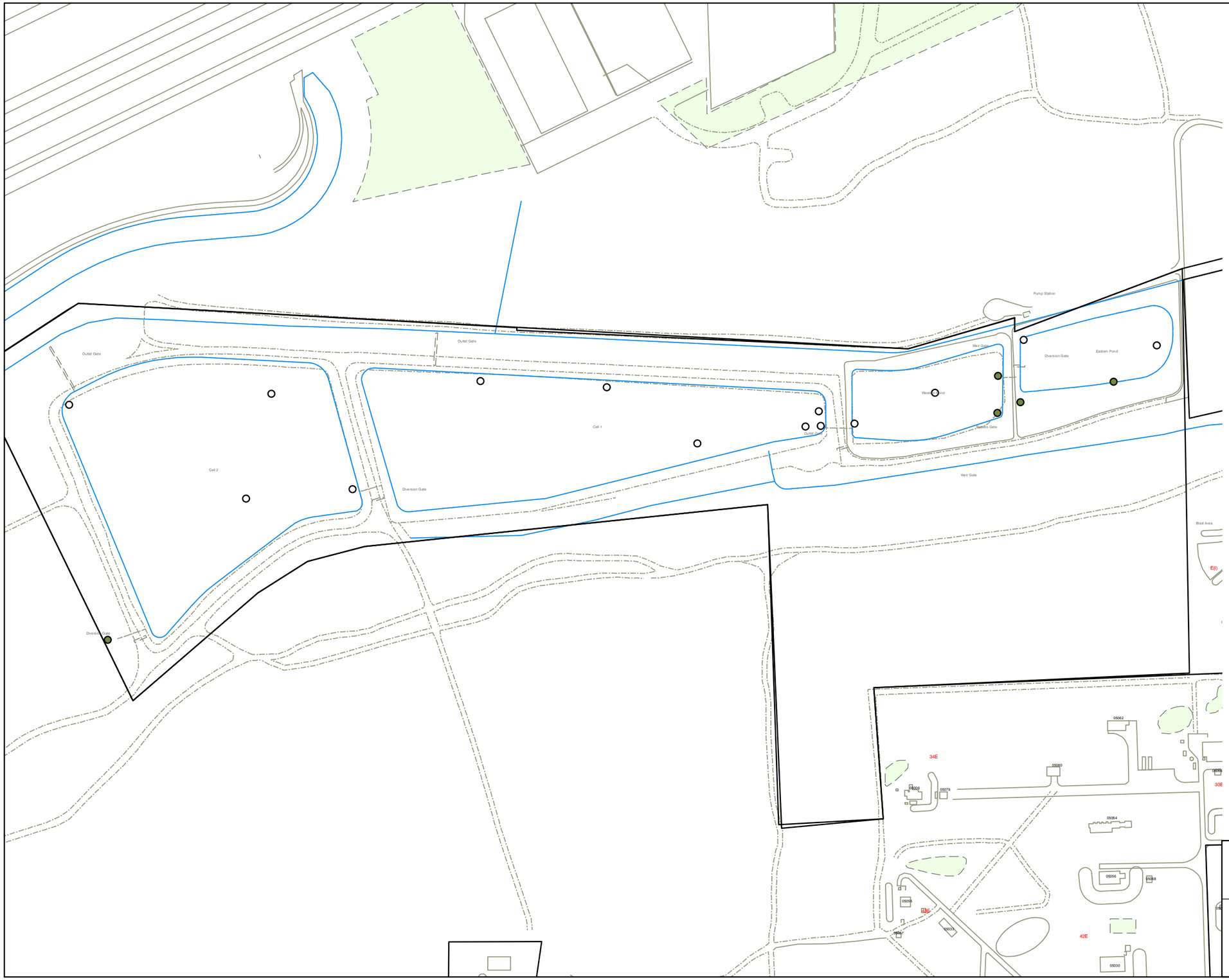
AEROJET

Environmental Remediation

Figure 5.5-2

Residential
Cancer Risks – All Media
Westlakes

DRAFT



Legend

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 300 '

0 300 600

AEROJET

Environmental Remediation

Figure 5.5-3

Construction Worker
Non-Cancer Effects – All Media
Westlakes

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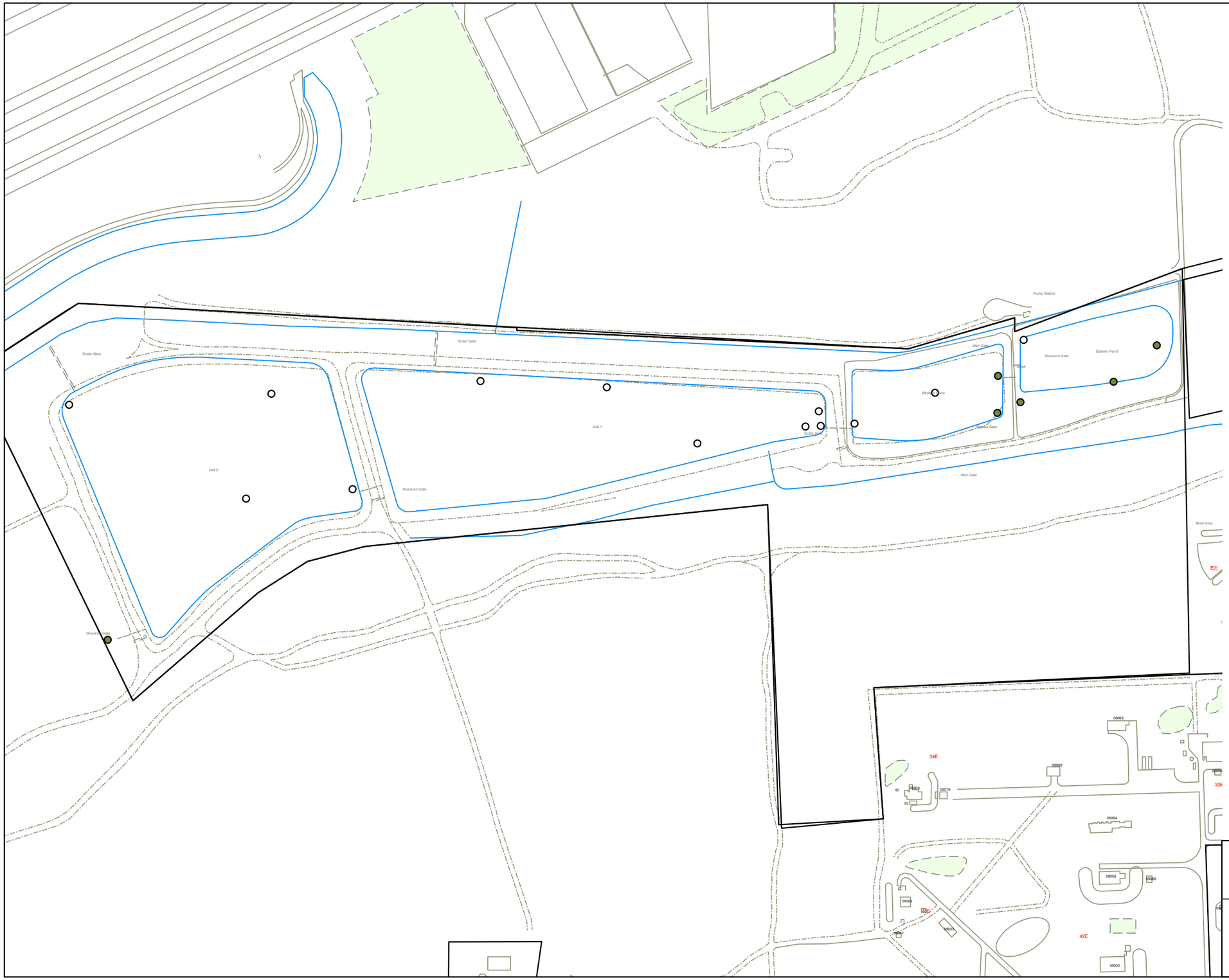

Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4
- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 300 '

0 300 600

AEROJET

Environmental Remediation

Figure 5.5-4

Construction Worker Cancer Risks – All Media Westlakes

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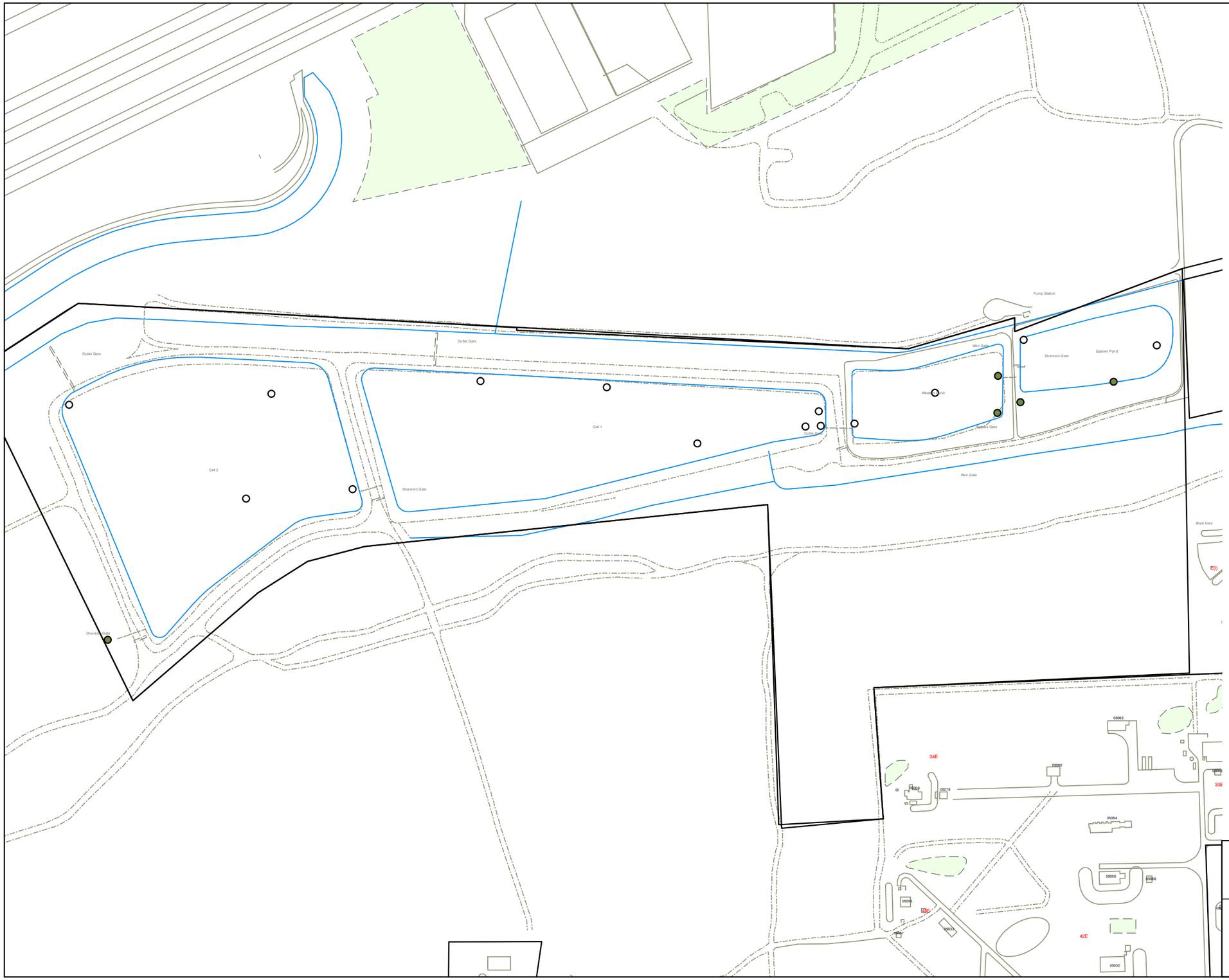

Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 300 '

0 300 600

AEROJET

Environmental Remediation

Figure 5.5-5

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Westlakes

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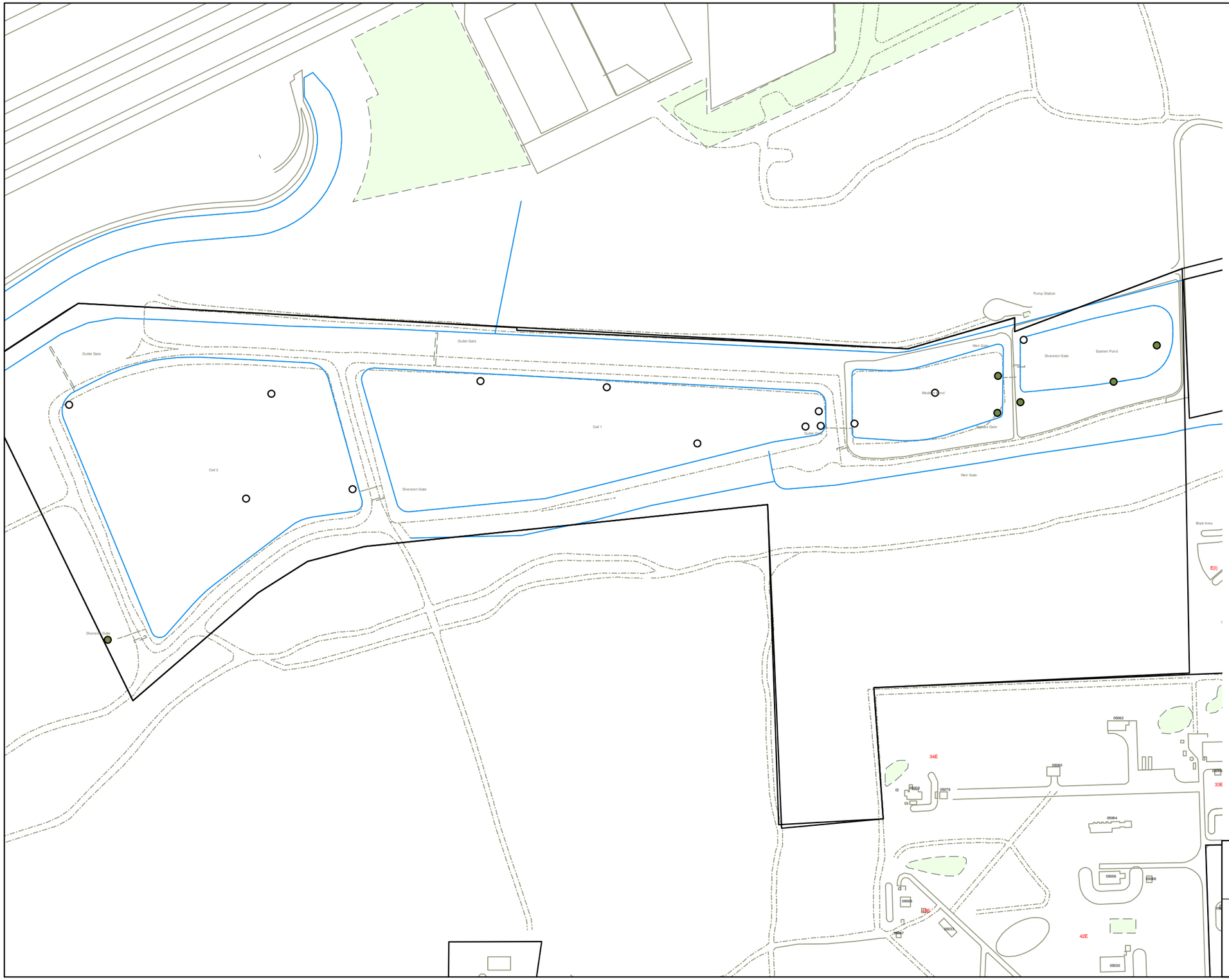

Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 300 '

0 300 600

AEROJET

Environmental Remediation

Figure 5.5-6

Commercial/Industrial Worker Cancer Risks – All Media Westlakes

DRAFT

Table 5.5-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Westlakes	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	6.2	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	60	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.061	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	53	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.35	ca	N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.61	nc	N	ND	NA
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	18	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.5-0.87	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	6.3	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.17	nc	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	310	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	47	0	0%	0.5-0.87	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	1.8	nc	N	ND	NA
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	51	0	0%	0.006-0.016	0.23	ca	N	ND	NA
	72-55-9	4,4'-DDE	0.00038	0.0013	mg/kg	WL-SD06	1.5	51	3	6%	0.002-0.0053	0.16	ca	Y		NA
	50-29-3	4,4'-DDT	0.0014	0.0033	mg/kg	WL-SD08	0.5	51	4	8%	0.006-0.016	0.16	ca	Y		NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.61	nc	N	ND	NA
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	24	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	47	0	0%	0.5-0.87	2.3	ca	N	ND	NA
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	47	0	0%	0.0066-0.27	370	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	47	0	0%	0.0066-0.27	230	nc	N	ND	NA
	309-00-2	Aldrin	0.00024	0.00024	mg/kg	WL-SB02	0.5	51	1	2%	0.001-0.0027	0.0029	ca	N	BSL	NA
	319-84-6	alpha-BHC	0.00023	0.00023	mg/kg	WL-SD04	0.5	51	1	2%	0.001-0.0027	0.009	ca	N	BSL	NA
	7429-90-5	Aluminum	7900	41000	mg/kg	WL-SB05, WL-SB10	1.5	49	49	100%	NA	7600	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	8.5	ca	N	ND	NA
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	47	0	0%	0.0066-0.27	2200	nc	N	ND	NA
	7440-36-0	Antimony	0.13	1.4	mg/kg	WL-SB04	0.5	39	26	67%	1-16	3	nc	N	BSL	NA
	7440-38-2	Arsenic	2.4	8.4	mg/kg	WL-SB05	0.5	49	49	100%	NA	0.0062	ca	N	BG	NA
	86-50-0	Azinphos methyl	ND	ND	mg/kg	ND	ND	25	0	0%	0.041-0.051	NA		N	ND	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.44	ca	N	ND	NA

Table 5.5-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Westlakes	7440-39-3	Barium	46	310	mg/kg	WL-SB05	1.5	49	49	100%	NA	520	nc	N	BSL	NA
	922-87-5	Benzidine	ND	ND	mg/kg	ND	ND	47	0	0%	0.35-0.61	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.0072	0.0072	mg/kg	WL-SD08	0.5	47	1	2%	0.0066-0.27	0.062	ca	N	BSL	NA
	50-32-8	Benzo (a) pyrene	0.0092	0.0092	mg/kg	WL-SD08	0.5	47	1	2%	0.0066-0.27	0.0038	ca	Y		NA
	205-99-2	Benzo (b & k) fluoranthene (total)	0.013	0.029	mg/kg	WL-SD08	0.5	47	3	6%	0.013-0.54	0.038	ca	Y		NA
	191-24-2	Benzo (ghi) perylene	0.012	0.012	mg/kg	WL-SD08	0.5	47	1	2%	0.0066-0.54	230	nc	N		NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	46	0	0%	0.5-0.67	10000	max	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	1800	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.15	1.2	mg/kg	WL-SB05	0.5	49	49	100%	NA	15	nc	N	BSL	NA
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	51	0	0%	0.001-0.0027	0.032	ca	N	ND	NA
	AER-001-412	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.022	ca	N	ND*	100%
	AER-001-413	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	94	0	0%	0.2-0.35	0.29	ca	N	ND	NA
	AER-001-414	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	47	0	0%	0.5-0.87	3.5	ca	N	ND	NA
	35400-43-2	Bolstar	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA		N	ND	NA
	7440-42-8	Boron	4.4	29	mg/kg	WL-SD08	0.5	38	12	32%	4-11	1600	nc	N	BSL	NA
	7440-43-9	Cadmium	0.17	2.5	mg/kg	WL-SB10	0.5	49	12	24%	0.4-1.1	0.17	nc	N	BG	NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	2.4	ca	N	ND	NA
	12789-03-6	Chlordane (tech)	ND	ND	mg/kg	ND	ND	51	0	0%	0.02-0.053	0.043	ca	N	ND	NA
	2921-88-2	Chlorpyrifos	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	18	nc	N	ND	NA
	7440-47-3	Chromium	17	90	mg/kg	WL-SB10, WL-SD05	0.5/1.5	49	49	100%	NA	10000	max	N	BSL	NA
	1333-82-0	Chromium VI	0.036	1.6	mg/kg	WL-SD08	1.5	47	45	96%	0.2-1	1.7	ca	N	BSL	NA
	218-01-9	Chrysene	0.0068	0.014	mg/kg	WL-SD08	0.5	47	2	4%	0.0066-0.27	0.38	ca	N	BSL	NA
	7440-48-4	Cobalt	4.4	28	mg/kg	WL-SB10	1.5	49	49	100%	NA	66	ca	N	BSL	NA
	7440-50-8	Copper	12	180	mg/kg	WL-SB04	10.5	49	49	100%	NA	300	nc	N	BSL	NA
	56-72-4	Coumaphos	ND	ND	mg/kg	ND	ND	25	0	0%	0.041-0.051	NA		N	ND	NA
	319-86-8	delta-BHC	0.00045	0.0011	mg/kg	WL-SD08	0.5	51	3	6%	0.001-0.0027	NA		Y		NA
	8065-48-3	Demeton	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	0.24	nc	N	ND	NA
	333-41-5	Diazinon	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	5.5	nc	N	ND	NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	47	0	0%	0.0066-0.54	0.0062	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	15	nc	N	ND	NA
	62-73-7	Dichlorvos	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	0.17	nc	N	ND	NA
	60-57-1	Dieldrin	0.00045	0.0013	mg/kg	WL-SD06	1.5	51	3	6%	0.002-0.0053	0.003	ca	Y		NA
	68334-30-5	Diesel Range Organics (C10-C28)	1.4	41	mg/kg	WL-SD08	0.5	14	14	100%	NA	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	4900	nc	N	ND	NA
	60-51-5	Dimethoate	ND	ND	mg/kg	ND	ND	25	0	0%	0.041-0.051	1.2	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	47	0	0%	0.4-0.7	610	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	240	nc	N	ND	NA
	298-04-4	Disulfoton	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	0.24	nc	N	ND	NA
	115-29-7	Endosulfan I	ND	ND	mg/kg	ND	ND	51	0	0%	0.002-0.0053	37	nc	N	ND	NA
	115-29-7	Endosulfan II	0.00052	0.00052	mg/kg	WL-SD04	0.5	51	1	2%	0.002-0.0053	37	nc	N	BSL	NA

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Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Westlakes	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	51	0	0%	0.006-0.016	37	nc	N	ND	NA
	72-20-8	Endrin	ND	ND	mg/kg	ND	ND	51	0	0%	0.002-0.0053	1.8	nc	N	ND	NA
	72-20-8	Endrin aldehyde	ND	ND	mg/kg	ND	ND	51	0	0%	0.006-0.016	1.8	nc	N	ND	NA
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	51	0	0%	0.006-0.016	1.8	nc	N	ND	NA
	2104-64-5	EPN	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	0.061	nc	N	ND	NA
	563-12-2	Ethion	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	3.1	nc	N	ND	NA
	13194-48-4	Ethoprop	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA		N	ND	NA
	115-90-2	Fensulfothion	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA		N	ND	NA
	55-38-9	Fenthion	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA		N	ND	NA
	206-44-0	Fluoranthene	0.0021	0.018	mg/kg	WL-SD08	0.5	47	11	23%	0.0066-0.27	230	nc	Y		NA
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	47	0	0%	0.0066-0.27	270	nc	N	ND	NA
	58-89-9	gamma-BHC (Lindane)	0.00026	0.00026	mg/kg	WL-SD05	0.5	51	1	2%	0.001-0.0027	0.044	ca	N	BSL	NA
	76-44-8	Heptachlor	ND	ND	mg/kg	ND	ND	51	0	0%	0.001-0.0027	0.011	ca	N	ND	NA
	1024-57-3	Heptachlor epoxide	0.00031	0.0014	mg/kg	WL-SB02	0.5	51	3	6%	0.001-0.0027	0.0053	ca	Y		NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.62	ca	N	ND	NA
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-1.2	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	3.5	ca	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0078	0.0078	mg/kg	WL-SD08	0.5	47	1	2%	0.0066-0.54	0.062	ca	N	BSL	NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	51	ca	N	ND	NA
	7439-92-1	Lead	2.1	60	mg/kg	WL-SD08	0.5	49	49	100%	NA	15	nc	N	BG	NA
	7439-92-1	Lithium	4.1	19	mg/kg	WL-SB05	1.5	49	49	100%	NA	160	nc	N	BSL	NA
	121-75-5	Malathion	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	120	nc	N	ND	NA
	7439-96-5	Manganese	170	900	mg/kg	WL-SB05	1.5	49	49	100%	NA	180	nc	N	BG	NA
	7439-97-6	Mercury	0.0051	0.21	mg/kg	WL-SB05	0.5	48	47	98%	0.02-0.04	1.8	nc	N	BSL	NA
	150-50-5	Merphos	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	0.18	nc	N	ND	NA
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	51	0	0%	0.02-0.053	31	nc	N	ND	NA
	7786-34-7	Mevinphos	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA	nc	N	ND	NA
	7439-98-7	Molybdenum	0.16	1.6	mg/kg	WL-SB05, WL-SB08	11/11.5	49	40	82%	1-4.3	38	nc	N	BSL	NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	4.6	110	mg/kg	WL-SD03, WL-SD08	0.5	14	14	100%	NA	NA		N	ITC	NA
	300-76-5	Naled	ND	ND	mg/kg	ND	ND	24	0	0%	0.041-0.051	12	nc	N	ND	NA
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	47	0	0%	0.0066-0.27	0.17	ca	N	ND	NA
	7440-02-0	Nickel	15	64	mg/kg	WL-SB10	1.5	49	49	100%	NA	160	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	2	nc	N	ND	NA
	556-88-7	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	41	0	0%	0.25-0.25	NA		N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	47	0	0%	0.0031-0.35	0.00095	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	0.007	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	47	0	0%	0.2-0.35	150	nc	N	ND	NA
	56-38-2	Parathion, ethyl	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	37	nc	N	ND	NA
	298-00-0	Parathion, methyl	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	1.5	nc	N	ND	NA
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	41	0	0%	0.02-0.027	0.39	ca	N	ND	NA
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	41	0	0%	0.02-0.027	0.0089	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	41	0	0%	0.02-0.027	0.0089	ca	N	ND*	100%

Table 5.5-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Westlakes	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	41	0	0%	0.02-0.027	0.0089	ca	N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	41	0	0%	0.02-0.027	0.0089	ca	N	ND*	100%
	11097-69-1	PCB-1254	0.02	0.021	mg/kg	WL-SD03	1.5	41	2	4.9%	0.02-0.027	0.022	ca	N	BSL	NA
	11096-82-5	PCB-1260	0.032	0.038	mg/kg	WL-SD06	1.5	41	4	10%	0.02-0.027	0.0089	ca	Y		NA
	40487-42-1	Pendimethalin (Prowl)	ND	ND	mg/kg	ND	ND	51	0	0%	0.002-0.0053	240	nc	N	ND	NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	47	0	0%	0.7-1.2	0.3	ca	N	ND*	100%
	7601-90-3	Perchlorate	0.0032	9	mg/kg	WL-SB01	5	50	2	4%	0.005-1.6	0.78	ca/nc	Y		NA
	85-01-8	Phenanthrene	0.0024	0.0068	mg/kg	WL-SD08	0.5	47	5	11%	0.0066-0.27	230	nc	Y		NA
	108-95-2	Phenol	0.43	0.43	mg/kg	WL-SB08	1.5	47	1	2%	0.2-0.35	1800	nc	N	BSL	NA
	298-02-2	Phorate	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	1.2	nc	N	ND	NA
	129-00-0	Pyrene	0.0061	0.023	mg/kg	WL-SD08	0.5	47	3	6%	0.0066-0.27	230	nc	Y		NA
	299-84-3	Ronnel	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	310	nc	N	ND	NA
	7782-49-2	Selenium	0.22	0.27	mg/kg	WL-SB08	0.5	49	2	4%	1-3.3	38	nc	N	BSL	NA
	7440-22-4	Silver	0.37	8.5	mg/kg	WL-SD04	0.5	49	15	31%	0.8-2.2	38	nc	N	BSL	NA
	22248-79-9	Stirophos	ND	ND	mg/kg	ND	ND	25	0	0%	0.041-0.051	NA		N	ND	NA
	7440-24-6	Strontium	12	63	mg/kg	WL-SB05	1.5	49	49	100%	NA	4700	nc	N	BSL	NA
	3689-24-5	Sulfotep	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	3.1		N	ND	NA
	7440-28-0	Thallium	0.11	4.3	mg/kg	WL-SD04	1.5	49	39	80%	0.51-11	0.5	nc	N	BG	NA
	7359-55-9	Thionazin	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA		N	ND	NA
	7440-32-6	Titanium	340	1100	mg/kg	WL-SB07	5	49	49	100%	NA	10000	nc	N	BSL	NA
	34643-46-4	Tokuthion (Prothiofos)	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA		N	ND	NA
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	51	0	0%	0.08-0.21	0.044	ca	N	ND*	100%
	327-98-0	Trichloronate	ND	ND	mg/kg	ND	ND	25	0	0%	0.02-0.025	NA		N	ND	NA
	7440-62-2	Vanadium	35	120	mg/kg	WL-SB10	1.5	49	49	100%	NA	0.53	nc	N	BG	NA
	7440-66-6	Zinc	23	460	mg/kg	WL-SD03	0.5	52	52	100%	NA	2300	nc	N	BSL	NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.5-2 *Outdoor Air Exposure Point Concentration Results*
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air			Commercial Worker Indoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF(1) (kg/m^3)	Air Conc.(2) (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF(1) (kg/m^3)	Air Conc.(2) (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF(1) (kg/m^3)	Air Conc.(2) (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF(1) (kg/m^3)	Air Conc.(2) (mg/m^3)
Inorganics												
Perchlorate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds												
Benzo (a) pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (b & k) fluoranthene (total)	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDE	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDT	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
delta-BHC	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Dieldrin	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Heptachlor epoxide	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1260	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Phenanthrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg,
Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.5-3 Soil Unit Hazard and Unit Cancer Risk Results - Resident
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Perchlorate	1.0 E+0	1.8 E-2	0.0 E+0	NA	1.8 E-2	2.0 E-3	0.0 E+0	NA	2.0 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds													
Benzo (a) pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	7.7 E-6	4.3 E-10	2.6 E-5
Benzo (b & k) fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
4,4'-DDT	1.0 E+0	2.6 E-2	2.1 E-3	9.4 E-7	2.8 E-2	2.7 E-3	3.3 E-4	4.0 E-7	3.1 E-3	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
delta-BHC	1.0 E+0	4.3 E-2	4.8 E-3	1.6 E-6	4.7 E-2	4.6 E-3	7.3 E-4	6.7 E-7	5.3 E-3	2.0 E-6	2.6 E-7	1.4 E-10	2.3 E-6
Dieldrin	1.0 E+0	2.6 E-1	2.9 E-2	9.4 E-6	2.8 E-1	2.7 E-2	4.4 E-3	4.0 E-6	3.2 E-2	2.5 E-5	3.2 E-6	1.7 E-9	2.8 E-5
Heptachlor epoxide	1.0 E+0	9.8 E-1	1.1 E-1	3.6 E-5	1.1 E+0	1.1 E-1	1.7 E-2	1.5 E-5	1.2 E-1	1.4 E-5	1.8 E-6	1.0 E-9	1.6 E-5
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
PCB-1260	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
Phenanthrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not analyzed

Table 5.5-4
Location-Specific Soil Risk Assessment Results - Resident
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)												Child Non-Cancer Hazard Index												
Sample Name	**Depth**	**4,4'-DDE**	**4,4'-DDT**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**delta-BHC**	**Dieldrin**	**Fluoranthene**	**Heptachlor epoxide**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Pyrene**	**4,4'-DDE**	**4,4'-DDT**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**delta-BHC**	**Dieldrin**	**Fluoranthene**	**Heptachlor epoxide**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Pyrene**	**HI**
Unit Hazard Child		NA	2.8 E-2	NA	NA	4.7 E-2	2.8 E-1	4.4 E-4	1.1 E+0	8.9 E-1	1.8 E-2	5.8 E-4	5.8 E-4													
Unit Hazard Adult		NA	3.1 E-3	NA	NA	5.3 E-3	3.2 E-2	5.2 E-5	1.2 E-1	1.1 E-1	2.0 E-3	6.9 E-5	6.9 E-5													
Unit Risk		5.8 E-7	5.8 E-7	2.6 E-5	2.6 E-6	2.3 E-6	2.8 E-5	NA	1.6 E-5	1.1 E-5	NA	NA	NA													
WL-SB01	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	4													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	4													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	5.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	10.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	11.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	11													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD03	0.5				0.013			0.0059				0.0024		NA	NA	NA	NA	NA	NA	2.6 E-6	NA	NA	NA	1.4 E-6	NA	4.0 E-6
WL-SD03	1.5							0.0021						NA	NA	NA	NA	NA	NA	9.2 E-7	NA	NA	NA	NA	NA	9.2 E-7
WL-SD04	0.5	0.00075	0.0018				0.00079	0.0041		0.037				NA	5.0 E-5	NA	NA	NA	2.2 E-4	1.8 E-6	NA	3.3 E-2	NA	NA	NA	3.3 E-2
WL-SD04	1.5						0.00045		0.00038					NA	NA	NA	NA	NA	1.3 E-4	NA	4.2 E-4	NA	NA	NA	NA	5.4 E-4
WL-SD05	0.5					0.00052		0.0031						NA	NA	NA	NA	2.5 E-5	NA	1.4 E-6	NA	NA	NA	NA	NA	2.6 E-5
WL-SD05	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD06	0.5							0.0048		0.032		0.0027	0.0061	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	2.8 E-2	NA	1.6 E-6	3.5 E-6	2.8 E-2
WL-SD06	1.5	0.0013	0.0019				0.0013	0.0031		0.038				NA	5.3 E-5	NA	NA	NA	3.7 E-4	1.4 E-6	NA	3.4 E-2	NA	NA	NA	3.4 E-2
WL-SD07	0.5		0.0014					0.0037		0.035				NA	3.9 E-5	NA	NA	NA	NA	1.6 E-6	NA	3.1 E-2	NA	NA	NA	3.1 E-2
WL-SD07	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD08	0.5	0.00038	0.0033	0.0092	0.029	0.0011		0.018				0.0068	0.023	NA	9.1 E-5	NA	NA	5.2 E-5	NA	7.8 E-6	NA	NA	NA	4.0 E-6	1.3 E-5	1.7 E-4
WL-SD08	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	0.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	1.5													NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.5-4
Location-Specific Soil Risk Assessment Results - Resident
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index													Incremental Lifetime Cancer Risk												
Sample Name	Depth	4,4'-DDE	4,4'-DDT	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	delta-BHC	Dieldrin	Fluoranthene	Heptachlor epoxide	PCB-1260	Perchlorate	Phenanthrene	Pyrene	HI	4,4'-DDE	4,4'-DDT	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	delta-BHC	Dieldrin	Fluoranthene	Heptachlor epoxide	PCB-1260	Perchlorate	Phenanthrene	Pyrene	ILCR
Unit Hazard Child																											
Unit Hazard Adult																											
Unit Risk																											
WL-SB01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD03	0.5	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	1.7 E-7	NA	4.7 E-7	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
WL-SD03	1.5	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD04	0.5	NA	5.5 E-6	NA	NA	NA	2.5 E-5	2.1 E-7	NA	4.0 E-3	NA	NA	NA	4.0 E-3	4.4 E-10	1.0 E-9	NA	NA	NA	2.2 E-8	NA	NA	4.2 E-7	NA	NA	NA	4 E-7
WL-SD04	1.5	NA	NA	NA	NA	NA	1.4 E-5	NA	4.6 E-5	NA	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	NA	1.3 E-8	NA	6.1 E-9	NA	NA	NA	NA	2 E-8
WL-SD05	0.5	NA	NA	NA	NA	2.8 E-6	NA	1.6 E-7	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	1 E-9
WL-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD06	0.5	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	3.4 E-3	NA	1.9 E-7	4.2 E-7	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	4 E-7
WL-SD06	1.5	NA	5.8 E-6	NA	NA	NA	4.1 E-5	1.6 E-7	NA	4.1 E-3	NA	NA	NA	4.1 E-3	7.6 E-10	1.1 E-9	NA	NA	NA	3.7 E-8	NA	NA	4.3 E-7	NA	NA	NA	5 E-7
WL-SD07	0.5	NA	4.3 E-6	NA	NA	NA	NA	1.9 E-7	NA	3.7 E-3	NA	NA	NA	3.7 E-3	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	NA	4 E-7
WL-SD07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD08	0.5	NA	1.0 E-5	NA	NA	5.8 E-6	NA	9.4 E-7	NA	NA	NA	4.7 E-7	1.6 E-6	1.9 E-5	2.2 E-10	1.9 E-9	2.4 E-7	7.7 E-8	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	3 E-7
WL-SD08	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.5-5 Soil Unit Hazard and Unit Cancer Risk Results - Construction Worker
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Perchlorate	1.0 E+0	4.6 E-3	0.0 E+0	NA	4.6 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo (a) pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-7	2.2 E-7	5.5 E-9	7.7 E-7
Benzo (b & k) fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
4,4'-DDT	1.0 E+0	6.5 E-3	5.8 E-4	2.0 E-4	7.2 E-3	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
delta-BHC	1.0 E+0	1.1 E-2	1.3 E-3	3.3 E-4	1.2 E-2	6.0 E-8	7.2 E-9	1.8 E-9	6.9 E-8
Dieldrin	1.0 E+0	6.5 E-2	7.7 E-3	2.0 E-3	7.4 E-2	7.4 E-7	8.9 E-8	2.2 E-8	8.5 E-7
Heptachlor epoxide	1.0 E+0	2.5 E-1	3.0 E-2	7.5 E-3	2.9 E-1	4.2 E-7	5.0 E-8	1.3 E-8	4.8 E-7
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
PCB-1260	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
Phenanthrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Pyrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.5-6
Location-Specific Soil Risk Assessment Results - Construction Workers
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)												Non-Cancer Hazard Index						
Sample Name	**Depth**	**4,4'-DDE**	**4,4'-DDT**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**delta-BHC**	**Dieldrin**	**Fluoranthene**	**Heptachlor epoxide**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Pyrene**	**4,4'-DDE**	**4,4'-DDT**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**delta-BHC**	**Dieldrin**	**Fluoranthene**
Unit Hazard		NA	7.2 E-3	NA	NA	1.2 E-2	7.4 E-2	1.1 E-4	2.9 E-1	2.3 E-1	4.6 E-3	1.5 E-4	1.5 E-4							
Unit Risk		1.8 E-8	1.8 E-8	7.7 E-7	7.7 E-8	6.9 E-8	8.5 E-7	NA	4.8 E-7	3.3 E-7	NA	NA	NA							
WL-SB01	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB01	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB01	5													NA	NA	NA	NA	NA	NA	NA
WL-SB01	11													NA	NA	NA	NA	NA	NA	NA
WL-SB02	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB02	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB02	4													NA	NA	NA	NA	NA	NA	NA
WL-SB03	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB03	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB03	4													NA	NA	NA	NA	NA	NA	NA
WL-SB04	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB04	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB04	5.5													NA	NA	NA	NA	NA	NA	NA
WL-SB04	10.5													NA	NA	NA	NA	NA	NA	NA
WL-SB05	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB05	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB05	5													NA	NA	NA	NA	NA	NA	NA
WL-SB05	11													NA	NA	NA	NA	NA	NA	NA
WL-SB06	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB06	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB06	5													NA	NA	NA	NA	NA	NA	NA
WL-SB06	11													NA	NA	NA	NA	NA	NA	NA
WL-SB07	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB07	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB07	5													NA	NA	NA	NA	NA	NA	NA
WL-SB07	11													NA	NA	NA	NA	NA	NA	NA
WL-SB08	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB08	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB08	5													NA	NA	NA	NA	NA	NA	NA
WL-SB08	11.5													NA	NA	NA	NA	NA	NA	NA
WL-SB09	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB09	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB09	5													NA	NA	NA	NA	NA	NA	NA
WL-SB09	11													NA	NA	NA	NA	NA	NA	NA
WL-SB10	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SB10	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SB10	5													NA	NA	NA	NA	NA	NA	NA
WL-SB10	11													NA	NA	NA	NA	NA	NA	NA
WL-SB11	5													NA	NA	NA	NA	NA	NA	NA
WL-SB11	11													NA	NA	NA	NA	NA	NA	NA
WL-SB12	5													NA	NA	NA	NA	NA	NA	NA
WL-SB12	11													NA	NA	NA	NA	NA	NA	NA
WL-SD03	0.5				0.013			0.0059				0.0024		NA	NA	NA	NA	NA	NA	6.8 E-7
WL-SD03	1.5							0.0021						NA	NA	NA	NA	NA	NA	2.4 E-7
WL-SD04	0.5	0.00075	0.0018				0.00079	0.0041		0.037				NA	1.3 E-5	NA	NA	NA	5.9 E-5	4.7 E-7
WL-SD04	1.5						0.00045		0.00038					NA	NA	NA	NA	NA	3.3 E-5	NA
WL-SD05	0.5					0.00052		0.0031						NA	NA	NA	NA	6.4 E-6	NA	3.6 E-7
WL-SD05	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SD06	0.5							0.0048		0.032		0.0027	0.0061	NA	NA	NA	NA	NA	NA	5.5 E-7
WL-SD06	1.5	0.0013	0.0019				0.0013	0.0031		0.038				NA	1.4 E-5	NA	NA	NA	9.7 E-5	3.6 E-7
WL-SD07	0.5		0.0014					0.0037		0.035				NA	1.0 E-5	NA	NA	NA	NA	4.2 E-7
WL-SD07	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SD08	0.5	0.00038	0.0033	0.0092	0.029	0.0011		0.018				0.0068	0.023	NA	2.4 E-5	NA	NA	1.4 E-5	NA	2.1 E-6
WL-SD08	1.5													NA	NA	NA	NA	NA	NA	NA
WL-SD10	0.5													NA	NA	NA	NA	NA	NA	NA
WL-SD10	1.5													NA	NA	NA	NA	NA	NA	NA

Table 5.5-6
Location-Specific Soil Risk Assessment Results - Construction Workers
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index						Incremental Lifetime Cancer Risk												
Sample Name	**Depth**	**Heptachlor epoxide**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Pyrene**	**HI**	**4,4'-DDE**	**4,4'-DDT**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**delta-BHC**	**Dieldrin**	**Fluoranthene**	**Heptachlor epoxide**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Pyrene**	**ILCR**
Unit Hazard																				
Unit Risk																				
WL-SB01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD03	0.5	NA	NA	NA	3.7 E-7	NA	1.0 E-6	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
WL-SD03	1.5	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD04	0.5	NA	8.7 E-3	NA	NA	NA	8.7 E-3	1.3 E-11	3.2 E-11	NA	NA	NA	6.7 E-10	NA	NA	1.2 E-8	NA	NA	NA	1 E-8
WL-SD04	1.5	1.1 E-4	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	3.8 E-10	NA	1.8 E-10	NA	NA	NA	NA	6 E-10
WL-SD05	0.5	NA	NA	NA	NA	NA	6.8 E-6	NA	NA	NA	NA	3.6 E-11	NA	NA	NA	NA	NA	NA	NA	4 E-11
WL-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD06	0.5	NA	7.5 E-3	NA	4.1 E-7	9.3 E-7	7.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	1 E-8
WL-SD06	1.5	NA	8.9 E-3	NA	NA	NA	9.0 E-3	2.3 E-11	3.3 E-11	NA	NA	NA	1.1 E-9	NA	NA	1.3 E-8	NA	NA	NA	1 E-8
WL-SD07	0.5	NA	8.2 E-3	NA	NA	NA	8.2 E-3	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	1 E-8
WL-SD07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD08	0.5	NA	NA	NA	1.0 E-6	3.5 E-6	4.4 E-5	6.7 E-12	5.8 E-11	7.1 E-9	2.2 E-9	7.6 E-11	NA	NA	NA	NA	NA	NA	NA	1 E-8
WL-SD08	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.5-7 Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Perchlorate	1.0 E+0	1.0 E+0	0.0 E+0	NA	1.0 E+0	NA	NA	NA	NA
Semivolatile Organic Compounds									
Benzo (a) pyrene	1.0 E+0	NA	NA	NA	NA	4.2 E-6	3.6 E-6	2.0 E-10	7.8 E-6
Benzo (b & k) fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
4,4'-DDT	1.0 E+0	2.0 E-3	3.9 E-4	3 E-7	2.3 E-3	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
delta-BHC	1.0 E+0	3.3 E-3	8.6 E-4	5 E-7	4.1 E-3	4.5 E-7	1.2 E-7	6.7 E-11	5.7 E-7
Dieldrin	1.0 E+0	2.0 E-2	5.2 E-3	3 E-6	2.5 E-2	5.6 E-6	1.5 E-6	8.2 E-10	7.1 E-6
Heptachlor epoxide	1.0 E+0	7.5 E-2	2.0 E-2	1 E-5	9.5 E-2	3.2 E-6	8.4 E-7	4.7 E-10	4.0 E-6
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	4 E-9	4.5 E-5	NA	NA	NA	NA
PCB-1260	1.0 E+0	4.9 E-2	4.5 E-2	7 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
Phenanthrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not analyzed

Table 5.5-8
Location-Specific Soil Risk Assessment Results - Commercial Worker
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)											
Sample Name	**Depth**	**4,4'-DDE**	**4,4'-DDT**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**delta-BHC**	**Dieldrin**	**Fluoranthene**	**Heptachlor epoxide**	**PCB-1260**	**Perchlorate**	**Phenanthrene**	**Pyrene**
Unit Hazard		NA	2.3 E-3	NA	NA	4.1 E-3	2.5 E-2	4.5 E-5	9.5 E-2	9.4 E-2	1.0 E+0	6.1 E-5	6.1 E-5
Unit Risk		1.4 E-7	1.4 E-7	7.8 E-6	7.8 E-7	5.7 E-7	7.1 E-6	NA	4.0 E-6	3.4 E-6	NA	NA	NA
WL-SB01	0.5												
WL-SB01	1.5												
WL-SB01	5												
WL-SB01	11												
WL-SB02	0.5												
WL-SB02	1.5												
WL-SB02	4												
WL-SB03	0.5												
WL-SB03	1.5												
WL-SB03	4												
WL-SB04	0.5												
WL-SB04	1.5												
WL-SB04	5.5												
WL-SB04	10.5												
WL-SB05	0.5												
WL-SB05	1.5												
WL-SB05	5												
WL-SB05	11												
WL-SB06	0.5												
WL-SB06	1.5												
WL-SB06	5												
WL-SB06	11												
WL-SB07	0.5												
WL-SB07	1.5												
WL-SB07	5												
WL-SB07	11												
WL-SB08	0.5												
WL-SB08	1.5												
WL-SB08	5												
WL-SB08	11.5												
WL-SB09	0.5												
WL-SB09	1.5												
WL-SB09	5												
WL-SB09	11												
WL-SB10	0.5												
WL-SB10	1.5												
WL-SB10	5												
WL-SB10	11												
WL-SB11	5												
WL-SB11	11												
WL-SB12	5												
WL-SB12	11												
WL-SD03	0.5				0.013			0.0059				0.0024	
WL-SD03	1.5							0.0021					
WL-SD04	0.5	0.00075	0.0018				0.00079	0.0041		0.037			
WL-SD04	1.5						0.00045		0.00038				
WL-SD05	0.5					0.00052		0.0031					
WL-SD05	1.5												
WL-SD06	0.5							0.0048		0.032		0.0027	0.0061
WL-SD06	1.5	0.0013	0.0019				0.0013	0.0031		0.038			
WL-SD07	0.5		0.0014					0.0037		0.035			
WL-SD07	1.5												
WL-SD08	0.5	0.00038	0.0033	0.0092	0.029	0.0011		0.018				0.0068	0.023
WL-SD08	1.5												
WL-SD10	0.5												
WL-SD10	1.5												

Table 5.5-8
Location-Specific Soil Risk Assessment Results - Commercial Worker
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index													Incremental Lifetime Cancer Risk												
Sample Name	Depth	4,4'-DDE	4,4'-DDT	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	delta-BHC	Dieldrin	Fluoranthene	Heptachlor epoxide	PCB-1260	Perchlorate	Phenanthrene	Pyrene	HI	4,4'-DDE	4,4'-DDT	Benzo (a) pyrene	Benzo (b & k) fluoranthene (total)	delta-BHC	Dieldrin	Fluoranthene	Heptachlor epoxide	PCB-1260	Perchlorate	Phenanthrene	Pyrene	ILCR
Unit Hazard																											
Unit Risk																											
WL-SB01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB01	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB02	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB03	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB04	10.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB05	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB06	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB07	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB08	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB09	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB10	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB11	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SB12	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD03	0.5	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	1.5 E-7	NA	4.1 E-7	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
WL-SD03	1.5	NA	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD04	0.5	NA	4.2 E-6	NA	NA	NA	2.0 E-5	1.9 E-7	NA	3.5 E-3	NA	NA	NA	3.5 E-3	1.1 E-10	2.6 E-10	NA	NA	NA	5.6 E-9	NA	NA	1.2 E-7	NA	NA	NA	1 E-7
WL-SD04	1.5	NA	NA	NA	NA	NA	1.1 E-5	NA	3.6 E-5	NA	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	NA	3.2 E-9	NA	1.5 E-9	NA	NA	NA	NA	5 E-9
WL-SD05	0.5	NA	NA	NA	NA	2.1 E-6	NA	1.4 E-7	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	3 E-10
WL-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD06	0.5	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	3.0 E-3	NA	1.6 E-7	3.7 E-7	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	1 E-7
WL-SD06	1.5	NA	4.5 E-6	NA	NA	NA	3.2 E-5	1.4 E-7	NA	3.6 E-3	NA	NA	NA	3.6 E-3	1.9 E-10	2.7 E-10	NA	NA	NA	9.2 E-9	NA	NA	1.3 E-7	NA	NA	NA	1 E-7
WL-SD07	0.5	NA	3.3 E-6	NA	NA	NA	NA	1.7 E-7	NA	3.3 E-3	NA	NA	NA	3.3 E-3	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	1 E-7
WL-SD07	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD08	0.5	NA	7.7 E-6	NA	NA	4.5 E-6	NA	8.2 E-7	NA	NA	NA	4.1 E-7	1.4 E-6	1.5 E-5	5.4 E-11	4.7 E-10	7.2 E-8	2.3 E-8	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	1 E-7
WL-SD08	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD10	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.5-9 All Receptors Hazard Index and Cancer Risk Results - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index				Incremental Lifetime Cancer Risk		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Outdoor Worker	Resident	Construction Worker	Outdoor Worker
WL-SB01	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB01	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB01	5	NA	NA	NA	NA	NA	NA	NA
WL-SB01	11	NA	NA	NA	NA	NA	NA	NA
WL-SB02	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB02	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB02	4	NA	NA	NA	NA	NA	NA	NA
WL-SB03	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB03	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB03	4	NA	NA	NA	NA	NA	NA	NA
WL-SB04	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB04	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB04	5.5	NA	NA	NA	NA	NA	NA	NA
WL-SB04	10.5	NA	NA	NA	NA	NA	NA	NA
WL-SB05	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB05	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB05	5	NA	NA	NA	NA	NA	NA	NA
WL-SB05	11	NA	NA	NA	NA	NA	NA	NA
WL-SB06	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB06	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB06	5	NA	NA	NA	NA	NA	NA	NA
WL-SB06	11	NA	NA	NA	NA	NA	NA	NA
WL-SB07	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB07	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB07	5	NA	NA	NA	NA	NA	NA	NA
WL-SB07	11	NA	NA	NA	NA	NA	NA	NA
WL-SB08	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB08	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB08	5	NA	NA	NA	NA	NA	NA	NA
WL-SB08	11.5	NA	NA	NA	NA	NA	NA	NA
WL-SB09	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB09	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB09	5	NA	NA	NA	NA	NA	NA	NA
WL-SB09	11	NA	NA	NA	NA	NA	NA	NA
WL-SB10	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SB10	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SB10	5	NA	NA	NA	NA	NA	NA	NA
WL-SB10	11	NA	NA	NA	NA	NA	NA	NA
WL-SB11	5	NA	NA	NA	NA	NA	NA	NA
WL-SB11	11	NA	NA	NA	NA	NA	NA	NA
WL-SB12	5	NA	NA	NA	NA	NA	NA	NA
WL-SB12	11	NA	NA	NA	NA	NA	NA	NA
WL-SD03	0.5	4.0 E-6	4.7 E-7	1.0 E-6	4.1 E-7	3 E-8	1 E-9	1 E-8
WL-SD03	1.5	9.2 E-7	1.1 E-7	2.4 E-7	9.5 E-8	NA	NA	NA
WL-SD04	0.5	3.3 E-2	4.0 E-3	8.7 E-3	3.5 E-3	4 E-7	1 E-8	1 E-7
WL-SD04	1.5	5.4 E-4	6.1 E-5	1.4 E-4	4.7 E-5	2 E-8	6 E-10	5 E-9
WL-SD05	0.5	2.6 E-5	2.9 E-6	6.8 E-6	2.3 E-6	1 E-9	4 E-11	3 E-10
WL-SD05	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SD06	0.5	2.8 E-2	3.4 E-3	7.5 E-3	3.0 E-3	4 E-7	1 E-8	1 E-7
WL-SD06	1.5	3.4 E-2	4.1 E-3	9.0 E-3	3.6 E-3	5 E-7	1 E-8	1 E-7
WL-SD07	0.5	3.1 E-2	3.7 E-3	8.2 E-3	3.3 E-3	4 E-7	1 E-8	1 E-7
WL-SD07	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SD08	0.5	1.7 E-4	1.9 E-5	4.4 E-5	1.5 E-5	3 E-7	1 E-8	1 E-7
WL-SD08	1.5	NA	NA	NA	NA	NA	NA	NA
WL-SD10	0.5	NA	NA	NA	NA	NA	NA	NA
WL-SD10	1.5	NA	NA	NA	NA	NA	NA	NA
Minimum		9.2 E-7	1.1 E-7	2.4 E-7	9.5 E-8	1 E-9	4 E-11	3 E-10
Median		5.4 E-4	6.1 E-5	1.4 E-4	4.7 E-5	3 E-7	1 E-8	1 E-7
Maximum		3.4 E-2	4.1 E-3	9.0 E-3	3.6 E-3	5 E-7	1 E-8	1 E-7

Key:
NA = Not applicable

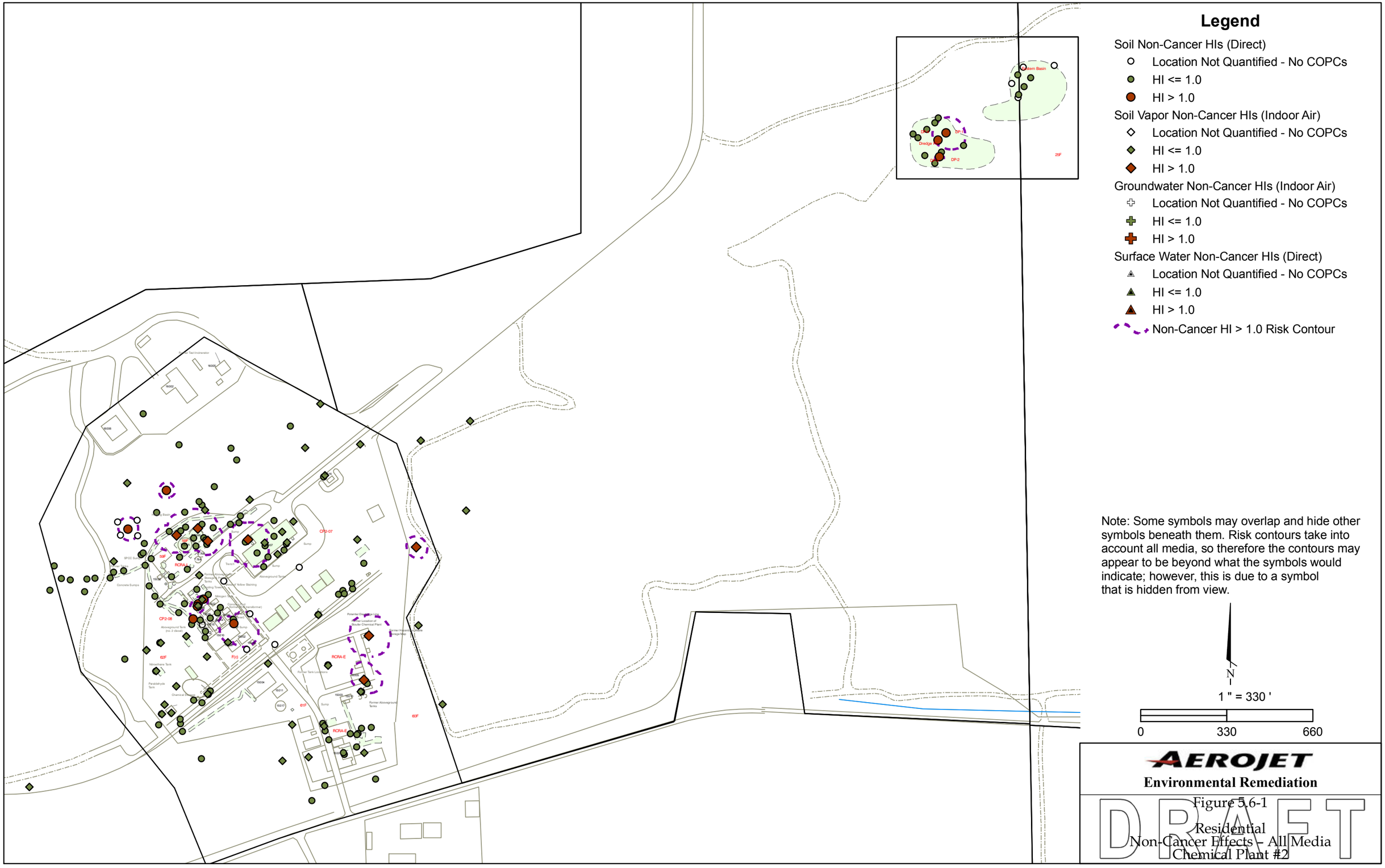
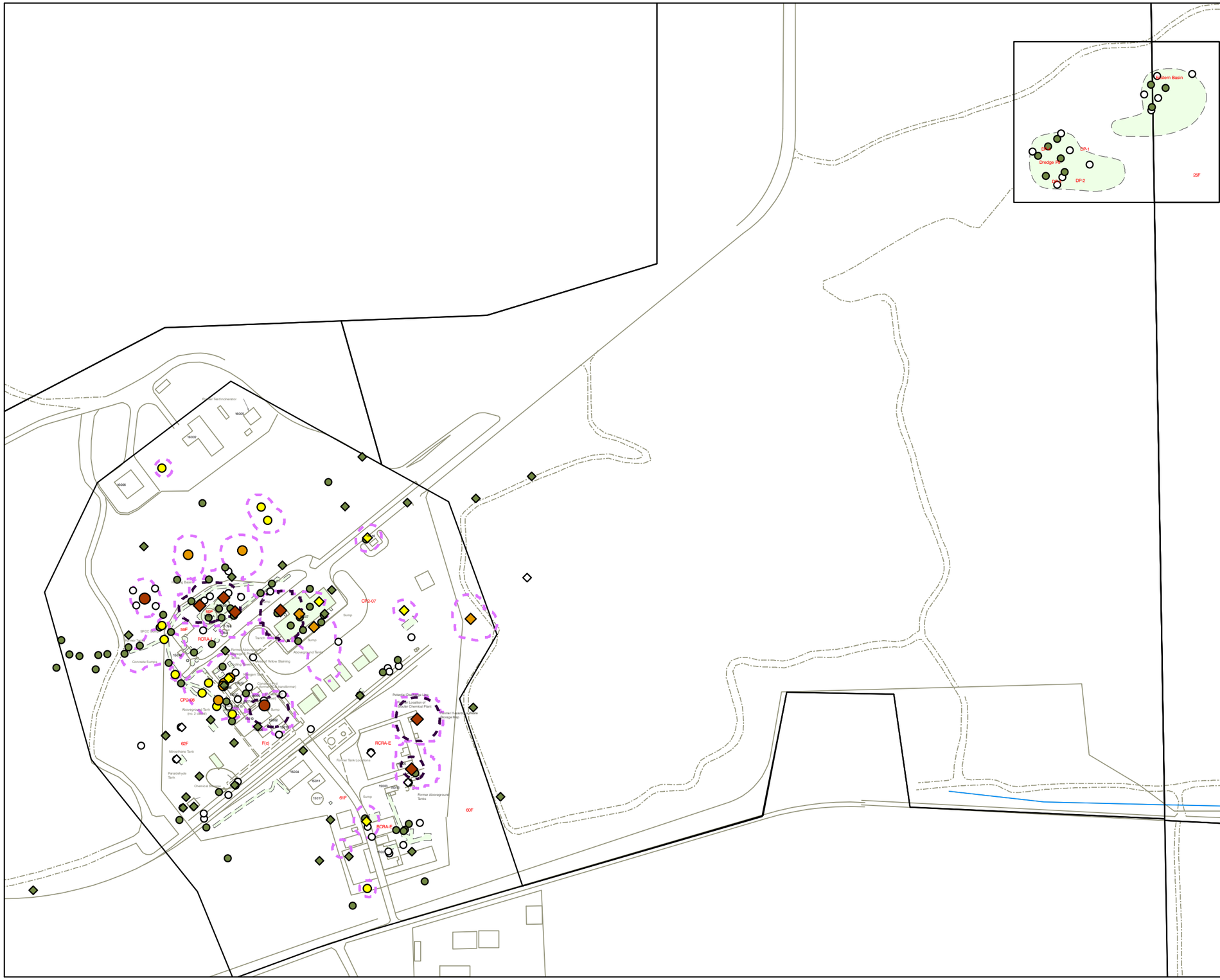


Figure 5.6-1

Residential
Non-Cancer Effects – All Media
Chemical Plant #2



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 330 '

0 330 660

AEROJET

Environmental Remediation

DRAFT

Figure 5.6-2

Residential
Cancer Risks – All Media
Chemical Plant #2

Figure 5.6-3
Construction Worker
Non-Cancer Effects – All Media
Chemical Plant #2

Figure 5.6-4
Construction Worker
Cancer Risks – All Media
Chemical Plant #2

Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Groundwater Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 330 '
0
330
660
AEROJET
Environmental Remediation
Figure 5.6-5
Commercial/Industrial Worker
Non-Cancer Effects – All Media
Chemical Plant #2
DRAFT

Legend
Soil Cancer Risks (Direct)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Soil Vapor Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Groundwater Cancer Risks (Indoor Air)
Location Not Quantified - No COPCs
<= 1E-6
> 1E-6 and <= 1E-5
> 1E-5 and <= 1E-4
> 1E-4
Cancer Risk > 10-6 Contour
Cancer Risk > 10-4 Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 330 '
0
330
660
AEROJET
Environmental Remediation
Figure 5.6-6
Commercial/Industrial Worker
Cancer Risks – All Media
Chemical Plant #2
DRAFT

Table 5.6-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Chem Plant 2	71-55-6	1,1,1-Trichloroethane	7.9	99	µg/m^3	CP2-07-SP06-10	10	104	2	1.9%	5.8-10000	9.9E+04	nc	N	BSL	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/m^3			104	0	0.0%	6.8 - 42000	1.8E+00	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/m^3			104	0	0.0%	5.4 - 33000	6.6E+00	ca	N	ND*	66%
	75-34-3	1,1-Dichloroethane	5.3	5.3	µg/m^3	59F-SP36-10	10	104	1	1.0%	4 - 24000	6.6E+01	ca	N	BSL	NA
	75-35-4	1,1-Dichloroethene	8.9	160	µg/m^3	CP2-07-SP01-10	10	104	6	5.8%	3.9 - 13000	3.1E+03	nc	Y		NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/m^3			104	0	0.0%	18 - 110000	6.7E+00	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/m^3			104	0	0.0%	29 - 180000	9.9E+03	nc	N	ND*	2%
	95-63-6	1,2,4-Trimethylbenzene	9.3	1000	µg/m^3	62F-SP05-10	10	104	19	18.3%	4.8 - 30000	2.7E+02	nc	Y		NA
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/m^3			104	0	0.0%	7.6 - 46000	1.7E+00	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/m^3			104	0	0.0%	5.9 - 36000	9.1E+03	nc	N	ND	NA
	107-06-2	1,2-Dichloroethane	5.6	8600000	µg/m^3	CP2-07-SP01-20	20	104	46	44.2%	4 - 24000	5.0E+00	ca*	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	µg/m^3			104	0	0.0%	4.6 - 28000	1.1E+01	ca*	N	ND*	17%
	108-67-8	1,3,5-Trimethylbenzene	5.5	380	µg/m^3	62F-SP05-20	20	104	9	8.7%	4.8 - 30000	2.7E+02	nc	Y		NA
	106-99-0	1,3-Butadiene	2.5	700	µg/m^3	CP2-07-SP10-20	20	104	57	54.8%	2.2 - 13000	5.9E-01	ca*	N	NR	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/m^3			104	0	0.0%	5.9 - 36000	4.8E+03	nc	N	ND*	2%
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/m^3			104	0	0.0%	5.9 - 36000	9.7E+00	ca	N	ND*	18%
	123-91-1	1,4-Dioxane	20	37	µg/m^3	CP2-07-SP08-30	30	104	4	3.8%	14 - 87000	1.4E+01	ca	Y		NA
	540-84-1	2,2,4-Trimethylpentane	5.0	220	µg/m^3	62F-SP05-10	10	104	19	18.3%	4.6 - 28000	3.2E+04	nc	Y		NA
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	20	140	µg/m^3	59F-SP33-10	10	104	25	24.0%	2.9 - 18000	2.3E+05	nc	Y		NA
	591-78-6	2-Hexanone	42	43	µg/m^3	62F-SP05-20	20	104	2	1.9%	16 - 99000	3.6E+03	nc	N	BSL	NA
	67-63-0	2-Propanol	12	1400	µg/m^3	59F-SP34-15	15	104	38	36.5%	9.7 - 59000	4.6E+02	nc	Y		NA
	107-05-1	3-Chloropropene	ND	ND	µg/m^3			104	0	0.0%	12 - 76000	1.7E+01	nc	N	ND*	22%
	622-96-8	4-Ethyltoluene	6.3	1100	µg/m^3	62F-SP05-20	20	104	19	18.3%	4.8 - 30000	3.2E+04	nc	Y		NA
	108-10-1	4-Methyl-2-pentanone	6.0	65	µg/m^3	59F-SP34-15	15	104	24	23.1%	4 - 25000	3.6E+03	nc	Y		NA
	67-64-1	Acetone	69	2000	µg/m^3	59F-SP34-10-T	10	104	63	60.6%	10 - 57000	1.5E+04	nc	Y		NA
	100-44-7	alpha-Chlorotoluene	ND	ND	µg/m^3			104	0	0.0%	5.1 - 31000	2.2E+00	ca	N	ND*	100%
	71-43-2	Benzene	3.7	100	µg/m^3	CP2-07-SP01-10	10	104	49	47.1%	3.1 - 19000	3.6E+00	ca	Y		NA
	75-27-4	Bromodichloromethane	17	17	µg/m^3	62F-SP07-10	10	104	1	1.0%	6.6 - 40000	3.1E+00	ca	Y		NA
	75-25-2	Bromoform	ND	ND	µg/m^3			104	0	0.0%	10 - 62000	1.2E+02	nc	N	ND*	11%
	74-83-9	Bromomethane	ND	ND	µg/m^3			104	0	0.0%	3.8 - 23000	2.3E+02	nc	N	ND*	2%
		Butylbenzene	ND	ND	µg/m^3			99	0	0.0%	22 - 130000	6.5E+03	nc	N	ND*	2%
	75-15-0	Carbon Disulfide	3.7	310	µg/m^3	CP2-07-SP04-20	20	104	78	75.0%	3.1 - 19000	3.1E+04	nc	Y		NA
	56-23-5	Carbon Tetrachloride	14	1500	µg/m^3	CP2-07-SP02-10	10	104	5	4.8%	6.2 - 38000	2.5E+00	ca*	Y		NA
	108-90-7	Chlorobenzene	ND	ND	µg/m^3			104	0	0.0%	4.5 - 28000	4.5E+04	nc	N	ND	NA
	75-00-3	Chloroethane	38	270	µg/m^3	59F-SP35-10	10	104	3	2.9%	2.6 - 16000	1.2E+02	ca	Y		NA
	67-66-3	Chloroform	6.7	120000	µg/m^3	CP2-07-SP01-20	20	104	32	30.8%	4.8 - 30000	2.0E+01	ca	Y		NA
	74-87-3	Chloromethane	26	26	µg/m^3	CP2-07-SP10-20	20	104	1	1.0%	8.1 - 50000	1.0E+02	nc	N	BSL	NA

Table 5.6-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Chem Plant 2	156-59-2	cis-1,2-Dichloroethene	6.9	400	µg/m^3	59F-SP35-10	10	104	4	3.8%	3.9 - 24000	1.6E+03	nc	N	BSL	NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/m^3			104	0	0.0%	4.5 - 27000	6.7E+00	ca	N	ND*	20%
	98-82-8	Cumene	7.7	52	µg/m^3	62F-SP05-20	20	104	6	5.8%	4.8 - 30000	1.8E+04	nc	Y		NA
	110-82-7	Cyclohexane	4.5	66	µg/m^3	59F-SP35-10	10	104	30	28.8%	3.4 - 11000	2.7E+05	nc	Y		NA
	124-48-1	Dibromochloromethane	ND	ND	µg/m^3			104	0	0.0%	8.4 - 52000	4.6E+00	ca	N	ND*	100%
	64-17-5	Ethanol	8.8	960	µg/m^3	CP2-07-SP01-10	10	104	61	58.7%	7.4 - 46000	7.9E+04	nc	Y		NA
	100-41-4	Ethyl Benzene	5.2	480	µg/m^3	62F-SP05-20	20	104	14	13.5%	4.3 - 26000	4.2E+01	nc	Y		NA
	75-69-4	Freon 11	6.7	930	µg/m^3	59F-SP33-20	20	104	22	21.2%	5.5 - 34000	3.1E+04	nc	Y		NA
	76-13-1	Freon 113	18	940	µg/m^3	CP2-RE05-SP02-40	40	104	9	8.7%	7.5 - 560	1.4E+06	nc	Y		NA
	76-14-2	Freon 114	ND	ND	µg/m^3			104	0	0.0%	6.9 - 42000	1.4E+06	nc	N	ND	NA
	75-71-8	Freon 12	7.3	7.8	µg/m^3	59F-SP36-10	10	104	2	1.9%	4.9 - 30000	9.1E+03	nc	N	BSL	NA
	142-82-5	Heptane	4.8	990	µg/m^3	59F-SP33-10	10	104	61	58.7%	4 - 25000	8.7E+03	nc	Y		NA
	87-68-3	Hexachlorobutadiene	ND	ND	µg/m^3			104	0	0.0%	42 - 260000	4.9E+00	ca*	N	ND*	100%
	110-54-3	Hexane	4.5	2400	µg/m^3	CP2-07-SP01-10	10	104	69	66.3%	3.5 - 21000	8.7E+03	nc	Y		NA
	136777-61-2	m,p-Xylene	5.4	2000	µg/m^3	62F-SP05-10	10	104	45	43.3%	4.3 - 26000	3.2E+04	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	5.9	730	µg/m^3	CP2-07-SP06-10	10	104	13	12.5%	3.6 - 22000	4.0E+02	ca	Y		NA
	75-09-2	Methylene Chloride	ND	ND	µg/m^3			104	0	0.0%	3.4 - 21000	1.0E+02	ca	N	ND*	3%
	95-47-6	o-Xylene	5.2	940	µg/m^3	62F-SP05-20	20	104	14	13.5%	4.3 - 26000	3.2E+04	nc	Y		NA
	99-87-6	p-Cymene	ND	ND	µg/m^3			104	0	0.0%	22 - 130000	3.2E+04	nc	N	ND	NA
	103-65-1	Propylbenzene	8.2	220	µg/m^3	62F-SP05-20	20	104	7	6.7%	4.8 - 30000	6.4E+03	nc	Y		NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/m^3			101	0	0.0%	22 - 130000	6.5E+03	nc	N	ND*	2%
	100-42-5	Styrene	6.6	11	µg/m^3	CP2-08-SP11-10	10	104	4	3.8%	4.2 - 26000	4.1E+04	nc	N	BSL	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/m^3			104	0	0.0%	22 - 130000	6.5E+03	nc	N	ND*	2%
	127-18-4	Tetrachloroethene	8.7	510	µg/m^3	59F-SP38-10-T	10	104	26	25.0%	6.7 - 1800	1.8E+01	ca	Y		NA
	109-99-9	Tetrahydrofuran	5.7	2800	µg/m^3	CP2-07-SP01-10	10	104	61	58.7%	2.9 - 18000	5.3E+01	ca	Y		NA
	108-88-3	Toluene	4	840	µg/m^3	62F-SP05-10	10	104	80	76.9%	3.7 - 23000	1.4E+04	nc	Y		NA
	156-60-5	trans-1,2-Dichloroethene	81	150	µg/m^3	59F-SP35-10	10	104	2	1.9%	3.9 - 24000	3.2E+03	nc	N	BSL	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/m^3			104	0	0.0%	4.5 - 27000	6.7E+00	ca	N	ND*	20%
	79-01-6	Trichloroethene	7.0	450	µg/m^3	CP2-RE05-SP02-40	40	104	30	28.8%	5.3 - 17000	5.3E+01	ca	Y		NA
	75-01-4	Vinyl Chloride	14	120000	µg/m^3	CP2-07-SP01-20	20	104	10	9.6%	2.5 - 8200	1.3E+00	ca	Y		NA

Footnotes:
(1) See Table 1
(2) FOD = Frequency of detection screening
BSL = Below screening level
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
NA = Not applicable
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible

Key:
bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/m^3 = Micrograms per cubic meter
nc = Noncancer

Table 5.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Chem Plant 2	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.32	ca	N	ND	NA
	71-55-6	1,1,1-Trichloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	120.00	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.01	ca	N	ND	NA
	79-00-5	1,1,2-Trichloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.07	ca	N	ND	NA
	75-34-3	1,1-Dichloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.28	ca	N	ND	NA
	75-35-4	1,1-Dichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	12.3530677	nc	N	ND	NA
	563-58-6	1,1-Dichloropropene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	ca	N	ND	NA
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	nc	N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.0034	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	217	0	0%	0.0067-8.33	6.2	nc	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	5.16	nc	N	ND	NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.00	ca	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.00	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	217	0	0%	0.0067-8.33	60	sat	N	ND	NA
	107-06-2	1,2-Dichloroethane	0.0041	0.0041	mg/kg	25F-SD01-5.0	5	3	1	33%	0.0067-0.0068	0.03	ca	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.03	ca	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	205	0	0%	0.2-83.3	0.44	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	2.13	nc	N	ND	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	217	0	0%	0.0067-8.33	53	nc	N	ND	NA
	142-28-9	1,3-Dichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	10.48	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	217	0	0%	0.0067-8.33	0.35	ca	N	ND*	29%
	594-20-7	2,2-Dichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA		N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	0.61	nc	N	ND*	24%
	120-83-2	2,4-Dichlorophenol	3.3	3.3	mg/kg	59F-SB11-5.0	5	217	1	0.5%	0.2-8.33	18	nc	N	BSL	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.51-16.7	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	217	0	0%	0.167-4.17	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	6.3	nc	N	ND	NA
	95-49-8	2-Chlorotoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	15.84	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	0.043	0.068	mg/kg	59F-SB26-1	1	217	2	1%	0.167-4.17	0.17	nc	N	BSL*	NA
	95-48-7	2-Methylphenol	0.15	0.15	mg/kg	59F-SB11-5.0	5	217	1	0.5%	0.2-8.33	310	nc	N	BSL	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-16.7	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	217	0	0%	0.51-16.7	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-16.7	1.8	nc	N	ND*	12%
	72-54-8	4,4'-DDD	0.0024	2.3	mg/kg	59F-SB22-1.0	1	159	8	5%	0.004-0.38	0.23	ca	Y		NA
	72-55-9	4,4'-DDE	0.00065	0.048	mg/kg	OS1-F2-SNS01-2.5	2.5	159	21	13%	0.002-0.12	0.16	ca	Y		NA
	50-29-3	4,4'-DDT	0.0015	1.2	mg/kg	59F-SB22-1.0	1	159	28	18%	0.006-0.38	0.16	ca	Y		NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-16.7	0.61	nc	N	ND*	31%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	168	0	0%	0.2-0.667	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-16.7	24	nc	N	ND	NA

Table 5.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Chem Plant 2	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	16.00	nc	N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	168	0	0%	0.2-0.667	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	217	0	0%	0.51-16.7	2.3	ca	N	ND*	6%
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-16.7	NA		N	ND	NA
	83-32-9	Acenaphthene	0.0049	0.057	mg/kg	59F-SB26-1	1	222	3	1%	0.0067-4.17	370	nc	N	BSL	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	222	0	0%	0.0067-4.17	230	nc	N	ND	NA
	309-00-2	Aldrin	0.00025	0.0074	mg/kg	CP2-08-SNS04-0.5	0.5	159	13	8%	0.001-0.062	0.0029	ca	Y		NA
	319-84-6	alpha-BHC	0.00022	0.0023	mg/kg	CP2-08-SNS04-0.5	0.5	159	3	2%	0.001-0.062	0.01	ca	N	BSL*	NA
	5103-71-9	alpha-Chlordane	ND	ND	mg/kg	ND	ND	2	0	0%	0.002-0.0046	0.043	ca	N	ND	NA
	7429-90-5	Aluminum	1400	64000	mg/kg	59F-SD02-1.5	1.5	234	234	100%	NA	7600	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	205	0	0%	0.2-8.33	8.5	ca	N	ND	NA
	120-12-7	Anthracene	0.0028	0.056	mg/kg	59F-SB26-1	1	222	8	4%	0.0067-4.17	2200	nc	N	BSL	NA
	7440-36-0	Antimony	0.078	5.67	mg/kg	C208-SB03	1	227	142	63%	1-9	3	nc	Y		NA
	AER-001-095	Arsenic	0.49	35	mg/kg	62F-SB10-1.0	1	228	226	99%	1-3	0.0062	ca	N	BG	NA
	86-50-0	Azinphos methyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	NA		N	ND	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	150	0	0%	0.2-0.31	0.44	ca	N	ND	NA
	7440-39-3	Barium	10	4620	mg/kg	59F-SPB02	1	228	228	100%	NA	520	nc	Y		NA
	71-43-2	Benzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.06	ca	N	ND	NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	150	0	0%	0.36-0.54	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.0049	0.17	mg/kg	59F-SB26-1	1	222	22	10%	0.0067-4.17	0.062	ca	Y		NA
	50-32-8	Benzo (a) pyrene	0.0068	0.15	mg/kg	59F-SB26-1	1	222	21	9%	0.0067-4.17	0.0038	ca	Y		NA
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.012	0.22	mg/kg	CP2-08-SNS04-0.5	0.5	155	25	16%	0.013-0.47	0.038	ca	Y		NA
	205-99-2	Benzo (b) fluoranthene	0.23	0.23	mg/kg	59F-SB26-1	1	67	1	1%	0.167-4.17	0.06	ca	Y		NA
	191-24-2	Benzo (ghi) perylene	0.0077	0.084	mg/kg	59F-SB26-1	1	222	13	6%	0.0067-4.17	230	nc	Y		NA
	207-08-9	Benzo (k) fluoranthene	0.11	0.11	mg/kg	59F-SB26-1	1	67	1	1%	0.167-4.17	0.037806593	ca	Y		NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	205	0	0%	0.51-16.7	10000	max	N	ND	NA
	100-51-6	Benzyl alcohol	0.34	0.34	mg/kg	59F-SB11-5.0	5	205	1	0.5%	0.2-8.33	1800	nc	N	BSL	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.14	1.6	mg/kg	59F-SD02-1.5	1.5	228	179	79%	0.11-0.5	15	nc	N	BSL	NA
	319-85-7	beta-BHC	0.00021	0.0038	mg/kg	59F-SB23-1.0	1	159	5	3%	0.001-0.062	0.03	ca	N	BSL	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	0.022	ca	N	ND*	100%
	39638-32-9	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	0.29	ca	N	ND*	32%
	117-81-7	Bis(2-ethylhexyl)phthalate	1.09	1.3	mg/kg	59F-SB28-1	1	217	2	1%	0.333-8.33	3.5	ca	N	BSL*	NA
	35400-43-2	Bolstar	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA		N	ND	NA
	7440-42-8	Boron	0.52	225	mg/kg	59F-SPB02	5	228	97	43%	4.1-11	1600	nc	N	BSL	NA
	108-86-1	Bromobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	2.783321159	nc	N	ND	NA
	74-97-5	Bromochloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA		N	ND	NA
	75-27-4	Bromodichloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.08	ca	N	ND	NA
	75-25-2	Bromoform	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	6.16	nc	N	ND	NA
	74-83-9	Bromomethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.39	nc	N	ND	NA
	7440-43-9	Cadmium	0.062	1.6	mg/kg	61F-SNS01-0.5	0.5	234	119	51%	0.22-1.1	0.17	nc	Y		NA

Table 5.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Chem Plant 2	7440-70-2	Calcium	775	13100	mg/kg	59F-SPB02	5	50	50	100%	NA	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	150	0	0%	0.2-0.31	2.4	ca	N	ND	NA
	56-23-5	Carbon tetrachloride	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.03	ca	N	ND	NA
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	157	0	0%	0.02-1.2	0.04	ca	N	ND*	15%
	108-90-7	Chlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	15.07	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.30	ca	N	ND	NA
	67-66-3	Chloroform	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.09	ca	N	ND	NA
	74-87-3	Chloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	4.69	nc	N	ND	NA
	2921-88-2	Chlorpyrifos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	18.33	nc	N	ND	NA
	7440-47-3	Chromium	4.6	240	mg/kg	CP2-08-SB14-1.0	1	234	234	100%	NA	10000	max	N	BSL	NA
	18540-29-9	Chromium VI	0.39	0.5	mg/kg	59F-SB28-1	1	3	3	100%	NA	1.70	ca	N	BSL	NA
	218-01-9	Chrysene	0.0057	0.2	mg/kg	59F-SB26-1	1	222	30	14%	0.0067-4.17	0.38	ca	Y		NA
	156-59-2	cis-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	4.29	nc	N	ND	NA
	7440-48-4	Cobalt	0.85	26	mg/kg	59F-SD02-0.25	0.25	228	228	100%	NA	66	ca	N	BSL	NA
	7440-50-8	Copper	3.4	130	mg/kg	F(c)-SNS01-0.5	0.5	234	234	100%	NA	300	nc	N	BSL	NA
	56-72-4	Coumaphos	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	NA		N	ND	NA
	319-86-8	delta-BHC	0.00068	0.51	mg/kg	59F-SB22-1.0	1	159	11	7%	0.001-0.062	0.03		Y		NA
	8065-48-3	Demeton	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	0.24	nc	N	ND	NA
	333-41-5	Diazinon	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	5.50	nc	N	ND	NA
	53-70-3	Dibenz (a,h) anthracene	0.0084	0.0084	mg/kg	CP2-08-SNS04-0.5	0.5	222	1	0%	0.0067-4.17	0.0062	ca	Y		NA
	132-64-9	Dibenzofuran	0.052	0.052	mg/kg	59F-SB26-1	1	217	1	0.5%	0.167-4.17	15	nc	N	BSL	NA
	124-48-1	Dibromochloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.11	ca	N	ND	NA
	74-95-3	Dibromomethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	6.69	nc	N	ND	NA
	75-71-8	Dichlorodifluoromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	9.39	nc	N	ND	NA
	62-73-7	Dichlorvos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	0.17	nc	N	ND	NA
	60-57-1	Dieldrin	0.00091	0.0083	mg/kg	OS1-F2-SNS02-0.5	0.5	159	8	5%	0.002-0.12	0.003	ca	Y		NA
	68334-30-5	Diesel Range Organics (C10-C28)	0.84	52	mg/kg	F(c)-SB04-1.0	1	16	14	88%	2.2-3.8	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	4900	nc	N	ND	NA
	60-51-5	Dimethoate	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	1.22	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	0.684	14.2	mg/kg	61F-SPB01	1	217	11	5%	0.38-8.33	610	nc	Y		NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	240	nc	N	ND	NA
	298-04-4	Disulfoton	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	0.24	nc	N	ND	NA
	959-98-8	Endosulfan I	0.00062	0.001	mg/kg	OS1-F3-SD01-.25	0.25	159	3	2%	0.002-0.12	36.66	nc	N	BSL	NA
	33213-65-9	Endosulfan II	0.0008	0.0038	mg/kg	OS1-F2-SNS03-0.5	0.5	159	12	8%	0.002-0.12	36.66	nc	Y		NA
	1031-07-8	Endosulfan sulfate	0.012	0.012	mg/kg	59F-SB28-1	1	159	1	1%	0.004-0.38	36.66	nc	N	BSL	NA
	72-20-8	Endrin	0.00052	0.22	mg/kg	59F-SB22-1.0	1	159	14	9%	0.002-0.12	1.83	nc	Y		NA
	7421-93-4	Endrin aldehyde	0.0014	0.014	mg/kg	59F-SB28-1	1	159	3	2%	0.004-0.38	1.83	nc	N	BSL	NA
	53494-70-5	Endrin ketone	0.0074	0.0074	mg/kg	59F-SB28-1	1	159	1	1%	0.004-0.38	1.83	nc	N	BSL	NA
	2104-64-5	EPN	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	nc	N	ND	NA
	563-12-2	Ethion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	3.06	nc	N	ND	NA
	13194-48-4	Ethoprop	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA		N	ND	NA
	100-41-4	Ethylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	39.50		N	ND	NA
	115-90-2	Fensulfothion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA		N	ND	NA
	55-38-9	Fenthion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA		N	ND	NA
	206-44-0	Fluoranthene	0.0018	0.46	mg/kg	59F-SB26-1	1	222	44	20%	0.0067-4.17	230	nc	Y		NA
	86-73-7	Fluorene	0.0038	0.039	mg/kg	59F-SB26-1	1	222	3	1%	0.0067-4.17	270	nc	N	BSL	NA

Table 5.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Chem Plant 2	58-89-9	gamma-BHC (Lindane)	0.00069	0.00073	mg/kg	59F-SD07-.25	0.25	159	3	2%	0.001-0.062	0.04	ca	N	BSL	NA
	5103-74-2	gamma-Chlordane	ND	ND	mg/kg	ND	ND	2	0	0%	0.002-0.0046	0.04	ca	N	ND	NA
	76-44-8	Heptachlor	0.00022	0.0018	mg/kg	59F-SB23-1.0	1	159	6	4%	0.001-0.062	0.01	ca	N	BSL*	NA
	1024-57-3	Heptachlor epoxide	0.00049	0.041	mg/kg	61F-SB04-1	1	159	10	6%	0.001-0.062	0.01	ca	Y		NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	0.03	ca	N	ND	NA
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	217	0	0%	0.0067-8.33	0.62	ca	N	ND	NA
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	217	0	0%	0.21-8.33	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	3.5	ca	N	ND	NA
	103-23-1	Hexanedioic Acid, dioctylester	1	2	mg/kg	59F-SPB01	1	6	6	100%	NA	40.50	ca	Y		NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0074	0.1	mg/kg	59F-SB26-1	1	222	10	5%	0.0067-4.17	0.062	ca	Y		NA
	7439-89-6	Iron	15400	38200	mg/kg	25F-SPB01	10	50	50	100%	NA	2300	nc	Y		NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	51	ca	N	ND	NA
	98-82-8	Isopropylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	24.00	nc	N	ND	NA
	7439-92-1	Lead	0.51	295	mg/kg	59F-SPB02	1	242	242	100%	NA	15	nc	Y		NA
	7439-93-2	Lithium	0.5	28	mg/kg	59F-SD02-1.5	1.5	178	178	100%	NA	160	nc	N	BSL	NA
	7439-95-4	Magnesium	2250	9210	mg/kg	25F-SPB01	1	50	50	100%	NA	NA		N	EN	NA
	121-75-5	Malathion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	122.21	nc	N	ND	NA
	7439-96-5	Manganese	33	1200	mg/kg	59F-SB14-5.5	5.5	228	228	100%	NA	180	nc	N	BG	NA
	7439-97-6	Mercury	0.0034	42	mg/kg	25F-SPB02	5	237	183	77%	0.021-0.1	1.8	nc	Y		NA
	150-50-5	Merphos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	0.18	nc	N	ND	NA
	72-43-5	Methoxychlor	0.003	0.0033	mg/kg	OS1-F2-SB04-1	1	159	2	1%	0.0043-1.2	30.55	nc	N	BSL	NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	1.67	ca	N	ND	NA
	75-09-2	Methylene chloride	ND	ND	mg/kg	ND	ND	3	0	0%	0.034-0.038	0.91	ca	N	ND	NA
	7786-34-7	Mevinphos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	nc	N	ND	NA
	7439-98-7	Molybdenum	0.11	130	mg/kg	25F-HA01-1.0	1	181	164	91%	1.1-1.8	38	nc	Y		NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.4	140	mg/kg	F(c)-SB04-1.0	1	16	13	81%	4.3-4.8	NA		N	ITC	NA
	91-20-3	Naphthalene	0.0021	0.003	mg/kg	59F-SB15-5.0	5	222	4	2%	0.0067-4.17	0.17	ca	N	BSL*	NA
	104-51-8	n-Butylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	24.00	nc	N	ND	NA
	7440-02-0	Nickel	3.1	94	mg/kg	59F-SD02-1.5	1.5	234	234	100%	NA	160	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	2	nc	N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	205	0	0%	0.2-8.33	0.00095	ca	N	ND	NA
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	217	0	0%	0.2-8.33	0.007	ca	N	ND	NA
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	67	0	0%	0.333-8.33	9.93	ca	N	ND	NA
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	150	0	0%	0.2-0.31	150	nc	N	ND	NA
	103-65-1	n-Propylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	24.00	nc	N	ND	NA
	AER-001-028	OBPA (WATER)	ND	ND	mg/kg	ND	ND	35	0	0%	0.2-100	NA		N	ND	NA
	123-63-7	Paraldehyde	ND	ND	mg/kg	ND	ND	3	0	0%	3-5	NA		N	ND	NA
	56-38-2	Parathion, ethyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	36.66	nc	N	ND	NA
	298-00-0	Parathion, methyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	36.66	nc	N	ND	NA
	12674-11-2	PCB-1016	0.011	0.011	mg/kg	CP2-08-SB11-5	5	43	1	2%	0.02-2.2	0.39	ca	N	BSL	NA
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	66	0	0%	0.02-2.2	0.02	ca	N	ND	NA
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	66	0	0%	0.02-2.2	0.02	ca	N	ND	NA
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	66	0	0%	0.02-2.2	0.02	ca	N	ND	NA
	12672-29-6	PCB-1248	0.013	120	mg/kg	F(c)-SB04-1.0	1	66	11	17%	0.02-2.1	0.02	ca	Y		NA
	11097-69-1	PCB-1254	0.016	2.8	mg/kg	59F-SB28-1	1	66	23	35%	0.02-2.2	0.02	ca	Y		NA
	11096-82-5	PCB-1260	ND	ND	mg/kg	ND	ND	66	0	0%	0.02-2.2	0.02	ca	N	ND	NA

Table 5.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Chem Plant 2	40487-42-1	Pendimethalin (Prowl)	0.0018	17000	mg/kg	25F-SB14-1	1	210	103	49%	0.0014-0.1	244.41	nc	Y		NA
	87-86-5	Pentachlorophenol	2.8	2.8	mg/kg	61F-SNS01-0.5	0.5	217	1	0%	0.667-16.7	0.3	ca	Y		NA
	14797-73-0	Perchlorate	0.011	0.095	mg/kg	0	0	37	3	8%	0.022-0.052	0.78	ca/nc	N	BSL	NA
	85-01-8	Phenanthrene	0.0025	0.43	mg/kg	59F-SB26-1	1	222	36	16%	0.0067-4.17	230	nc	Y		NA
	108-95-2	Phenol	0.093	14	mg/kg	59F-SD01-0.25	0.25	217	79	36%	0.2-8.33	1800	nc	Y		NA
	298-02-2	Phorate	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	1.22	nc	N	ND	NA
	99-87-6	p-Isopropyltoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA		N	ND	NA
	AER-001-089	Polychlorinated Biphenyl	ND	ND	mg/kg	ND	ND	23	0	0%	0.0333-0.167	0.01	ca	N	ND	NA
	7440-09-7	Potassium	845	3150	mg/kg	59F-SPB02	5	50	50	100%	NA	NA	ca	N	EN	NA
	129-00-0	Pyrene	0.006	0.35	mg/kg	59F-SB26-1	1	222	34	15%	0.0067-4.17	230	nc	Y		NA
	299-84-3	Ronnel	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	305.52	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	22.00	nc	N	ND	NA
	7782-49-2	Selenium	0.22	3.6	mg/kg	59F-SD02-1.5	1.5	229	49	21%	1-1.8	38	nc	N	BSL	NA
	7440-22-4	Silver	0.062	1.21	mg/kg	61F-SPB01	10	234	18	8%	0.43-2.2	38	nc	N	BSL	NA
	AER-001-082	Sodium	114	3640	mg/kg	25F-SPB03	6	50	49	98%	100-100	NA		N	EN	NA
	22248-79-9	Stirophos	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	NA		N	ND	NA
	7440-24-6	Strontium	2.8	64	mg/kg	62F-SNS01-0.5	0.5	178	178	100%	NA	4700	nc	N	BSL	NA
	100-42-5	Styrene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	170.00	nc	N	ND	NA
	3689-24-5	Sulfotep	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA		N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	39.00	nc	N	ND	NA
	127-18-4	Tetrachloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.05	ca	N	ND	NA
	7440-28-0	Thallium	0.1	36	mg/kg	60F-SB01	1	228	151	66%	0.52-5	0.5	nc	N	PEBG	NA
	297-97-2	Thionazin	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA		N	ND	NA
	7440-32-6	Titanium	140	1500	mg/kg	59F-SD01-1.5	1.5	178	178	100%	NA	10000	nc	N	BSL	NA
	34643-46-4	Tokuthion (Prothiofos)	ND	ND	mg/kg	ND	ND	2	0	0%	0.032-0.034	NA		N	ND	NA
	108-88-3	Toluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	52.00	nc	N	ND	NA
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	159	0	0%	0.079-5	0.04	ca	N	ND	NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	6.95	nc	N	ND	NA
	79-01-6	Trichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.29	ca	N	ND	NA
	75-69-4	Trichlorofluoromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	38.58	nc	N	ND	NA
	327-98-0	Trichloronate	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA		N	ND	NA
	7440-62-2	Vanadium	6.3	170	mg/kg	59F-SD02-1.5	1.5	228	228	100%	NA	0.53	nc	N	BG	NA
	75-01-4	Vinyl chloride	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	0.01	ca	N	ND	NA
	1330-20-7	Xylenes (total)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	27.06	nc	N	ND	NA
	7440-66-6	Zinc	4.2	540	mg/kg	CP2-08-SNS04-0.5	0.5	234	234	100%	NA	2300	nc	N	BSL	NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PEBG - Evidence from previous investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.6-3 Chemical of Potential Concern Summary
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
1,1,2,2-Tetrachloroethane	N	ND*	N	ND
1,1,1-Trichloroethane	N	BSL	N	ND
1,1,2-Trichloroethane	N	ND*	N	ND
1,1-Dichloroethane	N	BSL	N	ND
1,1-Dichloroethene	Y		N	ND
1,1-Dichloropropene	N	ND*	N	ND
1,2,3-Trichlorobenzene	NA	NA	N	ND
1,2,3-Trichloropropane	NA	NA	N	ND*
1,2,4-Trichlorobenzene	N	ND*	N	ND
1,2,4-Trimethylbenzene	Y		N	ND
1,2-Dibromo-3-chloropropane	NA	NA	N	ND*
1,2-Dibromoethane (EDB)	N	ND*	N	ND*
1,2-Dichlorobenzene	N	ND	N	ND
1,2-Dichloroethane	Y		Y	
cis-1,2-Dichloroethene	N	BSL	N	ND
trans-1,2-Dichloroethene	N	BSL	N	ND
1,2-Dichloropropane	N	ND*	N	ND
1,2-Diphenylhydrazine	NA	NA	NA	NA
1,3,5-Trimethylbenzene	Y		N	ND
1,3-Butadiene	N	NR	NA	NA
1,3-Dichlorobenzene	N	ND*	N	ND
1,3-Dichloropropane	NA	NA	N	ND
1,4-Dichlorobenzene	N	ND*	N	ND*
1,4-Dioxane	Y		NA	NA
2,2,4-Trimethylpentane	Y		NA	NA
2,2-Dichloropropane	NA	NA	N	ND
2,4,5-Trichlorophenol	NA	NA	N	ND
2,4,6-Trichlorophenol	NA	NA	N	ND*
2,4-Dichlorophenol	NA	NA	N	BSL
2,4-Dimethylphenol	NA	NA	N	ND
2,4-Dinitrophenol	NA	NA	N	ND
2,4-Dinitrotoluene	NA	NA	N	ND
2,6-Dinitrotoluene	NA	NA	N	ND
2-Butanone (Methyl Ethyl Ketone)	Y		NA	NA
2-Chloronaphthalene	NA	NA	N	ND
2-Chlorophenol	NA	NA	N	ND
2-Chlorotoluene	NA	NA	N	ND
2-Hexanone	N	BSL	NA	NA
2-Methylnaphthalene	NA	NA	N	BSL*
2-Methylphenol	NA	NA	N	BSL
2-Nitroaniline	NA	NA	N	ND
2-Nitrophenol	NA	NA	N	ND
2-Propanol	Y		NA	NA
3,3'-Dichlorobenzidine	NA	NA	N	ND*
3-Chloropropene	N	ND	NA	NA
3-Nitroaniline	NA	NA	N	ND*
4,4'-DDD	NA	NA	Y	
4,4'-DDE	NA	NA	Y	
4,4'-DDT	NA	NA	Y	
4,6-Dinitro-2-methylphenol	NA	NA	N	ND*
4-Bromophenyl phenyl ether	NA	NA	N	ND
4-Chloro-3-methylphenol	NA	NA	N	ND
4-Chloroaniline	NA	NA	N	ND
4-Chlorophenyl phenyl ether	NA	NA	N	ND
4-Chlorotoluene	NA	NA	N	ND
4-Ethyltoluene	Y		NA	NA
4-Methyl-2-pentanone	Y		NA	NA
4-Methylphenol	NA	NA	N	ND

Table 5.6-3 Chemical of Potential Concern Summary
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
4-Nitroaniline	NA	NA	N	ND*
4-Nitrophenol	NA	NA	N	ND
Acenaphthene	NA	NA	N	BSL
Acenaphthylene	NA	NA	N	ND
Acetone	Y		NA	NA
alpha-Chlorotoluene	N	ND*	NA	NA
Aldrin	NA	NA	Y	
alpha-BHC	NA	NA	N	BSL*
alpha-Chlordane	NA	NA	N	ND
Aluminum	NA	NA	N	BG
Aniline	NA	NA	N	ND
Anthracene	NA	NA	N	BSL
Antimony	NA	NA	Y	
PCB-1016	NA	NA	N	BSL
PCB-1221	NA	NA	N	ND
PCB-1232	NA	NA	N	ND
PCB-1242	NA	NA	N	ND
PCB-1248	NA	NA	Y	
PCB-1254	NA	NA	Y	
PCB-1260	NA	NA	N	ND
Arsenic	NA	NA	N	BG
Azinphos methyl	NA	NA	N	ND
Azobenzene	NA	NA	N	ND
Barium	NA	NA	Y	
Benzene	Y		N	ND
Benzidine	NA	NA	N	ND*
Benzo (a) anthracene	NA	NA	Y	
Benzo (a) pyrene	NA	NA	Y	
Benzo (b & k) fluoranthene (total)	NA	NA	Y	
Benzo (ghi) perylene	NA	NA	Y	
Benzo (b) fluoranthene	NA	NA	Y	
Benzo (k) fluoranthene	NA	NA	Y	
Benzoic acid	NA	NA	N	ND
Benzyl alcohol	NA	NA	N	BSL
Benzyl butyl phthalate	NA	NA	N	ND
beta-BHC	NA	NA	N	BSL
Beryllium	NA	NA	N	BSL
Bis(2-Chloroethoxy)methane	NA	NA	N	ND
Bis(2-Chloroethyl)ether	NA	NA	N	ND*
Bis(2-Chloroisopropyl)ether	NA	NA	N	ND*
Bis(2-Ethylhexyl)phthalate	NA	NA	N	BSL*
Boron	NA	NA	N	BSL
Bromobenzene	NA	NA	N	ND
Bromochloromethane	NA	NA	N	ND
Bromodichloromethane	Y		N	ND
Bromoform	N	ND*	N	ND
Bromomethane	N	ND*	N	ND
Butylbenzene	N	ND*	NA	NA
Cadmium	NA	NA	Y	
Calcium	NA	NA	N	EN
Carbazole	NA	NA	N	ND
Carbon Disulfide	Y		NA	NA
Carbon Tetrachloride	Y		N	ND
Chlorobenzene	N	ND	N	ND
Chlordane (tech)	NA	NA	N	ND*
Chloroethane	Y		N	ND
Chloroform	Y		N	ND
Chloromethane	N	BSL	N	ND

Table 5.6-3 Chemical of Potential Concern Summary
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Chromium	NA	NA	N	BSL
Chrysene	NA	NA	Y	
cis-1,2-Dichloroethene	N	BSL	N	ND
cis-1,3-Dichloropropene	N	ND*	NA	NA
Cobalt	NA	NA	N	BSL
Copper	NA	NA	N	BSL
Cyclohexane	Y		NA	NA
delta-BHC	NA	NA	Y	
Dibenz (a,h) anthracene	NA	NA	Y	
Dibenzofuran	NA	NA	N	BSL
Dibromochloromethane	N	ND*	N	ND
Dibromomethane	NA	NA	N	ND
Freon 12	N	BSL	NA	NA
Diesel Range Organics (C10-C28)	NA	NA	N	ITC
Diethyl phthalate	NA	NA	N	ND
Dimethyl phthalate	NA	NA	N	ND
Di-n-butyl phthalate	NA	NA	Y	
Di-n-octyl phthalate	NA	NA	N	ND
Endosulfan I	NA	NA	N	BSL
Endosulfan II	NA	NA	Y	
Endosulfan sulfate	NA	NA	N	BSL
Endrin	NA	NA	Y	
Endrin aldehyde	NA	NA	N	BSL
Endrin ketone	NA	NA	N	BSL
Ethanol	Y		NA	NA
Ethyl benzene	Y		NA	NA
Fluoranthene	NA	NA	Y	
Fluorene	NA	NA	N	BSL
Freon 113	Y		NA	NA
Freon 114	N	ND	NA	NA
gamma-BHC (Lindane)	NA	NA	N	BSL
gamma-Chlordane	NA	NA	N	ND
Heptachlor	NA	NA	N	BSL*
Heptachlor epoxide	NA	NA	Y	
Heptane	Y		NA	NA
Hexachlorobenzene	NA	NA	N	ND
Hexachlorobutadiene	N	ND*	N	ND
Hexachlorocyclopentadiene	NA	NA	N	ND
Hexachloroethane	NA	NA	N	ND
Hexane	Y		NA	NA
Chromium VI	NA	NA	N	BSL
Indeno (1,2,3-cd) pyrene	NA	NA	Y	
Iron	NA	NA	Y	
Isophorone	NA	NA	N	ND
Cumene	Y		NA	NA
Lead	NA	NA	Y	0
Lithium	NA	NA	N	BSL
m,p-Xylene	Y		NA	NA
Magnesium	NA	NA	N	EN
Manganese	NA	NA	N	BG
Mercury	NA	NA	Y	
Methyl tert-butyl ether	Y		N	ND
Methylene Chloride	N	ND*	N	ND
Methoxychlor	NA	NA	N	BSL
Molybdenum	NA	NA	Y	
Motor Oil Range Organics (C16-C36)	NA	NA	N	ITC
Naphthalene	NA	NA	N	BSL*
Butylbenzene	N	ND*	NA	NA

Table 5.6-3 Chemical of Potential Concern Summary
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Nickel	NA	NA	N	BSL
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	NA	NA	N	ND
N-Nitrosodimethylamine	NA	NA	N	ND
N-Nitrosodi-n-propylamine	NA	NA	N	ND
N-Nitrosodiphenylamine	NA	NA	N	ND
Pendimethalin (Prowl)	NA	NA	Y	
Propylbenzene	Y		NA	NA
o-Xylene	Y		NA	NA
Pentachlorophenol	NA	NA	Y	
Perchlorate	NA	NA	N	BSL
Phenanthrene	NA	NA	Y	
Phenol	NA	NA	Y	
p-Cymene	N	ND	NA	NA
Polychlorinated biphenyl	NA	NA	N	ND
Potassium	NA	NA	N	EN
Pyrene	NA	NA	Y	
sec-Butylbenzene	N	ND*	N	ND
Selenium	NA	NA	N	BSL
Silver	NA	NA	N	BSL
Sodium	NA	NA	N	EN
Strontium	NA	NA	N	BSL
Styrene	N	BSL	N	ND
tert-Butylbenzene	N	ND*	N	ND
Tetrachloroethene	Y		N	ND
Tetrahydrofuran	Y		NA	NA
Thallium	NA	NA	N	PEBG
Tin	NA	NA	NA	NA
Titanium	NA	NA	N	BSL
Toluene	Y		N	ND
Total Cyanide	NA	NA	NA	NA
trans-1,2-Dichloroethene	N	BSL	N	ND
trans-1,3-Dichloropropene	N	ND*	NA	NA
Trichloroethene	Y		N	ND
Freon 11	Y		NA	NA
Vanadium	NA	NA	N	BG
Vinyl Chloride	Y		N	ND
Xylenes (total)	NA	NA	N	ND
Zinc	NA	NA	N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of potential concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential nutrient
ND = Not detected above the reporting limit.
NR = Research has shown that 1,3-butadiene is not reproducible.
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level).
PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individual
PEBG - Evidence from previous investigations (Borch, 1994) indicates that measured thallium concentrations can be interpreted as site-related.

Table 5.6-4 *Outdoor Air Exposure Point Concentration Results*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Inorganics									
Antimony	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Barium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Cadmium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Chromium VI	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Iron	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Lead	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Mercury	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Molybdenum	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Perchlorate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds									
Aldrin	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDD	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDE	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDT	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
delta-BHC	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Dieldrin	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Endosulfan II	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Endrin	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Heptachlor epoxide	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(a)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(b)fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(b & k)fluoranthene (total)	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(k)fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(a)pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Benzo(ghi)perylene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Chrysene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Dibenz(a,h)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Hexanedioic Acid, dioctylester	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Indeno(1,2,3-cd)pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10

Table 5.6-4 *Outdoor Air Exposure Point Concentration Results*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Naphthalene	1.0 E+0	2.3 E-5	2.3 E-5	1.0 E+0	2.3 E-5	2.3 E-5	1.0 E+0	2.3 E-5	2.3 E-5
PCB-1248	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1254	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1260	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Pendimethalin (Prowl)	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Pentachlorophenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Di-n-butyl phthalate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenanthrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Volatile Organic Compounds									
1,2-Dichloroethane	1.0 E+0	2.6 E-4	2.6 E-4	1.0 E+0	2.6 E-4	2.6 E-4	1.0 E+0	2.6 E-4	2.6 E-4

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg, Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.6-5 Residential Soil Vapor to Indoor Air Attenuation Factors
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors						
	Feet bgs						
Chemical/Feet bgs	**10**	**15**	**18.5**	**20**	**30**	**34**	**40**
1,1-Dichloroethene	5.3 E-4	3.7 E-4	3.1 E-4	3.0 E-4	2.0 E-4	1.8 E-4	1.5 E-4
1,2-Dichloroethane	5.9 E-4	4.2 E-4	3.5 E-4	3.3 E-4	2.3 E-4	2.0 E-4	1.7 E-4
1,4-Dioxane	5.9 E-4	4.2 E-4	3.5 E-4	3.4 E-4	2.3 E-4	2.0 E-4	1.7 E-4
2-Propanol	5.2 E-4	3.7 E-4	3.1 E-4	3.0 E-4	2.0 E-4	1.8 E-4	1.5 E-4
Benzene	5.2 E-4	3.7 E-4	3.0 E-4	2.8 E-4	1.9 E-4	1.7 E-4	1.5 E-4
Bromodichloromethane	2.0 E-4	1.4 E-4	1.1 E-4	1.0 E-4	7.0 E-5	6.2 E-5	5.2 E-5
Carbon Tetrachloride	4.7 E-4	3.3 E-4	2.7 E-4	2.5 E-4	1.7 E-4	1.5 E-4	1.3 E-4
Chloroform	5.9 E-4	4.2 E-4	3.5 E-4	3.3 E-4	2.3 E-4	2.0 E-4	1.7 E-4
Chloroethane	1.1 E-3	8.6 E-4	7.4 E-4	7.3 E-4	5.1 E-4	4.6 E-4	4.1 E-4
Ethylbenzene	4.6 E-4	3.2 E-4	2.6 E-4	2.5 E-4	1.7 E-4	1.5 E-4	1.3 E-4
Freon 113	4.7 E-4	3.3 E-4	2.7 E-4	2.7 E-4	1.7 E-4	1.5 E-4	1.3 E-4
Heptane	9.3 E-4	7.0 E-4	6.0 E-4	5.8 E-4	4.0 E-4	3.6 E-4	3.1 E-4
Hexane	9.3 E-4	7.0 E-4	6.0 E-4	5.6 E-4	4.0 E-4	3.6 E-4	3.1 E-4
Methyl tert-butyl ether	5.8 E-4	4.2 E-4	3.5 E-4	3.4 E-4	2.2 E-4	2.0 E-4	1.7 E-4
Tetrachloroethylene	4.4 E-4	3.1 E-4	2.5 E-4	2.4 E-4	1.6 E-4	1.4 E-4	1.2 E-4
Tetrahydrofuran	6.0 E-4	4.3 E-4	3.6 E-4	3.5 E-4	2.3 E-4	2.0 E-4	1.8 E-4
Trichloroethylene	4.8 E-4	3.3 E-4	2.8 E-4	2.7 E-4	1.8 E-4	1.6 E-4	1.3 E-4
Vinyl Chloride	6.0 E-4	4.3 E-4	3.6 E-4	3.5 E-4	2.3 E-4	2.1 E-4	1.8 E-4
1,2,4-Trimethylbenzene	3.8 E-4	2.6 E-4	2.2 E-4	2.1 E-4	1.4 E-4	1.2 E-4	1.0 E-4
1,3,5-Trimethylbenzene	3.8 E-4	2.6 E-4	2.2 E-4	2.1 E-4	1.4 E-4	1.2 E-4	1.0 E-4
2,2,4-Trimethylpentane	5.1 E-4	3.6 E-4	3.0 E-4	2.9 E-4	1.9 E-4	1.7 E-4	1.5 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	3.4 E-4	2.8 E-4	2.8 E-4	1.8 E-4	1.6 E-4	1.4 E-4
4-Ethyltoluene	5.1 E-4	3.6 E-4	3.0 E-4	2.9 E-4	1.9 E-4	1.7 E-4	1.5 E-4
4-Methyl-2-pentanone	4.6 E-4	3.2 E-4	2.6 E-4	2.6 E-4	1.7 E-4	1.5 E-4	1.3 E-4
Acetone	6.8 E-4	4.9 E-4	4.1 E-4	4.0 E-4	2.7 E-4	2.4 E-4	2.1 E-4
Carbon Disulfide	5.9 E-4	4.2 E-4	3.5 E-4	3.4 E-4	2.3 E-4	2.0 E-4	1.7 E-4
Cumene	4.0 E-4	2.8 E-4	2.3 E-4	2.3 E-4	1.5 E-4	1.3 E-4	1.1 E-4
Cyclohexane	4.8 E-4	3.4 E-4	2.8 E-4	2.7 E-4	1.8 E-4	1.6 E-4	1.4 E-4
Ethanol	8.4 E-4	6.3 E-4	5.3 E-4	5.2 E-4	3.5 E-4	3.2 E-4	2.7 E-4
Freon 11	5.1 E-4	3.6 E-4	3.0 E-4	2.9 E-4	1.9 E-4	1.7 E-4	1.5 E-4
m,p-Xylene	4.6 E-4	3.3 E-4	2.7 E-4	2.6 E-4	1.7 E-4	1.5 E-4	1.3 E-4
o-Xylene	5.1 E-4	3.6 E-4	3.0 E-4	2.9 E-4	1.9 E-4	1.7 E-4	1.5 E-4
Propylbenzene	3.8 E-4	2.6 E-4	2.2 E-4	2.1 E-4	1.4 E-4	1.2 E-4	1.0 E-4
Toluene	5.1 E-4	3.6 E-4	3.0 E-4	2.9 E-4	1.9 E-4	1.7 E-4	1.5 E-4

Key:
bgs = Below ground surface

Table 5.6-6 Commercial Soil Vapor to Indoor Air Attenuation Factors
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors						
	Feet bgs						
Chemical/Feet bgs	**10**	**15**	**18.5**	**20**	**30**	**34**	**40**
1,1-Dichloroethene	2.6 E-4	1.9 E-4	1.5 E-4	1.5 E-4	9.9 E-5	8.8 E-5	7.6 E-5
1,2-Dichloroethane	2.9 E-4	2.1 E-4	1.8 E-4	1.6 E-4	1.1 E-4	1.0 E-4	8.7 E-5
1,4-Dioxane	3.0 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.1 E-4	1.0 E-4	8.7 E-5
2-Propanol	2.6 E-4	1.9 E-4	1.5 E-4	1.5 E-4	9.9 E-5	8.8 E-5	7.5 E-5
Benzene	2.6 E-4	1.8 E-4	1.5 E-4	1.4 E-4	9.7 E-5	8.7 E-5	7.4 E-5
Bromodichloromethane	1.0 E-4	6.9 E-5	5.6 E-5	5.2 E-5	3.5 E-5	3.1 E-5	2.6 E-5
Carbon Tetrachloride	2.4 E-4	1.6 E-4	1.4 E-4	1.3 E-4	8.7 E-5	7.7 E-5	6.6 E-5
Chloroform	2.9 E-4	2.1 E-4	1.8 E-4	1.6 E-4	1.1 E-4	1.0 E-4	8.7 E-5
Chloroethane	5.5 E-4	4.3 E-4	3.7 E-4	3.6 E-4	2.6 E-4	2.3 E-4	2.0 E-4
Ethylbenzene	2.3 E-4	1.6 E-4	1.3 E-4	1.2 E-4	8.4 E-5	7.5 E-5	6.4 E-5
Freon 113	2.4 E-4	1.6 E-4	1.4 E-4	1.3 E-4	8.7 E-5	7.7 E-5	6.6 E-5
Heptane	4.6 E-4	3.5 E-4	3.0 E-4	2.9 E-4	2.0 E-4	1.8 E-4	1.6 E-4
Hexane	4.6 E-4	3.5 E-4	3.0 E-4	2.8 E-4	2.0 E-4	1.8 E-4	1.6 E-4
Methyl tert-butyl ether	2.9 E-4	2.1 E-4	1.7 E-4	1.7 E-4	1.1 E-4	1.0 E-4	8.6 E-5
Tetrachloroethylene	2.2 E-4	1.5 E-4	1.3 E-4	1.2 E-4	8.1 E-5	7.2 E-5	6.1 E-5
Tetrahydrofuran	3.0 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.2 E-4	1.0 E-4	8.8 E-5
Trichloroethylene	2.4 E-4	1.7 E-4	1.4 E-4	1.3 E-4	8.8 E-5	7.8 E-5	6.7 E-5
Vinyl Chloride	3.0 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.2 E-4	1.0 E-4	8.8 E-5
1,2,4-Trimethylbenzene	1.9 E-4	1.3 E-4	1.1 E-4	1.1 E-4	6.9 E-5	6.1 E-5	5.2 E-5
1,3,5-Trimethylbenzene	1.9 E-4	1.3 E-4	1.1 E-4	1.1 E-4	6.8 E-5	6.1 E-5	5.2 E-5
2,2,4-Trimethylpentane	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	9.6 E-5	8.6 E-5	7.3 E-5
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.7 E-4	1.4 E-4	1.4 E-4	9.1 E-5	8.1 E-5	6.9 E-5
4-Ethyltoluene	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	9.6 E-5	8.6 E-5	7.3 E-5
4-Methyl-2-pentanone	2.3 E-4	1.6 E-4	1.3 E-4	1.3 E-4	8.4 E-5	7.5 E-5	6.4 E-5
Acetone	3.4 E-4	2.4 E-4	2.1 E-4	2.0 E-4	1.3 E-4	1.2 E-4	1.0 E-4
Carbon Disulfide	2.9 E-4	2.1 E-4	1.8 E-4	1.7 E-4	1.1 E-4	1.0 E-4	8.7 E-5
Cumene	2.0 E-4	1.4 E-4	1.2 E-4	1.1 E-4	7.3 E-5	6.5 E-5	5.6 E-5
Cyclohexane	2.4 E-4	1.7 E-4	1.4 E-4	1.4 E-4	8.9 E-5	7.9 E-5	6.8 E-5
Ethanol	4.2 E-4	3.1 E-4	2.6 E-4	2.6 E-4	1.8 E-4	1.6 E-4	1.4 E-4
Freon 11	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	9.6 E-5	8.6 E-5	7.3 E-5
m,p-Xylene	2.3 E-4	1.6 E-4	1.3 E-4	1.3 E-4	8.6 E-5	7.6 E-5	6.5 E-5
o-Xylene	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	9.6 E-5	8.6 E-5	7.3 E-5
Propylbenzene	1.9 E-4	1.3 E-4	1.1 E-4	1.1 E-4	6.8 E-5	6.0 E-5	5.2 E-5
Toluene	2.6 E-4	1.8 E-4	1.5 E-4	1.5 E-4	9.6 E-5	8.6 E-5	7.3 E-5

Key:
bgs = Below ground surface

Table 5.6-7 *Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Attenuation Factor for Sample Depth (Feet bgs)						
Chemical of Potential Concern	**Diffusivity in Air (cm2/s)**	**10**	**15**	**18.5**	**20**	**30**	**34**	**40**
1,1-Dichloroethene	9.0 E-2	7.2 E-6	4.8 E-6	3.9 E-6	3.6 E-6	2.4 E-6	2.1 E-6	1.8 E-6
1,2-Dichloroethane	1.0 E-1	8.3 E-6	5.5 E-6	4.5 E-6	4.2 E-6	2.8 E-6	2.4 E-6	2.1 E-6
1,4-Dioxane	9.9 E-2	7.9 E-6	5.3 E-6	4.3 E-6	4.0 E-6	2.6 E-6	2.3 E-6	2.0 E-6
2-Propanol	8.6 E-2	6.9 E-6	4.6 E-6	3.7 E-6	3.4 E-6	2.3 E-6	2.0 E-6	1.7 E-6
Benzene	8.8 E-2	7.0 E-6	4.7 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.1 E-6	1.8 E-6
Bromodichloromethane	3.0 E-2	2.4 E-6	1.6 E-6	1.3 E-6	1.2 E-6	7.9 E-7	7.0 E-7	5.9 E-7
Carbon Tetrachloride	7.8 E-2	6.2 E-6	4.2 E-6	3.4 E-6	3.1 E-6	2.1 E-6	1.8 E-6	1.6 E-6
Chloroform	1.0 E-1	8.3 E-6	5.5 E-6	4.5 E-6	4.2 E-6	2.8 E-6	2.4 E-6	2.1 E-6
Chloroethane	2.7 E-1	2.2 E-5	1.4 E-5	1.2 E-5	1.1 E-5	7.2 E-6	6.4 E-6	5.4 E-6
Ethylbenzene	7.5 E-2	6.0 E-6	4.0 E-6	3.2 E-6	3.0 E-6	2.0 E-6	1.8 E-6	1.5 E-6
Freon 113	7.8 E-2	6.2 E-6	4.2 E-6	3.4 E-6	3.1 E-6	2.1 E-6	1.8 E-6	1.6 E-6
Heptane	6.8 E-2	5.5 E-6	3.6 E-6	3.0 E-6	2.7 E-6	1.8 E-6	1.6 E-6	1.4 E-6
Hexane	2.0 E-1	1.6 E-5	1.1 E-5	8.6 E-6	8.0 E-6	5.3 E-6	4.7 E-6	4.0 E-6
Methyl tert-butyl ether	1.0 E-1	8.2 E-6	5.5 E-6	4.4 E-6	4.1 E-6	2.7 E-6	2.4 E-6	2.0 E-6
Tetrachloroethylene	7.2 E-2	5.8 E-6	3.8 E-6	3.1 E-6	2.9 E-6	1.9 E-6	1.7 E-6	1.4 E-6
Tetrahydrofuran	1.1 E-1	8.4 E-6	5.6 E-6	4.5 E-6	4.2 E-6	2.8 E-6	2.5 E-6	2.1 E-6
Trichloroethylene	7.9 E-2	6.3 E-6	4.2 E-6	3.4 E-6	3.2 E-6	2.1 E-6	1.9 E-6	1.6 E-6
Vinyl Chloride	7.9 E-2	6.3 E-6	4.2 E-6	3.4 E-6	3.2 E-6	2.1 E-6	1.9 E-6	1.6 E-6
1,3,5-Trimethylbenzene	6.0 E-2	4.8 E-6	3.2 E-6	2.6 E-6	2.4 E-6	1.6 E-6	1.4 E-6	1.2 E-6
1,2,4-Trimethylbenzene	6.1 E-2	4.8 E-6	3.2 E-6	2.6 E-6	2.4 E-6	1.6 E-6	1.4 E-6	1.2 E-6
2,2,4-Trimethylpentane	8.7 E-2	6.9 E-6	4.6 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.0 E-6	1.7 E-6
2-Butanone (Methyl Ethyl Ketone)	8.1 E-2	6.5 E-6	4.3 E-6	3.5 E-6	3.2 E-6	2.2 E-6	1.9 E-6	1.6 E-6
4-Ethyltoluene	8.7 E-2	6.9 E-6	4.6 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.0 E-6	1.7 E-6
4-Methyl-2-pentanone	7.5 E-2	6.0 E-6	4.0 E-6	3.2 E-6	3.0 E-6	2.0 E-6	1.8 E-6	1.5 E-6
Acetone	1.2 E-1	9.9 E-6	6.6 E-6	5.4 E-6	5.0 E-6	3.3 E-6	2.9 E-6	2.5 E-6
Carbon Disulfide	1.0 E-1	8.3 E-6	5.5 E-6	4.5 E-6	4.2 E-6	2.8 E-6	2.4 E-6	2.1 E-6
Cumene	6.5 E-2	5.2 E-6	3.5 E-6	2.8 E-6	2.6 E-6	1.7 E-6	1.5 E-6	1.3 E-6
Cyclohexane	8.0 E-2	6.4 E-6	4.3 E-6	3.5 E-6	3.2 E-6	2.1 E-6	1.9 E-6	1.6 E-6
Ethanol	1.6 E-1	1.3 E-5	8.4 E-6	6.8 E-6	6.3 E-6	4.2 E-6	3.7 E-6	3.1 E-6
Freon 11	8.7 E-2	6.9 E-6	4.6 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.0 E-6	1.7 E-6
m,p-Xylene	7.7 E-2	6.1 E-6	4.1 E-6	3.3 E-6	3.1 E-6	2.0 E-6	1.8 E-6	1.5 E-6
o-Xylene	8.7 E-2	6.9 E-6	4.6 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.0 E-6	1.7 E-6
Propylbenzene	6.0 E-2	4.8 E-6	3.2 E-6	2.6 E-6	2.4 E-6	1.6 E-6	1.4 E-6	1.2 E-6
Toluene	8.7 E-2	6.9 E-6	4.6 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.0 E-6	1.7 E-6

a = USEPA, 1988, Superfund Exposure Assessment Manual

Ambient Air Attenuation Factor =

$$\frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm}^3/\text{m}^3}$$

Dia =	chemical specific	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	2.0 E+7	cm^2	Area (assume 4500 cm x 4500 cm)
d =	304.8	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2.0	m	Breathing zone height
u =	3.0	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
cm^2/s = Square Centimeter per second
cm = Centimeter
m = Meter
m/s = Meter per second
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
cm^3 = Cubic centimeter
m^3 = Cubic meter

Table 5.6-8 ***Soil Unit Hazard and Unit Cancer Risk Results - Resident***
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Antimony	1.0 E+0	3.2 E-2	0.0 E+0	1.2 E-6	3.2 E-2	3.4 E-3	0.0 E+0	5.0 E-7	3.4 E-3	NA	NA	NA	NA
Barium	1.0 E+0	6.4 E-5	0.0 E+0	3.4 E-6	6.7 E-5	6.8 E-6	0.0 E+0	1.4 E-6	8.3 E-6	NA	NA	NA	NA
Cadmium	1.0 E+0	1.3 E-2	1.4 E-3	4.7 E-7	1.4 E-2	1.4 E-3	2.2 E-4	2.0 E-7	1.6 E-3	NA	NA	1.6 E-9	1.6 E-9
Chromium VI	1.0 E+0	4.3 E-3	0.0 E+0	2.1 E-4	4.5 E-3	4.6 E-4	0.0 E+0	9.2 E-5	5.5 E-4	NA	NA	5.6 E-8	5.6 E-8
Iron	1.0 E+0	1.8 E-5	0.0 E+0	NA	1.8 E-5	2.0 E-6	0.0 E+0	NA	2.0 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	4.3 E-2	0.0 E+0	5.5 E-6	4.3 E-2	4.6 E-3	0.0 E+0	2.4 E-6	4.6 E-3	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.6 E-3	0.0 E+0	9.4 E-8	2.6 E-3	2.7 E-4	0.0 E+0	4.0 E-8	2.7 E-4	NA	NA	NA	NA
Perchlorate	1.0 E+0	1.8 E-2	0.0 E+0	NA	1.8 E-2	2.0 E-3	0.0 E+0	NA	2.0 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds													
4,4'-DDD	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
4,4'-DDT	1.0 E+0	2.6 E-2	2.1 E-3	9.4 E-7	2.8 E-2	2.7 E-3	3.3 E-4	4.0 E-7	3.1 E-3	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
Aldrin	1.0 E+0	4.3 E-1	4.8 E-2	1.6 E-5	4.7 E-1	4.6 E-2	7.3 E-3	6.7 E-6	5.3 E-2	2.7 E-5	3.4 E-6	1.9 E-9	3.0 E-5
delta-BHC	1.0 E+0	4.3 E-2	4.8 E-3	1.6 E-6	4.7 E-2	4.6 E-3	7.3 E-4	6.7 E-7	5.3 E-3	2.0 E-6	2.6 E-7	1.4 E-10	2.3 E-6
Dieldrin	1.0 E+0	2.6 E-1	2.9 E-2	9.4 E-6	2.8 E-1	2.7 E-2	4.4 E-3	4.0 E-6	3.2 E-2	2.5 E-5	3.2 E-6	1.7 E-9	2.8 E-5
Endosulfan II	1.0 E+0	2.1 E-3	6.0 E-4	7.8 E-8	2.7 E-3	2.3 E-4	9.1 E-5	3.4 E-8	3.2 E-4	NA	NA	NA	NA
Endrin	1.0 E+0	4.3 E-2	4.8 E-3	1.6 E-6	4.7 E-2	4.6 E-3	7.3 E-4	6.7 E-7	5.3 E-3	NA	NA	NA	NA
Heptachlor epoxide	1.0 E+0	9.8 E-1	1.1 E-1	3.6 E-5	1.1 E+0	1.1 E-1	1.7 E-2	1.5 E-5	1.2 E-1	1.4 E-5	1.8 E-6	1.0 E-9	1.6 E-5
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	4.7 E-7	8.0 E-11	1.6 E-6
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	7.7 E-6	4.3 E-10	2.6 E-5
Benzo(b & k)fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo(b)fluoranthene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Benzo(ghi)perylene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Benzo(k)fluoranthene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
Chrysene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	7.7 E-8	4.3 E-12	2.6 E-7
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	4.7 E-6	4.5 E-10	1.6 E-5
Di-n-butyl phthalate	1.0 E+0	1.3 E-4	3.6 E-5	4.7 E-9	1.6 E-4	1.4 E-5	5.5 E-6	2.0 E-9	1.9 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
Hexanedioic Acid, dioctylester	1.0 E+0	2.1 E-5	6.0 E-6	7.8 E-10	2.7 E-5	2.3 E-6	9.1 E-7	3.4 E-10	3.2 E-6	1.9 E-9	5.9 E-10	1.3 E-13	2.5 E-9
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	7.7 E-7	4.3 E-11	2.6 E-6
PCB-1248	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
PCB-1254	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
Pendimethalin (Prowl)	1.0 E+0	3.2 E-4	8.9 E-5	1.2 E-8	4.1 E-4	3.4 E-5	1.4 E-5	5.0 E-9	4.8 E-5	NA	NA	NA	NA
Pentachlorophenol	1.0 E+0	4.3 E-4	1.2 E-4	1.6 E-8	5.5 E-4	4.6 E-5	1.8 E-5	6.7 E-9	6.4 E-5	1.9 E-7	5.9 E-8	2.0 E-12	2.5 E-7
Phenanthrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA

Table 5.6-8 *Soil Unit Hazard and Unit Cancer Risk Results - Resident*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Volatile Organic Compounds													
1,2-Dichloroethane	1.0 E+0	6.4 E-4	0.0 E+0	1.2 E-1	1.2 E-1	6.8 E-5	0.0 E+0	5.0 E-2	5.0 E-2	1.4 E-7	0.0 E+0	3.5 E-6	3.6 E-6

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.6-9 *Inhalation Unit Hazard and Unit Cancer Risk Results - Resident*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.9 E-2
Carbon Tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
Chloroethane	1.0 E+0	2.2 E-1	9.6 E-2	NA
Ethylbenzene	1.0 E+0	2.2 E+0	9.6 E-1	1.3 E-3
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Methyl tert-butyl ether	1.0 E+0	7.5 E-1	3.2 E-1	1.4 E-4
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
Vinyl Chloride	1.0 E+0	2.2 E+1	9.6 E+0	4.0 E-2
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
1,3,5-Trimethylbenzene	1.0 E+0	3.8 E+2	1.6 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	2.2 E+1	9.6 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.5 E-1	1.9 E-1	NA
4-Ethyltoluene	1.0 E+0	2.2 E+1	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Cumene	1.0 E+0	5.6 E+0	2.4 E+0	NA
Cyclohexane	1.0 E+0	3.7 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
Freon 11	1.0 E+0	1.1 E+1	4.8 E+0	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
o-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Propylbenzene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Toluene	1.0 E+0	7.5 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard Child		1.2 E-1	NA	NA	2.8 E-2	4.7 E-1	3.2 E-2	6.7 E-5	NA	NA	NA	NA	5.8 E-4	NA	1.4 E-2	NA	4.7 E-2	NA
Unit Hazard Adult		5.0 E-2	NA	NA	3.1 E-3	5.3 E-2	3.4 E-3	8.3 E-6	NA	NA	NA	NA	6.9 E-5	NA	1.6 E-3	NA	5.3 E-3	NA
Unit Risk		3.6 E-6	5.8 E-7	5.8 E-7	5.8 E-7	3.0 E-5	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	2.6 E-6	1.6 E-9	2.6 E-7	2.3 E-6	1.6 E-5
25F-HA01	1						0.21	52	0.0089	0.01	0.022				0.74	0.012		
25F-HA01	5						0.32	250							0.87			
25F-HA02	1						0.25	210							0.74			
25F-HA02	3						0.25	220							0.73			
25F-HA02	5						0.31	180							0.7			
25F-HA03	1						0.26	200							0.69			
25F-HA03	3						0.23	210							0.71			
25F-HA03	5						0.28	210							0.65			
25F-HA04	1						0.26	160							0.58			
25F-HA04	3						0.28	170							0.57			
25F-HA04	5						0.28	190							0.68			
25F-SB04	1							140							0.57			
25F-SB04	5							74							0.49			
25F-SB05	1							110							0.33			
25F-SB05	5							120							0.38			
25F-SB06	1							90	0.012	0.014	0.036		0.015		0.33	0.016		
25F-SB06	5							97	0.016	0.02	0.04		0.017		0.32	0.018		
25F-SB07	1						0.14	100							0.44			
25F-SB07	5						0.18	130							0.74			
25F-SB08	1																	
25F-SB09	1																	
25F-SB10	1																	
25F-SB11	1																	
25F-SB12	1																	
25F-SB13	1																	
25F-SB14	1																	
25F-SD01	0.25						0.27	170							0.85			
25F-SD01	1.5					0.0012	0.25	170							0.84			
25F-SD01	5	0.0041					0.27	210							0.91			
25F-SD02	0.25						0.33	220										
25F-SD02	1.5						0.32	200										
25F-SD02	5						0.30	200										
25F-SPB01	1							139										
25F-SPB01	5							137										
25F-SPB01	10							109										
25F-SPB02	1							87.9										
25F-SPB02	5							92.9										
25F-SPB02	10							82										
25F-SPB03	1							70.7										
25F-SPB03	5																	
25F-SPB03	6							113										
25F-SPB03	10							109										
59F-SB11	1						0.19	74							0.31			
59F-SB11	5					0.00085	0.22	120							0.46			
59F-SB12	1						0.16	90	0.02	0.014	0.038		0.0077		0.39	0.02		
59F-SB12	5						0.15	76							0.31			
59F-SB13	1						0.3	120										
59F-SB13	5						0.44	220							0.84			
59F-SB14	1						1.3	110										
59F-SB14	5.5						1.0	110										
59F-SB15	1				0.0015		0.13	85							0.31			
59F-SB15	5						0.11	72	0.019	0.013	0.041		0.0089		0.32	0.022		
59F-SB16	1				0.0024	0.00025	1.0	690							0.32			

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard Child		1.2 E-1	NA	NA	2.8 E-2	4.7 E-1	3.2 E-2	6.7 E-5	NA	NA	NA	NA	5.8 E-4	NA	1.4 E-2	NA	4.7 E-2	NA
Unit Hazard Adult		5.0 E-2	NA	NA	3.1 E-3	5.3 E-2	3.4 E-3	8.3 E-6	NA	NA	NA	NA	6.9 E-5	NA	1.6 E-3	NA	5.3 E-3	NA
Unit Risk		3.6 E-6	5.8 E-7	5.8 E-7	5.8 E-7	3.0 E-5	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	2.6 E-6	1.6 E-9	2.6 E-7	2.3 E-6	1.6 E-5
59F-SB16	5					0.00059	0.14	120							0.30			
59F-SB17	1						0.18	85							0.36			
59F-SB17	5						0.33	84							0.45			
59F-SB18	1						0.18	110							0.51			
59F-SB18	5						0.37	98							0.45			
59F-SB19	1				0.046		0.42	91							0.50		0.035	
59F-SB19	5						0.25	94							0.40			
59F-SB20	1			0.002	0.0054		0.29	210										
59F-SB20	5.5							130										
59F-SB21	1			0.0041			0.20	620										
59F-SB21	5.5						0.89	100										
59F-SB22	1		2.3		1.2		0.42	1100	0.051	0.039	0.084		0.017		0.61	0.06	0.51	
59F-SB22	5.5						0.30	100							0.41			
59F-SB23	1					0.001	0.29	120										
59F-SB23	5						0.25	94										
59F-SB25	1		0.0035	0.00065											0.20			
59F-SB26	1			0.0069	0.013				0.17	0.15		0.23	0.084	0.11	0.22	0.20		
59F-SB27	1		0.0025	0.001											0.25			
59F-SB28	1					0.0027									0.21			
59F-SD01	0.25						0.29	440	0.005		0.015					0.0083		
59F-SD01	1.5						0.31	200										
59F-SD01	5						1.1	180										
59F-SD02	0.25						0.37	220										
59F-SD02	1.5						2.5	260										
59F-SD02	5						0.26	220										
59F-SD03	0.25																	
59F-SD03	1.5																	
59F-SD04	0.25																	
59F-SD04	1.5																	
59F-SD05	0.25																	
59F-SD05	1.5																	
59F-SD06	0.25																	
59F-SD06	1.5																	
59F-SD07	0.25		0.0030												0.19			
59F-SNS01	0.5				0.0081			350	0.016	0.019	0.048		0.0091		0.82	0.028	0.0020	
59F-SNS01	2.5				0.0053			320							0.59			
59F-SNS02	0.5				0.0029			490							0.96	0.0057		
59F-SNS02	2.5							250							0.8			
59F-SNS03	0.5				0.026			160	0.0068	0.0068	0.013				0.45	0.0079		
59F-SNS03	2.5							180							0.83			
59F-SNS04	0.5							180							0.46	0.0076		
59F-SPB01	1							147										
59F-SPB01	5																	
59F-SPB01	10																	
59F-SPB02	1							4620										
59F-SPB02	5							267										
59F-SPB02	10							74.5										
59F-SPB03	1							130										
59F-SPB03	5							131										
59F-SPB03	10							87.3										
59F-SPB04	1							99.5										
59F-SPB04A	5							82.2										
59F-SPB05	1							111										

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard Child		1.2 E-1	NA	NA	2.8 E-2	4.7 E-1	3.2 E-2	6.7 E-5	NA	NA	NA	NA	5.8 E-4	NA	1.4 E-2	NA	4.7 E-2	NA
Unit Hazard Adult		5.0 E-2	NA	NA	3.1 E-3	5.3 E-2	3.4 E-3	8.3 E-6	NA	NA	NA	NA	6.9 E-5	NA	1.6 E-3	NA	5.3 E-3	NA
Unit Risk		3.6 E-6	5.8 E-7	5.8 E-7	5.8 E-7	3.0 E-5	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	2.6 E-6	1.6 E-9	2.6 E-7	2.3 E-6	1.6 E-5
59F-SPB05	5							101										
59F-SPB05	10							112										
59F-SPB06	1							80.9										
59F-SPB06	2																	
59F-SPB06	5							115										
59F-SPB06	10							114										
59F-SPB07	1							121										
59F-SPB07	2																	
59F-SPB07	5							108										
59F-SPB07	10							93										
59F-SPB08	1							112										
59F-SPB08	5							124										
59F-SPB08	10																	
60F-SB01	1							121										
60F-SB01	5							102										
60F-SB01	10							123										
60F-SB02	1			0.044	0.088		0.14	63										
60F-SB02	5				0.12		0.72	83										
60F-SB03	1						0.10	67										
60F-SB03	5						0.12	93										
60F-SB04	1						0.08	89										
60F-SB04	5						0.26	120										
60F-SB05	1						0.21	97										
60F-SB05	5						0.16	68										
60F-SNS01	0.5				0.023			110	0.013	0.014	0.058				0.44	0.021		
61F-SB02	1																	
61F-SB02	3							129										
61F-SB02	5							101										
61F-SB02	10							118										
61F-SB03	1						0.17	120							0.38			
61F-SB03	5						0.15	110	0.014						0.42	0.011		
61F-SB04	1			0.039	0.034													
61F-SB05	1			0.0041	0.0048													
61F-SNS01	0.5						1.1	190	0.023	0.033	0.13				1.6	0.045		
61F-SNS02	0.5							240							1.0			
61F-SPB01	1							132										
61F-SPB01	5							114										
61F-SPB01	10							102										
62F-SB04	1						0.13	100										
62F-SB04	5						0.12	62										
62F-SB05	1			0.0011			0.25	10										
62F-SB05	5						0.19	97										
62F-SB06	2			0.014	0.0028		0.12	64	0.0056	0.0075	0.012				0.082	0.0074	0.0074	
62F-SB06	5.5							78							0.42			
62F-SB07	5						0.31	77	0.012	0.0081	0.017				0.38	0.015		
62F-SB08	1						0.22	270										
62F-SB08	5						0.22	79										
62F-SB09	1						0.17	110										
62F-SB09	5						0.21	91										
62F-SB10	1						0.28	100										
62F-SB10	5						0.25	110										
62F-SD01	0.25																	
62F-SD01	1.5																	

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard Child		1.2 E-1	NA	NA	2.8 E-2	4.7 E-1	3.2 E-2	6.7 E-5	NA	NA	NA	NA	5.8 E-4	NA	1.4 E-2	NA	4.7 E-2	NA
Unit Hazard Adult		5.0 E-2	NA	NA	3.1 E-3	5.3 E-2	3.4 E-3	8.3 E-6	NA	NA	NA	NA	6.9 E-5	NA	1.6 E-3	NA	5.3 E-3	NA
Unit Risk		3.6 E-6	5.8 E-7	5.8 E-7	5.8 E-7	3.0 E-5	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	2.6 E-6	1.6 E-9	2.6 E-7	2.3 E-6	1.6 E-5
62F-SD01	5																	
62F-SNS01	0.5							140	0.0049	0.007	0.029				0.68	0.027		
62F-SNS01	2.5							190							0.63			
62F-SNS02	0.5				0.0087		0.31	150			0.039				0.66	0.020		
C201-SPB01	1							157										
C201-SPB01	5							138										
C201-SPB01	10							122										
C207-SB01	1																	
C207-SB01	5																	
C207-SB01	10																	
C208-SB02	1																	
C208-SB02	3																	
C208-SB02	5																	
C208-SB02	10																	
C208-SB03	1						5.7	98										
C208-SB03	5							92										
C208-SB03	10							109										
C208-SB04	1																	
C208-SB04	3																	
C208-SB04	5																	
C208-SB04	10																	
C208-SB05	1																	
C208-SB05	3																	
C208-SB05	5																	
C208-SB05	10																	
C208-SPB01	1							87										
C208-SPB01	3																	
C208-SPB01	6							122										
C208-SPB01	10							88										
C208-SPB06	1																	
C208-SPB06	3																	
C208-SPB06	5																	
C208-SPB06	10																	
CP2-07-SB02	1						0.16	110							0.37			
CP2-07-SB02	5						0.21	120							0.47			
CP2-07-SB03	1						0.21	110										
CP2-07-SB03	5						0.17	100							0.54			
CP2-07-SB04	1			0.0025	0.005		0.19	110							0.39			
CP2-07-SB04	5																	
CP2-07-SB05	1							120							0.42			
CP2-07-SB05	5							75							0.31			
CP2-07-SB06	1						0.30	77							0.32			
CP2-07-SB08	1						0.20	130							0.57			
CP2-07-SB08	5						0.24	86							0.39			
CP2-07-SB09	1						0.10	47							0.24	0.013		
CP2-07-SB09	5						0.18	81							0.48			
CP2-07-SB10	1							99							0.38			
CP2-07-SB10	5							92							0.26			
CP2-07-SB11	1							110							0.35			
CP2-07-SB11	5							130							0.33			
CP2-07-SB12	1						0.078	79							0.28			
CP2-07-SB12	5						0.12	98							0.36			
CP2-07-SB13	1							87							0.31			

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard Child		1.2 E-1	NA	NA	2.8 E-2	4.7 E-1	3.2 E-2	6.7 E-5	NA	NA	NA	NA	5.8 E-4	NA	1.4 E-2	NA	4.7 E-2	NA
Unit Hazard Adult		5.0 E-2	NA	NA	3.1 E-3	5.3 E-2	3.4 E-3	8.3 E-6	NA	NA	NA	NA	6.9 E-5	NA	1.6 E-3	NA	5.3 E-3	NA
Unit Risk		3.6 E-6	5.8 E-7	5.8 E-7	5.8 E-7	3.0 E-5	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	2.6 E-6	1.6 E-9	2.6 E-7	2.3 E-6	1.6 E-5
CP2-07-SB13	5							120							0.33			
CP2-07-SB14	1						0.24	80										
CP2-07-SB14	5						0.21	77										
CP2-07-SB15	1						0.17	68							0.29			
CP2-07-SB15	5						0.11	140							0.46			
CP2-07-SB16	1						0.24	110										
CP2-07-SB16	5						0.16	62										
CP2-07-SB17	1						0.22	140										
CP2-07-SB17	5						0.70	130										
CP2-07-SB18	1						0.14	130										
CP2-07-SB18	5						0.13	93										
CP2-07-SB19	1						0.18	100							0.24			
CP2-07-SB19	5						0.17	76										
CP2-07-SB20	1																	
CP2-07-SB20	5																	
CP2-07-SB21	1																	
CP2-07-SB21	5																	
CP2-07-SB22	1																	
CP2-07-SB22	5																	
CP2-07-SB23	1																	
CP2-07-SB23	5																	
CP2-07-SB24	1																	
CP2-07-SB24	5																	
CP2-08-SB09	1						0.24	76										
CP2-08-SB09	5						0.20	130										
CP2-08-SB10	2						0.17	100							0.090			
CP2-08-SB10	6						0.14	110							0.20			
CP2-08-SB11	1						0.34	92							0.46			
CP2-08-SB11	5						0.37	88							0.48			
CP2-08-SB12	1				0.044			63		0.011	0.029		0.0087		0.30	0.020	0.014	
CP2-08-SB12	5						0.72	150										
CP2-08-SB13	1						0.87	120										
CP2-08-SB13	5						0.7	88										
CP2-08-SB14	1						1.4	290										
CP2-08-SB14	5						0.22	120										
CP2-08-SB15	1						0.20	160										
CP2-08-SB15	5							110							0.39			
CP2-08-SNS01	0.5						0.30	220							0.48			
CP2-08-SNS01	2.5						0.39	140							0.40			
CP2-08-SNS02	0.5			0.0042			0.24	97	0.0076	0.0072	0.023				0.40	0.010		
CP2-08-SNS02	2.5						0.19	100							0.42			
CP2-08-SNS03	0.5			0.0051			0.24	83	0.0050						0.29	0.0064		
CP2-08-SNS03	2.5						0.25	120							0.43			
CP2-08-SNS04	0.5					0.0074		120	0.12	0.094	0.22		0.027		1.0	0.16		0.0084
CP2-08-SNS04	2.5							120							0.43			
CP2-RE01-SB01	1				0.0015		0.26	76										
CP2-RE01-SB01	5						0.19	120										
CP2-RE05-SB01	1						0.43	120			0.016				0.38	0.010		
CP2-RE05-SB01	5						1.7	78										
CP2-RE05-SB02	1						1.7	110							0.32			
CP2-RE05-SB02	5						1.6	120										
CP2-RE05-SB03	1						2.1	110							0.32			
CP2-RE05-SB03	5						0.23	77										

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard Child		1.2 E-1	NA	NA	2.8 E-2	4.7 E-1	3.2 E-2	6.7 E-5	NA	NA	NA	NA	5.8 E-4	NA	1.4 E-2	NA	4.7 E-2	NA
Unit Hazard Adult		5.0 E-2	NA	NA	3.1 E-3	5.3 E-2	3.4 E-3	8.3 E-6	NA	NA	NA	NA	6.9 E-5	NA	1.6 E-3	NA	5.3 E-3	NA
Unit Risk		3.6 E-6	5.8 E-7	5.8 E-7	5.8 E-7	3.0 E-5	NA	NA	1.6 E-6	2.6 E-5	2.6 E-6	2.6 E-6	NA	2.6 E-6	1.6 E-9	2.6 E-7	2.3 E-6	1.6 E-5
CP2-RE05-SB04	1				0.0024		0.27	130										
CP2-RE05-SB04	5			0.0012			0.24	76							0.43			
CP2-RE05-SB05	1						0.22	130										
CP2-RE05-SB05	5						0.20	90							0.51			
CP2-ST07-SB01	1				0.0044			100			0.020				0.38	0.0088		
CP2-ST07-SB01	5							110							0.41			
F(C)-SB01	1							98.7										
F(C)-SB01	5							115										
F(C)-SB01	10							102										
F(c)-SB02	1							71			0.015							
F(c)-SB02	5							100										
F(c)-SB03	1							150										
F(c)-SB03	5						0.70	67										
F(c)-SB04	1						1.5	97							0.37			
F(c)-SB04	5						1.4	65							0.23			
F(c)-SNS01	0.5						0.54	100		0.008	0.014		0.024		0.75	0.0062		
F(c)-SNS02	0.5						0.19	110	0.014	0.014	0.033		0.016		0.46	0.021		
F(c)-SNS03	0.5						0.17	100	0.011	0.012	0.030		0.0099		0.42	0.020		
OS1-F2-SB02	1			0.0021		0.0014												
OS1-F2-SB03	1		0.0036	0.00083														
OS1-F2-SB04	1					0.0009												
OS1-F2-SNS01	0.5				0.004	0.00083	0.21	250							0.079			
OS1-F2-SNS01	2.5			0.048	0.018	0.00084		550							0.32		0.0012	
OS1-F2-SNS02	0.5		0.0071	0.028	0.020	0.0013	0.33	710							0.22			
OS1-F2-SNS02	2.5				0.0072	0.00087	0.21	98							0.071		0.00091	
OS1-F2-SNS03	0.5			0.0067	0.028		0.79	320	0.0079	0.012	0.022		0.0094		0.48	0.013	0.0028	
OS1-F2-SNS03	2.5						0.40	130							0.065		0.0011	
OS1-F2-SNS04	0.5		0.0024				0.32	99							0.062		0.00068	
OS1-F2-SNS04	2.5		0.029	0.0056	0.025		0.36	220							0.24		0.0026	
OS1-F3-SD01	0.25			0.0021											0.19			

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard Child		2.8 E-1	1.6 E-4	2.7 E-3	4.7 E-2	4.4 E-4	1.1 E+0	2.7 E-5	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	8.9 E-1	8.9 E-1	4.1 E-4	5.5 E-4	5.8 E-4	5.5 E-5	5.8 E-4
Unit Hazard Adult		3.2 E-2	1.9 E-5	3.2 E-4	5.3 E-3	5.2 E-5	1.2 E-1	3.2 E-6	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	1.1 E-1	1.1 E-1	4.8 E-5	6.4 E-5	6.9 E-5	6.4 E-6	6.9 E-5
Unit Risk		2.8 E-5	NA	NA	NA	NA	1.6 E-5	2.5 E-9	2.6 E-6	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	2.5 E-7	NA	NA	NA
25F-HA01	1					0.035					15	1.5	130			27		0.011	1.2	0.029
25F-HA01	5										16	2.1	0.41			0.029			2.8	
25F-HA02	1										11	0.05	0.41						1.8	
25F-HA02	3										11	0.039	0.14						0.91	
25F-HA02	5										10	0.037							0.47	
25F-HA03	1										11	0.051							0.88	
25F-HA03	3										11	0.043	0.19			0.0049			0.62	
25F-HA03	5										9.9	0.056							1.1	
25F-HA04	1										8.4	0.062							4.6	
25F-HA04	3										8.5	0.052							2.2	
25F-HA04	5										10	0.094							1.7	
25F-SB04	1										5.5	0.0071	0.57			0.024				
25F-SB04	5										3.3	0.013	0.21			0.05				
25F-SB05	1					0.0080					5.4	0.076	0.89			0.4		0.011		0.010
25F-SB05	5										6.2	0.097	0.40			0.27				
25F-SB06	1					0.024			0.012		5.0	0.79	0.95			11		0.0091		0.019
25F-SB06	5					0.029			0.013		4.9	0.68	0.71			6.6		0.0089		0.025
25F-SB07	1										11	34	0.20			0.11				
25F-SB07	5										6.2	0.62	0.30			0.066				
25F-SB08	1																			
25F-SB09	1																			
25F-SB10	1																			
25F-SB11	1																			
25F-SB12	1												0.59			0.37				
25F-SB13	1												0.11			0.038				
25F-SB14	1											0.069	0.33			770				
25F-SD01	0.25										21	2.6	0.54			11				
25F-SD01	1.5										11	5.7	0.49			18			0.50	
25F-SD01	5										12	3.1	0.29			0.25				
25F-SD02	0.25										13	0.064	1.1						2.9	
25F-SD02	1.5										13	0.049	1.1			0.013			0.74	
25F-SD02	5										12	0.076	0.42						2.0	
25F-SPB01	1									30900	22	0.801				520				
25F-SPB01	5									26000	3.4	0.165				0.41				
25F-SPB01	10		1.0							38200	2.5					0.53				
25F-SPB02	1									24800	10	1.3				2300				
25F-SPB02	5									22400	2.6	42				3.0				
25F-SPB02	10									22500	2.2	2.1				24				
25F-SPB03	1									17200	1.5	0.218				17000				
25F-SPB03	5															320				
25F-SPB03	6		7.5							26700	3.8	0.331								
25F-SPB03	10		3.4							21000	16	1.8				0.44				
59F-SB11	1										3.3	0.0072	0.55						0.48	
59F-SB11	5				0.0017	0.0039					5.6	0.018	0.54			0.62		0.0025	2.7	
59F-SB12	1					0.046			0.0077		4.7	0.014	4			0.092		0.045	0.76	0.036
59F-SB12	5										3.4	0.025	0.42			0.0074			0.42	
59F-SB13	1										8.9	0.028	0.78						3.7	
59F-SB13	5										10	0.14	0.73							
59F-SB14	1										11	0.068	0.63						2.4	
59F-SB14	5.5										12	0.014	0.47							
59F-SB15	1				0.00052	0.0021					4.8	0.015	0.23			0.19				
59F-SB15	5					0.052			0.0074		4.0	0.013	0.36			0.043		0.06		0.047
59F-SB16	1					0.0055	0.00099				4.3	0.0085	0.44			0.19		0.0038	0.62	

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard Child		2.8 E-1	1.6 E-4	2.7 E-3	4.7 E-2	4.4 E-4	1.1 E+0	2.7 E-5	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	8.9 E-1	8.9 E-1	4.1 E-4	5.5 E-4	5.8 E-4	5.5 E-5	5.8 E-4
Unit Hazard Adult		3.2 E-2	1.9 E-5	3.2 E-4	5.3 E-3	5.2 E-5	1.2 E-1	3.2 E-6	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	1.1 E-1	1.1 E-1	4.8 E-5	6.4 E-5	6.9 E-5	6.4 E-6	6.9 E-5
Unit Risk		2.8 E-5	NA	NA	NA	NA	1.6 E-5	2.5 E-9	2.6 E-6	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	2.5 E-7	NA	NA	NA
59F-SB16	5										4.8	0.025	0.66			0.086				
59F-SB17	1										5.1		1.0			0.030			0.58	
59F-SB17	5										8.3	0.018	0.63			0.086			0.98	
59F-SB18	1										6.2	0.02	0.33						0.32	
59F-SB18	5										5.6	0.015	0.31			0.0081			0.27	
59F-SB19	1										14	0.041	1.3			11			2.6	
59F-SB19	5										6.9	0.021	0.56						1.6	
59F-SB20	1			0.0011	0.0011	0.0038					17	0.088	0.51			0.022		0.0069	0.95	0.0092
59F-SB20	5.5										10	0.028	0.62						0.18	
59F-SB21	1			0.0012	0.00072						7.8	0.0084	0.43			0.27			1.1	
59F-SB21	5.5										11	0.02	0.58			0.094			0.61	
59F-SB22	1				0.22	0.089			0.016		14	0.076	0.6			19		0.024	4.1	0.075
59F-SB22	5.5										8.2	0.019	0.35							
59F-SB23	1										8.0	0.033	0.73			12			1.2	
59F-SB23	5										9.9	0.024	0.60						2.5	
59F-SB25	1	0.0014									11	0.082			0.016	0.015				
59F-SB26	1			0.0025	0.0063	0.46			0.1		7.6	0.042			1.1	0.15		0.43		0.35
59F-SB27	1	0.0015		0.0012							12	0.07			0.35	0.0051				
59F-SB28	1	0.0054									23	0.077			2.8	0.21				0.042
59F-SD01	0.25					0.062					140	0.079	0.73	16		49		0.0050	14	0.0083
59F-SD01	1.5										11	0.085	0.54			0.024			3.3	
59F-SD01	5										11	0.042	0.71			0.0039			4.1	
59F-SD02	0.25										13	0.16	0.73	0.54					0.75	
59F-SD02	1.5										18	0.13	1.1		0.32				0.95	
59F-SD02	5										10	0.019	0.43		0.44				0.49	
59F-SD03	0.25										10									
59F-SD03	1.5										9.1									
59F-SD04	0.25										9.9									
59F-SD04	1.5										10									
59F-SD05	0.25										9.5									
59F-SD05	1.5										12									
59F-SD06	0.25										18									
59F-SD06	1.5										11									
59F-SD07	0.25				0.00084		0.00073				13	0.086				0.017				
59F-SNS01	0.5				0.0023	0.047					16	0.10	0.99			0.31		0.015		0.033
59F-SNS01	2.5										9.3	0.085				0.050				
59F-SNS02	0.5					0.010					14	0.096	0.11			0.0035		0.0050		0.0088
59F-SNS02	2.5					0.0038					10	0.13								
59F-SNS03	0.5					0.014					11	0.043	0.13					0.0060		0.014
59F-SNS03	2.5										13	0.16	0.15							
59F-SNS04	0.5					0.014					23	0.076	0.86					0.0064		0.01
59F-SPB01	1							2		26800	7.2	0.14								
59F-SPB01	5							1												
59F-SPB01	10							2												
59F-SPB02	1							1		17700	295	0.15				1.6				
59F-SPB02	5							1		28100	165	0.11				0.20				
59F-SPB02	10							1		25600	13									
59F-SPB03	1									25400	5.5					0.60				
59F-SPB03	5									27500	5.5					0.60				
59F-SPB03	10									19700	2.9									
59F-SPB04	1									21600	4.9					0.20				
59F-SPB04A	5									20700	4.0					0.60				
59F-SPB05	1									25600	5.0					0.20				

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard Child		2.8 E-1	1.6 E-4	2.7 E-3	4.7 E-2	4.4 E-4	1.1 E+0	2.7 E-5	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	8.9 E-1	8.9 E-1	4.1 E-4	5.5 E-4	5.8 E-4	5.5 E-5	5.8 E-4
Unit Hazard Adult		3.2 E-2	1.9 E-5	3.2 E-4	5.3 E-3	5.2 E-5	1.2 E-1	3.2 E-6	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	1.1 E-1	1.1 E-1	4.8 E-5	6.4 E-5	6.9 E-5	6.4 E-6	6.9 E-5
Unit Risk		2.8 E-5	NA	NA	NA	NA	1.6 E-5	2.5 E-9	2.6 E-6	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	2.5 E-7	NA	NA	NA
59F-SPB05	5									24700	3.9					0.30				
59F-SPB05	10									26400	7.1					0.10				
59F-SPB06	1									15400	3.3					1.8				
59F-SPB06	2																			
59F-SPB06	5									21500	4.1					1.0				
59F-SPB06	10									30600	7.9									
59F-SPB07	1									23700	4.1					0.2				
59F-SPB07	2																			
59F-SPB07	5									23400	5.2									
59F-SPB07	10									27200	11.8									
59F-SPB08	1									25100	6.9									
59F-SPB08	5									31600	5.8									
59F-SPB08	10																			
60F-SB01	1									22700	13	3.5								
60F-SB01	5									22500	5.1	0.13								
60F-SB01	10									24300	11									
60F-SB02	1					0.0021					6.7	0.13	0.79			0.07				
60F-SB02	5										5.3	0.023	0.88			0.25				
60F-SB03	1										3.3	0.047	0.64			0.0051			2.5	
60F-SB03	5										3.2	0.023	1.3						0.34	
60F-SB04	1						0.00049				3.7	0.016	0.47						3.6	
60F-SB04	5						0.00085				4.9	0.010	0.51						0.14	
60F-SB05	1										3.9	0.012	0.43						2.2	
60F-SB05	5										3.5	0.014	0.51						0.093	
60F-SNS01	0.5			0.0027		0.047					9.5	0.26	0.91					0.018		0.041
61F-SB02	1															1.4				
61F-SB02	3									20400	3.4									
61F-SB02	5		1.3							19600	3.5									
61F-SB02	10		1.2							18200	3.0	0.142								
61F-SB03	1										3.9		0.9							
61F-SB03	5					0.0029					4.2		6.5			0.011		0.012		0.013
61F-SB04	1						0.041					0.45								
61F-SB05	1						0.0026					0.073								
61F-SNS01	0.5					0.081					50	1.6	0.48				2.8	0.033		0.10
61F-SNS02	0.5					0.0038					16	0.21				0.0053				
61F-SPB01	1		14							24400	8.8									
61F-SPB01	5									28400	3.1									
61F-SPB01	10									20100	4.7									
62F-SB04	1										3.8	0.0094	0.78							
62F-SB04	5										2.9	0.012	1.1							
62F-SB05	1										0.51	0.098	0.11						0.32	
62F-SB05	5										3.0	0.0086	1.5							
62F-SB06	2	0.00092		0.00099	0.0018	0.0058	0.033				2.9	0.014	0.54							0.006
62F-SB06	5.5										5.5	0.047								
62F-SB07	5					0.021					5.2	0.037	0.83					0.013		0.026
62F-SB08	1										9.6	0.0073	0.39							
62F-SB08	5										5.3	0.018	1.4							
62F-SB09	1										3.8	0.0072	0.39							
62F-SB09	5										4.1	0.02	0.49							
62F-SB10	1										6.5	0.038	0.48							
62F-SB10	5										4.9	0.025	0.49							
62F-SD01	0.25																		1.2	
62F-SD01	1.5																		1.6	

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard Child		2.8 E-1	1.6 E-4	2.7 E-3	4.7 E-2	4.4 E-4	1.1 E+0	2.7 E-5	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	8.9 E-1	8.9 E-1	4.1 E-4	5.5 E-4	5.8 E-4	5.5 E-5	5.8 E-4
Unit Hazard Adult		3.2 E-2	1.9 E-5	3.2 E-4	5.3 E-3	5.2 E-5	1.2 E-1	3.2 E-6	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	1.1 E-1	1.1 E-1	4.8 E-5	6.4 E-5	6.9 E-5	6.4 E-6	6.9 E-5
Unit Risk		2.8 E-5	NA	NA	NA	NA	1.6 E-5	2.5 E-9	2.6 E-6	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	2.5 E-7	NA	NA	NA
62F-SD01	5																		2.2	
62F-SNS01	0.5					0.076					14	0.031				0.0048		0.021		0.041
62F-SNS01	2.5										8.9	0.090				0.013				
62F-SNS02	0.5					0.034					13	0.17				0.12		0.0080		0.028
C201-SPB01	1									25500	4.3									
C201-SPB01	5									25000	3.0									
C201-SPB01	10									21400	3.2									
C207-SB01	1																			
C207-SB01	5																			
C207-SB01	10																			
C208-SB02	1														1.2					
C208-SB02	3														0.42					
C208-SB02	5																			
C208-SB02	10																			
C208-SB03	1		1.5							21500	3.7									
C208-SB03	5									23200	3.7									
C208-SB03	10		2.3							20000	2.0									
C208-SB04	1																			
C208-SB04	3																			
C208-SB04	5																			
C208-SB04	10																			
C208-SB05	1													1.3						
C208-SB05	3													0.65						
C208-SB05	5													0.26						
C208-SB05	10													0.091						
C208-SPB01	1									17400	6.0				1.5					
C208-SPB01	3																			
C208-SPB01	6		1.1							24300	3.9				0.16					
C208-SPB01	10									16700	3.9									
C208-SPB06	1		0.83											0.38						
C208-SPB06	3													0.47						
C208-SPB06	5		0.68																	
C208-SPB06	10																			
CP2-07-SB02	1										3.9		0.58							
CP2-07-SB02	5										5.5	0.022	0.28							
CP2-07-SB03	1										7.0	0.038	0.84			0.0018			2.6	
CP2-07-SB03	5										5.4	0.13	0.26							
CP2-07-SB04	1										4.8	0.023	0.37						1.2	
CP2-07-SB04	5																			
CP2-07-SB05	1										5.1		1.1							
CP2-07-SB05	5										4.3	0.0081	0.23							
CP2-07-SB06	1										9.4	0.028	0.50						0.43	
CP2-07-SB08	1										8.9	0.12	0.45						0.28	
CP2-07-SB08	5										7.4		0.19							
CP2-07-SB09	1					0.0021					2.9		1.2					0.011	0.99	0.0063
CP2-07-SB09	5										5.1	0.007	0.32							
CP2-07-SB10	1										3.3	0.0099	0.74			0.0063			0.97	
CP2-07-SB10	5										2.1	0.0039	0.31						0.38	
CP2-07-SB11	1										2.5	0.0037	0.56						0.56	
CP2-07-SB11	5										3.8	0.0078	0.37			0.0088			1.6	
CP2-07-SB12	1										2.4	0.013	0.32						5.0	
CP2-07-SB12	5										4.9		0.44						1.7	
CP2-07-SB13	1										5.3		0.64						0.29	

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard Child		2.8 E-1	1.6 E-4	2.7 E-3	4.7 E-2	4.4 E-4	1.1 E+0	2.7 E-5	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	8.9 E-1	8.9 E-1	4.1 E-4	5.5 E-4	5.8 E-4	5.5 E-5	5.8 E-4
Unit Hazard Adult		3.2 E-2	1.9 E-5	3.2 E-4	5.3 E-3	5.2 E-5	1.2 E-1	3.2 E-6	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	1.1 E-1	1.1 E-1	4.8 E-5	6.4 E-5	6.9 E-5	6.4 E-6	6.9 E-5
Unit Risk		2.8 E-5	NA	NA	NA	NA	1.6 E-5	2.5 E-9	2.6 E-6	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	2.5 E-7	NA	NA	NA
CP2-07-SB13	5										3.6		6.0			0.0078			0.13	
CP2-07-SB14	1										4.5	0.032	1.3							
CP2-07-SB14	5					0.0033					7.0	0.017	1.4							
CP2-07-SB15	1										9.1	0.019	0.61							
CP2-07-SB15	5										6.8		2.0							
CP2-07-SB16	1										7.0	0.021	0.68							
CP2-07-SB16	5										3	0.013	1.0							
CP2-07-SB17	1										5.7	0.013	0.41							
CP2-07-SB17	5										4.7	0.013	0.61							
CP2-07-SB18	1										30	0.02	0.87							
CP2-07-SB18	5										8.4		1.4							
CP2-07-SB19	1										8.0	0.029	0.19							
CP2-07-SB19	5										4.7	0.0076	0.41							
CP2-07-SB20	1															0.0037				
CP2-07-SB20	5																			
CP2-07-SB21	1															0.0094				
CP2-07-SB21	5																			
CP2-07-SB22	1																			
CP2-07-SB22	5															0.0021				
CP2-07-SB23	1															0.066				
CP2-07-SB23	5																			
CP2-07-SB24	1															0.0040				
CP2-07-SB24	5																			
CP2-08-SB09	1										5.6	0.013	0.50					0.0083	2.3	
CP2-08-SB09	5										3.8	0.008	0.30						0.46	
CP2-08-SB10	2										6.1	0.028	0.20	0.23						
CP2-08-SB10	6										3.7	0.041	0.24							
CP2-08-SB11	1										5.5	0.0051	0.49							
CP2-08-SB11	5										6.3		0.55							
CP2-08-SB12	1										2.5		0.23		1.9	0.043		0.017	2.2	0.011
CP2-08-SB12	5										3.6	0.0034	0.75							
CP2-08-SB13	1										6.0	0.024	0.95		0.068				3.3	
CP2-08-SB13	5										3.8	0.034	0.49						0.71	
CP2-08-SB14	1										8.2	0.019	0.55							
CP2-08-SB14	5										4.3	0.016	0.69							
CP2-08-SB15	1										6.1	0.019	0.73			0.56				
CP2-08-SB15	5										4.5									
CP2-08-SNS01	0.5					0.0035					8.1	0.047	0.27		0.068	0.019				
CP2-08-SNS01	2.5										6.5	0.038	0.46			0.0019				
CP2-08-SNS02	0.5					0.012					5.8	0.024	0.23		0.12					0.016
CP2-08-SNS02	2.5										6.3	0.032	0.21							
CP2-08-SNS03	0.5					0.0096					4.3	0.015	0.14		0.075			0.0050		0.0082
CP2-08-SNS03	2.5										7.0	0.081	0.37		0.045					
CP2-08-SNS04	0.5					0.21			0.025		16	0.036			0.48	3.6		0.045		0.35
CP2-08-SNS04	2.5										7.4	0.066				0.015				
CP2-RE01-SB01	1										3.1	0.021	0.41			0.011				
CP2-RE01-SB01	5										4.6	0.027	0.70						0.84	
CP2-RE05-SB01	1					0.030					3.7	0.023	0.21			0.0084		0.037	0.29	0.026
CP2-RE05-SB01	5										3.0		2.5							
CP2-RE05-SB02	1					0.0025					3.3	0.013	0.53						0.93	
CP2-RE05-SB02	5										4.0		0.85							
CP2-RE05-SB03	1			0.0023			0.0082				4.3	0.010	0.73			0.042			1.5	
CP2-RE05-SB03	5										3.3	0.0092	1.3							

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard Child		2.8 E-1	1.6 E-4	2.7 E-3	4.7 E-2	4.4 E-4	1.1 E+0	2.7 E-5	NA	1.8 E-5	NA	4.3 E-2	2.6 E-3	8.9 E-1	8.9 E-1	4.1 E-4	5.5 E-4	5.8 E-4	5.5 E-5	5.8 E-4
Unit Hazard Adult		3.2 E-2	1.9 E-5	3.2 E-4	5.3 E-3	5.2 E-5	1.2 E-1	3.2 E-6	NA	2.0 E-6	NA	4.6 E-3	2.7 E-4	1.1 E-1	1.1 E-1	4.8 E-5	6.4 E-5	6.9 E-5	6.4 E-6	6.9 E-5
Unit Risk		2.8 E-5	NA	NA	NA	NA	1.6 E-5	2.5 E-9	2.6 E-6	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	2.5 E-7	NA	NA	NA
CP2-RE05-SB04	1										4.9	0.0088	0.75							
CP2-RE05-SB04	5										3.1	0.0043	0.67			0.0078				
CP2-RE05-SB05	1										4.9	0.023	1.1							
CP2-RE05-SB05	5										2.5	0.022	2.4							
CP2-ST07-SB01	1					0.015					8.9		0.79			0.036		0.0056		0.012
CP2-ST07-SB01	5										7.3	0.016	0.45							
F(C)-SB01	1									20000	4.36	1.5								
F(C)-SB01	5									22000	5.79									
F(C)-SB01	10									20500	3.49	0.352								
F(c)-SB02	1					0.0039					3.1		1.3		0.077			0.015	0.75	0.016
F(c)-SB02	5										3.9	0.0068	0.69							
F(c)-SB03	1										6.8	0.090	0.31							
F(c)-SB03	5										2.5	0.012	0.53							
F(c)-SB04	1					0.0018					4.6	0.0097	1.1	120				0.0036	0.75	
F(c)-SB04	5										2.3	0.013	1.6	0.013					0.87	
F(c)-SNS01	0.5					0.011			0.011		15	0.15	0.61					0.0036		0.013
F(c)-SNS02	0.5					0.028			0.011		8.9	0.021	0.27		0.2			0.0057		0.028
F(c)-SNS03	0.5					0.031			0.0099		5.2	0.066	0.12		0.23			0.011		0.027
OS1-F2-SB02	1															0.025				
OS1-F2-SB03	1														0.061	0.0020				
OS1-F2-SB04	1			0.0008											0.093	0.0071				
OS1-F2-SNS01	0.5				0.0022						7.7	0.15	0.47							
OS1-F2-SNS01	2.5				0.0018	0.0025					16	0.097				0.46				
OS1-F2-SNS02	0.5	0.0083		0.0031	0.0038		0.028				19	0.086	0.54			0.048				
OS1-F2-SNS02	2.5				0.0019		0.0018				7.9		0.50							
OS1-F2-SNS03	0.5	0.0051		0.0038		0.020					26	0.18	0.72			0.26		0.0064	0.32	0.019
OS1-F2-SNS03	2.5										8.7	0.020	0.58							
OS1-F2-SNS04	0.5					0.006					7.0	0.015	0.60					0.0034	0.12	
OS1-F2-SNS04	2.5	0.0029		0.0029							10	0.091	0.60			0.060			0.18	
OS1-F3-SD01	0.25	0.00091		0.0011	0.0015						11.9	0.094			0.16	0.034				

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)a nthracene**	**Dieldrin**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
25F-HA01	1	NA	NA	NA	NA	NA	6.7 E-3	3.5 E-3	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA
25F-HA01	5	NA	NA	NA	NA	NA	1.0 E-2	1.7 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA
25F-HA02	1	NA	NA	NA	NA	NA	8.0 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA
25F-HA02	3	NA	NA	NA	NA	NA	8.0 E-3	1.5 E-2	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA
25F-HA02	5	NA	NA	NA	NA	NA	9.9 E-3	1.2 E-2	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA
25F-HA03	1	NA	NA	NA	NA	NA	8.3 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	9.8 E-3	NA	NA	NA	NA
25F-HA03	3	NA	NA	NA	NA	NA	7.4 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA
25F-HA03	5	NA	NA	NA	NA	NA	9.0 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	9.2 E-3	NA	NA	NA	NA
25F-HA04	1	NA	NA	NA	NA	NA	8.3 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	8.2 E-3	NA	NA	NA	NA
25F-HA04	3	NA	NA	NA	NA	NA	9.0 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA
25F-HA04	5	NA	NA	NA	NA	NA	9.0 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	9.7 E-3	NA	NA	NA	NA
25F-SB04	1	NA	NA	NA	NA	NA	NA	9.4 E-3	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA
25F-SB04	5	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	NA	NA	NA	NA
25F-SB05	1	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	NA
25F-SB05	5	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA
25F-SB06	1	NA	NA	NA	NA	NA	NA	6.1 E-3	NA	NA	NA	NA	8.7 E-6	NA	4.7 E-3	NA	NA	NA	NA
25F-SB06	5	NA	NA	NA	NA	NA	NA	6.5 E-3	NA	NA	NA	NA	9.9 E-6	NA	4.5 E-3	NA	NA	NA	NA
25F-SB07	1	NA	NA	NA	NA	NA	4.5 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	NA	NA
25F-SB07	5	NA	NA	NA	NA	NA	5.8 E-3	8.7 E-3	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	8.6 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA
25F-SD01	1.5	NA	NA	NA	NA	5.7 E-4	8.0 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA
25F-SD01	5	4.8 E-4	NA	NA	NA	NA	8.6 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA
25F-SD02	0.25	NA	NA	NA	NA	NA	1.1 E-2	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	1.5	NA	NA	NA	NA	NA	1.0 E-2	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	5	NA	NA	NA	NA	NA	9.6 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	1	NA	NA	NA	NA	NA	NA	9.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	5	NA	NA	NA	NA	NA	NA	9.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	10	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	1	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	5	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	10	NA	NA	NA	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	1	NA	NA	NA	NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	7.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	10	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB11	1	NA	NA	NA	NA	NA	6.1 E-3	5.0 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	NA
59F-SB11	5	NA	NA	NA	NA	4.0 E-4	7.0 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	6.5 E-3	NA	NA	NA	NA
59F-SB12	1	NA	NA	NA	NA	NA	5.1 E-3	6.1 E-3	NA	NA	NA	NA	4.5 E-6	NA	5.5 E-3	NA	NA	NA	NA
59F-SB12	5	NA	NA	NA	NA	NA	4.8 E-3	5.1 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	NA
59F-SB13	1	NA	NA	NA	NA	NA	9.6 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB13	5	NA	NA	NA	NA	NA	1.4 E-2	1.5 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA
59F-SB14	1	NA	NA	NA	NA	NA	4.2 E-2	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB14	5.5	NA	NA	NA	NA	NA	3.2 E-2	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB15	1	NA	NA	NA	4.2 E-5	NA	4.2 E-3	5.7 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	NA
59F-SB15	5	NA	NA	NA	NA	NA	3.5 E-3	4.8 E-3	NA	NA	NA	NA	5.2 E-6	NA	4.5 E-3	NA	NA	NA	NA
59F-SB16	1	NA	NA	NA	6.7 E-5	1.2 E-4	3.2 E-2	4.6 E-2	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
59F-SB16	5	NA	NA	NA	NA	2.8 E-4	4.5 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	4.3 E-3	NA	NA	NA	NA
59F-SB17	1	NA	NA	NA	NA	NA	5.8 E-3	5.7 E-3	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	NA	NA	NA
59F-SB17	5	NA	NA	NA	NA	NA	1.1 E-2	5.7 E-3	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA
59F-SB18	1	NA	NA	NA	NA	NA	5.8 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA
59F-SB18	5	NA	NA	NA	NA	NA	1.2 E-2	6.6 E-3	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA
59F-SB19	1	NA	NA	NA	1.3 E-3	NA	1.3 E-2	6.1 E-3	NA	NA	NA	NA	NA	NA	7.1 E-3	NA	1.7 E-3	NA	NA
59F-SB19	5	NA	NA	NA	NA	NA	8.0 E-3	6.3 E-3	NA	NA	NA	NA	NA	NA	5.7 E-3	NA	NA	NA	NA
59F-SB20	1	NA	NA	NA	1.5 E-4	NA	9.3 E-3	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	1	NA	NA	NA	NA	NA	6.4 E-3	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	5.5	NA	NA	NA	NA	NA	2.8 E-2	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB22	1	NA	NA	NA	3.3 E-2	NA	1.3 E-2	7.4 E-2	NA	NA	NA	NA	9.9 E-6	NA	8.7 E-3	NA	2.4 E-2	NA	NA
59F-SB22	5.5	NA	NA	NA	NA	NA	9.6 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	5.8 E-3	NA	NA	NA	NA
59F-SB23	1	NA	NA	NA	NA	4.7 E-4	9.3 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB23	5	NA	NA	NA	NA	NA	8.0 E-3	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB25	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	4.0 E-4
59F-SB26	1	NA	NA	NA	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	3.1 E-3	NA	NA	NA	NA
59F-SB27	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	4.3 E-4
59F-SB28	1	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	NA	1.5 E-3
59F-SD01	0.25	NA	NA	NA	NA	NA	9.3 E-3	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	1.5	NA	NA	NA	NA	NA	9.9 E-3	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	5	NA	NA	NA	NA	NA	3.5 E-2	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	0.25	NA	NA	NA	NA	NA	1.2 E-2	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	1.5	NA	NA	NA	NA	NA	8.0 E-2	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	5	NA	NA	NA	NA	NA	8.3 E-3	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	NA
59F-SNS01	0.5	NA	NA	NA	2.2 E-4	NA	NA	2.4 E-2	NA	NA	NA	NA	5.3 E-6	NA	1.2 E-2	NA	9.5 E-5	NA	NA
59F-SNS01	2.5	NA	NA	NA	1.5 E-4	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	8.4 E-3	NA	NA	NA	NA
59F-SNS02	0.5	NA	NA	NA	8.0 E-5	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA
59F-SNS03	0.5	NA	NA	NA	7.2 E-4	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	6.5 E-3	NA	NA	NA	NA
59F-SPB01	1	NA	NA	NA	NA	NA	NA	9.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	5	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	10	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	1	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	5	NA	NA	NA	NA	NA	NA	8.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	10	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04	1	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	1	NA	NA	NA	NA	NA	NA	7.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
59F-SPB05	5	NA	NA	NA	NA	NA	NA	6.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	10	NA	NA	NA	NA	NA	NA	7.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	1	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	10	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	1	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	10	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	1	NA	NA	NA	NA	NA	NA	7.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	5	NA	NA	NA	NA	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	5	NA	NA	NA	NA	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	10	NA	NA	NA	NA	NA	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	1	NA	NA	NA	2.4 E-3	NA	4.5 E-3	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	5	NA	NA	NA	3.3 E-3	NA	2.3 E-2	5.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	1	NA	NA	NA	NA	NA	3.2 E-3	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	5	NA	NA	NA	NA	NA	3.8 E-3	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	1	NA	NA	NA	NA	NA	2.6 E-3	6.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	5	NA	NA	NA	NA	NA	8.3 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	1	NA	NA	NA	NA	NA	6.7 E-3	6.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	5	NA	NA	NA	NA	NA	5.1 E-3	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SNS01	0.5	NA	NA	NA	6.4 E-4	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	NA	NA
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	3	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	5	NA	NA	NA	NA	NA	NA	6.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	10	NA	NA	NA	NA	NA	NA	7.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB03	1	NA	NA	NA	NA	NA	5.4 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA
61F-SB03	5	NA	NA	NA	NA	NA	4.8 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA	NA	NA
61F-SB04	1	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB05	1	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	3.5 E-2	1.3 E-2	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA
61F-SPB01	1	NA	NA	NA	NA	NA	NA	8.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	5	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	10	NA	NA	NA	NA	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	1	NA	NA	NA	NA	NA	4.2 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	5	NA	NA	NA	NA	NA	3.8 E-3	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	1	NA	NA	NA	NA	NA	8.0 E-3	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	5	NA	NA	NA	NA	NA	6.1 E-3	6.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB06	2	NA	NA	NA	7.8 E-5	NA	3.8 E-3	4.3 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	3.5 E-4	NA	2.6 E-4
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA	NA	NA
62F-SB07	5	NA	NA	NA	NA	NA	9.9 E-3	5.2 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA
62F-SB08	1	NA	NA	NA	NA	NA	7.0 E-3	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB08	5	NA	NA	NA	NA	NA	7.0 E-3	5.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	1	NA	NA	NA	NA	NA	5.4 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	5	NA	NA	NA	NA	NA	6.7 E-3	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	1	NA	NA	NA	NA	NA	9.0 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	5	NA	NA	NA	NA	NA	8.0 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	9.4 E-3	NA	NA	NA	NA	NA	NA	9.7 E-3	NA	NA	NA	NA
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	9.0 E-3	NA	NA	NA	NA
62F-SNS02	0.5	NA	NA	NA	2.4 E-4	NA	9.9 E-3	1.0 E-2	NA	NA	NA	NA	NA	NA	9.4 E-3	NA	NA	NA	NA
C201-SPB01	1	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	5	NA	NA	NA	NA	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	10	NA	NA	NA	NA	NA	NA	8.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	1.8 E-1	6.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	5	NA	NA	NA	NA	NA	NA	6.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	10	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	5.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	8.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	10	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	5.1 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	5.3 E-3	NA	NA	NA	NA
CP2-07-SB02	5	NA	NA	NA	NA	NA	6.7 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	NA	NA
CP2-07-SB03	1	NA	NA	NA	NA	NA	6.7 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB03	5	NA	NA	NA	NA	NA	5.4 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	NA	NA
CP2-07-SB04	1	NA	NA	NA	1.4 E-4	NA	6.1 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	5.5 E-3	NA	NA	NA	NA
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA	NA	NA
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	NA
CP2-07-SB06	1	NA	NA	NA	NA	NA	9.6 E-3	5.2 E-3	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA
CP2-07-SB08	1	NA	NA	NA	NA	NA	6.4 E-3	8.7 E-3	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA
CP2-07-SB08	5	NA	NA	NA	NA	NA	7.7 E-3	5.8 E-3	NA	NA	NA	NA	NA	NA	5.5 E-3	NA	NA	NA	NA
CP2-07-SB09	1	NA	NA	NA	NA	NA	3.2 E-3	3.2 E-3	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA
CP2-07-SB09	5	NA	NA	NA	NA	NA	5.8 E-3	5.5 E-3	NA	NA	NA	NA	NA	NA	6.8 E-3	NA	NA	NA	NA
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	6.2 E-3	NA	NA	NA	NA	NA	NA	3.7 E-3	NA	NA	NA	NA
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	8.7 E-3	NA	NA	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	NA
CP2-07-SB12	1	NA	NA	NA	NA	NA	2.5 E-3	5.3 E-3	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA
CP2-07-SB12	5	NA	NA	NA	NA	NA	3.8 E-3	6.6 E-3	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	NA	NA	NA
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	NA	NA	NA	NA	4.4 E-3	NA	NA	NA	NA

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	NA
CP2-07-SB14	1	NA	NA	NA	NA	NA	7.7 E-3	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB14	5	NA	NA	NA	NA	NA	6.7 E-3	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB15	1	NA	NA	NA	NA	NA	5.4 E-3	4.6 E-3	NA	NA	NA	NA	NA	NA	4.1 E-3	NA	NA	NA	NA
CP2-07-SB15	5	NA	NA	NA	NA	NA	3.5 E-3	9.4 E-3	NA	NA	NA	NA	NA	NA	6.5 E-3	NA	NA	NA	NA
CP2-07-SB16	1	NA	NA	NA	NA	NA	7.7 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB16	5	NA	NA	NA	NA	NA	5.1 E-3	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	1	NA	NA	NA	NA	NA	7.0 E-3	9.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	5	NA	NA	NA	NA	NA	2.2 E-2	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	1	NA	NA	NA	NA	NA	4.5 E-3	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	5	NA	NA	NA	NA	NA	4.2 E-3	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB19	1	NA	NA	NA	NA	NA	5.8 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA
CP2-07-SB19	5	NA	NA	NA	NA	NA	5.4 E-3	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	7.7 E-3	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	5	NA	NA	NA	NA	NA	6.4 E-3	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB10	2	NA	NA	NA	NA	NA	5.4 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA
CP2-08-SB10	6	NA	NA	NA	NA	NA	4.5 E-3	7.4 E-3	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA
CP2-08-SB11	1	NA	NA	NA	NA	NA	1.1 E-2	6.2 E-3	NA	NA	NA	NA	NA	NA	6.5 E-3	NA	NA	NA	NA
CP2-08-SB11	5	NA	NA	NA	NA	NA	1.2 E-2	5.9 E-3	NA	NA	NA	NA	NA	NA	6.8 E-3	NA	NA	NA	NA
CP2-08-SB12	1	NA	NA	NA	1.2 E-3	NA	NA	4.2 E-3	NA	NA	NA	NA	5.1 E-6	NA	4.3 E-3	NA	6.6 E-4	NA	NA
CP2-08-SB12	5	NA	NA	NA	NA	NA	2.3 E-2	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	1	NA	NA	NA	NA	NA	2.8 E-2	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	5	NA	NA	NA	NA	NA	2.2 E-2	5.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	1	NA	NA	NA	NA	NA	4.5 E-2	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	5	NA	NA	NA	NA	NA	7.0 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	1	NA	NA	NA	NA	NA	6.4 E-3	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	5.5 E-3	NA	NA	NA	NA
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	9.6 E-3	1.5 E-2	NA	NA	NA	NA	NA	NA	6.8 E-3	NA	NA	NA	NA
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	1.2 E-2	9.4 E-3	NA	NA	NA	NA	NA	NA	5.7 E-3	NA	NA	NA	NA
CP2-08-SNS02	0.5	NA	NA	NA	NA	NA	7.7 E-3	6.5 E-3	NA	NA	NA	NA	NA	NA	5.7 E-3	NA	NA	NA	NA
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	6.1 E-3	6.7 E-3	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA	NA	NA
CP2-08-SNS03	0.5	NA	NA	NA	NA	NA	7.7 E-3	5.6 E-3	NA	NA	NA	NA	NA	NA	4.1 E-3	NA	NA	NA	NA
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	8.0 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	6.1 E-3	NA	NA	NA	NA
CP2-08-SNS04	0.5	NA	NA	NA	NA	3.5 E-3	NA	8.1 E-3	NA	NA	NA	NA	1.6 E-5	NA	1.4 E-2	NA	NA	NA	NA
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	6.1 E-3	NA	NA	NA	NA
CP2-RE01-SB01	1	NA	NA	NA	4.2 E-5	NA	8.3 E-3	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	6.1 E-3	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	1.4 E-2	8.1 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	5.4 E-2	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	5.4 E-2	7.4 E-3	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	5.1 E-2	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	6.7 E-2	7.4 E-3	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	NA	NA	NA
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	7.4 E-3	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)a nthracene**	**Dieldrin**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
CP2-RE05-SB04	1	NA	NA	NA	6.7 E-5	NA	8.6 E-3	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	7.7 E-3	5.1 E-3	NA	NA	NA	NA	NA	NA	6.1 E-3	NA	NA	NA	NA
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	7.0 E-3	8.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	6.4 E-3	6.1 E-3	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA
CP2-ST07-SB01	1	NA	NA	NA	1.2 E-4	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	NA	NA	NA	NA	NA	5.8 E-3	NA	NA	NA	NA
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	6.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	7.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	5	NA	NA	NA	NA	NA	2.2 E-2	4.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB04	1	NA	NA	NA	NA	NA	4.8 E-2	6.5 E-3	NA	NA	NA	NA	NA	NA	5.3 E-3	NA	NA	NA	NA
F(c)-SB04	5	NA	NA	NA	NA	NA	4.5 E-2	4.4 E-3	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	NA	NA
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	1.7 E-2	6.7 E-3	NA	NA	NA	NA	1.4 E-5	NA	1.1 E-2	NA	NA	NA	NA
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	6.1 E-3	7.4 E-3	NA	NA	NA	NA	9.3 E-6	NA	6.5 E-3	NA	NA	NA	NA
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	5.4 E-3	6.7 E-3	NA	NA	NA	NA	5.8 E-6	NA	6.0 E-3	NA	NA	NA	NA
OS1-F2-SB02	1	NA	NA	NA	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	1.1 E-4	3.9 E-4	6.7 E-3	1.7 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA
OS1-F2-SNS01	2.5	NA	NA	NA	5.0 E-4	4.0 E-4	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	5.7 E-5	NA	NA
OS1-F2-SNS02	0.5	NA	NA	NA	5.5 E-4	6.2 E-4	1.1 E-2	4.8 E-2	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA	2.4 E-3
OS1-F2-SNS02	2.5	NA	NA	NA	2.0 E-4	4.1 E-4	6.7 E-3	6.6 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	4.3 E-5	NA	NA
OS1-F2-SNS03	0.5	NA	NA	NA	7.8 E-4	NA	2.5 E-2	2.2 E-2	NA	NA	NA	NA	5.5 E-6	NA	6.8 E-3	NA	1.3 E-4	NA	1.5 E-3
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	1.3 E-2	8.7 E-3	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	5.2 E-5	NA	NA
OS1-F2-SNS04	0.5	NA	NA	NA	NA	NA	1.0 E-2	6.7 E-3	NA	NA	NA	NA	NA	NA	8.8 E-4	NA	3.2 E-5	NA	NA
OS1-F2-SNS04	2.5	NA	NA	NA	6.9 E-4	NA	1.2 E-2	1.5 E-2	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	1.2 E-4	NA	8.2 E-4
OS1-F3-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	2.6 E-4

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	Depth	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
25F-HA01	1	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	6.4 E-2	3.3 E-1	NA	NA	1.1 E-2	NA	6.4 E-6	6.5 E-5	1.7 E-5	4.3 E-1
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-2	1.0 E-3	NA	NA	1.2 E-5	NA	NA	1.5 E-4	NA	1.3 E-1
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	1.0 E-3	NA	NA	NA	NA	NA	9.8 E-5	NA	3.6 E-2
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.6 E-4	NA	NA	NA	NA	NA	5.0 E-5	NA	3.5 E-2
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	3.4 E-2
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	3.4 E-2
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	4.9 E-4	NA	NA	2.0 E-6	NA	NA	3.4 E-5	NA	3.4 E-2
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	3.5 E-2
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	3.0 E-2
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	3.1 E-2
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	9.3 E-5	NA	3.6 E-2
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	1.5 E-3	NA	NA	9.8 E-6	NA	NA	NA	NA	1.9 E-2
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	5.4 E-4	NA	NA	2.0 E-5	NA	NA	NA	NA	1.3 E-2
25F-SB05	1	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	3.2 E-3	2.3 E-3	NA	NA	1.6 E-4	NA	6.4 E-6	NA	5.8 E-6	1.8 E-2
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-3	1.0 E-3	NA	NA	1.1 E-4	NA	NA	NA	NA	1.9 E-2
25F-SB06	1	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	3.4 E-2	2.4 E-3	NA	NA	4.5 E-3	NA	5.3 E-6	NA	1.1 E-5	5.1 E-2
25F-SB06	5	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	2.9 E-2	1.8 E-3	NA	NA	2.7 E-3	NA	5.2 E-6	NA	1.5 E-5	4.5 E-2
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E+0	5.1 E-4	NA	NA	4.5 E-5	NA	NA	NA	NA	1.5 E+0
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	7.7 E-4	NA	NA	2.7 E-5	NA	NA	NA	NA	5.2 E-2
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	1.5 E-4	NA	NA	NA	NA	1.7 E-3
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	1.6 E-5	NA	NA	NA	NA	3.0 E-4
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	8.4 E-4	NA	NA	3.2 E-1	NA	NA	NA	NA	3.2 E-1
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	1.4 E-3	NA	NA	4.5 E-3	NA	NA	NA	NA	1.5 E-1
25F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-1	1.3 E-3	NA	NA	7.4 E-3	NA	NA	2.7 E-5	NA	2.8 E-1
25F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	7.4 E-4	NA	NA	1.0 E-4	NA	NA	NA	NA	1.7 E-1
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	2.8 E-3	NA	NA	NA	NA	NA	1.6 E-4	NA	3.1 E-2
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3	2.8 E-3	NA	NA	5.3 E-6	NA	NA	4.0 E-5	NA	2.9 E-2
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	1.1 E-3	NA	NA	NA	NA	NA	1.1 E-4	NA	2.7 E-2
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	5.6 E-1	NA	3.4 E-2	NA	NA	NA	2.1 E-1	NA	NA	NA	NA	8.2 E-1
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	4.7 E-1	NA	7.0 E-3	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	4.9 E-1
25F-SPB01	10	1.7 E-4	NA	NA	NA	NA	NA	NA	7.0 E-1	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	7.1 E-1
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	4.5 E-1	NA	5.7 E-2	NA	NA	NA	9.4 E-1	NA	NA	NA	NA	1.5 E+0
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	1.8 E+0	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	2.2 E+0
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	9.0 E-2	NA	NA	NA	9.8 E-3	NA	NA	NA	NA	5.2 E-1
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	9.3 E-3	NA	NA	NA	7.0 E+0	NA	NA	NA	NA	7.3 E+0
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	1.3 E-1
25F-SPB03	6	1.2 E-3	NA	NA	NA	NA	NA	NA	4.9 E-1	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-1
25F-SPB03	10	5.5 E-4	NA	NA	NA	NA	NA	NA	3.8 E-1	NA	7.5 E-2	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	4.7 E-1
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	1.4 E-3	NA	NA	NA	NA	NA	2.6 E-5	NA	1.7 E-2
59F-SB11	5	NA	NA	8.1 E-5	1.7 E-6	NA	NA	NA	NA	NA	7.7 E-4	1.4 E-3	NA	NA	2.5 E-4	NA	1.5 E-6	1.5 E-4	NA	2.5 E-2
59F-SB12	1	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	6.0 E-4	1.0 E-2	NA	NA	3.8 E-5	NA	2.6 E-5	4.1 E-5	2.1 E-5	2.8 E-2
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	1.1 E-3	NA	NA	3.0 E-6	NA	NA	2.3 E-5	NA	1.6 E-2
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.0 E-3	NA	NA	NA	NA	NA	2.0 E-4	NA	2.1 E-2
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-3	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	4.9 E-2
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	1.6 E-3	NA	NA	NA	NA	NA	1.3 E-4	NA	5.4 E-2
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	4.1 E-2
59F-SB15	1	NA	NA	2.5 E-5	9.2 E-7	NA	NA	NA	NA	NA	6.4 E-4	5.9 E-4	NA	NA	7.8 E-5	NA	NA	NA	NA	1.6 E-2
59F-SB15	5	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	5.5 E-4	9.2 E-4	NA	NA	1.8 E-5	NA	3.5 E-5	NA	2.7 E-5	1.4 E-2
59F-SB16	1	NA	NA	NA	2.4 E-6	1.1 E-3	NA	NA	NA	NA	3.6 E-4	1.1 E-3	NA	NA	7.8 E-5	NA	2.2 E-6	3.4 E-5	NA	8.6 E-2

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	Depth	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	1.7 E-3	NA	NA	3.5 E-5	NA	NA	NA	NA	2.0 E-2
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	1.2 E-5	NA	NA	3.2 E-5	NA	1.9 E-2
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	1.6 E-3	NA	NA	3.5 E-5	NA	NA	5.3 E-5	NA	2.5 E-2
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	8.4 E-4	NA	NA	NA	NA	NA	1.7 E-5	NA	2.2 E-2
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	7.9 E-4	NA	NA	3.3 E-6	NA	NA	1.5 E-5	NA	2.6 E-2
59F-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	3.3 E-3	NA	NA	4.5 E-3	NA	NA	1.4 E-4	NA	3.9 E-2
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	1.4 E-3	NA	NA	NA	NA	NA	8.7 E-5	NA	2.2 E-2
59F-SB20	1	NA	3.0 E-6	5.2 E-5	1.7 E-6	NA	NA	NA	NA	NA	3.8 E-3	1.3 E-3	NA	NA	9.0 E-6	NA	4.0 E-6	5.2 E-5	5.3 E-6	2.9 E-2
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.6 E-3	NA	NA	NA	NA	NA	9.8 E-6	NA	1.2 E-2
59F-SB21	1	NA	3.3 E-6	3.4 E-5	NA	NA	NA	NA	NA	NA	3.6 E-4	1.1 E-3	NA	NA	1.1 E-4	NA	NA	6.0 E-5	NA	5.0 E-2
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	1.5 E-3	NA	NA	3.8 E-5	NA	NA	3.3 E-5	NA	3.8 E-2
59F-SB22	1	NA	NA	1.0 E-2	3.9 E-5	NA	NA	NA	NA	NA	3.2 E-3	1.5 E-3	NA	NA	7.8 E-3	NA	1.4 E-5	2.2 E-4	4.4 E-5	1.8 E-1
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
59F-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	1.9 E-3	NA	NA	4.9 E-3	NA	NA	6.5 E-5	NA	2.6 E-2
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	1.5 E-3	NA	NA	NA	NA	NA	1.4 E-4	NA	1.7 E-2
59F-SB25	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	NA	NA	1.4 E-2	6.1 E-6	NA	NA	NA	NA	2.1 E-2
59F-SB26	1	NA	6.8 E-6	3.0 E-4	2.0 E-4	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	9.8 E-1	6.1 E-5	NA	2.5 E-4	NA	2.0 E-4	9.9 E-1
59F-SB27	1	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	3.1 E-1	2.1 E-6	NA	NA	NA	NA	3.2 E-1
59F-SB28	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	2.5 E+0	8.6 E-5	NA	NA	NA	2.4 E-5	2.5 E+0
59F-SD01	0.25	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	3.4 E-3	1.9 E-3	1.4 E+1	NA	2.0 E-2	NA	2.9 E-6	7.6 E-4	4.8 E-6	1.4 E+1
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	1.4 E-3	NA	NA	9.8 E-6	NA	NA	1.8 E-4	NA	2.9 E-2
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	1.8 E-3	NA	NA	1.6 E-6	NA	NA	2.2 E-4	NA	5.1 E-2
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-3	1.9 E-3	4.8 E-1	NA	NA	NA	NA	4.1 E-5	NA	5.2 E-1
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-3	2.8 E-3	NA	2.8 E-1	NA	NA	NA	5.2 E-5	NA	3.9 E-1
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	1.1 E-3	NA	3.9 E-1	NA	NA	NA	2.7 E-5	NA	4.2 E-1
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	NA	4.0 E-5	NA	8.0 E-4	NA	NA	NA	NA	3.7 E-3	NA	NA	NA	7.0 E-6	NA	NA	NA	NA	7.2 E-3
59F-SNS01	0.5	NA	NA	1.1 E-4	2.0 E-5	NA	NA	NA	NA	NA	4.3 E-3	2.5 E-3	NA	NA	1.3 E-4	NA	8.7 E-6	NA	1.9 E-5	4.3 E-2
59F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	3.4 E-2
59F-SNS02	0.5	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	NA	4.1 E-3	2.8 E-4	NA	NA	1.4 E-6	NA	2.9 E-6	NA	5.1 E-6	5.1 E-2
59F-SNS02	2.5	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	5.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2
59F-SNS03	0.5	NA	NA	NA	6.1 E-6	NA	NA	NA	NA	NA	1.8 E-3	3.3 E-4	NA	NA	NA	NA	3.5 E-6	NA	8.1 E-6	2.0 E-2
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-3	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	3.1 E-2
59F-SNS04	0.5	NA	NA	NA	6.1 E-6	NA	NA	NA	NA	NA	3.2 E-3	2.2 E-3	NA	NA	NA	NA	3.7 E-6	NA	5.8 E-6	2.4 E-2
59F-SPB01	1	NA	NA	NA	NA	NA	5.5 E-5	NA	4.9 E-1	NA	5.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-1
59F-SPB01	5	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5
59F-SPB01	10	NA	NA	NA	NA	NA	5.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5
59F-SPB02	1	NA	NA	NA	NA	NA	2.7 E-5	NA	3.2 E-1	NA	6.4 E-3	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	6.4 E-1
59F-SPB02	5	NA	NA	NA	NA	NA	2.7 E-5	NA	5.1 E-1	NA	4.8 E-3	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	5.4 E-1
59F-SPB02	10	NA	NA	NA	NA	NA	2.7 E-5	NA	4.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-1
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	4.7 E-1
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	5.0 E-1	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	5.1 E-1
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	4.0 E-1
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	3.8 E-1	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	3.8 E-1
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	4.7 E-1	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	4.8 E-1

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	4.5 E-1	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	4.6 E-1
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	4.8 E-1	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	4.9 E-1
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	7.4 E-4	NA	NA	NA	NA	2.9 E-1
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	4.0 E-1
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	5.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-1
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	NA	4.4 E-1
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	5.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-1
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-1
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	5.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-1
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-1
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-1
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	4.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-1
60F-SB02	1	NA	NA	NA	9.2 E-7	NA	NA	NA	NA	NA	5.5 E-3	2.0 E-3	NA	NA	2.9 E-5	NA	NA	NA	NA	1.9 E-2
60F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-4	2.3 E-3	NA	NA	1.0 E-4	NA	NA	NA	NA	3.5 E-2
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	1.6 E-3	NA	NA	2.1 E-6	NA	NA	1.4 E-4	NA	1.1 E-2
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-4	3.3 E-3	NA	NA	NA	NA	NA	1.9 E-5	NA	1.4 E-2
60F-SB04	1	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	6.8 E-4	1.2 E-3	NA	NA	NA	NA	NA	2.0 E-4	NA	1.1 E-2
60F-SB04	5	NA	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	4.3 E-4	1.3 E-3	NA	NA	NA	NA	NA	7.6 E-6	NA	1.9 E-2
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	1.1 E-3	NA	NA	NA	NA	NA	1.2 E-4	NA	1.5 E-2
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	1.3 E-3	NA	NA	NA	NA	NA	5.1 E-6	NA	1.2 E-2
60F-SNS01	0.5	NA	7.4 E-6	NA	2.0 E-5	NA	NA	NA	NA	NA	1.1 E-2	2.3 E-3	NA	NA	NA	NA	1.0 E-5	NA	2.4 E-5	2.8 E-2
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	5.7 E-4
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-1
61F-SB02	5	2.1 E-4	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1
61F-SB02	10	1.9 E-4	NA	NA	NA	NA	NA	NA	3.3 E-1	NA	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.1 E-2
61F-SB03	5	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	4.5 E-6	NA	7.0 E-6	NA	7.6 E-6	3.5 E-2
61F-SB04	1	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-2
61F-SB05	1	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-3
61F-SNS01	0.5	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	6.8 E-2	1.2 E-3	NA	NA	NA	1.5 E-3	1.9 E-5	NA	5.8 E-5	1.4 E-1
61F-SNS02	0.5	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	9.0 E-3	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	3.9 E-2
61F-SPB01	1	2.3 E-3	NA	NA	NA	NA	NA	NA	4.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-1
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	5.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-1
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
62F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-3	2.8 E-4	NA	NA	NA	NA	NA	1.7 E-5	NA	1.3 E-2
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
62F-SB06	2	NA	2.7 E-6	8.5 E-5	2.5 E-6	3.6 E-2	NA	NA	NA	NA	6.0 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	3.5 E-6	4.8 E-2
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
62F-SB07	5	NA	NA	NA	9.2 E-6	NA	NA	NA	NA	NA	1.6 E-3	2.1 E-3	NA	NA	NA	NA	7.6 E-6	NA	1.5 E-5	2.4 E-2
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	NA	6.5 E-5
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	NA	8.7 E-5

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	1.2 E-4
62F-SNS01	0.5	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	2.0 E-6	NA	1.2 E-5	NA	2.4 E-5	2.0 E-2
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	NA	NA	NA	5.3 E-6	NA	NA	NA	NA	2.6 E-2
62F-SNS02	0.5	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	7.2 E-3	NA	NA	NA	4.9 E-5	NA	4.7 E-6	NA	1.6 E-5	3.7 E-2
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	4.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-1
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-1
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E+0	NA	NA	NA	NA	NA	1.1 E+0
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	3.7 E-1
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	2.5 E-4	NA	NA	NA	NA	NA	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-1
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	4.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1
C208-SB03	10	3.8 E-4	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-1
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+0	NA	NA	NA	NA	NA	NA	1.2 E+0
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-1	NA	NA	NA	NA	NA	NA	5.8 E-1
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	2.3 E-1
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-2	NA	NA	NA	NA	NA	NA	8.1 E-2
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	3.2 E-1	NA	NA	NA	NA	1.3 E+0	NA	NA	NA	NA	NA	1.6 E+0
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	1.8 E-4	NA	NA	NA	NA	NA	NA	4.4 E-1	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	5.9 E-1
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1
C208-SPB06	1	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-1	NA	NA	NA	NA	NA	NA	3.4 E-1
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-1	NA	NA	NA	NA	NA	NA	4.2 E-1
C208-SPB06	5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-4	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	2.3 E-2
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	2.1 E-3	NA	NA	7.4 E-7	NA	NA	1.4 E-4	NA	1.8 E-2
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-3	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.6 E-2
CP2-07-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-4	9.5 E-4	NA	NA	NA	NA	NA	6.5 E-5	NA	2.1 E-2
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-2
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.3 E-3	NA	NA	NA	NA	NA	2.3 E-5	NA	2.2 E-2
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	1.2 E-3	NA	NA	NA	NA	NA	1.5 E-5	NA	3.0 E-2
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
CP2-07-SB09	1	NA	NA	NA	9.2 E-7	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA	NA	6.4 E-6	5.4 E-5	3.7 E-6	1.3 E-2
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-2
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	1.9 E-3	NA	NA	2.6 E-6	NA	NA	5.3 E-5	NA	1.4 E-2
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	7.9 E-4	NA	NA	NA	NA	NA	2.1 E-5	NA	1.1 E-2
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	1.4 E-3	NA	NA	NA	NA	NA	3.1 E-5	NA	1.4 E-2
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	9.5 E-4	NA	NA	3.6 E-6	NA	NA	8.7 E-5	NA	1.5 E-2
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	8.2 E-4	NA	NA	NA	NA	NA	2.7 E-4	NA	1.3 E-2
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	9.3 E-5	NA	1.7 E-2
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	1.6 E-5	NA	1.2 E-2

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	3.2 E-6	NA	NA	7.1 E-6	NA	2.8 E-2
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
CP2-07-SB14	5	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	7.2 E-4	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-2
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-2
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	1.4 E-2
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	1.2 E-2
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	1.5 E-6
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6	NA	NA	NA	NA	3.8 E-6
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-7	NA	NA	NA	NA	8.6 E-7
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	2.7 E-5
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	1.6 E-6
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	1.3 E-3	NA	NA	NA	NA	4.8 E-6	1.3 E-4	NA	1.5 E-2
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	7.7 E-4	NA	NA	NA	NA	NA	2.5 E-5	NA	1.6 E-2
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	5.1 E-4	2.0 E-1	NA	NA	NA	NA	NA	NA	2.2 E-1
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.6 E-2
CP2-08-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	1.7 E+0	1.8 E-5	NA	9.9 E-6	1.2 E-4	6.4 E-6	1.7 E+0
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	2.4 E-3	NA	6.1 E-2	NA	NA	NA	1.8 E-4	NA	1.0 E-1
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	1.3 E-3	NA	NA	NA	NA	NA	3.9 E-5	NA	3.1 E-2
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	6.6 E-2
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	1.9 E-3	NA	NA	2.3 E-4	NA	NA	NA	NA	2.0 E-2
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
CP2-08-SNS01	0.5	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	2.0 E-3	6.9 E-4	NA	6.1 E-2	7.8 E-6	NA	NA	NA	NA	9.4 E-2
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	1.2 E-3	NA	NA	7.8 E-7	NA	NA	NA	NA	3.0 E-2
CP2-08-SNS02	0.5	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	NA	1.0 E-3	5.9 E-4	NA	1.1 E-1	NA	NA	NA	NA	9.3 E-6	1.3 E-1
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-2
CP2-08-SNS03	0.5	NA	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	6.4 E-4	3.6 E-4	NA	6.7 E-2	NA	NA	2.9 E-6	NA	4.8 E-6	8.5 E-2
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	9.5 E-4	NA	4.0 E-2	NA	NA	NA	NA	NA	6.7 E-2
CP2-08-SNS04	0.5	NA	NA	NA	9.2 E-5	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	4.3 E-1	1.5 E-3	NA	2.6 E-5	NA	2.0 E-4	4.6 E-1
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	6.1 E-6	NA	NA	NA	NA	1.7 E-2
CP2-RE01-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	1.0 E-3	NA	NA	4.5 E-6	NA	NA	NA	NA	1.5 E-2
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	1.8 E-3	NA	NA	NA	NA	NA	4.6 E-5	NA	1.7 E-2
CP2-RE05-SB01	1	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	9.8 E-4	5.4 E-4	NA	NA	3.4 E-6	NA	2.2 E-5	1.6 E-5	1.5 E-5	2.9 E-2
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	NA	6.6 E-2
CP2-RE05-SB02	1	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	5.5 E-4	1.4 E-3	NA	NA	NA	NA	NA	5.1 E-5	NA	6.8 E-2
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	6.1 E-2
CP2-RE05-SB03	1	NA	6.3 E-6	NA	NA	9.0 E-3	NA	NA	NA	NA	4.3 E-4	1.9 E-3	NA	NA	1.7 E-5	NA	NA	8.2 E-5	NA	9.0 E-2
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	3.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-2

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-RE05-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	1.7 E-3	NA	NA	3.2 E-6	NA	NA	NA	NA	2.1 E-2
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-4	2.8 E-3	NA	NA	NA	NA	NA	NA	NA	2.0 E-2
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-4	6.1 E-3	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
CP2-ST07-SB01	1	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	1.5 E-5	NA	3.3 E-6	NA	7.0 E-6	1.4 E-2
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	6.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	3.7 E-1	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1
F(c)-SB02	1	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	6.9 E-2	NA	NA	8.7 E-6	4.1 E-5	9.3 E-6	7.7 E-2
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	8.8 E-3
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
F(c)-SB04	1	NA	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	4.1 E-4	2.8 E-3	1.1 E+2	NA	NA	NA	2.1 E-6	4.1 E-5	NA	1.1 E+2
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	4.1 E-3	1.2 E-2	NA	NA	NA	NA	4.7 E-5	NA	6.9 E-2
F(c)-SNS01	0.5	NA	NA	NA	4.8 E-6	NA	NA	NA	NA	NA	6.4 E-3	1.6 E-3	NA	NA	NA	NA	2.1 E-6	NA	7.6 E-6	4.3 E-2
F(c)-SNS02	0.5	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	9.0 E-4	6.9 E-4	NA	1.8 E-1	NA	NA	3.3 E-6	NA	1.6 E-5	2.0 E-1
F(c)-SNS03	0.5	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	2.8 E-3	3.1 E-4	NA	2.0 E-1	NA	NA	6.4 E-6	NA	1.6 E-5	2.3 E-1
OS1-F2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	6.7 E-4
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2	8.2 E-7	NA	NA	NA	NA	5.4 E-2
OS1-F2-SB04	1	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-2	2.9 E-6	NA	NA	NA	NA	8.3 E-2
OS1-F2-SNS01	0.5	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	6.4 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
OS1-F2-SNS01	2.5	NA	NA	8.5 E-5	1.1 E-6	NA	NA	NA	NA	NA	4.1 E-3	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	4.7 E-2
OS1-F2-SNS02	0.5	NA	8.5 E-6	1.8 E-4	NA	3.1 E-2	NA	NA	NA	NA	3.7 E-3	1.4 E-3	NA	NA	2.0 E-5	NA	NA	NA	NA	1.0 E-1
OS1-F2-SNS02	2.5	NA	NA	9.0 E-5	NA	2.0 E-3	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-2
OS1-F2-SNS03	0.5	NA	1.0 E-5	NA	8.7 E-6	NA	NA	NA	NA	NA	7.7 E-3	1.8 E-3	NA	NA	1.1 E-4	NA	3.7 E-6	1.7 E-5	1.1 E-5	6.6 E-2
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	2.5 E-2
OS1-F2-SNS04	0.5	NA	NA	NA	2.6 E-6	NA	NA	NA	NA	NA	6.4 E-4	1.5 E-3	NA	NA	NA	NA	2.0 E-6	6.5 E-6	NA	2.0 E-2
OS1-F2-SNS04	2.5	NA	7.9 E-6	NA	NA	NA	NA	NA	NA	NA	3.9 E-3	1.5 E-3	NA	NA	2.5 E-5	NA	NA	9.8 E-6	NA	3.7 E-2
OS1-F3-SD01	0.25	NA	3.0 E-6	7.1 E-5	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	1.4 E-1	1.4 E-5	NA	NA	NA	NA	1.5 E-1

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene	Dieldrin	Di-n-butyl phthalate
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
25F-HA01	1	NA	NA	NA	NA	NA	7.2 E-4	4.3 E-4	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA
25F-HA01	5	NA	NA	NA	NA	NA	1.1 E-3	2.1 E-3	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA
25F-HA02	1	NA	NA	NA	NA	NA	8.6 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA
25F-HA02	3	NA	NA	NA	NA	NA	8.6 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA
25F-HA02	5	NA	NA	NA	NA	NA	1.1 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA
25F-HA03	1	NA	NA	NA	NA	NA	8.9 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA
25F-HA03	3	NA	NA	NA	NA	NA	7.9 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA
25F-HA03	5	NA	NA	NA	NA	NA	9.6 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA
25F-HA04	1	NA	NA	NA	NA	NA	8.9 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	NA	NA	NA	NA
25F-HA04	3	NA	NA	NA	NA	NA	9.6 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA
25F-HA04	5	NA	NA	NA	NA	NA	9.6 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA
25F-SB04	1	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA
25F-SB04	5	NA	NA	NA	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA	NA	NA
25F-SB05	1	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA
25F-SB05	5	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA
25F-SB06	1	NA	NA	NA	NA	NA	NA	7.5 E-4	NA	NA	NA	NA	1.0 E-6	NA	5.2 E-4	NA	NA	NA	NA	NA
25F-SB06	5	NA	NA	NA	NA	NA	NA	8.0 E-4	NA	NA	NA	NA	1.2 E-6	NA	5.1 E-4	NA	NA	NA	NA	NA
25F-SB07	1	NA	NA	NA	NA	NA	4.8 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	NA
25F-SB07	5	NA	NA	NA	NA	NA	6.2 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	9.2 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA
25F-SD01	1.5	NA	NA	NA	NA	6.4 E-5	8.6 E-4	1.4 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA
25F-SD01	5	2.1 E-4	NA	NA	NA	NA	9.2 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA
25F-SD02	0.25	NA	NA	NA	NA	NA	1.1 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	1.5	NA	NA	NA	NA	NA	1.1 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	5	NA	NA	NA	NA	NA	1.0 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	1	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	10	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5
25F-SPB02	1	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	5	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	10	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	1	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
25F-SPB03	10	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5
59F-SB11	1	NA	NA	NA	NA	NA	6.5 E-4	6.1 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA
59F-SB11	5	NA	NA	NA	NA	4.5 E-5	7.5 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA
59F-SB12	1	NA	NA	NA	NA	NA	5.5 E-4	7.5 E-4	NA	NA	NA	NA	5.3 E-7	NA	6.2 E-4	NA	NA	NA	NA	NA
59F-SB12	5	NA	NA	NA	NA	NA	5.1 E-4	6.3 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA
59F-SB13	1	NA	NA	NA	NA	NA	1.0 E-3	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB13	5	NA	NA	NA	NA	NA	1.5 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA
59F-SB14	1	NA	NA	NA	NA	NA	4.5 E-3	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB14	5.5	NA	NA	NA	NA	NA	3.4 E-3	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB15	1	NA	NA	NA	4.6 E-6	NA	4.5 E-4	7.0 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA
59F-SB15	5	NA	NA	NA	NA	NA	3.8 E-4	6.0 E-4	NA	NA	NA	NA	6.2 E-7	NA	5.1 E-4	NA	NA	NA	NA	NA
59F-SB16	1	NA	NA	NA	7.4 E-6	1.3 E-5	3.4 E-3	5.7 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene	Dieldrin	Di-n-butyl phthalate
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SB16	5	NA	NA	NA	NA	3.1 E-5	4.8 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA	NA	NA
59F-SB17	1	NA	NA	NA	NA	NA	6.2 E-4	7.0 E-4	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	NA
59F-SB17	5	NA	NA	NA	NA	NA	1.1 E-3	7.0 E-4	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA
59F-SB18	1	NA	NA	NA	NA	NA	6.2 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	8.1 E-4	NA	NA	NA	NA	NA
59F-SB18	5	NA	NA	NA	NA	NA	1.3 E-3	8.1 E-4	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA
59F-SB19	1	NA	NA	NA	1.4 E-4	NA	1.4 E-3	7.5 E-4	NA	NA	NA	NA	NA	NA	7.9 E-4	NA	1.9 E-4	NA	NA	NA
59F-SB19	5	NA	NA	NA	NA	NA	8.6 E-4	7.8 E-4	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	NA	NA	NA	NA
59F-SB20	1	NA	NA	NA	1.7 E-5	NA	9.9 E-4	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	1	NA	NA	NA	NA	NA	6.9 E-4	5.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	5.5	NA	NA	NA	NA	NA	3.0 E-3	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB22	1	NA	NA	NA	3.7 E-3	NA	1.4 E-3	9.1 E-3	NA	NA	NA	NA	1.2 E-6	NA	9.7 E-4	NA	2.7 E-3	NA	NA	NA
59F-SB22	5.5	NA	NA	NA	NA	NA	1.0 E-3	8.3 E-4	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA
59F-SB23	1	NA	NA	NA	NA	5.3 E-5	9.9 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB23	5	NA	NA	NA	NA	NA	8.6 E-4	7.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB25	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	4.4 E-5	NA
59F-SB26	1	NA	NA	NA	4.0 E-5	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	3.5 E-4	NA	NA	NA	NA	NA
59F-SB27	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	4.8 E-5	NA
59F-SB28	1	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	1.7 E-4	NA
59F-SD01	0.25	NA	NA	NA	NA	NA	9.9 E-4	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	1.5	NA	NA	NA	NA	NA	1.1 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	5	NA	NA	NA	NA	NA	3.8 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	0.25	NA	NA	NA	NA	NA	1.3 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	1.5	NA	NA	NA	NA	NA	8.6 E-3	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	5	NA	NA	NA	NA	NA	8.9 E-4	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA
59F-SNS01	0.5	NA	NA	NA	2.5 E-5	NA	NA	2.9 E-3	NA	NA	NA	NA	6.3 E-7	NA	1.3 E-3	NA	1.1 E-5	NA	NA	NA
59F-SNS01	2.5	NA	NA	NA	1.6 E-5	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	NA
59F-SNS02	0.5	NA	NA	NA	8.9 E-6	NA	NA	4.1 E-3	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA
59F-SNS03	0.5	NA	NA	NA	8.0 E-5	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA
59F-SPB01	1	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	5	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	10	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	1	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	10	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04	1	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	1	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SPB05	5	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	10	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	1	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	10	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	1	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	10	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	1	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	5	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	5	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	10	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	1	NA	NA	NA	2.7 E-4	NA	4.8 E-4	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	5	NA	NA	NA	3.7 E-4	NA	2.5 E-3	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	1	NA	NA	NA	NA	NA	3.4 E-4	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	5	NA	NA	NA	NA	NA	4.1 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	1	NA	NA	NA	NA	NA	2.7 E-4	7.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	5	NA	NA	NA	NA	NA	8.9 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	1	NA	NA	NA	NA	NA	7.2 E-4	8.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	5	NA	NA	NA	NA	NA	5.5 E-4	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SNS01	0.5	NA	NA	NA	7.1 E-5	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	NA
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	5	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5
61F-SB02	10	NA	NA	NA	NA	NA	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5
61F-SB03	1	NA	NA	NA	NA	NA	5.8 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA
61F-SB03	5	NA	NA	NA	NA	NA	5.1 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA
61F-SB04	1	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB05	1	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	3.8 E-3	1.6 E-3	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	NA	NA	NA
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA
61F-SPB01	1	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4
61F-SPB01	5	NA	NA	NA	NA	NA	NA	9.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	10	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	1	NA	NA	NA	NA	NA	4.5 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	5	NA	NA	NA	NA	NA	4.1 E-4	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	1	NA	NA	NA	NA	NA	8.6 E-4	8.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	5	NA	NA	NA	NA	NA	6.5 E-4	8.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB06	2	NA	NA	NA	8.6 E-6	NA	4.1 E-4	5.3 E-4	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	3.9 E-5	NA	2.9 E-5	NA
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA
62F-SB07	5	NA	NA	NA	NA	NA	1.1 E-3	6.4 E-4	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA
62F-SB08	1	NA	NA	NA	NA	NA	7.5 E-4	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB08	5	NA	NA	NA	NA	NA	7.5 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	1	NA	NA	NA	NA	NA	5.8 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	5	NA	NA	NA	NA	NA	7.2 E-4	7.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	1	NA	NA	NA	NA	NA	9.6 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	5	NA	NA	NA	NA	NA	8.6 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA
62F-SNS02	0.5	NA	NA	NA	2.7 E-5	NA	1.1 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA
C201-SPB01	1	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	10	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	1.9 E-2	8.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5
C208-SB03	5	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	10	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5
C208-SPB01	10	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	5.5 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA
CP2-07-SB02	5	NA	NA	NA	NA	NA	7.2 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	7.5 E-4	NA	NA	NA	NA	NA
CP2-07-SB03	1	NA	NA	NA	NA	NA	7.2 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB03	5	NA	NA	NA	NA	NA	5.8 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	8.6 E-4	NA	NA	NA	NA	NA
CP2-07-SB04	1	NA	NA	NA	1.5 E-5	NA	6.5 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	NA
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA
CP2-07-SB06	1	NA	NA	NA	NA	NA	1.0 E-3	6.4 E-4	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA
CP2-07-SB08	1	NA	NA	NA	NA	NA	6.9 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA
CP2-07-SB08	5	NA	NA	NA	NA	NA	8.2 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	NA
CP2-07-SB09	1	NA	NA	NA	NA	NA	3.4 E-4	3.9 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA
CP2-07-SB09	5	NA	NA	NA	NA	NA	6.2 E-4	6.7 E-4	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA	NA	NA
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	NA
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA
CP2-07-SB12	1	NA	NA	NA	NA	NA	2.7 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA
CP2-07-SB12	5	NA	NA	NA	NA	NA	4.1 E-4	8.1 E-4	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	NA
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA
CP2-07-SB14	1	NA	NA	NA	NA	NA	8.2 E-4	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB14	5	NA	NA	NA	NA	NA	7.2 E-4	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB15	1	NA	NA	NA	NA	NA	5.8 E-4	5.6 E-4	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA
CP2-07-SB15	5	NA	NA	NA	NA	NA	3.8 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA
CP2-07-SB16	1	NA	NA	NA	NA	NA	8.2 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB16	5	NA	NA	NA	NA	NA	5.5 E-4	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	1	NA	NA	NA	NA	NA	7.5 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	5	NA	NA	NA	NA	NA	2.4 E-3	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	1	NA	NA	NA	NA	NA	4.8 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	5	NA	NA	NA	NA	NA	4.5 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB19	1	NA	NA	NA	NA	NA	6.2 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA
CP2-07-SB19	5	NA	NA	NA	NA	NA	5.8 E-4	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	8.2 E-4	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	5	NA	NA	NA	NA	NA	6.9 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB10	2	NA	NA	NA	NA	NA	5.8 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA
CP2-08-SB10	6	NA	NA	NA	NA	NA	4.8 E-4	9.1 E-4	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	NA
CP2-08-SB11	1	NA	NA	NA	NA	NA	1.2 E-3	7.6 E-4	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA
CP2-08-SB11	5	NA	NA	NA	NA	NA	1.3 E-3	7.3 E-4	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA
CP2-08-SB12	1	NA	NA	NA	1.3 E-4	NA	NA	5.2 E-4	NA	NA	NA	NA	6.0 E-7	NA	4.8 E-4	NA	7.4 E-5	NA	NA	NA
CP2-08-SB12	5	NA	NA	NA	NA	NA	2.5 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	1	NA	NA	NA	NA	NA	3.0 E-3	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	5	NA	NA	NA	NA	NA	2.4 E-3	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	1	NA	NA	NA	NA	NA	4.8 E-3	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	5	NA	NA	NA	NA	NA	7.5 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	1	NA	NA	NA	NA	NA	6.9 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	NA
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	1.0 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	1.3 E-3	1.2 E-3	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	NA	NA	NA	NA
CP2-08-SNS02	0.5	NA	NA	NA	NA	NA	8.2 E-4	8.0 E-4	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	NA	NA	NA	NA
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	6.5 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA
CP2-08-SNS03	0.5	NA	NA	NA	NA	NA	8.2 E-4	6.9 E-4	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	8.6 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA
CP2-08-SNS04	0.5	NA	NA	NA	NA	3.9 E-4	NA	9.9 E-4	NA	NA	NA	NA	1.9 E-6	NA	1.6 E-3	NA	NA	NA	NA	NA
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA
CP2-RE01-SB01	1	NA	NA	NA	4.6 E-6	NA	8.9 E-4	6.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	6.5 E-4	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	1.5 E-3	9.9 E-4	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	5.8 E-3	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	5.8 E-3	9.1 E-4	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	5.5 E-3	9.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	7.2 E-3	9.1 E-4	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	7.9 E-4	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-RE05-SB04	1	NA	NA	NA	7.4 E-6	NA	9.2 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	8.2 E-4	6.3 E-4	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	7.5 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	6.9 E-4	7.5 E-4	NA	NA	NA	NA	NA	NA	8.1 E-4	NA	NA	NA	NA	NA
CP2-ST07-SB01	1	NA	NA	NA	1.3 E-5	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	5	NA	NA	NA	NA	NA	2.4 E-3	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB04	1	NA	NA	NA	NA	NA	5.1 E-3	8.0 E-4	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA
F(c)-SB04	5	NA	NA	NA	NA	NA	4.8 E-3	5.4 E-4	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	1.8 E-3	8.3 E-4	NA	NA	NA	NA	1.7 E-6	NA	1.2 E-3	NA	NA	NA	NA	NA
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	6.5 E-4	9.1 E-4	NA	NA	NA	NA	1.1 E-6	NA	7.3 E-4	NA	NA	NA	NA	NA
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	5.8 E-4	8.3 E-4	NA	NA	NA	NA	6.9 E-7	NA	6.7 E-4	NA	NA	NA	NA	NA
OS1-F2-SB02	1	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	1.2 E-5	4.4 E-5	7.2 E-4	2.1 E-3	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA
OS1-F2-SNS01	2.5	NA	NA	NA	5.5 E-5	4.4 E-5	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	6.4 E-6	NA	NA	NA
OS1-F2-SNS02	0.5	NA	NA	NA	6.1 E-5	6.9 E-5	1.1 E-3	5.9 E-3	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA	2.6 E-4	NA
OS1-F2-SNS02	2.5	NA	NA	NA	2.2 E-5	4.6 E-5	7.2 E-4	8.1 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	4.8 E-6	NA	NA	NA
OS1-F2-SNS03	0.5	NA	NA	NA	8.6 E-5	NA	2.7 E-3	2.7 E-3	NA	NA	NA	NA	6.5 E-7	NA	7.6 E-4	NA	1.5 E-5	NA	1.6 E-4	NA
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	1.4 E-3	1.1 E-3	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	5.8 E-6	NA	NA	NA
OS1-F2-SNS04	0.5	NA	NA	NA	NA	NA	1.1 E-3	8.2 E-4	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	3.6 E-6	NA	NA	NA
OS1-F2-SNS04	2.5	NA	NA	NA	7.7 E-5	NA	1.2 E-3	1.8 E-3	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	1.4 E-5	NA	9.2 E-5	NA
OS1-F3-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	2.9 E-5	NA

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	Depth	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
25F-HA01	1	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	6.9 E-3	3.6 E-2	NA	NA	1.3 E-3	NA	7.6 E-7	7.7 E-6	2.0 E-6	4.6 E-2
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-3	1.1 E-4	NA	NA	1.4 E-6	NA	NA	1.8 E-5	NA	1.4 E-2
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	1.1 E-4	NA	NA	NA	NA	NA	1.2 E-5	NA	4.1 E-3
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	3.8 E-5	NA	NA	NA	NA	NA	5.8 E-6	NA	4.1 E-3
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	3.0 E-6	NA	3.8 E-3
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	5.6 E-6	NA	3.9 E-3
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	5.2 E-5	NA	NA	2.3 E-7	NA	NA	4.0 E-6	NA	3.9 E-3
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	4.0 E-3
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	3.5 E-3
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	3.5 E-3
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	4.1 E-3
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	1.6 E-4	NA	NA	1.1 E-6	NA	NA	NA	NA	2.3 E-3
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	5.8 E-5	NA	NA	2.4 E-6	NA	NA	NA	NA	1.5 E-3
25F-SB05	1	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	3.5 E-4	2.4 E-4	NA	NA	1.9 E-5	NA	7.6 E-7	NA	6.9 E-7	2.0 E-3
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	1.1 E-4	NA	NA	1.3 E-5	NA	NA	NA	NA	2.2 E-3
25F-SB06	1	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	3.6 E-3	2.6 E-4	NA	NA	5.3 E-4	NA	6.3 E-7	NA	1.3 E-6	5.7 E-3
25F-SB06	5	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	3.1 E-3	1.9 E-4	NA	NA	3.2 E-4	NA	6.2 E-7	NA	1.7 E-6	4.9 E-3
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	5.5 E-5	NA	NA	5.3 E-6	NA	NA	NA	NA	1.6 E-1
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3	8.2 E-5	NA	NA	3.2 E-6	NA	NA	NA	NA	5.8 E-3
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	1.8 E-5	NA	NA	NA	NA	1.8 E-4
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	1.8 E-6	NA	NA	NA	NA	3.2 E-5
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	9.0 E-5	NA	NA	3.7 E-2	NA	NA	NA	NA	3.7 E-2
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	1.5 E-4	NA	NA	5.3 E-4	NA	NA	NA	NA	1.6 E-2
25F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	1.3 E-4	NA	NA	8.6 E-4	NA	NA	3.2 E-6	NA	3.1 E-2
25F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	7.9 E-5	NA	NA	1.2 E-5	NA	NA	NA	NA	1.9 E-2
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	3.0 E-4	NA	NA	NA	NA	NA	1.9 E-5	NA	3.6 E-3
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	3.0 E-4	NA	NA	6.2 E-7	NA	NA	4.7 E-6	NA	3.3 E-3
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	1.2 E-4	NA	NA	NA	NA	NA	1.3 E-5	NA	3.2 E-3
25F-SPB01	1	NA	NA	NA	NA	NA	NA	6.0 E-2	NA	3.7 E-3	NA	NA	NA	2.5 E-2	NA	NA	NA	NA	9.0 E-2
25F-SPB01	5	NA	NA	NA	NA	NA	NA	5.1 E-2	NA	7.5 E-4	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	5.3 E-2
25F-SPB01	10	NA	NA	NA	NA	NA	NA	7.5 E-2	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	7.6 E-2
25F-SPB02	1	NA	NA	NA	NA	NA	NA	4.9 E-2	NA	6.1 E-3	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	1.7 E-1
25F-SPB02	5	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	1.9 E-1	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	2.4 E-1
25F-SPB02	10	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	9.6 E-3	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	5.5 E-2
25F-SPB03	1	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	1.0 E-3	NA	NA	NA	8.1 E-1	NA	NA	NA	NA	8.5 E-1
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	1.5 E-2
25F-SPB03	6	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-2
25F-SPB03	10	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	8.1 E-3	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	5.0 E-2
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	1.5 E-4	NA	NA	NA	NA	NA	3.1 E-6	NA	1.9 E-3
59F-SB11	5	NA	9.0 E-6	2.0 E-7	NA	NA	NA	NA	NA	8.2 E-5	1.5 E-4	NA	NA	3.0 E-5	NA	1.7 E-7	1.7 E-5	NA	2.8 E-3
59F-SB12	1	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	6.4 E-5	1.1 E-3	NA	NA	4.4 E-6	NA	3.1 E-6	4.9 E-6	2.5 E-6	3.1 E-3
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.2 E-4	NA	NA	3.5 E-7	NA	NA	2.7 E-6	NA	1.9 E-3
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.1 E-4	NA	NA	NA	NA	NA	2.4 E-5	NA	2.4 E-3
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	5.5 E-3
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	1.7 E-4	NA	NA	NA	NA	NA	1.5 E-5	NA	5.9 E-3
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	4.5 E-3
59F-SB15	1	NA	2.8 E-6	1.1 E-7	NA	NA	NA	NA	NA	6.9 E-5	6.3 E-5	NA	NA	9.1 E-6	NA	NA	NA	NA	1.8 E-3
59F-SB15	5	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	5.9 E-5	9.9 E-5	NA	NA	2.1 E-6	NA	4.2 E-6	NA	3.3 E-6	1.7 E-3
59F-SB16	1	NA	NA	2.9 E-7	1.2 E-4	NA	NA	NA	NA	3.9 E-5	1.2 E-4	NA	NA	9.1 E-6	NA	2.6 E-7	4.0 E-6	NA	1.0 E-2

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
59F-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.8 E-4	NA	NA	4.1 E-6	NA	NA	NA	NA	2.3 E-3
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	1.4 E-6	NA	NA	3.7 E-6	NA	2.2 E-3
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	1.7 E-4	NA	NA	4.1 E-6	NA	NA	6.3 E-6	NA	2.8 E-3
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	9.0 E-5	NA	NA	NA	NA	NA	2.0 E-6	NA	2.5 E-3
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	8.5 E-5	NA	NA	3.9 E-7	NA	NA	1.7 E-6	NA	3.0 E-3
59F-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	3.6 E-4	NA	NA	5.3 E-4	NA	NA	1.7 E-5	NA	4.4 E-3
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	1.5 E-4	NA	NA	NA	NA	NA	1.0 E-5	NA	2.5 E-3
59F-SB20	1	3.5 E-7	5.8 E-6	2.0 E-7	NA	NA	NA	NA	NA	4.0 E-4	1.4 E-4	NA	NA	1.1 E-6	NA	4.8 E-7	6.1 E-6	6.4 E-7	3.3 E-3
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	1.7 E-4	NA	NA	NA	NA	NA	1.2 E-6	NA	1.4 E-3
59F-SB21	1	3.8 E-7	3.8 E-6	NA	NA	NA	NA	NA	NA	3.8 E-5	1.2 E-4	NA	NA	1.3 E-5	NA	NA	7.0 E-6	NA	6.0 E-3
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	1.6 E-4	NA	NA	4.5 E-6	NA	NA	3.9 E-6	NA	4.1 E-3
59F-SB22	1	NA	1.2 E-3	4.6 E-6	NA	NA	NA	NA	NA	3.5 E-4	1.6 E-4	NA	NA	9.1 E-4	NA	1.7 E-6	2.6 E-5	5.2 E-6	2.1 E-2
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	2.7 E-3
59F-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	2.0 E-4	NA	NA	5.7 E-4	NA	NA	7.7 E-6	NA	3.0 E-3
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.6 E-4	NA	NA	NA	NA	NA	1.6 E-5	NA	1.9 E-3
59F-SB25	1	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	1.7 E-3	7.2 E-7	NA	NA	NA	NA	2.4 E-3
59F-SB26	1	8.0 E-7	3.3 E-5	2.4 E-5	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	1.2 E-1	7.2 E-6	NA	3.0 E-5	NA	2.4 E-5	1.2 E-1
59F-SB27	1	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	3.7 E-2	2.4 E-7	NA	NA	NA	NA	3.8 E-2
59F-SB28	1	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	3.0 E-1	1.0 E-5	NA	NA	NA	2.9 E-6	3.0 E-1
59F-SD01	0.25	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	3.6 E-4	2.0 E-4	1.7 E+0	NA	2.3 E-3	NA	3.5 E-7	8.9 E-5	5.8 E-7	1.7 E+0
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	1.5 E-4	NA	NA	1.1 E-6	NA	NA	2.1 E-5	NA	3.3 E-3
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	1.9 E-4	NA	NA	1.9 E-7	NA	NA	2.6 E-5	NA	5.7 E-3
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	2.0 E-4	5.8 E-2	NA	NA	NA	NA	4.8 E-6	NA	6.2 E-2
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	3.0 E-4	NA	3.4 E-2	NA	NA	NA	6.1 E-6	NA	4.6 E-2
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	1.2 E-4	NA	4.7 E-2	NA	NA	NA	3.1 E-6	NA	5.0 E-2
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	4.4 E-6	NA	8.9 E-5	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	8.1 E-7	NA	NA	NA	NA	7.9 E-4
59F-SNS01	0.5	NA	1.2 E-5	2.4 E-6	NA	NA	NA	NA	NA	4.6 E-4	2.7 E-4	NA	NA	1.5 E-5	NA	1.0 E-6	NA	2.3 E-6	5.0 E-3
59F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	4.0 E-3
59F-SNS02	0.5	NA	NA	5.2 E-7	NA	NA	NA	NA	NA	4.4 E-4	3.0 E-5	NA	NA	1.7 E-7	NA	3.5 E-7	NA	6.1 E-7	6.1 E-3
59F-SNS02	2.5	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-3
59F-SNS03	0.5	NA	NA	7.3 E-7	NA	NA	NA	NA	NA	2.0 E-4	3.6 E-5	NA	NA	NA	NA	4.2 E-7	NA	9.7 E-7	2.4 E-3
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	3.6 E-3
59F-SNS04	0.5	NA	NA	7.3 E-7	NA	NA	NA	NA	NA	3.5 E-4	2.4 E-4	NA	NA	NA	NA	4.4 E-7	NA	6.9 E-7	2.8 E-3
59F-SPB01	1	NA	NA	NA	NA	6.4 E-6	NA	5.2 E-2	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2
59F-SPB01	5	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6
59F-SPB01	10	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-6
59F-SPB02	1	NA	NA	NA	NA	3.2 E-6	NA	3.5 E-2	NA	6.9 E-4	NA	NA	NA	7.7 E-5	NA	NA	NA	NA	7.4 E-2
59F-SPB02	5	NA	NA	NA	NA	3.2 E-6	NA	5.5 E-2	NA	5.1 E-4	NA	NA	NA	9.6 E-6	NA	NA	NA	NA	5.8 E-2
59F-SPB02	10	NA	NA	NA	NA	3.2 E-6	NA	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-2
59F-SPB03	1	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	5.1 E-2
59F-SPB03	5	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	5.5 E-2
59F-SPB03	10	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
59F-SPB04	1	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	9.6 E-6	NA	NA	NA	NA	4.3 E-2
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	4.1 E-2
59F-SPB05	1	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	NA	NA	NA	NA	9.6 E-6	NA	NA	NA	NA	5.1 E-2

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
59F-SPB05	5	NA	NA	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	4.9 E-2
59F-SPB05	10	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	NA	NA	5.3 E-2
59F-SPB06	1	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	8.6 E-5	NA	NA	NA	NA	3.1 E-2
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	4.3 E-2
59F-SPB06	10	NA	NA	NA	NA	NA	NA	6.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2
59F-SPB07	1	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	9.6 E-6	NA	NA	NA	NA	4.7 E-2
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2
59F-SPB07	10	NA	NA	NA	NA	NA	NA	5.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2
59F-SPB08	1	NA	NA	NA	NA	NA	NA	4.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2
59F-SPB08	5	NA	NA	NA	NA	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2
60F-SB01	5	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2
60F-SB01	10	NA	NA	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-2
60F-SB02	1	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	5.9 E-4	2.2 E-4	NA	NA	3.4 E-6	NA	NA	NA	NA	2.1 E-3
60F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.4 E-4	NA	NA	1.2 E-5	NA	NA	NA	NA	3.9 E-3
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	1.8 E-4	NA	NA	2.4 E-7	NA	NA	1.6 E-5	NA	1.3 E-3
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	3.6 E-4	NA	NA	NA	NA	NA	2.2 E-6	NA	1.6 E-3
60F-SB04	1	NA	NA	NA	6.0 E-5	NA	NA	NA	NA	7.3 E-5	1.3 E-4	NA	NA	NA	NA	NA	2.3 E-5	NA	1.3 E-3
60F-SB04	5	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	4.6 E-5	1.4 E-4	NA	NA	NA	NA	NA	8.9 E-7	NA	2.2 E-3
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	1.2 E-4	NA	NA	NA	NA	NA	1.4 E-5	NA	1.7 E-3
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	1.4 E-4	NA	NA	NA	NA	NA	5.9 E-7	NA	1.3 E-3
60F-SNS01	0.5	8.6 E-7	NA	2.4 E-6	NA	NA	NA	NA	NA	1.2 E-3	2.5 E-4	NA	NA	NA	NA	1.2 E-6	NA	2.8 E-6	3.1 E-3
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	NA	NA	NA	6.7 E-5
61F-SB02	3	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-2
61F-SB02	5	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
61F-SB02	10	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	2.4 E-3
61F-SB03	5	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	5.3 E-7	NA	8.3 E-7	NA	9.0 E-7	3.9 E-3
61F-SB04	1	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-3
61F-SB05	1	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4
61F-SNS01	0.5	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	7.3 E-3	1.3 E-4	NA	NA	NA	1.8 E-4	2.3 E-6	NA	6.9 E-6	1.6 E-2
61F-SNS02	0.5	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	9.6 E-4	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	4.5 E-3
61F-SPB01	1	NA	NA	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-2
61F-SPB01	5	NA	NA	NA	NA	NA	NA	5.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-2
61F-SPB01	10	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
62F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	3.0 E-5	NA	NA	NA	NA	NA	2.0 E-6	NA	1.4 E-3
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
62F-SB06	2	3.2 E-7	9.5 E-6	3.0 E-7	4.0 E-3	NA	NA	NA	NA	6.4 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	4.2 E-7	5.4 E-3
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
62F-SB07	5	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	1.7 E-4	2.3 E-4	NA	NA	NA	NA	9.0 E-7	NA	1.8 E-6	2.7 E-3
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	3.1 E-3
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	7.7 E-6
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	1.0 E-5

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	1.4 E-5
62F-SNS01	0.5	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	2.3 E-7	NA	1.5 E-6	NA	2.8 E-6	2.4 E-3
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA	6.2 E-7	NA	NA	NA	NA	3.0 E-3
62F-SNS02	0.5	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA	5.7 E-6	NA	5.5 E-7	NA	1.9 E-6	4.2 E-3
C201-SPB01	1	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-2
C201-SPB01	5	NA	NA	NA	NA	NA	NA	4.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2
C201-SPB01	10	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	1.3 E-1
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	4.4 E-2
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-2
C208-SB03	5	NA	NA	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2
C208-SB03	10	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	1.4 E-1
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-2	NA	NA	NA	NA	NA	NA	6.9 E-2
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	2.7 E-2
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	9.7 E-3
C208-SPB01	1	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	1.6 E-1	NA	NA	NA	NA	NA	1.9 E-1
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	6.6 E-2
C208-SPB01	10	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	4.0 E-2
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	NA	NA	NA	NA	NA	5.0 E-2
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	7.7 E-5	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	2.3 E-4	NA	NA	8.6 E-8	NA	NA	1.7 E-5	NA	2.1 E-3
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-4	7.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
CP2-07-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.0 E-4	NA	NA	NA	NA	NA	7.7 E-6	NA	2.4 E-3
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	6.3 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	1.4 E-4	NA	NA	NA	NA	NA	2.7 E-6	NA	2.4 E-3
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	1.2 E-4	NA	NA	NA	NA	NA	1.8 E-6	NA	3.3 E-3
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
CP2-07-SB09	1	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	7.6 E-7	6.3 E-6	4.4 E-7	1.4 E-3
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	2.0 E-4	NA	NA	3.0 E-7	NA	NA	6.2 E-6	NA	1.7 E-3
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	8.5 E-5	NA	NA	NA	NA	NA	2.4 E-6	NA	1.3 E-3
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	1.5 E-4	NA	NA	NA	NA	NA	3.6 E-6	NA	1.6 E-3
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	1.0 E-4	NA	NA	4.2 E-7	NA	NA	1.0 E-5	NA	1.7 E-3
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	8.8 E-5	NA	NA	NA	NA	NA	3.2 E-5	NA	1.5 E-3
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	1.1 E-5	NA	1.9 E-3
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	1.9 E-6	NA	1.4 E-3

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	Depth	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	3.7 E-7	NA	NA	8.3 E-7	NA	3.2 E-3
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
CP2-07-SB14	5	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	7.8 E-5	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-3
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	3.7 E-3
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	1.8 E-7
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	4.5 E-7
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	1.0 E-7
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	3.2 E-6
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	1.9 E-7
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.4 E-4	NA	NA	NA	NA	5.8 E-7	1.5 E-5	NA	1.7 E-3
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	8.2 E-5	NA	NA	NA	NA	NA	2.9 E-6	NA	1.9 E-3
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	5.5 E-5	2.5 E-2	NA	NA	NA	NA	NA	NA	2.6 E-2
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	6.6 E-5	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
CP2-08-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	NA	2.0 E-1	2.1 E-6	NA	1.2 E-6	1.4 E-5	7.6 E-7	2.0 E-1
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	3.9 E-3
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	2.6 E-4	NA	7.3 E-3	NA	NA	NA	2.1 E-5	NA	1.2 E-2
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	1.3 E-4	NA	NA	NA	NA	NA	4.5 E-6	NA	3.4 E-3
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	7.4 E-3
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	2.0 E-4	NA	NA	2.7 E-5	NA	NA	NA	NA	2.3 E-3
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
CP2-08-SNS01	0.5	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	2.1 E-4	7.4 E-5	NA	7.3 E-3	9.1 E-7	NA	NA	NA	NA	1.1 E-2
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	1.3 E-4	NA	NA	9.1 E-8	NA	NA	NA	NA	3.4 E-3
CP2-08-SNS02	0.5	NA	NA	6.2 E-7	NA	NA	NA	NA	NA	1.1 E-4	6.3 E-5	NA	1.3 E-2	NA	NA	NA	NA	1.1 E-6	1.5 E-2
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	5.8 E-5	NA	NA	NA	NA	NA	NA	NA	2.4 E-3
CP2-08-SNS03	0.5	NA	NA	5.0 E-7	NA	NA	NA	NA	NA	6.9 E-5	3.8 E-5	NA	8.0 E-3	NA	NA	3.5 E-7	NA	5.7 E-7	1.0 E-2
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	1.0 E-4	NA	4.8 E-3	NA	NA	NA	NA	NA	7.8 E-3
CP2-08-SNS04	0.5	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	5.1 E-2	1.7 E-4	NA	3.1 E-6	NA	2.4 E-5	5.5 E-2
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	7.2 E-7	NA	NA	NA	NA	2.0 E-3
CP2-RE01-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	1.1 E-4	NA	NA	5.3 E-7	NA	NA	NA	NA	1.7 E-3
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.9 E-4	NA	NA	NA	NA	NA	5.4 E-6	NA	2.0 E-3
CP2-RE05-SB01	1	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	1.1 E-4	5.8 E-5	NA	NA	4.0 E-7	NA	2.6 E-6	1.9 E-6	1.8 E-6	3.2 E-3
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	7.2 E-3
CP2-RE05-SB02	1	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	5.9 E-5	1.5 E-4	NA	NA	NA	NA	NA	5.9 E-6	NA	7.5 E-3
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.7 E-3
CP2-RE05-SB03	1	7.3 E-7	NA	NA	1.0 E-3	NA	NA	NA	NA	4.6 E-5	2.0 E-4	NA	NA	2.0 E-6	NA	NA	9.6 E-6	NA	9.9 E-3
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-3

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	**Depth**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
CP2-RE05-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.3 E-3
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	1.8 E-4	NA	NA	3.7 E-7	NA	NA	NA	NA	2.3 E-3
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	3.0 E-3
CP2-ST07-SB01	1	NA	NA	7.8 E-7	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	1.7 E-6	NA	3.9 E-7	NA	8.3 E-7	1.7 E-3
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-3
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	6.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	4.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2
F(c)-SB02	1	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	8.2 E-3	NA	NA	1.0 E-6	4.8 E-6	1.1 E-6	9.2 E-3
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4	8.5 E-5	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	3.2 E-3
F(c)-SB04	1	NA	NA	9.4 E-8	NA	NA	NA	NA	NA	4.4 E-5	3.0 E-4	1.3 E+1	NA	NA	NA	2.5 E-7	4.8 E-6	NA	1.3 E+1
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	4.4 E-4	1.4 E-3	NA	NA	NA	NA	5.6 E-6	NA	7.6 E-3
F(c)-SNS01	0.5	NA	NA	5.7 E-7	NA	NA	NA	NA	NA	6.9 E-4	1.7 E-4	NA	NA	NA	NA	2.5 E-7	NA	9.0 E-7	4.7 E-3
F(c)-SNS02	0.5	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	9.6 E-5	7.4 E-5	NA	2.1 E-2	NA	NA	4.0 E-7	NA	1.9 E-6	2.4 E-2
F(c)-SNS03	0.5	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	3.0 E-4	3.3 E-5	NA	2.5 E-2	NA	NA	7.6 E-7	NA	1.9 E-6	2.7 E-2
OS1-F2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	7.5 E-5
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-3	9.6 E-8	NA	NA	NA	NA	6.5 E-3
OS1-F2-SB04	1	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-3	3.4 E-7	NA	NA	NA	NA	1.0 E-2
OS1-F2-SNS01	0.5	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	6.9 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	3.8 E-3
OS1-F2-SNS01	2.5	NA	9.5 E-6	1.3 E-7	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	5.6 E-3
OS1-F2-SNS02	0.5	9.9 E-7	2.0 E-5	NA	3.4 E-3	NA	NA	NA	NA	3.9 E-4	1.5 E-4	NA	NA	2.3 E-6	NA	NA	NA	NA	1.2 E-2
OS1-F2-SNS02	2.5	NA	1.0 E-5	NA	2.2 E-4	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
OS1-F2-SNS03	0.5	1.2 E-6	NA	1.0 E-6	NA	NA	NA	NA	NA	8.2 E-4	2.0 E-4	NA	NA	1.2 E-5	NA	4.4 E-7	2.0 E-6	1.3 E-6	7.4 E-3
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
OS1-F2-SNS04	0.5	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	6.9 E-5	1.6 E-4	NA	NA	NA	NA	2.4 E-7	7.7 E-7	NA	2.3 E-3
OS1-F2-SNS04	2.5	9.3 E-7	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	1.6 E-4	NA	NA	2.9 E-6	NA	NA	1.2 E-6	NA	4.2 E-3
OS1-F3-SD01	0.25	3.5 E-7	7.9 E-6	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	1.7 E-2	1.6 E-6	NA	NA	NA	NA	1.8 E-2

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
25F-HA01	1	NA	NA	NA	NA	NA	NA	NA	1 E-8	3 E-7	6 E-8	NA	NA	NA	1 E-9	3 E-9	NA	NA	NA	NA
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	NA	NA	NA	NA	NA
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	NA	NA	NA	NA	NA
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
25F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
25F-SB06	1	NA	NA	NA	NA	NA	NA	NA	2 E-8	4 E-7	1 E-7	NA	NA	NA	5 E-10	4 E-9	NA	NA	NA	NA
25F-SB06	5	NA	NA	NA	NA	NA	NA	NA	3 E-8	5 E-7	1 E-7	NA	NA	NA	5 E-10	5 E-9	NA	NA	NA	NA
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-SD01	1.5	NA	NA	NA	NA	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-SD01	5	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
59F-SB11	5	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
59F-SB12	1	NA	NA	NA	NA	NA	NA	NA	3 E-8	4 E-7	1 E-7	NA	NA	NA	6 E-10	5 E-9	NA	NA	NA	NA
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB15	1	NA	NA	NA	9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
59F-SB15	5	NA	NA	NA	NA	NA	NA	NA	3 E-8	3 E-7	1 E-7	NA	NA	NA	5 E-10	6 E-9	NA	NA	NA	NA
59F-SB16	1	NA	NA	NA	1 E-9	7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a) pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene	Dieldrin	Di-n-butyl phthalate
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SB16	5	NA	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
59F-SB19	1	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	8 E-8	NA	NA	NA
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
59F-SB20	1	NA	NA	1 E-9	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	1	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB22	1	NA	1 E-6	NA	7 E-7	NA	NA	NA	8 E-8	1 E-6	2 E-7	NA	NA	NA	1 E-9	2 E-8	1 E-6	NA	NA	NA
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
59F-SB23	1	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB25	1	NA	2 E-9	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA	4 E-8	NA
59F-SB26	1	NA	NA	4 E-9	8 E-9	NA	NA	NA	3 E-7	4 E-6	NA	6 E-7	NA	3 E-7	4 E-10	5 E-8	NA	NA	NA	NA
59F-SB27	1	NA	1 E-9	6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA	4 E-8	NA
59F-SB28	1	NA	NA	NA	NA	8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA	2 E-7	NA
59F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	8 E-9	NA	4 E-8	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA
59F-SNS01	0.5	NA	NA	NA	5 E-9	NA	NA	NA	3 E-8	5 E-7	1 E-7	NA	NA	NA	1 E-9	7 E-9	5 E-9	NA	NA	NA
59F-SNS01	2.5	NA	NA	NA	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
59F-SNS02	0.5	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	2 E-9	NA	NA	NA	NA
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
59F-SNS03	0.5	NA	NA	NA	2 E-8	NA	NA	NA	1 E-8	2 E-7	3 E-8	NA	NA	NA	7 E-10	2 E-9	NA	NA	NA	NA
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	2 E-9	NA	NA	NA	NA
59F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	1	NA	NA	3 E-8	5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	5	NA	NA	NA	7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SNS01	0.5	NA	NA	NA	1 E-8	NA	NA	NA	2 E-8	4 E-7	2 E-7	NA	NA	NA	7 E-10	6 E-9	NA	NA	NA	NA
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
61F-SB03	5	NA	NA	NA	NA	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	7 E-10	3 E-9	NA	NA	NA	NA
61F-SB04	1	NA	NA	2 E-8	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB05	1	NA	NA	2 E-9	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	4 E-8	9 E-7	3 E-7	NA	NA	NA	3 E-9	1 E-8	NA	NA	NA	NA
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA
61F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	1	NA	NA	6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB06	2	NA	NA	8 E-9	2 E-9	NA	NA	NA	9 E-9	2 E-7	3 E-8	NA	NA	NA	1 E-10	2 E-9	2 E-8	NA	3 E-8	NA
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
62F-SB07	5	NA	NA	NA	NA	NA	NA	NA	2 E-8	2 E-7	5 E-8	NA	NA	NA	6 E-10	4 E-9	NA	NA	NA	NA
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	8 E-9	2 E-7	8 E-8	NA	NA	NA	1 E-9	7 E-9	NA	NA	NA	NA
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA
62F-SNS02	0.5	NA	NA	NA	5 E-9	NA	NA	NA	NA	NA	1 E-7	NA	NA	NA	1 E-9	5 E-9	NA	NA	NA	NA
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	NA	NA	NA	NA	NA
CP2-07-SB04	1	NA	NA	1 E-9	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	NA	NA	NA	NA	NA
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
CP2-07-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3 E-9	NA	NA	NA	NA
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA	NA	NA	NA	NA
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
CP2-08-SB12	1	NA	NA	NA	3 E-8	NA	NA	NA	NA	3 E-7	8 E-8	NA	NA	NA	5 E-10	5 E-9	3 E-8	NA	NA	NA
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
CP2-08-SNS02	0.5	NA	NA	2 E-9	NA	NA	NA	NA	1 E-8	2 E-7	6 E-8	NA	NA	NA	7 E-10	3 E-9	NA	NA	NA	NA
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
CP2-08-SNS03	0.5	NA	NA	3 E-9	NA	NA	NA	NA	8 E-9	NA	NA	NA	NA	NA	5 E-10	2 E-9	NA	NA	NA	NA
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
CP2-08-SNS04	0.5	NA	NA	NA	NA	2 E-7	NA	NA	2 E-7	2 E-6	6 E-7	NA	NA	NA	2 E-9	4 E-8	NA	1 E-7	NA	NA
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
CP2-RE01-SB01	1	NA	NA	NA	9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	NA	NA	NA	6 E-10	3 E-9	NA	NA	NA	NA
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA	NA	NA
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a) pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**	**Dieldrin**	**Di-n-butyl phthalate**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-RE05-SB04	1	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	5	NA	NA	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA
CP2-ST07-SB01	1	NA	NA	NA	3 E-9	NA	NA	NA	NA	NA	5 E-8	NA	NA	NA	6 E-10	2 E-9	NA	NA	NA	NA
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	4 E-8	NA	NA	NA	1 E-9	2 E-9	NA	NA	NA	NA
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	2 E-8	4 E-7	9 E-8	NA	NA	NA	8 E-10	6 E-9	NA	NA	NA	NA
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	2 E-8	3 E-7	8 E-8	NA	NA	NA	7 E-10	5 E-9	NA	NA	NA	NA
OS1-F2-SB02	1	NA	NA	1 E-9	NA	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB03	1	NA	2 E-9	5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	2 E-9	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA	NA	NA	NA	NA
OS1-F2-SNS01	2.5	NA	NA	3 E-8	1 E-8	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	3 E-9	NA	NA	NA
OS1-F2-SNS02	0.5	NA	4 E-9	2 E-8	1 E-8	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA	2 E-7	NA
OS1-F2-SNS02	2.5	NA	NA	NA	4 E-9	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA	2 E-9	NA	NA	NA
OS1-F2-SNS03	0.5	NA	NA	4 E-9	2 E-8	NA	NA	NA	1 E-8	3 E-7	6 E-8	NA	NA	NA	8 E-10	3 E-9	6 E-9	NA	1 E-7	NA
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA	3 E-9	NA	NA	NA
OS1-F2-SNS04	0.5	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA	2 E-9	NA	NA	NA
OS1-F2-SNS04	2.5	NA	2 E-8	3 E-9	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	6 E-9	NA	8 E-8	NA
OS1-F3-SD01	0.25	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA	3 E-8	NA

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	Blood Lead	
Sample Name	Depth	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Child	Adult
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
25F-HA01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	5.3	3.4
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.3	3.4
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.0	3.4
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	5.0	3.4
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	4.9	3.4
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.8	3.4
25F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.9	3.4
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.9	3.4
25F-SB06	1	NA	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	4.9	3.4
25F-SB06	5	NA	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	4.9	3.4
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	5.1	3.4
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	4.9	3.4
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.5	3.5
25F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	5.1	3.4
25F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	5.2	3.4
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6	3.5
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
25F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7	3.4
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7	3.4
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
25F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3	3.4
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
59F-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.9	3.4
59F-SB12	1	NA	NA	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	4.8	3.4
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
59F-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	4.9	3.4
59F-SB15	5	NA	NA	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	4.8	3.4
59F-SB16	1	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		Blood Lead	
Sample Name	Depth	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Child	Adult
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
59F-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	4.9	3.4
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.9	3.4
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	5.0	3.4
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.9	3.4
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.9	3.4
59F-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	5.2	3.4
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.9	3.4
59F-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	5.4	3.4
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	5.0	3.4
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SB22	1	NA	NA	NA	NA	NA	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	5.2	3.4
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	5.0	3.4
59F-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SB25	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA	NA	NA	NA	2 E-7	5.1	3.4
59F-SB26	1	NA	NA	NA	NA	NA	3 E-7	NA	NA	NA	NA	NA	1 E-5	NA	NA	NA	NA	NA	2 E-5	5.0	3.4
59F-SB27	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA	NA	NA	NA	4 E-6	5.2	3.4
59F-SB28	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5	NA	NA	NA	NA	NA	3 E-5	5.6	3.5
59F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4	NA	NA	NA	NA	NA	NA	2 E-4	11	4.1
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-6	NA	NA	NA	NA	NA	NA	6 E-6	5.2	3.4
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA	NA	NA	NA	4 E-6	5.4	3.4
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	NA	NA	NA	NA	NA	5 E-6	5.1	3.4
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4	3.4
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SD07	0.25	NA	NA	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	5.2	3.4
59F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	5.3	3.4
59F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	5.0	3.4
59F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	5.2	3.4
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.1	3.4
59F-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	5.1	3.4
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.2	3.4
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	5.6	3.5
59F-SPB01	1	NA	NA	NA	NA	5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	5.0	3.4
59F-SPB01	5	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	NA	NA
59F-SPB01	10	NA	NA	NA	NA	5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	NA	NA
59F-SPB02	1	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	17.1	4.9
59F-SPB02	5	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	11.6	4.2
59F-SPB02	10	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	5.2	3.4
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		Blood Lead	
Sample Name	Depth	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Child	Adult
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2	3.4
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
60F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	4.9	3.4
60F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	4.9	3.4
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
60F-SB04	1	NA	NA	NA	8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	4.8	3.4
60F-SB04	5	NA	NA	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	4.9	3.4
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
60F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	5.0	3.4
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
61F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
61F-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.8	3.4
61F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	4.8	3.4
61F-SB04	1	NA	NA	NA	7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	NA	NA
61F-SB05	1	NA	NA	NA	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	NA	NA	NA	2 E-6	6.8	3.6
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	5.3	3.4
61F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
62F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.7	3.3
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
62F-SB06	2	NA	NA	NA	5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	4.8	3.4
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.9	3.4
62F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	4.9	3.4
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		Blood Lead	
Sample Name	Depth	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Child	Adult
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	5.2	3.4
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	5.0	3.4
62F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	5.2	3.4
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	NA	NA	NA	NA	NA	1 E-5	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	NA	NA	NA	NA	NA	5 E-6	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
C208-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7	3.4
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	NA	NA	NA	NA	NA	NA	2 E-5	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6	NA	NA	NA	NA	NA	NA	7 E-6	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	NA	NA	NA	NA	NA	NA	3 E-6	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	NA	NA	NA	NA	NA	2 E-5	4.9	3.4
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	NA	NA	NA	NA	NA	2 E-6	4.8	3.4
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	NA	NA	NA	NA	NA	NA	5 E-6	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.8	3.4
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.9	3.4
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	4.9	3.4
CP2-07-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	4.9	3.4
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.9	3.4
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	5.0	3.4
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	5.0	3.4
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	5.0	3.4
CP2-07-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	4.8	3.4
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.9	3.4
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.8	3.4
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	4.7	3.4
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.8	3.4
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.7	3.4
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.9	3.4
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.9	3.4

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		Blood Lead	
Sample Name	Depth	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Child	Adult
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-07-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	5.0	3.4
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.9	3.4
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9	3.5
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	5.0	3.4
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	NA	NA	NA	NA	NA	NA	3 E-6	4.9	3.4
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	4.8	3.4
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.9	3.4
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.9	3.4
CP2-08-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	NA	NA	NA	NA	NA	2 E-5	4.8	3.4
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	NA	NA	NA	NA	NA	8 E-7	4.9	3.4
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	4.8	3.4
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	NA	NA	NA	NA	NA	8 E-7	5.0	3.4
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.9	3.4
CP2-08-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	2 E-6	4.9	3.4
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.9	3.4
CP2-08-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	NA	NA	NA	NA	NA	9 E-7	4.8	3.4
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	NA	NA	NA	NA	NA	5 E-7	4.9	3.4
CP2-08-SNS04	0.5	NA	NA	NA	NA	NA	7 E-8	NA	NA	NA	NA	NA	5 E-6	NA	NA	NA	NA	NA	9 E-6	5.3	3.4
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	5.0	3.4
CP2-RE01-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	4.8	3.4
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	4.8	3.4
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	4.8	3.4
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
CP2-RE05-SB03	1	NA	NA	NA	1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	4.8	3.4
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4

Table 5.6-10
Location-Specific Soil Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	Blood Lead	
Sample Name	**Depth**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**ILCR**	**Child**	**Adult**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
CP2-RE05-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	4.9	3.4
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	4.8	3.4
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	4.8	3.4
CP2-ST07-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	5.0	3.4
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	5.0	3.4
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7	NA	NA	NA	NA	NA	9 E-7	4.8	3.4
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9	3.4
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8	3.4
F(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-3	NA	NA	NA	NA	NA	NA	1 E-3	4.8	3.4
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	NA	NA	NA	NA	NA	NA	1 E-7	4.7	3.4
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	5.3	3.4
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	2 E-6	NA	NA	NA	NA	NA	3 E-6	5.0	3.4
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	3 E-6	NA	NA	NA	NA	NA	3 E-6	4.9	3.4
OS1-F2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	NA	NA
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	NA	NA	NA	NA	NA	7 E-7	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	1 E-6	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	5.0	3.4
OS1-F2-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	5.3	3.4
OS1-F2-SNS02	0.5	NA	NA	NA	4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	5.5	3.4
OS1-F2-SNS02	2.5	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	5.0	3.4
OS1-F2-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	5.7	3.5
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	5.0	3.4
OS1-F2-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	4.9	3.4
OS1-F2-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	5.1	3.4
OS1-F3-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	NA	NA	NA	NA	NA	2 E-6	5.2	3.4

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child		3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	2.2 E-1
Unit Hazard Adult		1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	9.6 E-2
Unit Risk		NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	NA
59F-SP33	10		100	3900	37		110	140	1200	120	50	820	22		140		
59F-SP33	20			33000					550			920			230		
59F-SP34	10		82	41000			74		400	110		2000			170		
59F-SP34	15			30000					1400		65	1100			82		38
59F-SP35	10	120		88000								760			100		270
59F-SP35	20			310000			100		160			770			280		100
59F-SP36	10			10									14		57		
59F-SP36	20		27	38	7.6					17		69			23		
59F-SP37	10							70			38	240	11				
59F-SP38	10														4.5		
59F-SP38	20							82			6.0	390	12				
59F-SP38	40																
59F-SP39	20			18											26		
60F-SP08	10											98					
60F-SP08	20		13							8.2	23	74	5.7		80		
61F-SP03	10			760				25	33		12	340	5.0		14		
61F-SP03	20			330				23	32		12	280	12		12		
61F-SP04	10								14						6.7		
61F-SP04	20								17								
61F-SP05	10											130	5.4		7.0		
61F-SP05	20											120	3.8				
61F-SP06	10											78					
61F-SP06	20											130	8.6		11		
62F-SP01	20		680		240		80	76	150	680	17	300			14		
62F-SP02	20		22					34	60	15	31	440			37		
62F-SP03	20		24					26	90	18	16	350			39		
62F-SP04	10		18		5.5		18		39	11	6.7	82			13		
62F-SP05	10		1000		370		220	130	190	1000	8.4	750	12		60		
62F-SP05	20		950		380		160	110	170	1100	39	520	9.5		17		
62F-SP06	10		13							8.3					8.2		
62F-SP06	20		11				8.1		17	7.4	25	100	15		73		
62F-SP07	10					20			25			110	4.9	17	15		
62F-SP07	20												3.7		7.6		
CP2-07-SP01	10	160		230000			160						100				
CP2-07-SP01	20			8600000													
CP2-07-SP01	40			2200000													
CP2-07-SP02	10															1500	
CP2-07-SP02	20																
CP2-07-SP03	10								64		8.2	180	4.5		10		
CP2-07-SP03	20						25		97			180	16		95		
CP2-07-SP04	10			170			58						14		210		
CP2-07-SP04	20			190			40					150	35		310		
CP2-07-SP05	10			12			45						25		36	23	
CP2-07-SP05	20			11									12		33	14	
CP2-07-SP06	10	24	9.3	440						8.0			12		44	96	
CP2-07-SP06	20	22		160									23		70	100	
CP2-07-SP07	10						15		30		18	140	13		19		
CP2-07-SP07	20			8					18		16	94	6.4		24		
CP2-07-SP08	10			20								120			6.2		
CP2-07-SP08	20			5.6								170			17		
CP2-07-SP08	30					37		29	20			650			17		
CP2-07-SP09	10																
CP2-07-SP09	20							28				150	34				
CP2-07-SP09	34						5.0	110				640	59		4.8		
CP2-07-SP10	10							34				85	34		55		
CP2-07-SP10	20			9.0				85	20			260	89		45		

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child		3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	2.2 E-1
Unit Hazard Adult		1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	9.6 E-2
Unit Risk		NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	NA
CP2-07-SP10	40							22	12			82	16		27		
CP2-07-SP11	10							34	16			220	5				
CP2-07-SP11	20											150	15				
CP2-07-SP12	10							29				96	25		61		
CP2-07-SP12	20											86	8.9		10		
CP2-07-SP12	40	17		72				48	18			200	64		210		
CP2-07-SP13	10								13			78	14				
CP2-07-SP13	20							43				250	18				
CP2-07-SP14	10											310			7.7		
CP2-07-SP14	18.5					27		28	12			510			39		
CP2-07-SP15	10											70	4.1		31		
CP2-07-SP15	20																
CP2-08-SP11	10		44	130	12		12	23	180	42	16	470	4.9		25		
CP2-08-SP11	20		40	36			16	51	640	38	53	1100	7.7		27		
CP2-08-SP12	10		18	9.8					190	13	21	300	4.4		15		
CP2-08-SP12	20			2200					26		11	120			26		
CP2-08-SP13	10											200					
CP2-08-SP14	10														4.5		
CP2-RE05-SP01	10			300000													
CP2-RE05-SP01	20			110000													
CP2-RE05-SP01	40			9.6											14		
CP2-RE05-SP02	10			38000											49		
CP2-RE05-SP02	20			9900													
CP2-RE05-SP02	40	8.9				29		20	12			270	27		88		
CP2-RE05-SP03	10														4		
CP2-RE05-SP03	20		9.4							6.3		120			13		
CP2-RE05-SP04	10											91			3.7		
CP2-RE05-SP04	20											84			4.1		
CP2-RE05-SP05	10			340									4.2		14		
CP2-RE05-SP05	20			21											16		
CP2-RE05-SP05	40			17											26		
CP2-RE05-SP06	10			12000											15		
CP2-RE05-SP06	20			4300											8.4		
CP2-RE05-SP06	40			910									7.0		15		
CP2-RE05-SP07	10								41						9.3		
CP2-RE05-SP07	20								23						26		
CP2-RE05-SP08	10			21									5.7		28		
CP2-RE05-SP08	20			15									7.7		48		
CP2-RE05-SP08	40			11											8.1		
CP2-RE05-SP09	10			7.7													
CP2-RE05-SP09	20			7.2											27		
CP2-RE05-SP10	10											110					
CP2-RE05-SP10	20											130					
F(C)-SP05	20			13					16		7.0				10		
F(C)-SP06	10		350		120		30	37	79	310	15	120			28		
F(C)-SP06	20		220		70		6.8		20	180	18	77	6.2		37		
OS1-F1-SP01	10											75			20		
OS1-F1-SP01	20											100	5.1		20		

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		4.9 E+1	5.6 E+0	3.7 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	7.5 E-1	2.2 E+1	6.4 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.1 E+1	2.4 E+0	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	3.2 E-1	9.6 E+0	2.7 E+1	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
59F-SP33	10			37	370	75	22		990	93	260		120	26		180	210		14
59F-SP33	20				270		930		170	150						170	100		71
59F-SP34	10				280				180	210	120					180	110		51
59F-SP34	15				150				120	64						340	90		55
59F-SP35	10			66	140				220	580						180		330	540
59F-SP35	20	160		59	140				380	420						170	62	140	830
59F-SP36	10	120			42		300		23	42	11						36	32	
59F-SP36	20	22			49		44									6.6	5.3		
59F-SP37	10				22					8.6	6.8					25	29		
59F-SP38	10									7.3					510	11	7.4	9.3	
59F-SP38	20				15				21	30	7.9				380	33	28	12	
59F-SP38	40														8.7				
59F-SP39	20	16					130	18				16			69		4.9	55	
60F-SP08	10				46												6.0		
60F-SP08	20	12		7.3	84				48	13						23	29		
61F-SP03	10			6.3	29						10					22	24	15	
61F-SP03	20	8.7	8.2	5.0	30					7.0	10					24	33	41	
61F-SP04	10									14						11	13		
61F-SP04	20															7.9	14		
61F-SP05	10									7.7							6.3	8.7	
61F-SP05	20				20												5.9		
61F-SP06	10				22												8.8	15	
61F-SP06	20								13	18	6.1						15	10	
62F-SP01	20		30	16	170	250		23	32	4.7	1100	9.3	520	130	15	92	300		
62F-SP02	20			11	66				38		8					44	20		
62F-SP03	20			8.1	59		14	130	18		8.7		6.1			33	11	7.9	
62F-SP04	10			6.4	55				14							17	4.0		
62F-SP05	10		45	28	300	460	10		58	17	2000	21	880	200	33	140	840		
62F-SP05	20		52	34	280	480	6.7		110	12	2000	15	940	220	31	180	690		
62F-SP06	10				79				10							15	11		
62F-SP06	20			25	64			21	110	37	5.7					40	49		
62F-SP07	10	6.7		4.7	22				40	93						73	20	7.0	
62F-SP07	20						10	41	5.6	27	15		6.2			7.2	12		
CP2-07-SP01	10	3700			960		480			2400						2800	190	160	64000
CP2-07-SP01	20	120000																	120000
CP2-07-SP01	40	12000																	
CP2-07-SP02	10								71							91			
CP2-07-SP02	20																		
CP2-07-SP03	10	19			22		240		20	6.2					20	28	23		
CP2-07-SP03	20	9.8			20		44		82	85						75	31		
CP2-07-SP04	10	190		53	27				200	430							23	8.0	
CP2-07-SP04	20	690		21	22				160	220						16	32		
CP2-07-SP05	10	180			17		260		12	48	12	59			74		26	22	
CP2-07-SP05	20	330					440		15	21	9.5	18			70		34	28	
CP2-07-SP06	10	1300				12	140			25	42	730	13		190		50	95	
CP2-07-SP06	20	480					420			58	18	230			59		44	41	
CP2-07-SP07	10	10			30		100		48	24	8.6				130	36	42		
CP2-07-SP07	20	16			18		110		38	16	9.5				13	35	24		
CP2-07-SP08	10				11														
CP2-07-SP08	20				20		13												
CP2-07-SP08	30				47			550	19	43	7.6				20	45	40	270	
CP2-07-SP09	10									7.3					30	6.8	9.1		
CP2-07-SP09	20				9.6				57	54	8.6				46	18	50		
CP2-07-SP09	34			7.3	25	8.5			100	130	13		5.2		50	34	90		
CP2-07-SP10	10	6.9		8.4	12				150	290	8.6					6.0	22		
CP2-07-SP10	20	34			88				540	1800	9.3					19	34		

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		4.9 E+1	5.6 E+0	3.7 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	7.5 E-1	2.2 E+1	6.4 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.1 E+1	2.4 E+0	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	3.2 E-1	9.6 E+0	2.7 E+1	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
CP2-07-SP10	40				43				98	170	10					5.8	14		
CP2-07-SP11	10									11					17		8.2		
CP2-07-SP11	20					5.9			25	42	7.7				21	12	34		
CP2-07-SP12	10	9.9		14	32	5.2	8.5		160	390	13					5.7	21		
CP2-07-SP12	20				11		16		14	18	8.9						12	12	
CP2-07-SP12	40	41			98		28		470	1600	14						29	15	
CP2-07-SP13	10				14					25					62	24	15		
CP2-07-SP13	20				22	5.3			19	31	8.4				11	16	39		
CP2-07-SP14	10				22			270	7.4	11					8.8	12	67	99	
CP2-07-SP14	18.5			8.5	38			190	10	180	10					35	200	64	
CP2-07-SP15	10																		
CP2-07-SP15	20																		
CP2-08-SP11	10			8.4	110	17			66	6.3	64	43	26	8.2		110	55	8.8	
CP2-08-SP11	20			26	160	14			140	9.5	59	21	21			240	85		
CP2-08-SP12	10	12		8.4	70				27	4.8	17	16	8.2			43	27	18	
CP2-08-SP12	20	10		6.0	22					6.3	8.2	8.9				23	14	19	
CP2-08-SP13	10				20														
CP2-08-SP14	10										6.4						7.5		
CP2-RE05-SP01	10	3000														98			240
CP2-RE05-SP01	20	1200							120							130	240		58
CP2-RE05-SP01	40																		
CP2-RE05-SP02	10	400							78							86			
CP2-RE05-SP02	20	120							110							140	62		
CP2-RE05-SP02	40			23	26	5.6		940	380	1500	8.3				26		60	450	
CP2-RE05-SP03	10				8.8														
CP2-RE05-SP03	20				9.7				14	8.5	12		6.2				8.6		
CP2-RE05-SP04	10				9.1														
CP2-RE05-SP04	20				14														
CP2-RE05-SP05	10									6.8							5.4		
CP2-RE05-SP05	20								6.2								5.3		
CP2-RE05-SP05	40								4.8	7.0								13	
CP2-RE05-SP06	10	50								11						5.7	8.2		
CP2-RE05-SP06	20	19								6.7	5.4								
CP2-RE05-SP06	40									23	9.8						9.2		
CP2-RE05-SP07	10								28	32						7.4	9.1		
CP2-RE05-SP07	20								27	53						19	28	7.2	
CP2-RE05-SP08	10								23	23							5.6		
CP2-RE05-SP08	20			8.0					29	64							7.8		
CP2-RE05-SP08	40									12									
CP2-RE05-SP09	10																		
CP2-RE05-SP09	20			4.7					35	44									
CP2-RE05-SP10	10																		
CP2-RE05-SP10	20																		
F(C)-SP05	20			5.5	14				13							21	7.3		
F(C)-SP06	10		14	9.2	160	66			34	5.4	300	5.9	180	57		81	58		
F(C)-SP06	20		7.7	4.5	31	26			36	7.4	110		76	32		68	32		
OS1-F1-SP01	10									4.5					330	7.5	6.6		
OS1-F1-SP01	20								7.0	18	7.6				290	26	17		

		Child Non-Cancer Hazard Index														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
59F-SP33	10	NA	1.2 E-2	1.1 E+0	5.3 E-3	NA	1.3 E-3	3.1 E-5	1.5 E-1	1.4 E-3	1.7 E-5	3.9 E-4	8.5 E-4	NA	2.6 E-4	NA
59F-SP33	20	NA	NA	4.9 E+0	NA	NA	NA	NA	4.1 E-2	NA	NA	2.6 E-4	NA	NA	2.5 E-4	NA
59F-SP34	10	NA	1.0 E-2	1.1 E+1	NA	NA	8.5 E-4	NA	5.2 E-2	1.3 E-3	NA	9.6 E-4	NA	NA	3.2 E-4	NA
59F-SP34	15	NA	NA	5.8 E+0	NA	NA	NA	NA	1.3 E-1	NA	1.6 E-5	3.8 E-4	NA	NA	1.1 E-4	NA
59F-SP35	10	2.0 E-3	NA	2.4 E+1	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	1.9 E-4	NA
59F-SP35	20	NA	NA	4.6 E+1	NA	NA	6.6 E-4	NA	1.2 E-2	NA	NA	2.2 E-4	NA	NA	3.1 E-4	NA
59F-SP36	10	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	1.1 E-4	NA
59F-SP36	20	NA	1.8 E-3	5.7 E-3	6.0 E-4	NA	NA	NA	NA	1.1 E-4	NA	2.0 E-5	NA	NA	2.5 E-5	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	1.3 E-5	1.2 E-4	4.2 E-4	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-6	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	1.2 E-6	1.1 E-4	2.5 E-4	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	NA	NA
60F-SP08	20	NA	8.8 E-4	NA	NA	NA	NA	NA	NA	5.4 E-5	4.4 E-6	2.1 E-5	1.2 E-4	NA	8.8 E-5	NA
61F-SP03	10	NA	NA	2.0 E-1	NA	NA	NA	5.5 E-6	4.3 E-3	NA	4.1 E-6	1.6 E-4	1.9 E-4	NA	2.6 E-5	NA
61F-SP03	20	NA	NA	4.9 E-2	NA	NA	NA	2.9 E-6	2.4 E-3	NA	2.3 E-6	8.0 E-5	2.5 E-4	NA	1.3 E-5	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	1.3 E-5	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	2.1 E-4	NA	1.3 E-5	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	8.0 E-5	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	1.8 E-4	NA	1.2 E-5	NA
62F-SP01	20	NA	4.6 E-2	NA	1.9 E-2	NA	5.3 E-4	9.4 E-6	1.1 E-2	4.5 E-3	3.3 E-6	8.6 E-5	NA	NA	1.5 E-5	NA
62F-SP02	20	NA	1.5 E-3	NA	NA	NA	NA	4.2 E-6	4.4 E-3	9.9 E-5	6.0 E-6	1.3 E-4	NA	NA	4.1 E-5	NA
62F-SP03	20	NA	1.6 E-3	NA	NA	NA	NA	3.2 E-6	6.7 E-3	1.2 E-4	3.1 E-6	1.0 E-4	NA	NA	4.3 E-5	NA
62F-SP04	10	NA	2.2 E-3	NA	7.9 E-4	NA	2.1 E-4	NA	5.0 E-3	1.3 E-4	2.3 E-6	3.9 E-5	NA	NA	2.4 E-5	NA
62F-SP05	10	NA	1.2 E-1	NA	5.3 E-2	NA	2.5 E-3	2.8 E-5	2.4 E-2	1.1 E-2	2.9 E-6	3.6 E-4	4.6 E-4	NA	1.1 E-4	NA
62F-SP05	20	NA	6.4 E-2	NA	3.0 E-2	NA	1.1 E-3	1.4 E-5	1.3 E-2	7.2 E-3	7.5 E-6	1.5 E-4	2.0 E-4	NA	1.9 E-5	NA
62F-SP06	10	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	9.5 E-5	NA	NA	NA	NA	1.5 E-5	NA
62F-SP06	20	NA	7.5 E-4	NA	NA	NA	5.3 E-5	NA	1.3 E-3	4.9 E-5	4.8 E-6	2.9 E-5	3.2 E-4	NA	8.0 E-5	NA
62F-SP07	10	NA	NA	NA	NA	8.8 E-6	NA	NA	3.2 E-3	NA	NA	5.3 E-5	1.9 E-4	1.1 E-4	2.8 E-5	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	NA	8.3 E-6	NA
CP2-07-SP01	10	2.7 E-3	NA	6.2 E+1	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	3.9 E-3	NA	NA	NA
CP2-07-SP01	20	NA	NA	1.3 E+3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP01	40	NA	NA	1.7 E+2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	8.3 E-3	NA	2.8 E-6	8.7 E-5	1.7 E-4	NA	1.9 E-5	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	1.6 E-4	NA	7.2 E-3	NA	NA	5.1 E-5	3.4 E-4	NA	1.0 E-4	NA
CP2-07-SP04	10	NA	NA	4.6 E-2	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	5.4 E-4	NA	4.0 E-4	NA
CP2-07-SP04	20	NA	NA	2.8 E-2	NA	NA	2.6 E-4	NA	NA	NA	NA	4.3 E-5	7.4 E-4	NA	3.4 E-4	NA
CP2-07-SP05	10	NA	NA	3.2 E-3	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	9.6 E-4	NA	6.8 E-5	6.1 E-4
CP2-07-SP05	20	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	3.6 E-5	2.0 E-4
CP2-07-SP06	10	4.0 E-4	1.1 E-3	1.2 E-1	NA	NA	NA	NA	NA	9.2 E-5	NA	NA	4.6 E-4	NA	8.3 E-5	2.5 E-3
CP2-07-SP06	20	2.1 E-4	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	7.7 E-5	1.4 E-3
CP2-07-SP07	10	NA	NA	NA	NA	NA	1.7 E-4	NA	3.9 E-3	NA	6.1 E-6	6.7 E-5	5.0 E-4	NA	3.6 E-5	NA
CP2-07-SP07	20	NA	NA	1.2 E-3	NA	NA	NA	NA	1.3 E-3	NA	3.1 E-6	2.7 E-5	1.3 E-4	NA	2.6 E-5	NA
CP2-07-SP08	10	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	1.2 E-5	NA
CP2-07-SP08	20	NA	NA	8.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	1.9 E-5	NA
CP2-07-SP08	30	NA	NA	NA	NA	6.3 E-6	NA	2.4 E-6	9.7 E-4	NA	NA	1.2 E-4	NA	NA	1.2 E-5	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	4.3 E-5	7.2 E-4	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	1.9 E-5	7.9 E-6	NA	NA	NA	1.1 E-4	7.6 E-4	NA	3.1 E-6	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	7.4 E-6	NA	NA	NA	4.1 E-5	1.3 E-3	NA	1.0 E-4	NA
CP2-07-SP10	20	NA	NA	1.3 E-3	NA	NA	NA	1.1 E-5	1.5 E-3	NA	NA	7.4 E-5	1.9 E-3	NA	4.9 E-5	NA

		Child Non-Cancer Hazard Index														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	1.4 E-6	4.4 E-4	NA	NA	1.2 E-5	1.8 E-4	NA	1.5 E-5	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	7.4 E-6	2.1 E-3	NA	NA	1.1 E-4	1.9 E-4	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	3.2 E-4	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	NA	4.6 E-5	9.6 E-4	NA	1.1 E-4	NA
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	1.9 E-4	NA	1.1 E-5	NA
CP2-07-SP12	40	8.2 E-5	NA	5.7 E-3	NA	NA	NA	3.0 E-6	6.7 E-4	NA	NA	2.9 E-5	7.1 E-4	NA	1.2 E-4	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	3.7 E-5	5.4 E-4	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	5.3 E-6	NA	NA	NA	7.1 E-5	3.8 E-4	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	1.5 E-5	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	7.1 E-6	NA	3.6 E-6	9.1 E-4	NA	NA	1.5 E-4	NA	NA	4.4 E-5	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	1.6 E-4	NA	5.8 E-5	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	5.4 E-3	3.5 E-2	1.7 E-3	NA	1.4 E-4	5.0 E-6	2.3 E-2	4.8 E-4	5.5 E-6	2.3 E-4	1.9 E-4	NA	4.7 E-5	NA
CP2-08-SP11	20	NA	2.7 E-3	5.4 E-3	NA	NA	1.1 E-4	6.3 E-6	4.7 E-2	2.5 E-4	1.0 E-5	3.1 E-4	1.6 E-4	NA	3.0 E-5	NA
CP2-08-SP12	10	NA	2.2 E-3	2.6 E-3	NA	NA	NA	NA	2.4 E-2	1.5 E-4	7.2 E-6	1.4 E-4	1.7 E-4	NA	2.8 E-5	NA
CP2-08-SP12	20	NA	NA	3.3 E-1	NA	NA	NA	NA	1.9 E-3	NA	2.1 E-6	3.4 E-5	NA	NA	2.8 E-5	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-6	NA
CP2-RE05-SP01	10	NA	NA	8.1 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	20	NA	NA	1.6 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	40	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-6	NA
CP2-RE05-SP02	10	NA	NA	1.0 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA
CP2-RE05-SP02	20	NA	NA	1.5 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	40	4.3 E-5	NA	NA	NA	3.8 E-6	NA	1.2 E-6	4.4 E-4	NA	NA	3.9 E-5	3.0 E-4	NA	4.9 E-5	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	NA
CP2-RE05-SP03	20	NA	6.4 E-4	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	3.4 E-5	NA	NA	1.4 E-5	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	NA	NA	7.0 E-6	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	4.5 E-6	NA
CP2-RE05-SP05	10	NA	NA	9.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	2.6 E-5	NA
CP2-RE05-SP05	20	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA
CP2-RE05-SP05	40	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA
CP2-RE05-SP06	10	NA	NA	3.2 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA
CP2-RE05-SP06	20	NA	NA	6.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-6	NA
CP2-RE05-SP06	40	NA	NA	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	8.3 E-6	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	1.8 E-5	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	2.8 E-5	NA
CP2-RE05-SP08	10	NA	NA	5.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	5.3 E-5	NA
CP2-RE05-SP08	20	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	5.3 E-5	NA
CP2-RE05-SP08	40	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	NA
CP2-RE05-SP09	10	NA	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	1.9 E-3	NA	NA	NA	NA	1.2 E-3	NA	1.3 E-6	NA	NA	NA	1.1 E-5	NA
F(C)-SP06	10	NA	4.3 E-2	NA	1.7 E-2	NA	3.4 E-4	8.1 E-6	1.0 E-2	3.6 E-3	5.1 E-6	5.8 E-5	NA	NA	5.3 E-5	NA
F(C)-SP06	20	NA	1.5 E-2	NA	5.5 E-3	NA	4.5 E-5	NA	1.5 E-3	1.2 E-3	3.5 E-6	2.2 E-5	1.3 E-4	NA	4.1 E-5	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	3.8 E-5	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	1.1 E-4	NA	2.2 E-5	NA

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
59F-SP33	10	NA	NA	NA	6.6 E-6	4.0 E-4	7.6 E-5	1.3 E-4	NA	2.9 E-3	2.8 E-4	2.7 E-3	NA	1.4 E-3	6.3 E-4	NA	8.0 E-4	8.0 E-4	NA	1.9 E-4	1.2 E+0
59F-SP33	20	NA	NA	NA	NA	1.8 E-4	NA	3.1 E-3	NA	3.2 E-4	2.7 E-4	NA	NA	NA	NA	NA	4.4 E-4	2.2 E-4	NA	5.5 E-4	5.0 E+0
59F-SP34	10	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	5.3 E-4	6.2 E-4	1.2 E-3	NA	NA	NA	NA	8.0 E-4	4.2 E-4	NA	6.8 E-4	1.1 E+1
59F-SP34	15	7.3 E-6	NA	NA	NA	1.2 E-4	NA	NA	NA	2.7 E-4	1.4 E-4	NA	NA	NA	NA	NA	1.1 E-3	2.4 E-4	NA	5.3 E-4	5.9 E+0
59F-SP35	10	6.7 E-5	NA	NA	1.2 E-5	1.5 E-4	NA	NA	NA	6.5 E-4	1.7 E-3	NA	NA	NA	NA	NA	8.0 E-4	NA	5.9 E-4	7.2 E-3	2.4 E+1
59F-SP35	20	1.6 E-5	2.6 E-3	NA	6.0 E-6	9.3 E-5	NA	NA	NA	7.1 E-4	7.5 E-4	NA	NA	NA	NA	NA	4.4 E-4	1.4 E-4	1.4 E-4	6.5 E-3	4.6 E+1
59F-SP36	10	NA	3.5 E-3	NA	NA	4.5 E-5	NA	1.7 E-3	NA	6.8 E-5	1.2 E-4	1.1 E-4	NA	NA	NA	NA	NA	1.4 E-4	5.7 E-5	NA	9.1 E-3
59F-SP36	20	NA	3.5 E-4	NA	NA	3.2 E-5	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	1.2 E-5	NA	NA	8.8 E-3
59F-SP37	10	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	2.6 E-5	7.1 E-5	NA	NA	NA	NA	1.1 E-4	1.1 E-4	NA	NA	9.1 E-4
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	1.4 E-2	4.9 E-5	2.8 E-5	1.7 E-5	NA	1.4 E-2
59F-SP38	20	NA	NA	NA	NA	9.9 E-6	NA	NA	NA	3.9 E-5	5.4 E-5	4.6 E-5	NA	NA	NA	5.7 E-3	8.5 E-5	6.1 E-5	1.2 E-5	NA	6.4 E-3
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	NA	NA	NA	NA	6.8 E-5
59F-SP39	20	NA	2.6 E-4	NA	NA	NA	NA	4.3 E-4	3.6 E-7	NA	NA	NA	4.0 E-6	NA	NA	1.0 E-3	NA	1.1 E-5	5.6 E-5	NA	4.5 E-3
60F-SP08	10	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	1.2 E-4
60F-SP08	20	NA	1.9 E-4	NA	7.4 E-7	5.6 E-5	NA	NA	NA	9.0 E-5	2.3 E-5	NA	NA	NA	NA	NA	5.9 E-5	6.3 E-5	NA	NA	1.7 E-3
61F-SP03	10	NA	NA	NA	1.1 E-6	3.1 E-5	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	9.8 E-5	9.2 E-5	2.7 E-5	NA	2.1 E-1
61F-SP03	20	NA	1.4 E-4	1.0 E-5	5.1 E-7	2.0 E-5	NA	NA	NA	NA	1.3 E-5	5.9 E-5	NA	NA	NA	NA	6.2 E-5	7.2 E-5	4.2 E-5	NA	5.3 E-2
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	NA	4.9 E-5	5.0 E-5	NA	NA	2.0 E-3
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	3.1 E-5	NA	NA	1.3 E-3
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	2.4 E-5	1.6 E-5	NA	3.5 E-4
61F-SP05	20	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	1.4 E-4
61F-SP06	10	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	2.7 E-5	NA	1.2 E-4
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	3.2 E-5	3.6 E-5	NA	NA	NA	NA	NA	3.3 E-5	1.0 E-5	NA	3.7 E-4
62F-SP01	20	NA	NA	3.8 E-5	1.6 E-6	1.1 E-4	1.4 E-4	NA	4.6 E-7	6.0 E-5	8.4 E-6	6.5 E-3	2.3 E-6	3.4 E-3	1.7 E-3	2.3 E-4	2.4 E-4	6.6 E-4	NA	NA	9.4 E-2
62F-SP02	20	NA	NA	NA	1.1 E-6	4.4 E-5	NA	NA	NA	7.1 E-5	NA	4.7 E-5	NA	NA	NA	NA	1.1 E-4	4.4 E-5	NA	NA	6.5 E-3
62F-SP03	20	NA	NA	NA	8.2 E-7	3.9 E-5	NA	4.6 E-5	2.6 E-6	3.4 E-5	NA	5.1 E-5	NA	4.0 E-5	NA	NA	8.5 E-5	2.4 E-5	8.0 E-6	NA	8.9 E-3
62F-SP04	10	NA	NA	NA	1.1 E-6	5.9 E-5	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	NA	NA	7.5 E-5	1.5 E-5	NA	NA	8.6 E-3
62F-SP05	10	NA	NA	1.0 E-4	5.0 E-6	3.2 E-4	4.7 E-4	5.8 E-5	NA	1.7 E-4	5.0 E-5	2.1 E-2	9.1 E-6	1.0 E-2	4.8 E-3	9.3 E-4	6.2 E-4	3.2 E-3	NA	NA	2.6 E-1
62F-SP05	20	NA	NA	6.6 E-5	3.5 E-6	1.9 E-4	2.6 E-4	2.2 E-5	NA	2.1 E-4	2.2 E-5	1.2 E-2	3.8 E-6	6.2 E-3	3.0 E-3	4.7 E-4	4.6 E-4	1.5 E-3	NA	NA	1.4 E-1
62F-SP06	10	NA	NA	NA	NA	8.5 E-5	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	6.7 E-5	4.2 E-5	NA	NA	1.9 E-3
62F-SP06	20	NA	NA	NA	2.5 E-6	4.2 E-5	NA	NA	4.2 E-7	2.1 E-4	6.6 E-5	3.4 E-5	NA	NA	NA	NA	1.0 E-4	1.1 E-4	NA	NA	3.1 E-3
62F-SP07	10	NA	1.9 E-4	NA	8.4 E-7	2.4 E-5	NA	NA	NA	1.2 E-4	2.8 E-4	NA	NA	NA	NA	NA	3.2 E-4	7.7 E-5	1.3 E-5	NA	4.6 E-3
62F-SP07	20	NA	NA	NA	NA	NA	NA	3.3 E-5	8.1 E-7	1.0 E-5	4.8 E-5	8.8 E-5	NA	4.1 E-5	NA	NA	1.9 E-5	2.6 E-5	NA	NA	3.5 E-4
CP2-07-SP01	10	NA	1.1 E-1	NA	NA	1.0 E-3	NA	2.8 E-3	NA	NA	7.1 E-3	NA	NA	NA	NA	NA	1.2 E-2	7.3 E-4	2.9 E-4	8.6 E-1	6.3 E+1
CP2-07-SP01	20	NA	1.9 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-1	1.3 E+3
CP2-07-SP01	40	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E+2
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA	4.0 E-2
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	5.5 E-4	NA	NA	2.4 E-5	NA	1.4 E-3	NA	5.9 E-5	1.8 E-5	NA	NA	NA	NA	5.6 E-4	1.2 E-4	8.8 E-5	NA	NA	1.1 E-2
CP2-07-SP03	20	NA	1.6 E-4	NA	NA	1.3 E-5	NA	1.4 E-4	NA	1.5 E-4	1.5 E-4	NA	NA	NA	NA	NA	1.9 E-4	6.8 E-5	NA	NA	8.7 E-3
CP2-07-SP04	10	NA	5.5 E-3	NA	9.5 E-6	2.9 E-5	NA	NA	NA	5.9 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	8.8 E-5	1.4 E-5	NA	5.5 E-2
CP2-07-SP04	20	NA	1.1 E-2	NA	2.1 E-6	1.5 E-5	NA	NA	NA	3.0 E-4	3.9 E-4	NA	NA	NA	NA	NA	4.1 E-5	7.0 E-5	NA	NA	4.2 E-2
CP2-07-SP05	10	NA	5.2 E-3	NA	NA	1.8 E-5	NA	1.5 E-3	NA	3.6 E-5	1.4 E-4	1.2 E-4	2.6 E-5	NA	NA	2.1 E-3	NA	1.0 E-4	3.9 E-5	NA	1.5 E-2
CP2-07-SP05	20	NA	5.3 E-3	NA	NA	NA	NA	1.4 E-3	NA	2.8 E-5	3.8 E-5	5.6 E-5	4.5 E-6	NA	NA	1.1 E-3	NA	7.4 E-5	2.8 E-5	NA	1.0 E-2
CP2-07-SP06	10	NA	3.8 E-2	NA	NA	NA	1.2 E-5	8.1 E-4	NA	NA	7.4 E-5	4.4 E-4	3.2 E-4	1.5 E-4	NA	5.4 E-3	NA	1.9 E-4	1.7 E-4	NA	1.7 E-1
CP2-07-SP06	20	NA	7.7 E-3	NA	NA	NA	NA	1.4 E-3	NA	NA	1.0 E-4	1.1 E-4	5.8 E-5	NA	NA	8.9 E-4	NA	9.6 E-5	4.2 E-5	NA	3.7 E-2
CP2-07-SP07	10	NA	2.9 E-4	NA	NA	3.2 E-5	NA	5.8 E-4	NA	1.4 E-4	7.1 E-5	8.9 E-5	NA	NA	NA	3.7 E-3	1.6 E-4	1.6 E-4	NA	NA	9.8 E-3
CP2-07-SP07	20	NA	2.6 E-4	NA	NA	1.2 E-5	NA	3.6 E-4	NA	7.1 E-5	2.9 E-5	5.6 E-5	NA	NA	NA	2.0 E-4	9.0 E-5	5.3 E-5	NA	NA	3.8 E-3
CP2-07-SP08	10	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-3
CP2-07-SP08	20	NA	NA	NA	NA	1.3 E-5	NA	4.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-4
CP2-07-SP08	30	NA	NA	NA	NA	2.1 E-5	NA	NA	7.1 E-6	2.4 E-5	5.5 E-5	2.9 E-5	NA	NA	NA	2.1 E-4	7.7 E-5	5.7 E-5	1.8 E-4	NA	1.8 E-3
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	8.5 E-4	3.0 E-5	3.5 E-5	NA	NA	9.3 E-4
CP2-07-SP09	20	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	1.1 E-4	9.7 E-5	5.1 E-5	NA	NA	NA	7.0 E-4	4.6 E-5	1.1 E-4	NA	NA	1.9 E-3
CP2-07-SP09	34	NA	NA	NA	4.3 E-7	1.0 E-5	2.8 E-6	NA	NA	1.2 E-4	1.5 E-4	4.4 E-5	NA	2.0 E-5	NA	4.6 E-4	5.2 E-5	1.1 E-4	NA	NA	1.9 E-3
CP2-07-SP10	10	NA	2.0 E-4	NA	1.5 E-6	1.3 E-5	NA	NA	NA	4.5 E-4	8.6 E-4	8.9 E-5	NA	NA	NA	NA	2.7 E-5	8.4 E-5	NA	NA	3.2 E-3
CP2-07-SP10	20	NA	5.5 E-4	NA	NA	5.8 E-5	NA	NA	NA	1.0 E-3	3.2 E-3	5.5 E-5	NA	NA	NA	NA	4.9 E-5	7.4 E-5	NA	NA	9.9 E-3

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
CP2-07-SP10	40	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	9.8 E-5	1.7 E-4	2.9 E-5	NA	NA	NA	NA	7.6 E-6	1.5 E-5	NA	NA	9.8 E-4
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	4.8 E-4	NA	3.1 E-5	NA	NA	2.9 E-3
CP2-07-SP11	20	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	4.7 E-5	7.5 E-5	4.5 E-5	NA	NA	NA	3.2 E-4	3.1 E-5	7.4 E-5	NA	NA	9.5 E-4
CP2-07-SP12	10	NA	2.9 E-4	NA	2.5 E-6	3.4 E-5	5.3 E-6	4.9 E-5	NA	4.7 E-4	1.2 E-3	1.4 E-4	NA	NA	NA	NA	2.5 E-5	8.0 E-5	NA	NA	3.4 E-3
CP2-07-SP12	20	NA	NA	NA	NA	7.3 E-6	NA	5.3 E-5	NA	2.6 E-5	3.2 E-5	5.2 E-5	NA	NA	NA	NA	NA	2.6 E-5	1.2 E-5	NA	4.3 E-4
CP2-07-SP12	40	NA	3.5 E-4	NA	NA	3.4 E-5	NA	4.6 E-5	NA	4.7 E-4	1.6 E-3	4.1 E-5	NA	NA	NA	NA	NA	3.2 E-5	7.6 E-6	NA	9.9 E-3
CP2-07-SP13	10	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	1.7 E-3	1.1 E-4	5.7 E-5	NA	NA	4.3 E-3
CP2-07-SP13	20	NA	NA	NA	NA	1.5 E-5	2.9 E-6	NA	NA	3.5 E-5	5.6 E-5	4.9 E-5	NA	NA	NA	1.7 E-4	4.1 E-5	8.5 E-5	NA	NA	9.1 E-4
CP2-07-SP14	10	NA	NA	NA	NA	2.4 E-5	NA	NA	9.4 E-6	2.2 E-5	3.3 E-5	NA	NA	NA	NA	2.5 E-4	5.3 E-5	2.6 E-4	1.8 E-4	NA	9.9 E-4
CP2-07-SP14	18.5	NA	NA	NA	8.8 E-7	2.6 E-5	NA	NA	3.9 E-6	1.9 E-5	3.4 E-4	6.0 E-5	NA	NA	NA	NA	9.3 E-5	4.5 E-4	6.6 E-5	NA	2.2 E-3
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	NA	1.5 E-6	1.2 E-4	1.7 E-5	NA	NA	2.0 E-4	1.9 E-5	6.7 E-4	1.9 E-5	3.0 E-4	2.0 E-4	NA	4.9 E-4	2.1 E-4	1.6 E-5	NA	6.9 E-2
CP2-08-SP11	20	NA	NA	NA	2.6 E-6	1.1 E-4	7.7 E-6	NA	NA	2.6 E-4	1.7 E-5	3.5 E-4	5.3 E-6	1.4 E-4	NA	NA	6.2 E-4	1.9 E-4	NA	NA	5.8 E-2
CP2-08-SP12	10	NA	3.5 E-4	NA	1.5 E-6	7.5 E-5	NA	NA	NA	8.0 E-5	1.4 E-5	1.8 E-4	7.0 E-6	9.4 E-5	NA	NA	1.9 E-4	1.0 E-4	3.2 E-5	NA	3.1 E-2
CP2-08-SP12	20	NA	1.6 E-4	NA	6.1 E-7	1.5 E-5	NA	NA	NA	NA	1.1 E-5	4.8 E-5	2.2 E-6	NA	NA	NA	5.9 E-5	3.1 E-5	1.9 E-5	NA	3.3 E-1
CP2-08-SP13	10	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	1.0 E-4
CP2-RE05-SP01	10	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	3.2 E-3	8.1 E+1
CP2-RE05-SP01	20	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA	3.4 E-4	5.3 E-4	NA	4.5 E-4	1.6 E+1
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4
CP2-RE05-SP02	10	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA	1.0 E+1
CP2-RE05-SP02	20	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	3.6 E-4	1.4 E-4	NA	NA	1.5 E+0
CP2-RE05-SP02	40	NA	NA	NA	1.2 E-6	9.1 E-6	1.6 E-6	NA	9.3 E-6	3.8 E-4	1.5 E-3	2.4 E-5	NA	NA	NA	2.0 E-4	NA	6.6 E-5	2.3 E-4	NA	3.3 E-3
CP2-RE05-SP03	10	NA	NA	NA	NA	9.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5
CP2-RE05-SP03	20	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	2.6 E-5	1.5 E-5	7.1 E-5	NA	4.1 E-5	NA	NA	NA	1.9 E-5	NA	NA	9.1 E-4
CP2-RE05-SP04	10	NA	NA	NA	NA	9.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5
CP2-RE05-SP04	20	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	9.2 E-2
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	3.2 E-3
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	7.0 E-6	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	NA	1.4 E-3
CP2-RE05-SP06	10	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	2.5 E-5	3.1 E-5	NA	NA	3.2 E+0
CP2-RE05-SP06	20	NA	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-1
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	2.9 E-5	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	7.2 E-2
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-5	9.5 E-5	NA	NA	NA	NA	NA	3.3 E-5	3.5 E-5	NA	NA	5.5 E-3
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-5	9.5 E-5	NA	NA	NA	NA	NA	4.9 E-5	6.1 E-5	7.3 E-6	NA	2.0 E-3
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-5	6.8 E-5	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	6.1 E-3
CP2-RE05-SP08	20	NA	NA	NA	8.1 E-7	NA	NA	NA	NA	5.4 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	2.6 E-3
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
CP2-RE05-SP09	20	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	6.5 E-5	7.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5
F(C)-SP05	20	NA	NA	NA	5.6 E-7	9.3 E-6	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	5.4 E-5	1.6 E-5	NA	NA	3.2 E-3
F(C)-SP06	10	NA	NA	3.2 E-5	1.6 E-6	1.7 E-4	6.7 E-5	NA	NA	1.0 E-4	1.6 E-5	3.1 E-3	2.6 E-6	2.1 E-3	1.4 E-3	NA	3.6 E-4	2.2 E-4	NA	NA	8.2 E-2
F(C)-SP06	20	NA	NA	9.7 E-6	4.6 E-7	2.1 E-5	1.4 E-5	NA	NA	6.7 E-5	1.3 E-5	6.5 E-4	NA	5.0 E-4	4.3 E-4	NA	1.8 E-4	7.0 E-5	NA	NA	2.5 E-2
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	9.3 E-3	3.3 E-5	2.5 E-5	NA	NA	9.4 E-3
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	3.2 E-5	4.5 E-5	NA	NA	NA	4.4 E-3	6.7 E-5	3.7 E-5	NA	NA	4.7 E-3

		Adult Non-Cancer Hazard Index														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
59F-SP33	10	NA	5.2 E-3	4.5 E-1	2.3 E-3	NA	5.4 E-4	1.3 E-5	6.6 E-2	5.9 E-4	7.3 E-6	1.7 E-4	3.6 E-4	NA	1.1 E-4	NA
59F-SP33	20	NA	NA	2.1 E+0	NA	NA	NA	NA	1.7 E-2	NA	NA	1.1 E-4	NA	NA	1.1 E-4	NA
59F-SP34	10	NA	4.3 E-3	4.7 E+0	NA	NA	3.6 E-4	NA	2.2 E-2	5.4 E-4	NA	4.1 E-4	NA	NA	1.4 E-4	NA
59F-SP34	15	NA	NA	2.5 E+0	NA	NA	NA	NA	5.5 E-2	NA	6.6 E-6	1.6 E-4	NA	NA	4.7 E-5	NA
59F-SP35	10	8.7 E-4	NA	1.0 E+1	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	8.1 E-5	NA
59F-SP35	20	NA	NA	2.0 E+1	NA	NA	2.8 E-4	NA	5.1 E-3	NA	NA	9.4 E-5	NA	NA	1.3 E-4	NA
59F-SP36	10	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	4.6 E-5	NA
59F-SP36	20	NA	7.8 E-4	2.4 E-3	2.6 E-4	NA	NA	NA	NA	4.8 E-5	NA	8.4 E-6	NA	NA	1.1 E-5	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	5.5 E-6	4.9 E-5	1.8 E-4	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	4.9 E-7	4.8 E-5	1.1 E-4	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA
60F-SP08	20	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	2.3 E-5	1.9 E-6	9.0 E-6	5.1 E-5	NA	3.8 E-5	NA
61F-SP03	10	NA	NA	8.8 E-2	NA	NA	NA	2.3 E-6	1.8 E-3	NA	1.8 E-6	7.0 E-5	8.3 E-5	NA	1.1 E-5	NA
61F-SP03	20	NA	NA	2.1 E-2	NA	NA	NA	1.2 E-6	1.0 E-3	NA	9.9 E-7	3.4 E-5	1.1 E-4	NA	5.6 E-6	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	5.4 E-6	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	8.9 E-5	NA	5.7 E-6	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	3.4 E-5	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	7.8 E-5	NA	5.2 E-6	NA
62F-SP01	20	NA	2.0 E-2	NA	8.2 E-3	NA	2.3 E-4	4.0 E-6	4.8 E-3	1.9 E-3	1.4 E-6	3.7 E-5	NA	NA	6.6 E-6	NA
62F-SP02	20	NA	6.4 E-4	NA	NA	NA	NA	1.8 E-6	1.9 E-3	4.2 E-5	2.6 E-6	5.4 E-5	NA	NA	1.7 E-5	NA
62F-SP03	20	NA	7.0 E-4	NA	NA	NA	NA	1.4 E-6	2.9 E-3	5.1 E-5	1.3 E-6	4.3 E-5	NA	NA	1.8 E-5	NA
62F-SP04	10	NA	9.4 E-4	NA	3.4 E-4	NA	8.9 E-5	NA	2.2 E-3	5.4 E-5	9.8 E-7	1.7 E-5	NA	NA	1.0 E-5	NA
62F-SP05	10	NA	5.2 E-2	NA	2.3 E-2	NA	1.1 E-3	1.2 E-5	1.0 E-2	4.9 E-3	1.2 E-6	1.5 E-4	2.0 E-4	NA	4.8 E-5	NA
62F-SP05	20	NA	2.8 E-2	NA	1.3 E-2	NA	4.5 E-4	5.8 E-6	5.4 E-3	3.1 E-3	3.2 E-6	6.4 E-5	8.6 E-5	NA	8.0 E-6	NA
62F-SP06	10	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	6.6 E-6	NA
62F-SP06	20	NA	3.2 E-4	NA	NA	NA	2.3 E-5	NA	5.4 E-4	2.1 E-5	2.1 E-6	1.2 E-5	1.4 E-4	NA	3.4 E-5	NA
62F-SP07	10	NA	NA	NA	NA	3.8 E-6	NA	NA	1.4 E-3	NA	NA	2.3 E-5	8.1 E-5	4.7 E-5	1.2 E-5	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	3.6 E-6	NA
CP2-07-SP01	10	1.2 E-3	NA	2.7 E+1	NA	NA	7.9 E-4	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
CP2-07-SP01	20	NA	NA	5.5 E+2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP01	40	NA	NA	7.5 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	NA	1.2 E-6	3.7 E-5	7.4 E-5	NA	8.1 E-6	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	7.0 E-5	NA	3.1 E-3	NA	NA	2.2 E-5	1.4 E-4	NA	4.5 E-5	NA
CP2-07-SP04	10	NA	NA	2.0 E-2	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	2.3 E-4	NA	1.7 E-4	NA
CP2-07-SP04	20	NA	NA	1.2 E-2	NA	NA	1.1 E-4	NA	NA	NA	NA	1.8 E-5	3.2 E-4	NA	1.5 E-4	NA
CP2-07-SP05	10	NA	NA	1.4 E-3	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	4.1 E-4	NA	2.9 E-5	2.6 E-4
CP2-07-SP05	20	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	1.5 E-5	8.5 E-5
CP2-07-SP06	10	1.7 E-4	4.9 E-4	5.1 E-2	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	2.0 E-4	NA	3.6 E-5	1.1 E-3
CP2-07-SP06	20	9.1 E-5	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	NA	3.3 E-5	6.1 E-4
CP2-07-SP07	10	NA	NA	NA	NA	NA	7.4 E-5	NA	1.7 E-3	NA	2.6 E-6	2.9 E-5	2.1 E-4	NA	1.5 E-5	NA
CP2-07-SP07	20	NA	NA	5.1 E-4	NA	NA	NA	NA	5.7 E-4	NA	1.3 E-6	1.1 E-5	5.8 E-5	NA	1.1 E-5	NA
CP2-07-SP08	10	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	5.0 E-6	NA
CP2-07-SP08	20	NA	NA	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	8.0 E-6	NA
CP2-07-SP08	30	NA	NA	NA	NA	2.7 E-6	NA	1.0 E-6	4.2 E-4	NA	NA	5.3 E-5	NA	NA	5.3 E-6	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	1.8 E-5	3.1 E-4	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	8.2 E-6	3.4 E-6	NA	NA	NA	4.7 E-5	3.3 E-4	NA	1.3 E-6	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	1.8 E-5	5.6 E-4	NA	4.4 E-5	NA
CP2-07-SP10	20	NA	NA	5.8 E-4	NA	NA	NA	4.5 E-6	6.3 E-4	NA	NA	3.2 E-5	8.0 E-4	NA	2.1 E-5	NA

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	5.8 E-7	1.9 E-4	NA	NA	5.1 E-6	7.6 E-5	NA	6.4 E-6	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	3.2 E-6	8.8 E-4	NA	NA	4.5 E-5	8.3 E-5	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	1.4 E-4	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	2.0 E-5	4.1 E-4	NA	4.9 E-5	NA
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	8.0 E-5	NA	4.7 E-6	NA
CP2-07-SP12	40	3.5 E-5	NA	2.4 E-3	NA	NA	NA	1.3 E-6	2.9 E-4	NA	NA	1.3 E-5	3.0 E-4	NA	5.0 E-5	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	1.6 E-5	2.3 E-4	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	3.1 E-5	1.6 E-4	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	6.2 E-6	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	3.0 E-6	NA	1.5 E-6	3.9 E-4	NA	NA	6.4 E-5	NA	NA	1.9 E-5	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	6.8 E-5	NA	2.5 E-5	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	2.3 E-3	1.5 E-2	7.3 E-4	NA	5.9 E-5	2.1 E-6	9.9 E-3	2.1 E-4	2.3 E-6	9.7 E-5	8.1 E-5	NA	2.0 E-5	NA
CP2-08-SP11	20	NA	1.2 E-3	2.3 E-3	NA	NA	4.5 E-5	2.7 E-6	2.0 E-2	1.1 E-4	4.4 E-6	1.3 E-4	6.9 E-5	NA	1.3 E-5	NA
CP2-08-SP12	10	NA	9.4 E-4	1.1 E-3	NA	NA	NA	NA	1.0 E-2	6.4 E-5	3.1 E-6	6.2 E-5	7.3 E-5	NA	1.2 E-5	NA
CP2-08-SP12	20	NA	NA	1.4 E-1	NA	NA	NA	NA	8.2 E-4	NA	9.1 E-7	1.5 E-5	NA	NA	1.2 E-5	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA
CP2-RE05-SP01	10	NA	NA	3.5 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	20	NA	NA	7.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	40	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA
CP2-RE05-SP02	10	NA	NA	4.4 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA
CP2-RE05-SP02	20	NA	NA	6.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	40	1.8 E-5	NA	NA	NA	1.6 E-6	NA	5.3 E-7	1.9 E-4	NA	NA	1.7 E-5	1.3 E-4	NA	2.1 E-5	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA
CP2-RE05-SP03	20	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	1.5 E-5	NA	NA	6.1 E-6	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	3.0 E-6	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	1.9 E-6	NA
CP2-RE05-SP05	10	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	1.1 E-5	NA
CP2-RE05-SP05	20	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-6	NA
CP2-RE05-SP05	40	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-6	NA
CP2-RE05-SP06	10	NA	NA	1.4 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA
CP2-RE05-SP06	20	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	NA
CP2-RE05-SP06	40	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	3.6 E-6	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	7.5 E-6	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	1.2 E-5	NA
CP2-RE05-SP08	10	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-5	NA	2.3 E-5	NA
CP2-RE05-SP08	20	NA	NA	9.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	2.3 E-5	NA
CP2-RE05-SP08	40	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA
CP2-RE05-SP09	10	NA	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	8.3 E-4	NA	NA	NA	NA	5.1 E-4	NA	5.8 E-7	NA	NA	NA	4.7 E-6	NA
F(C)-SP06	10	NA	1.8 E-2	NA	7.3 E-3	NA	1.5 E-4	3.5 E-6	4.4 E-3	1.5 E-3	2.2 E-6	2.5 E-5	NA	NA	2.3 E-5	NA
F(C)-SP06	20	NA	6.4 E-3	NA	2.4 E-3	NA	1.9 E-5	NA	6.3 E-4	5.1 E-4	1.5 E-6	9.4 E-6	5.6 E-5	NA	1.7 E-5	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	1.6 E-5	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	4.6 E-5	NA	9.4 E-6	NA

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
59F-SP33	10	NA	NA	NA	2.8 E-6	1.7 E-4	3.3 E-5	5.4 E-5	NA	1.3 E-3	1.2 E-4	1.2 E-3	NA	5.9 E-4	2.7 E-4	NA	3.4 E-4	3.4 E-4	NA	8.0 E-5	5.3 E-1
59F-SP33	20	NA	NA	NA	NA	7.7 E-5	NA	1.3 E-3	NA	1.4 E-4	1.2 E-4	NA	NA	NA	NA	NA	1.9 E-4	9.4 E-5	NA	2.4 E-4	2.1 E+0
59F-SP34	10	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	2.3 E-4	2.7 E-4	5.4 E-4	NA	NA	NA	NA	3.4 E-4	1.8 E-4	NA	2.9 E-4	4.8 E+0
59F-SP34	15	3.1 E-6	NA	NA	NA	5.1 E-5	NA	NA	NA	1.1 E-4	6.1 E-5	NA	NA	NA	NA	NA	4.6 E-4	1.0 E-4	NA	2.3 E-4	2.5 E+0
59F-SP35	10	2.9 E-5	NA	NA	5.1 E-6	6.5 E-5	NA	NA	NA	2.8 E-4	7.4 E-4	NA	NA	NA	NA	NA	3.4 E-4	NA	2.5 E-4	3.1 E-3	1.0 E+1
59F-SP35	20	7.0 E-6	1.1 E-3	NA	2.6 E-6	4.0 E-5	NA	NA	NA	3.0 E-4	3.2 E-4	NA	NA	NA	NA	NA	1.9 E-4	5.8 E-5	6.1 E-5	2.8 E-3	2.0 E+1
59F-SP36	10	NA	1.5 E-3	NA	NA	1.9 E-5	NA	7.4 E-4	NA	2.9 E-5	5.3 E-5	4.9 E-5	NA	NA	NA	NA	NA	5.9 E-5	2.5 E-5	NA	3.9 E-3
59F-SP36	20	NA	1.5 E-4	NA	NA	1.4 E-5	NA	6.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-6	5.0 E-6	NA	NA	3.8 E-3
59F-SP37	10	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	1.1 E-5	3.0 E-5	NA	NA	NA	NA	4.8 E-5	4.8 E-5	NA	NA	3.9 E-4
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	6.2 E-3	2.1 E-5	1.2 E-5	7.1 E-6	NA	6.2 E-3
59F-SP38	20	NA	NA	NA	NA	4.3 E-6	NA	NA	NA	1.7 E-5	2.3 E-5	2.0 E-5	NA	NA	NA	2.5 E-3	3.7 E-5	2.6 E-5	5.2 E-6	NA	2.8 E-3
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	2.9 E-5
59F-SP39	20	NA	1.1 E-4	NA	NA	NA	NA	1.8 E-4	1.5 E-7	NA	NA	NA	1.7 E-6	NA	NA	4.5 E-4	NA	4.6 E-6	2.4 E-5	NA	1.9 E-3
60F-SP08	10	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-6	NA	NA	5.1 E-5
60F-SP08	20	NA	8.3 E-5	NA	3.2 E-7	2.4 E-5	NA	NA	NA	3.8 E-5	1.0 E-5	NA	NA	NA	NA	NA	2.5 E-5	2.7 E-5	NA	NA	7.1 E-4
61F-SP03	10	NA	NA	NA	4.8 E-7	1.3 E-5	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	4.2 E-5	3.9 E-5	1.1 E-5	NA	9.0 E-2
61F-SP03	20	NA	6.0 E-5	4.4 E-6	2.2 E-7	8.5 E-6	NA	NA	NA	NA	5.4 E-6	2.5 E-5	NA	NA	NA	NA	2.7 E-5	3.1 E-5	1.8 E-5	NA	2.3 E-2
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	2.1 E-5	2.1 E-5	NA	NA	8.4 E-4
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-6	1.3 E-5	NA	NA	5.6 E-4
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-6	NA	NA	NA	NA	NA	NA	1.0 E-5	6.7 E-6	NA	1.5 E-4
61F-SP05	20	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-6	NA	NA	6.0 E-5
61F-SP06	10	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	1.1 E-5	NA	5.2 E-5
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	1.4 E-5	1.5 E-5	NA	NA	NA	NA	NA	1.4 E-5	4.3 E-6	NA	1.6 E-4
62F-SP01	20	NA	NA	1.6 E-5	7.0 E-7	4.8 E-5	5.9 E-5	NA	2.0 E-7	2.6 E-5	3.6 E-6	2.8 E-3	1.0 E-6	1.5 E-3	7.5 E-4	9.7 E-5	1.0 E-4	2.8 E-4	NA	NA	4.0 E-2
62F-SP02	20	NA	NA	NA	4.8 E-7	1.9 E-5	NA	NA	NA	3.0 E-5	NA	2.0 E-5	NA	NA	NA	NA	4.9 E-5	1.9 E-5	NA	NA	2.8 E-3
62F-SP03	20	NA	NA	NA	3.5 E-7	1.7 E-5	NA	2.0 E-5	1.1 E-6	1.4 E-5	NA	2.2 E-5	NA	1.7 E-5	NA	NA	3.7 E-5	1.0 E-5	3.4 E-6	NA	3.8 E-3
62F-SP04	10	NA	NA	NA	4.9 E-7	2.5 E-5	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	3.2 E-5	6.6 E-6	NA	NA	3.7 E-3
62F-SP05	10	NA	NA	4.4 E-5	2.1 E-6	1.4 E-4	2.0 E-4	2.5 E-5	NA	7.4 E-5	2.2 E-5	8.9 E-3	3.9 E-6	4.3 E-3	2.1 E-3	4.0 E-4	2.7 E-4	1.4 E-3	NA	NA	1.1 E-1
62F-SP05	20	NA	NA	2.8 E-5	1.5 E-6	8.0 E-5	1.1 E-4	9.5 E-6	NA	8.8 E-5	9.2 E-6	5.0 E-3	1.6 E-6	2.6 E-3	1.3 E-3	2.0 E-4	2.0 E-4	6.5 E-4	NA	NA	6.0 E-2
62F-SP06	10	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	2.9 E-5	1.8 E-5	NA	NA	8.2 E-4
62F-SP06	20	NA	NA	NA	1.1 E-6	1.8 E-5	NA	NA	1.8 E-7	8.8 E-5	2.8 E-5	1.4 E-5	NA	NA	NA	NA	4.4 E-5	4.6 E-5	NA	NA	1.3 E-3
62F-SP07	10	NA	8.3 E-5	NA	3.6 E-7	1.0 E-5	NA	NA	NA	5.1 E-5	1.2 E-4	NA	NA	NA	NA	NA	1.4 E-4	3.3 E-5	5.4 E-6	NA	2.0 E-3
62F-SP07	20	NA	NA	NA	NA	NA	NA	1.4 E-5	3.5 E-7	4.5 E-6	2.1 E-5	3.8 E-5	NA	1.7 E-5	NA	NA	8.0 E-6	1.1 E-5	NA	NA	1.5 E-4
CP2-07-SP01	10	NA	4.6 E-2	NA	NA	4.4 E-4	NA	1.2 E-3	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	5.3 E-3	3.1 E-4	1.2 E-4	3.7 E-1	2.7 E+1
CP2-07-SP01	20	NA	8.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	5.5 E+2
CP2-07-SP01	40	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E+1
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	1.7 E-2
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	2.4 E-4	NA	NA	1.0 E-5	NA	5.9 E-4	NA	2.5 E-5	7.9 E-6	NA	NA	NA	NA	2.4 E-4	5.3 E-5	3.8 E-5	NA	NA	4.9 E-3
CP2-07-SP03	20	NA	6.8 E-5	NA	NA	5.7 E-6	NA	6.2 E-5	NA	6.6 E-5	6.5 E-5	NA	NA	NA	NA	NA	8.3 E-5	2.9 E-5	NA	NA	3.7 E-3
CP2-07-SP04	10	NA	2.4 E-3	NA	4.1 E-6	1.2 E-5	NA	NA	NA	2.5 E-4	5.5 E-4	NA	NA	NA	NA	NA	NA	3.8 E-5	6.1 E-6	NA	2.4 E-2
CP2-07-SP04	20	NA	4.8 E-3	NA	9.1 E-7	6.3 E-6	NA	NA	NA	1.3 E-4	1.7 E-4	NA	NA	NA	NA	NA	1.8 E-5	3.0 E-5	NA	NA	1.8 E-2
CP2-07-SP05	10	NA	2.2 E-3	NA	NA	7.8 E-6	NA	6.4 E-4	NA	1.5 E-5	6.1 E-5	5.4 E-5	1.1 E-5	NA	NA	8.9 E-4	NA	4.3 E-5	1.7 E-5	NA	6.3 E-3
CP2-07-SP05	20	NA	2.3 E-3	NA	NA	NA	NA	6.2 E-4	NA	1.2 E-5	1.6 E-5	2.4 E-5	1.9 E-6	NA	NA	4.5 E-4	NA	3.2 E-5	1.2 E-5	NA	4.4 E-3
CP2-07-SP06	10	NA	1.6 E-2	NA	NA	NA	5.2 E-6	3.5 E-4	NA	NA	3.2 E-5	1.9 E-4	1.4 E-4	6.4 E-5	NA	2.3 E-3	NA	8.2 E-5	7.3 E-5	NA	7.2 E-2
CP2-07-SP06	20	NA	3.3 E-3	NA	NA	NA	NA	5.9 E-4	NA	NA	4.5 E-5	4.5 E-5	2.5 E-5	NA	NA	3.8 E-4	NA	4.1 E-5	1.8 E-5	NA	1.6 E-2
CP2-07-SP07	10	NA	1.2 E-4	NA	NA	1.4 E-5	NA	2.5 E-4	NA	6.1 E-5	3.1 E-5	3.8 E-5	NA	NA	NA	1.6 E-3	6.8 E-5	6.9 E-5	NA	NA	4.2 E-3
CP2-07-SP07	20	NA	1.1 E-4	NA	NA	5.1 E-6	NA	1.6 E-4	NA	3.0 E-5	1.2 E-5	2.4 E-5	NA	NA	NA	8.4 E-5	3.9 E-5	2.3 E-5	NA	NA	1.6 E-3
CP2-07-SP08	10	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-3
CP2-07-SP08	20	NA	NA	NA	NA	5.7 E-6	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-4
CP2-07-SP08	30	NA	NA	NA	NA	9.1 E-6	NA	NA	3.1 E-6	1.0 E-5	2.4 E-5	1.3 E-5	NA	NA	NA	8.9 E-5	3.3 E-5	2.5 E-5	7.7 E-5	NA	7.6 E-4
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	3.6 E-4	1.3 E-5	1.5 E-5	NA	NA	4.0 E-4
CP2-07-SP09	20	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	4.6 E-5	4.1 E-5	2.2 E-5	NA	NA	NA	3.0 E-4	2.0 E-5	4.7 E-5	NA	NA	8.0 E-4
CP2-07-SP09	34	NA	NA	NA	1.8 E-7	4.3 E-6	1.2 E-6	NA	NA	4.9 E-5	6.4 E-5	1.9 E-5	NA	8.5 E-6	NA	2.0 E-4	2.2 E-5	4.9 E-5	NA	NA	8.0 E-4
CP2-07-SP10	10	NA	8.6 E-5	NA	6.4 E-7	5.5 E-6	NA	NA	NA	1.9 E-4	3.7 E-4	3.8 E-5	NA	NA	NA	NA	1.1 E-5	3.6 E-5	NA	NA	1.4 E-3
CP2-07-SP10	20	NA	2.3 E-4	NA	NA	2.5 E-5	NA	NA	NA	4.3 E-4	1.4 E-3	2.3 E-5	NA	NA	NA	NA	2.1 E-5	3.2 E-5	NA	NA	4.2 E-3

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
CP2-07-SP10	40	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	4.2 E-5	7.3 E-5	1.3 E-5	NA	NA	NA	NA	3.3 E-6	6.6 E-6	NA	NA	4.2 E-4
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	2.1 E-4	NA	1.3 E-5	NA	NA	1.2 E-3
CP2-07-SP11	20	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	2.0 E-5	3.2 E-5	1.9 E-5	NA	NA	NA	1.4 E-4	1.3 E-5	3.2 E-5	NA	NA	4.1 E-4
CP2-07-SP12	10	NA	1.2 E-4	NA	1.1 E-6	1.5 E-5	2.3 E-6	2.1 E-5	NA	2.0 E-4	5.0 E-4	5.8 E-5	NA	NA	NA	NA	1.1 E-5	3.4 E-5	NA	NA	1.4 E-3
CP2-07-SP12	20	NA	NA	NA	NA	3.1 E-6	NA	2.3 E-5	NA	1.1 E-5	1.4 E-5	2.2 E-5	NA	NA	NA	NA	NA	1.1 E-5	5.2 E-6	NA	1.9 E-4
CP2-07-SP12	40	NA	1.5 E-4	NA	NA	1.5 E-5	NA	2.0 E-5	NA	2.0 E-4	6.9 E-4	1.8 E-5	NA	NA	NA	NA	NA	1.4 E-5	3.2 E-6	NA	4.2 E-3
CP2-07-SP13	10	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	7.5 E-4	4.6 E-5	2.5 E-5	NA	NA	1.8 E-3
CP2-07-SP13	20	NA	NA	NA	NA	6.3 E-6	1.2 E-6	NA	NA	1.5 E-5	2.4 E-5	2.1 E-5	NA	NA	NA	7.1 E-5	1.8 E-5	3.7 E-5	NA	NA	3.9 E-4
CP2-07-SP14	10	NA	NA	NA	NA	1.0 E-5	NA	NA	4.0 E-6	9.4 E-6	1.4 E-5	NA	NA	NA	NA	1.1 E-4	2.3 E-5	1.1 E-4	7.6 E-5	NA	4.2 E-4
CP2-07-SP14	18.5	NA	NA	NA	3.8 E-7	1.1 E-5	NA	NA	1.7 E-6	8.2 E-6	1.5 E-4	2.6 E-5	NA	NA	NA	NA	4.0 E-5	1.9 E-4	2.8 E-5	NA	9.3 E-4
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	NA	6.4 E-7	5.1 E-5	7.4 E-6	NA	NA	8.4 E-5	8.0 E-6	2.9 E-4	8.0 E-6	1.3 E-4	8.5 E-5	NA	2.1 E-4	9.0 E-5	6.7 E-6	NA	2.9 E-2
CP2-08-SP11	20	NA	NA	NA	1.1 E-6	4.5 E-5	3.3 E-6	NA	NA	1.1 E-4	7.3 E-6	1.5 E-4	2.3 E-6	5.9 E-5	NA	NA	2.7 E-4	8.0 E-5	NA	NA	2.5 E-2
CP2-08-SP12	10	NA	1.5 E-4	NA	6.4 E-7	3.2 E-5	NA	NA	NA	3.4 E-5	6.1 E-6	7.6 E-5	3.0 E-6	4.0 E-5	NA	NA	8.2 E-5	4.4 E-5	1.4 E-5	NA	1.3 E-2
CP2-08-SP12	20	NA	6.9 E-5	NA	2.6 E-7	6.3 E-6	NA	NA	NA	NA	4.8 E-6	2.1 E-5	9.6 E-7	NA	NA	NA	2.5 E-5	1.3 E-5	8.3 E-6	NA	1.4 E-1
CP2-08-SP13	10	NA	NA	NA	NA	9.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-5
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	4.4 E-5
CP2-RE05-SP01	10	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	1.4 E-3	3.5 E+1
CP2-RE05-SP01	20	NA	8.3 E-3	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	NA	NA	NA	NA	1.4 E-4	2.3 E-4	NA	1.9 E-4	7.1 E+0
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4
CP2-RE05-SP02	10	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	4.4 E+0
CP2-RE05-SP02	20	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	NA	NA	NA	NA	NA	1.5 E-4	5.8 E-5	NA	NA	6.4 E-1
CP2-RE05-SP02	40	NA	NA	NA	5.0 E-7	3.9 E-6	6.9 E-7	NA	4.0 E-6	1.6 E-4	6.4 E-4	1.0 E-5	NA	NA	NA	8.7 E-5	NA	2.8 E-5	9.7 E-5	NA	1.4 E-3
CP2-RE05-SP03	10	NA	NA	NA	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-6
CP2-RE05-SP03	20	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	1.1 E-5	6.5 E-6	3.0 E-5	NA	1.7 E-5	NA	NA	NA	8.1 E-6	NA	NA	3.9 E-4
CP2-RE05-SP04	10	NA	NA	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5
CP2-RE05-SP04	20	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	NA	NA	NA	NA	NA	8.9 E-6	NA	NA	3.9 E-2
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	1.4 E-3
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	3.0 E-6	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	5.9 E-4
CP2-RE05-SP06	10	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	1.1 E-5	1.3 E-5	NA	NA	1.4 E+0
CP2-RE05-SP06	20	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-6	1.2 E-5	NA	NA	NA	NA	NA	4.3 E-6	NA	NA	3.1 E-2
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	4.1 E-5	NA	NA	NA	NA	NA	1.4 E-5	1.5 E-5	NA	NA	2.4 E-3
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	4.1 E-5	NA	NA	NA	NA	NA	2.1 E-5	2.6 E-5	3.1 E-6	NA	8.5 E-4
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	2.9 E-5	NA	NA	NA	NA	NA	NA	9.2 E-6	NA	NA	2.6 E-3
CP2-RE05-SP08	20	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	2.3 E-5	4.9 E-5	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	NA	1.1 E-3
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4
CP2-RE05-SP09	20	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	2.8 E-5	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-4
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5
F(C)-SP05	20	NA	NA	NA	2.4 E-7	4.0 E-6	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	2.3 E-5	6.8 E-6	NA	NA	1.4 E-3
F(C)-SP06	10	NA	NA	1.4 E-5	7.1 E-7	7.4 E-5	2.9 E-5	NA	NA	4.3 E-5	6.9 E-6	1.3 E-3	1.1 E-6	8.9 E-4	5.9 E-4	NA	1.5 E-4	9.5 E-5	NA	NA	3.5 E-2
F(C)-SP06	20	NA	NA	4.2 E-6	2.0 E-7	8.8 E-6	6.1 E-6	NA	NA	2.9 E-5	5.7 E-6	2.8 E-4	NA	2.1 E-4	1.8 E-4	NA	7.5 E-5	3.0 E-5	NA	NA	1.1 E-2
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	4.0 E-3	1.4 E-5	1.1 E-5	NA	NA	4.0 E-3
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-6	1.4 E-5	1.9 E-5	NA	NA	NA	1.9 E-3	2.9 E-5	1.6 E-5	NA	NA	2.0 E-3

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**	**Cumene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
59F-SP33	10	NA	NA	3.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA
59F-SP33	20	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	10	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	15	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	10	NA	NA	7.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	20	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-7	NA
59F-SP36	10	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	8.5 E-7	NA
59F-SP36	20	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-8	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	4.7 E-8	NA
61F-SP03	10	NA	NA	6.1 E-6	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA
61F-SP03	20	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	3.4 E-8	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA
62F-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	NA	NA	NA
62F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	NA
62F-SP07	10	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	3.8 E-8	6.7 E-8	NA	NA	NA	4.7 E-8	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP01	10	NA	NA	1.8 E-3	NA	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	2.6 E-5	NA
CP2-07-SP01	20	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA
CP2-07-SP01	40	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	1.3 E-7	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	NA	NA	3.8 E-8	NA
CP2-07-SP04	10	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	1.3 E-6	NA
CP2-07-SP04	20	NA	NA	8.4 E-7	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	2.7 E-6	NA
CP2-07-SP05	10	NA	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	2.4 E-7	NA	1.3 E-6	NA
CP2-07-SP05	20	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	7.9 E-8	NA	1.3 E-6	NA
CP2-07-SP06	10	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	1.0 E-6	NA	9.2 E-6	NA
CP2-07-SP06	20	NA	NA	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA	NA	5.7 E-7	NA	1.9 E-6	NA
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	7.1 E-8	NA
CP2-07-SP07	20	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	6.3 E-8	NA
CP2-07-SP08	10	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	20	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	30	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	4.9 E-8	NA
CP2-07-SP10	20	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	1.3 E-7	NA

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**	**Cumene**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	7.0 E-8	NA
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP12	40	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	8.5 E-8	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA
CP2-08-SP11	20	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA
CP2-08-SP12	10	NA	NA	7.8 E-8	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	8.5 E-8	NA
CP2-08-SP12	20	NA	NA	9.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	10	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA
CP2-RE05-SP01	20	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-6	NA
CP2-RE05-SP01	40	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	10	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA
CP2-RE05-SP02	20	NA	NA	4.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	NA
CP2-RE05-SP02	40	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	NA	NA	NA	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	10	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	20	NA	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	40	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	10	NA	NA	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA
CP2-RE05-SP06	20	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	NA
CP2-RE05-SP06	40	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	10	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	20	NA	NA	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	40	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	10	NA	NA	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	NA	NA	NA

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
59F-SP33	10	NA	NA	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	3.4 E-7	3 E-5
59F-SP33	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	NA	9.9 E-7	1 E-4
59F-SP34	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	1.2 E-6	3 E-4
59F-SP34	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	9.4 E-7	2 E-4
59F-SP35	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	1.6 E-7	1.3 E-5	7 E-4
59F-SP35	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	3.9 E-8	1.2 E-5	1 E-3
59F-SP36	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	1 E-6
59F-SP36	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	3 E-7
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	1 E-7
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-7	6.6 E-9	NA	4.6 E-9	NA	7 E-7
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	1.2 E-8	NA	3.4 E-9	NA	3 E-7
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	3 E-9
59F-SP39	20	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-10	NA	NA	5.1 E-8	NA	NA	1.5 E-8	NA	2 E-7
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	NA	8 E-8
61F-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	7.4 E-9	NA	6 E-6
61F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	1.2 E-8	NA	2 E-6
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	7 E-9
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	NA	NA	3 E-9
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	5 E-8
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	7 E-9
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	4 E-8
62F-SP01	20	NA	NA	7.9 E-8	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	1.1 E-8	3.2 E-8	NA	NA	NA	1 E-7
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	2 E-8
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	2.2 E-9	NA	1 E-8
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	1 E-8
62F-SP05	10	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	4.5 E-8	8.4 E-8	NA	NA	NA	5 E-7
62F-SP05	20	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	2.3 E-8	6.3 E-8	NA	NA	NA	3 E-7
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	NA	NA	9 E-9
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	8 E-8
62F-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	3.5 E-9	NA	2 E-7
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	2 E-8
CP2-07-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	7.9 E-8	1.5 E-3	3 E-3
CP2-07-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4 E-2
CP2-07-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-3
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-8	NA	NA	NA	2 E-5
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	1.7 E-8	NA	NA	NA	2 E-7
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	1 E-7
CP2-07-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	3 E-6
CP2-07-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	NA	NA	4 E-6
CP2-07-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-9	NA	NA	1.0 E-7	NA	NA	1.1 E-8	NA	2 E-6
CP2-07-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	5.2 E-8	NA	NA	7.9 E-9	NA	2 E-6
CP2-07-SP06	10	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	2.6 E-7	NA	NA	4.7 E-8	NA	1 E-5
CP2-07-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	4.4 E-8	NA	NA	1.2 E-8	NA	3 E-6
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	2.2 E-8	NA	NA	NA	4 E-7
CP2-07-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	1.2 E-8	NA	NA	NA	1 E-7
CP2-07-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
CP2-07-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
CP2-07-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	1.0 E-8	NA	5.0 E-8	NA	1 E-7
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	4.1 E-9	NA	NA	NA	5 E-8
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	6.3 E-9	NA	NA	NA	2 E-7
CP2-07-SP09	34	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	7.0 E-9	NA	NA	NA	2 E-7
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	3 E-7
CP2-07-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	6 E-7

Table 5.6-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																		
Unit Hazard Adult																		
Unit Risk																		
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	4 E-8
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	6 E-8
CP2-07-SP11	20	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	4.2 E-9	NA	NA	NA	8 E-8
CP2-07-SP12	10	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	3 E-7
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	4 E-8
CP2-07-SP12	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	4 E-7
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	1.4 E-8	NA	NA	NA	2 E-7
CP2-07-SP13	20	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	5.6 E-9	NA	NA	NA	9 E-8
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	7.2 E-9	NA	4.9 E-8	NA	7 E-8
CP2-07-SP14	18.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	1.8 E-8	NA	7 E-8
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP11	10	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	6.6 E-8	NA	4.4 E-9	NA	1 E-6
CP2-08-SP11	20	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	9.6 E-10	NA	NA	NA	8.4 E-8	NA	NA	NA	3 E-7
CP2-08-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	2.6 E-8	NA	8.9 E-9	NA	2 E-7
CP2-08-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	8.1 E-9	NA	5.3 E-9	NA	1 E-5
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	5.8 E-6	2 E-3
CP2-RE05-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	8.1 E-7	5 E-4
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
CP2-RE05-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	NA	3 E-4
CP2-RE05-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	NA	4 E-5
CP2-RE05-SP02	40	NA	NA	9.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	6.3 E-8	NA	2 E-7
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-8
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	4 E-8
CP2-RE05-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	1 E-4
CP2-RE05-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-9	NA	NA	NA	4 E-9
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	2.0 E-9	NA	9 E-9
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
CP2-RE05-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8
CP2-RE05-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
F(C)-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	NA	NA	7 E-8
F(C)-SP06	10	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	4.9 E-8	NA	NA	NA	9 E-8
F(C)-SP06	20	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	6 E-8
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-7	4.5 E-9	NA	NA	NA	5 E-7
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	9.1 E-9	NA	NA	NA	2 E-7

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.6-5) x the unit hazard or unit risk for the chemical).

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child		3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	2.2 E-1
Unit Hazard Adult		1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	9.6 E-2
Unit Risk		NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	NA
59F-SP33	10		100	3900	37		110	140	1200	120	50	820	22		140		
59F-SP33	20			33000					550			920			230		
59F-SP34	10		82	41000			74		400	110		2000			170		
59F-SP34	15			30000					1400		65	1100			82		38
59F-SP35	10	120		88000								760			100		270
59F-SP35	20			310000			100		160			770			280		100
59F-SP36	10			10									14		57		
59F-SP36	20		27	38	7.6					17		69			23		
59F-SP37	10							70			38	240	11				
59F-SP38	10														4.5		
59F-SP38	20							82			6.0	390	12				
59F-SP38	40																
59F-SP39	20			18											26		
60F-SP08	10											98					
60F-SP08	20		13							8.2	23	74	5.7		80		
61F-SP03	10			760				25	33		12	340	5.0		14		
61F-SP03	20			330				23	32		12	280	12		12		
61F-SP04	10								14						6.7		
61F-SP04	20								17								
61F-SP05	10											130	5.4		7.0		
61F-SP05	20											120	3.8				
61F-SP06	10											78					
61F-SP06	20											130	8.6		11		
62F-SP01	20		680		240		80	76	150	680	17	300			14		
62F-SP02	20		22					34	60	15	31	440			37		
62F-SP03	20		24					26	90	18	16	350			39		
62F-SP04	10		18		5.5		18		39	11	6.7	82			13		
62F-SP05	10		1000		370		220	130	190	1000	8.4	750	12		60		
62F-SP05	20		950		380		160	110	170	1100	39	520	9.5		17		
62F-SP06	10		13							8.3					8.2		
62F-SP06	20		11				8.1		17	7.4	25	100	15		73		
62F-SP07	10					20			25			110	4.9	17	15		
62F-SP07	20												3.7		7.6		
CP2-07-SP01	10	160		230000			160						100				
CP2-07-SP01	20			8600000													
CP2-07-SP01	40			2200000													
CP2-07-SP02	10															1500	
CP2-07-SP02	20																
CP2-07-SP03	10								64		8.2	180	4.5		10		
CP2-07-SP03	20						25		97			180	16		95		
CP2-07-SP04	10			170			58						14		210		
CP2-07-SP04	20			190			40					150	35		310		
CP2-07-SP05	10			12			45						25		36	23	
CP2-07-SP05	20			11									12		33	14	
CP2-07-SP06	10	24	9.3	440						8.0			12		44	96	
CP2-07-SP06	20	22		160									23		70	100	
CP2-07-SP07	10						15		30		18	140	13		19		
CP2-07-SP07	20			8.0					18		16	94	6.4		24		
CP2-07-SP08	10			20								120			6.2		
CP2-07-SP08	20			5.6								170			17		
CP2-07-SP08	30					37		29	20			650			17		
CP2-07-SP09	10																
CP2-07-SP09	20							28				150	34				
CP2-07-SP09	34						5.0	110				640	59		4.8		
CP2-07-SP10	10							34				85	34		55		
CP2-07-SP10	20			9.0				85	20			260	89		45		
CP2-07-SP10	40							22	12			82	16		27		

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child		3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	2.2 E-1
Unit Hazard Adult		1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	9.6 E-2
Unit Risk		NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	NA
CP2-07-SP11	10							34	16			220	5.0				
CP2-07-SP11	20											150	15				
CP2-07-SP12	10							29				96	25		61		
CP2-07-SP12	20											86	8.9		10		
CP2-07-SP12	40	17		72				48	18			200	64		210		
CP2-07-SP13	10								13			78	14				
CP2-07-SP13	20							43				250	18				
CP2-07-SP14	10											310			7.7		
CP2-07-SP14	18.5					27		28	12			510			39		
CP2-07-SP15	10											70	4.1		31		
CP2-07-SP15	20																
CP2-08-SP11	10		44	130	12		12	23	180	42	16	470	4.9		25		
CP2-08-SP11	20		40	36			16	51	640	38	53	1100	7.7		27		
CP2-08-SP12	10		18	9.8					190	13	21	300	4.4		15		
CP2-08-SP12	20			2200					26		11	120			26		
CP2-08-SP13	10											200					
CP2-08-SP14	10														4.5		
CP2-RE05-SP01	10			300000													
CP2-RE05-SP01	20			110000													
CP2-RE05-SP01	40			9.6											14		
CP2-RE05-SP02	10			38000											49		
CP2-RE05-SP02	20			9900													
CP2-RE05-SP02	40	8.9				29		20	12			270	27		88		
CP2-RE05-SP03	10														4		
CP2-RE05-SP03	20		9.4							6.3		120			13		
CP2-RE05-SP04	10											91			3.7		
CP2-RE05-SP04	20											84			4.1		
CP2-RE05-SP05	10			340									4.2		14		
CP2-RE05-SP05	20			21											16		
CP2-RE05-SP05	40			17											26		
CP2-RE05-SP06	10			12000											15		
CP2-RE05-SP06	20			4300											8.4		
CP2-RE05-SP06	40			910									7.0		15		
CP2-RE05-SP07	10								41						9.3		
CP2-RE05-SP07	20								23						26		
CP2-RE05-SP08	10			21									5.7		28		
CP2-RE05-SP08	20			15									7.7		48		
CP2-RE05-SP08	40			11											8.1		
CP2-RE05-SP09	10			7.7													
CP2-RE05-SP09	20			7.2											27		
CP2-RE05-SP10	10											110					
CP2-RE05-SP10	20											130					
F(C)-SP05	20			13					16		7.0				10		
F(C)-SP06	10		350		120		30	37	79	310	15	120			28		
F(C)-SP06	20		220		70		6.8		20	180	18	77	6.2		37		
OS1-F1-SP01	10											75			20		
OS1-F1-SP01	20											100	5.1		20		

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		4.9 E+1	5.6 E+0	3.7 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	7.5 E-1	2.2 E+1	6.4 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.1 E+1	2.4 E+0	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	3.2 E-1	9.6 E+0	2.7 E+1	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
59F-SP33	10			37	370	75	22		990	93	260		120	26		180	210		14
59F-SP33	20				270		930		170	150						170	100		71
59F-SP34	10				280				180	210	120					180	110		51
59F-SP34	15				150				120	64						340	90		55
59F-SP35	10			66	140				220	580						180		330	540
59F-SP35	20	160		59	140				380	420						170	62	140	830
59F-SP36	10	120			42		300		23	42	11						36	32	
59F-SP36	20	22			49		44									6.6	5.3		
59F-SP37	10				22					8.6	6.8					25	29		
59F-SP38	10									7.3					510	11	7.4	9.3	
59F-SP38	20				15				21	30	7.9				380	33	28	12	
59F-SP38	40														8.7				
59F-SP39	20	16					130	18				16			69		4.9	55	
60F-SP08	10				46												6		
60F-SP08	20	12		7.3	84				48	13						23	29		
61F-SP03	10			6.3	29						10					22	24	15	
61F-SP03	20	8.7	8.2	5.0	30					7.0	10					24	33	41	
61F-SP04	10									14						11	13		
61F-SP04	20															7.9	14		
61F-SP05	10									7.7							6.3	8.7	
61F-SP05	20				20												5.9		
61F-SP06	10				22												8.8	15	
61F-SP06	20								13	18	6.1						15	10	
62F-SP01	20		30	16	170	250		23	32	4.7	1100	9.3	520	130	15	92	300		
62F-SP02	20			11	66				38		8.0					44	20		
62F-SP03	20			8.1	59		14	130	18		8.7		6.1			33	11	7.9	
62F-SP04	10			6.4	55				14							17	4.0		
62F-SP05	10		45	28	300	460	10		58	17	2000	21	880	200	33	140	840		
62F-SP05	20		52	34	280	480	6.7		110	12	2000	15	940	220	31	180	690		
62F-SP06	10				79				10							15	11		
62F-SP06	20			25	64			21	110	37	5.7					40	49		
62F-SP07	10	6.7		4.7	22				40	93						73	20	7.0	
62F-SP07	20						10	41	5.6	27	15		6.2			7.2	12		
CP2-07-SP01	10	3700			960		480			2400						2800	190	160	64000
CP2-07-SP01	20	120000																	120000
CP2-07-SP01	40	12000																	
CP2-07-SP02	10								71							91			
CP2-07-SP02	20																		
CP2-07-SP03	10	19			22		240		20	6.2					20	28	23		
CP2-07-SP03	20	9.8			20		44		82	85						75	31		
CP2-07-SP04	10	190		53	27				200	430							23	8.0	
CP2-07-SP04	20	690		21	22				160	220						16	32		
CP2-07-SP05	10	180			17		260		12	48	12	59			74		26	22	
CP2-07-SP05	20	330					440		15	21	9.5	18			70		34	28	
CP2-07-SP06	10	1300				12	140			25	42	730	13		190		50	95	
CP2-07-SP06	20	480					420			58	18	230			59		44	41	
CP2-07-SP07	10	10			30		100		48	24	8.6				130	36	42		
CP2-07-SP07	20	16			18		110		38	16	9.5				13	35	24		
CP2-07-SP08	10				11														
CP2-07-SP08	20				20		13												
CP2-07-SP08	30				47			550	19	43	7.6				20	45	40	270	
CP2-07-SP09	10									7.3					30	6.8	9.1		
CP2-07-SP09	20				9.6				57	54	8.6				46	18	50		
CP2-07-SP09	34			7.3	25	8.5			100	130	13		5.2		50	34	90		
CP2-07-SP10	10	6.9		8.4	12				150	290	8.6					6.0	22		
CP2-07-SP10	20	34			88				540	1800	9.3					19	34		
CP2-07-SP10	40				43				98	170	10					5.8	14		

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard Child		4.9 E+1	5.6 E+0	3.7 E-1	1.3 E+0	2.2 E+0	1.1 E+1	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	7.5 E-1	2.2 E+1	6.4 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		2.1 E+1	2.4 E+0	1.6 E-1	5.5 E-1	9.6 E-1	4.8 E+0	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	3.2 E-1	9.6 E+0	2.7 E+1	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		1.2 E-2	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
CP2-07-SP11	10									11					17		8.2		
CP2-07-SP11	20					5.9			25	42	7.7				21	12	34		
CP2-07-SP12	10	9.9		14	32	5.2	8.5		160	390	13					5.7	21		
CP2-07-SP12	20				11		16		14	18	8.9						12	12	
CP2-07-SP12	40	41			98		28		470	1600	14						29	15	
CP2-07-SP13	10				14					25					62	24	15		
CP2-07-SP13	20				22	5.3			19	31	8.4				11	16	39		
CP2-07-SP14	10				22			270	7.4	11					8.8	12	67	99	
CP2-07-SP14	18.5			8.5	38			190	10	180	10					35	200	64	
CP2-07-SP15	10																		
CP2-07-SP15	20																		
CP2-08-SP11	10			8.4	110	17			66	6.3	64	43	26	8.2		110	55	8.8	
CP2-08-SP11	20			26	160	14			140	9.5	59	21	21			240	85		
CP2-08-SP12	10	12		8.4	70				27	4.8	17	16	8.2			43	27	18	
CP2-08-SP12	20	10		6.0	22					6.3	8.2	8.9				23	14	19	
CP2-08-SP13	10				20														
CP2-08-SP14	10										6.4						7.5		
CP2-RE05-SP01	10	3000														98			240
CP2-RE05-SP01	20	1200							120							130	240		58
CP2-RE05-SP01	40																		
CP2-RE05-SP02	10	400							78							86			
CP2-RE05-SP02	20	120							110							140	62		
CP2-RE05-SP02	40			23	26	5.6		940	380	1500	8.3				26		60	450	
CP2-RE05-SP03	10				8.8														
CP2-RE05-SP03	20				9.7				14	8.5	12		6.2				8.6		
CP2-RE05-SP04	10				9.1														
CP2-RE05-SP04	20				14														
CP2-RE05-SP05	10									6.8							5.4		
CP2-RE05-SP05	20								6.2								5.3		
CP2-RE05-SP05	40								4.8	7.0								13	
CP2-RE05-SP06	10	50								11						5.7	8.2		
CP2-RE05-SP06	20	19								6.7	5.4								
CP2-RE05-SP06	40									23	9.8						9.2		
CP2-RE05-SP07	10								28	32						7.4	9.1		
CP2-RE05-SP07	20								27	53						19	28	7.2	
CP2-RE05-SP08	10								23	23							5.6		
CP2-RE05-SP08	20			8.0					29	64							7.8		
CP2-RE05-SP08	40									12									
CP2-RE05-SP09	10																		
CP2-RE05-SP09	20			4.7					35	44									
CP2-RE05-SP10	10																		
CP2-RE05-SP10	20																		
F(C)-SP05	20			5.5	14				13							21	7.3		
F(C)-SP06	10		14	9.2	160	66			34	5.4	300	5.9	180	57		81	58		
F(C)-SP06	20		7.7	4.5	31	26			36	7.4	110		76	32		68	32		
OS1-F1-SP01	10									4.5					330	7.5	6.6		
OS1-F1-SP01	20								7.0	18	7.6				290	26	17		

		Child Non-Cancer Hazard Index														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
59F-SP33	10	NA	1.5 E-4	1.5 E-2	6.7 E-5	NA	1.7 E-5	4.0 E-7	2.0 E-3	1.9 E-5	2.2 E-7	5.8 E-6	1.1 E-5	NA	3.7 E-6	NA
59F-SP33	20	NA	NA	6.3 E-2	NA	NA	NA	NA	4.6 E-4	NA	NA	3.2 E-6	NA	NA	3.1 E-6	NA
59F-SP34	10	NA	1.3 E-4	1.6 E-1	NA	NA	1.2 E-5	NA	6.8 E-4	1.7 E-5	NA	1.4 E-5	NA	NA	4.5 E-6	NA
59F-SP34	15	NA	NA	7.6 E-2	NA	NA	NA	NA	1.6 E-3	NA	1.9 E-7	5.2 E-6	NA	NA	1.5 E-6	NA
59F-SP35	10	2.8 E-5	NA	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	5.3 E-6	NA	NA	2.7 E-6	NA
59F-SP35	20	NA	NA	5.9 E-1	NA	NA	7.8 E-6	NA	1.4 E-4	NA	NA	2.7 E-6	NA	NA	3.7 E-6	NA
59F-SP36	10	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	1.5 E-6	NA
59F-SP36	20	NA	2.1 E-5	7.2 E-5	6.9 E-6	NA	NA	NA	NA	1.3 E-6	NA	2.4 E-7	NA	NA	3.1 E-7	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	1.7 E-7	1.7 E-6	5.7 E-6	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	1.3 E-8	1.4 E-6	3.1 E-6	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-7	NA	NA	NA	NA
60F-SP08	20	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	6.4 E-7	5.1 E-8	2.6 E-7	1.5 E-6	NA	1.1 E-6	NA
61F-SP03	10	NA	NA	2.9 E-3	NA	NA	NA	7.2 E-8	5.6 E-5	NA	5.4 E-8	2.4 E-6	2.6 E-6	NA	3.7 E-7	NA
61F-SP03	20	NA	NA	6.3 E-4	NA	NA	NA	3.3 E-8	2.7 E-5	NA	2.7 E-8	9.8 E-7	3.1 E-6	NA	1.6 E-7	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	1.8 E-7	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-7	2.8 E-6	NA	1.9 E-7	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	9.9 E-7	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	2.2 E-6	NA	1.5 E-7	NA
62F-SP01	20	NA	5.3 E-4	NA	2.2 E-4	NA	6.2 E-6	1.1 E-7	1.3 E-4	5.3 E-5	3.8 E-8	1.1 E-6	NA	NA	1.9 E-7	NA
62F-SP02	20	NA	1.7 E-5	NA	NA	NA	NA	4.9 E-8	5.1 E-5	1.2 E-6	6.9 E-8	1.5 E-6	NA	NA	4.9 E-7	NA
62F-SP03	20	NA	1.9 E-5	NA	NA	NA	NA	3.8 E-8	7.6 E-5	1.4 E-6	3.6 E-8	1.2 E-6	NA	NA	5.2 E-7	NA
62F-SP04	10	NA	2.8 E-5	NA	9.9 E-6	NA	2.8 E-6	NA	6.6 E-5	1.7 E-6	3.0 E-8	5.8 E-7	NA	NA	3.5 E-7	NA
62F-SP05	10	NA	1.5 E-3	NA	6.7 E-4	NA	3.4 E-5	3.8 E-7	3.2 E-4	1.6 E-4	3.8 E-8	5.3 E-6	6.3 E-6	NA	1.6 E-6	NA
62F-SP05	20	NA	7.3 E-4	NA	3.4 E-4	NA	1.2 E-5	1.6 E-7	1.4 E-4	8.6 E-5	8.7 E-8	1.8 E-6	2.5 E-6	NA	2.3 E-7	NA
62F-SP06	10	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	2.2 E-7	NA
62F-SP06	20	NA	8.5 E-6	NA	NA	NA	6.3 E-7	NA	1.4 E-5	5.8 E-7	5.6 E-8	3.5 E-7	3.9 E-6	NA	9.7 E-7	NA
62F-SP07	10	NA	NA	NA	NA	1.2 E-7	NA	NA	4.2 E-5	NA	NA	7.7 E-7	2.6 E-6	1.3 E-6	4.0 E-7	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-7	NA	1.0 E-7	NA
CP2-07-SP01	10	3.7 E-5	NA	8.7 E-1	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA
CP2-07-SP01	20	NA	NA	1.6 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP01	40	NA	NA	2.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	3.7 E-8	1.3 E-6	2.4 E-6	NA	2.7 E-7	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	1.9 E-6	NA	8.2 E-5	NA	NA	6.3 E-7	4.2 E-6	NA	1.3 E-6	NA
CP2-07-SP04	10	NA	NA	6.4 E-4	NA	NA	9.0 E-6	NA	NA	NA	NA	NA	7.3 E-6	NA	5.6 E-6	NA
CP2-07-SP04	20	NA	NA	3.6 E-4	NA	NA	3.1 E-6	NA	NA	NA	NA	5.3 E-7	9.1 E-6	NA	4.1 E-6	NA
CP2-07-SP05	10	NA	NA	4.6 E-5	NA	NA	7.0 E-6	NA	NA	NA	NA	NA	1.3 E-5	NA	9.6 E-7	8.0 E-6
CP2-07-SP05	20	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	4.4 E-7	2.4 E-6
CP2-07-SP06	10	5.5 E-6	1.4 E-5	1.7 E-3	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	6.3 E-6	NA	1.2 E-6	3.3 E-5
CP2-07-SP06	20	2.5 E-6	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	9.3 E-7	1.7 E-5
CP2-07-SP07	10	NA	NA	NA	NA	NA	2.3 E-6	NA	5.1 E-5	NA	8.0 E-8	9.8 E-7	6.8 E-6	NA	5.0 E-7	NA
CP2-07-SP07	20	NA	NA	1.5 E-5	NA	NA	NA	NA	1.5 E-5	NA	3.6 E-8	3.3 E-7	1.7 E-6	NA	3.2 E-7	NA
CP2-07-SP08	10	NA	NA	7.6 E-5	NA	NA	NA	NA	NA	NA	NA	8.4 E-7	NA	NA	1.6 E-7	NA
CP2-07-SP08	20	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	6.0 E-7	NA	NA	2.3 E-7	NA
CP2-07-SP08	30	NA	NA	NA	NA	7.3 E-8	NA	2.8 E-8	1.1 E-5	NA	NA	1.5 E-6	NA	NA	1.5 E-7	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	5.3 E-7	8.9 E-6	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	2.3 E-7	9.3 E-8	NA	NA	NA	1.3 E-6	9.1 E-6	NA	3.7 E-8	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	6.0 E-7	1.8 E-5	NA	1.5 E-6	NA
CP2-07-SP10	20	NA	NA	1.7 E-5	NA	NA	NA	1.2 E-7	1.7 E-5	NA	NA	9.1 E-7	2.3 E-5	NA	6.0 E-7	NA
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	1.6 E-8	5.1 E-6	NA	NA	1.4 E-7	2.1 E-6	NA	1.8 E-7	NA

		Child Non-Cancer Hazard Index														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard Child																
Unit Hazard Adult																
Unit Risk																
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	9.8 E-8	2.7 E-5	NA	NA	1.5 E-6	2.6 E-6	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	3.9 E-6	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	8.4 E-8	NA	NA	NA	6.8 E-7	1.3 E-5	NA	1.6 E-6	NA
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	2.3 E-6	NA	1.3 E-7	NA
CP2-07-SP12	40	9.8 E-7	NA	6.8 E-5	NA	NA	NA	3.5 E-8	7.6 E-6	NA	NA	3.5 E-7	8.4 E-6	NA	1.4 E-6	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	5.5 E-7	7.3 E-6	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	NA	8.8 E-7	4.7 E-6	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	2.0 E-7	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	8.6 E-8	NA	4.4 E-8	1.1 E-5	NA	NA	1.9 E-6	NA	NA	5.6 E-7	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	2.1 E-6	NA	8.2 E-7	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	6.8 E-5	4.9 E-4	2.2 E-5	NA	1.9 E-6	6.6 E-8	3.0 E-4	6.5 E-6	7.1 E-8	3.3 E-6	2.6 E-6	NA	6.6 E-7	NA
CP2-08-SP11	20	NA	3.1 E-5	6.8 E-5	NA	NA	1.2 E-6	7.4 E-8	5.4 E-4	3.0 E-6	1.2 E-7	3.9 E-6	2.0 E-6	NA	3.6 E-7	NA
CP2-08-SP12	10	NA	2.8 E-5	3.7 E-5	NA	NA	NA	NA	3.2 E-4	2.0 E-6	9.4 E-8	2.1 E-6	2.3 E-6	NA	4.0 E-7	NA
CP2-08-SP12	20	NA	NA	4.2 E-3	NA	NA	NA	NA	2.2 E-5	NA	2.5 E-8	4.2 E-7	NA	NA	3.5 E-7	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA
CP2-RE05-SP01	10	NA	NA	1.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	20	NA	NA	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	40	NA	NA	9.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA
CP2-RE05-SP02	10	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA
CP2-RE05-SP02	20	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	40	5.1 E-7	NA	NA	NA	4.3 E-8	NA	1.4 E-8	5.1 E-6	NA	NA	4.7 E-7	3.5 E-6	NA	5.8 E-7	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA
CP2-RE05-SP03	20	NA	7.3 E-6	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	4.2 E-7	NA	NA	1.7 E-7	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-7	NA	NA	9.8 E-8	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	5.4 E-8	NA
CP2-RE05-SP05	10	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	3.7 E-7	NA
CP2-RE05-SP05	20	NA	NA	4.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA
CP2-RE05-SP05	40	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA
CP2-RE05-SP06	10	NA	NA	4.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	NA
CP2-RE05-SP06	20	NA	NA	8.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA
CP2-RE05-SP06	40	NA	NA	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-7	NA	1.0 E-7	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	NA	NA	NA	NA	NA	2.5 E-7	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	3.5 E-7	NA
CP2-RE05-SP08	10	NA	NA	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-6	NA	7.4 E-7	NA
CP2-RE05-SP08	20	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	6.4 E-7	NA
CP2-RE05-SP08	40	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA
CP2-RE05-SP09	10	NA	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	2.5 E-5	NA	NA	NA	NA	1.4 E-5	NA	1.6 E-8	NA	NA	NA	1.3 E-7	NA
F(C)-SP06	10	NA	5.4 E-4	NA	2.2 E-4	NA	4.7 E-6	1.1 E-7	1.3 E-4	4.8 E-5	6.7 E-8	8.4 E-7	NA	NA	7.4 E-7	NA
F(C)-SP06	20	NA	1.7 E-4	NA	6.3 E-5	NA	5.3 E-7	NA	1.7 E-5	1.4 E-5	4.0 E-8	2.7 E-7	1.6 E-6	NA	4.9 E-7	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	5.3 E-7	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	1.3 E-6	NA	2.7 E-7	NA

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
59F-SP33	10	NA	NA	NA	8.8 E-8	5.9 E-6	1.0 E-6	1.7 E-6	NA	1.7 E-5	4.7 E-6	3.6 E-5	NA	1.9 E-5	8.0 E-6	NA	1.1 E-5	1.1 E-5	NA	2.0 E-6	1.7 E-2
59F-SP33	20	NA	NA	NA	NA	2.2 E-6	NA	3.6 E-5	NA	1.5 E-6	3.8 E-6	NA	NA	NA	NA	NA	5.3 E-6	2.6 E-6	NA	5.0 E-6	6.3 E-2
59F-SP34	10	NA	NA	NA	NA	4.5 E-6	NA	NA	NA	3.1 E-6	1.1 E-5	1.6 E-5	NA	NA	NA	NA	1.1 E-5	5.7 E-6	NA	7.2 E-6	1.6 E-1
59F-SP34	15	1.2 E-7	NA	NA	NA	1.6 E-6	NA	NA	NA	1.4 E-6	2.2 E-6	NA	NA	NA	NA	NA	1.4 E-5	3.1 E-6	NA	5.2 E-6	7.7 E-2
59F-SP35	10	1.3 E-6	NA	NA	1.6 E-7	2.2 E-6	NA	NA	NA	3.8 E-6	3.0 E-5	NA	NA	NA	NA	NA	1.1 E-5	NA	7.8 E-6	7.6 E-5	3.3 E-1
59F-SP35	20	2.4 E-7	3.3 E-5	NA	7.0 E-8	1.1 E-6	NA	NA	NA	3.3 E-6	1.1 E-5	NA	NA	NA	NA	NA	5.3 E-6	1.6 E-6	1.7 E-6	5.9 E-5	5.9 E-1
59F-SP36	10	NA	4.9 E-5	NA	NA	6.7 E-7	NA	2.3 E-5	NA	4.0 E-7	2.1 E-6	1.5 E-6	NA	NA	NA	NA	NA	1.9 E-6	7.6 E-7	NA	1.3 E-4
59F-SP36	20	NA	4.5 E-6	NA	NA	3.9 E-7	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	1.4 E-7	NA	NA	1.1 E-4
59F-SP37	10	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	4.4 E-7	9.3 E-7	NA	NA	NA	NA	1.6 E-6	1.5 E-6	NA	NA	1.3 E-5
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	1.9 E-4	6.9 E-7	3.8 E-7	2.2 E-7	NA	1.9 E-4
59F-SP38	20	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	1.8 E-7	7.7 E-7	5.4 E-7	NA	NA	NA	7.0 E-5	1.0 E-6	7.3 E-7	1.4 E-7	NA	7.8 E-5
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-7	NA	NA	NA	NA	8.0 E-7
59F-SP39	20	NA	3.3 E-6	NA	NA	NA	NA	5.1 E-6	4.2 E-9	NA	NA	NA	4.9 E-8	NA	NA	1.3 E-5	NA	1.3 E-7	6.5 E-7	NA	5.6 E-5
60F-SP08	10	NA	NA	NA	NA	7.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	1.7 E-6
60F-SP08	20	NA	2.5 E-6	NA	8.7 E-9	6.7 E-7	NA	NA	NA	4.2 E-7	3.3 E-7	NA	NA	NA	NA	NA	7.2 E-7	7.5 E-7	NA	NA	1.9 E-5
61F-SP03	10	NA	NA	NA	1.5 E-8	4.6 E-7	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	1.4 E-6	1.2 E-6	3.6 E-7	NA	2.9 E-3
61F-SP03	20	NA	1.8 E-6	1.2 E-7	6.0 E-9	2.4 E-7	NA	NA	NA	NA	1.8 E-7	6.9 E-7	NA	NA	NA	NA	7.5 E-7	8.6 E-7	4.9 E-7	NA	6.6 E-4
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	NA	NA	6.9 E-7	6.7 E-7	NA	NA	2.6 E-5
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	3.6 E-7	NA	NA	1.5 E-5
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	NA	NA	3.3 E-7	2.1 E-7	NA	4.8 E-6
61F-SP05	20	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	1.7 E-6
61F-SP06	10	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	3.6 E-7	NA	1.7 E-6
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	4.6 E-7	4.2 E-7	NA	NA	NA	NA	NA	3.9 E-7	1.2 E-7	NA	4.3 E-6
62F-SP01	20	NA	NA	4.4 E-7	1.9 E-8	1.4 E-6	1.7 E-6	NA	5.3 E-9	2.8 E-7	1.2 E-7	7.6 E-5	2.8 E-8	4.0 E-5	2.0 E-5	2.8 E-6	2.9 E-6	7.8 E-6	NA	NA	1.1 E-3
62F-SP02	20	NA	NA	NA	1.3 E-8	5.3 E-7	NA	NA	NA	3.3 E-7	NA	5.5 E-7	NA	NA	NA	NA	1.4 E-6	5.2 E-7	NA	NA	7.4 E-5
62F-SP03	20	NA	NA	NA	9.6 E-9	4.7 E-7	NA	5.5 E-7	3.0 E-8	1.6 E-7	NA	6.0 E-7	NA	4.7 E-7	NA	NA	1.0 E-6	2.9 E-7	9.4 E-8	NA	1.0 E-4
62F-SP04	10	NA	NA	NA	1.5 E-8	8.8 E-7	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	1.1 E-6	2.1 E-7	NA	NA	1.1 E-4
62F-SP05	10	NA	NA	1.3 E-6	6.7 E-8	4.8 E-6	6.2 E-6	7.8 E-7	NA	1.0 E-6	8.7 E-7	2.7 E-4	1.3 E-7	1.4 E-4	6.1 E-5	1.2 E-5	8.7 E-6	4.4 E-5	NA	NA	3.3 E-3
62F-SP05	20	NA	NA	7.5 E-7	4.1 E-8	2.2 E-6	3.2 E-6	2.6 E-7	NA	9.6 E-7	3.1 E-7	1.4 E-4	4.6 E-8	7.3 E-5	3.4 E-5	5.7 E-6	5.6 E-6	1.8 E-5	NA	NA	1.6 E-3
62F-SP06	10	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	9.3 E-7	5.7 E-7	NA	NA	2.5 E-5
62F-SP06	20	NA	NA	NA	3.0 E-8	5.1 E-7	NA	NA	4.9 E-9	9.6 E-7	9.4 E-7	3.9 E-7	NA	NA	NA	NA	1.2 E-6	1.3 E-6	NA	NA	3.5 E-5
62F-SP07	10	NA	2.7 E-6	NA	1.1 E-8	3.5 E-7	NA	NA	NA	7.0 E-7	4.7 E-6	NA	NA	NA	NA	NA	4.6 E-6	1.0 E-6	1.7 E-7	NA	6.2 E-5
62F-SP07	20	NA	NA	NA	NA	NA	NA	3.9 E-7	9.5 E-9	4.9 E-8	6.9 E-7	1.0 E-6	NA	4.8 E-7	NA	NA	2.2 E-7	3.1 E-7	NA	NA	4.3 E-6
CP2-07-SP01	10	NA	1.5 E-3	NA	NA	1.5 E-5	NA	3.7 E-5	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	1.7 E-4	9.8 E-6	3.8 E-6	9.0 E-3	8.8 E-1
CP2-07-SP01	20	NA	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-3	1.6 E+1
CP2-07-SP01	40	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E+0
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	5.3 E-4
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	7.8 E-6	NA	NA	3.5 E-7	NA	1.9 E-5	NA	3.5 E-7	3.2 E-7	NA	NA	NA	NA	7.4 E-6	1.7 E-6	1.2 E-6	NA	NA	1.5 E-4
CP2-07-SP03	20	NA	2.0 E-6	NA	NA	1.6 E-7	NA	1.7 E-6	NA	7.2 E-7	2.2 E-6	NA	NA	NA	NA	NA	2.3 E-6	8.0 E-7	NA	NA	1.0 E-4
CP2-07-SP04	10	NA	7.8 E-5	NA	1.3 E-7	4.3 E-7	NA	NA	NA	3.5 E-6	2.2 E-5	NA	NA	NA	NA	NA	NA	1.2 E-6	1.9 E-7	NA	7.7 E-4
CP2-07-SP04	20	NA	1.4 E-4	NA	2.5 E-8	1.8 E-7	NA	NA	NA	1.4 E-6	5.6 E-6	NA	NA	NA	NA	NA	5.0 E-7	8.3 E-7	NA	NA	5.3 E-4
CP2-07-SP05	10	NA	7.4 E-5	NA	NA	2.7 E-7	NA	2.0 E-5	NA	2.1 E-7	2.5 E-6	1.6 E-6	3.6 E-7	NA	NA	2.7 E-5	NA	1.3 E-6	5.2 E-7	NA	2.0 E-4
CP2-07-SP05	20	NA	6.7 E-5	NA	NA	NA	NA	1.7 E-5	NA	1.3 E-7	5.4 E-7	6.5 E-7	5.5 E-8	NA	NA	1.3 E-5	NA	8.8 E-7	3.3 E-7	NA	1.3 E-4
CP2-07-SP06	10	NA	5.3 E-4	NA	NA	NA	1.6 E-7	1.1 E-5	NA	NA	1.3 E-6	5.8 E-6	4.5 E-6	2.0 E-6	NA	7.0 E-5	NA	2.6 E-6	2.3 E-6	NA	2.4 E-3
CP2-07-SP06	20	NA	9.8 E-5	NA	NA	NA	NA	1.6 E-5	NA	NA	1.5 E-6	1.2 E-6	7.0 E-7	NA	NA	1.1 E-5	NA	1.1 E-6	4.9 E-7	NA	4.6 E-4
CP2-07-SP07	10	NA	4.1 E-6	NA	NA	4.8 E-7	NA	7.8 E-6	NA	8.4 E-7	1.2 E-6	1.2 E-6	NA	NA	NA	4.8 E-5	2.2 E-6	2.2 E-6	NA	NA	1.3 E-4
CP2-07-SP07	20	NA	3.3 E-6	NA	NA	1.4 E-7	NA	4.3 E-6	NA	3.3 E-7	4.1 E-7	6.5 E-7	NA	NA	NA	2.4 E-6	1.1 E-6	6.2 E-7	NA	NA	4.6 E-5
CP2-07-SP08	10	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-5
CP2-07-SP08	20	NA	NA	NA	NA	1.6 E-7	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5
CP2-07-SP08	30	NA	NA	NA	NA	2.5 E-7	NA	NA	8.5 E-8	1.1 E-7	7.3 E-7	3.5 E-7	NA	NA	NA	2.5 E-6	9.3 E-7	6.9 E-7	2.1 E-6	NA	2.1 E-5
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	1.1 E-5	4.2 E-7	4.7 E-7	NA	NA	1.2 E-5
CP2-07-SP09	20	NA	NA	NA	NA	7.7 E-8	NA	NA	NA	5.0 E-7	1.4 E-6	5.9 E-7	NA	NA	NA	8.5 E-6	5.6 E-7	1.3 E-6	NA	NA	2.2 E-5
CP2-07-SP09	34	NA	NA	NA	5.1 E-9	1.2 E-7	3.4 E-8	NA	NA	5.1 E-7	2.0 E-6	5.3 E-7	NA	2.4 E-7	NA	5.4 E-6	6.2 E-7	1.4 E-6	NA	NA	2.2 E-5
CP2-07-SP10	10	NA	2.8 E-6	NA	2.0 E-8	1.9 E-7	NA	NA	NA	2.6 E-6	1.5 E-5	1.2 E-6	NA	NA	NA	NA	3.7 E-7	1.1 E-6	NA	NA	4.3 E-5
CP2-07-SP10	20	NA	6.9 E-6	NA	NA	7.0 E-7	NA	NA	NA	4.7 E-6	4.6 E-5	6.4 E-7	NA	NA	NA	NA	5.9 E-7	8.8 E-7	NA	NA	1.2 E-4
CP2-07-SP10	40	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	4.3 E-7	2.2 E-6	3.4 E-7	NA	NA	NA	NA	9.0 E-8	1.8 E-7	NA	NA	1.1 E-5

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	6.2 E-6	NA	4.2 E-7	NA	NA	3.9 E-5
CP2-07-SP11	20	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	2.2 E-7	1.1 E-6	5.3 E-7	NA	NA	NA	3.9 E-6	3.7 E-7	8.8 E-7	NA	NA	1.1 E-5
CP2-07-SP12	10	NA	4.0 E-6	NA	3.3 E-8	5.1 E-7	7.0 E-8	6.6 E-7	NA	2.8 E-6	2.0 E-5	1.8 E-6	NA	NA	NA	NA	3.6 E-7	1.1 E-6	NA	NA	4.7 E-5
CP2-07-SP12	20	NA	NA	NA	NA	8.8 E-8	NA	6.2 E-7	NA	1.2 E-7	4.6 E-7	6.1 E-7	NA	NA	NA	NA	NA	3.1 E-7	1.4 E-7	NA	5.1 E-6
CP2-07-SP12	40	NA	4.2 E-6	NA	NA	3.9 E-7	NA	5.5 E-7	NA	2.1 E-6	2.0 E-5	4.8 E-7	NA	NA	NA	NA	NA	3.8 E-7	8.9 E-8	NA	1.2 E-4
CP2-07-SP13	10	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	2.3 E-5	1.5 E-6	7.8 E-7	NA	NA	5.6 E-5
CP2-07-SP13	20	NA	NA	NA	NA	1.8 E-7	3.6 E-8	NA	NA	1.7 E-7	7.9 E-7	5.8 E-7	NA	NA	NA	2.0 E-6	5.0 E-7	1.0 E-6	NA	NA	1.1 E-5
CP2-07-SP14	10	NA	NA	NA	NA	3.5 E-7	NA	NA	1.3 E-7	1.3 E-7	5.6 E-7	NA	NA	NA	NA	3.2 E-6	7.5 E-7	3.5 E-6	2.3 E-6	NA	1.3 E-5
CP2-07-SP14	18.5	NA	NA	NA	1.1 E-8	3.3 E-7	NA	NA	4.8 E-8	9.4 E-8	5.0 E-6	7.4 E-7	NA	NA	NA	NA	1.2 E-6	5.6 E-6	8.2 E-7	NA	2.7 E-5
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	NA	2.0 E-8	1.8 E-6	2.3 E-7	NA	NA	1.2 E-6	3.2 E-7	8.8 E-6	2.6 E-7	4.0 E-6	2.5 E-6	NA	6.9 E-6	2.9 E-6	2.1 E-7	NA	9.3 E-4
CP2-08-SP11	20	NA	NA	NA	3.1 E-8	1.3 E-6	9.4 E-8	NA	NA	1.2 E-6	2.4 E-7	4.1 E-6	6.4 E-8	1.6 E-6	NA	NA	7.5 E-6	2.2 E-6	NA	NA	6.7 E-4
CP2-08-SP12	10	NA	4.9 E-6	NA	2.0 E-8	1.1 E-6	NA	NA	NA	4.7 E-7	2.5 E-7	2.3 E-6	9.8 E-8	1.3 E-6	NA	NA	2.7 E-6	1.4 E-6	4.3 E-7	NA	4.1 E-4
CP2-08-SP12	20	NA	2.0 E-6	NA	7.1 E-9	1.8 E-7	NA	NA	NA	NA	1.6 E-7	5.6 E-7	2.7 E-8	NA	NA	NA	7.2 E-7	3.6 E-7	2.3 E-7	NA	4.2 E-3
CP2-08-SP13	10	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-7	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	1.4 E-6
CP2-RE05-SP01	10	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-6	NA	NA	3.4 E-5	1.1 E+0
CP2-RE05-SP01	20	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	4.1 E-6	6.2 E-6	NA	4.1 E-6	2.1 E-1
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-6
CP2-RE05-SP02	10	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	NA	1.4 E-1
CP2-RE05-SP02	20	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	NA	NA	NA	4.4 E-6	1.6 E-6	NA	NA	1.9 E-2
CP2-RE05-SP02	40	NA	NA	NA	1.4 E-8	1.0 E-7	1.9 E-8	NA	1.1 E-7	1.7 E-6	1.9 E-5	2.9 E-7	NA	NA	NA	2.4 E-6	NA	7.8 E-7	2.7 E-6	NA	3.7 E-5
CP2-RE05-SP03	10	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7
CP2-RE05-SP03	20	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	1.2 E-7	2.2 E-7	8.2 E-7	NA	4.8 E-7	NA	NA	NA	2.2 E-7	NA	NA	1.0 E-5
CP2-RE05-SP04	10	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-7
CP2-RE05-SP04	20	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	1.3 E-3
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	4.0 E-5
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	8.9 E-8	NA	NA	NA	NA	NA	NA	NA	7.7 E-8	NA	1.6 E-5
CP2-RE05-SP06	10	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	NA	NA	NA	3.6 E-7	4.2 E-7	NA	NA	4.6 E-2
CP2-RE05-SP06	20	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-3
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	3.4 E-7	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	8.6 E-4
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	1.6 E-6	NA	NA	NA	NA	NA	4.6 E-7	4.7 E-7	NA	NA	7.3 E-5
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	1.4 E-6	NA	NA	NA	NA	NA	5.9 E-7	7.3 E-7	8.5 E-8	NA	2.3 E-5
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	1.2 E-6	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	8.5 E-5
CP2-RE05-SP08	20	NA	NA	NA	9.5 E-9	NA	NA	NA	NA	2.5 E-7	1.6 E-6	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	3.3 E-5
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5
CP2-RE05-SP09	20	NA	NA	NA	5.6 E-9	NA	NA	NA	NA	3.1 E-7	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-7
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7
F(C)-SP05	20	NA	NA	NA	6.6 E-9	1.1 E-7	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	6.5 E-7	1.9 E-7	NA	NA	3.9 E-5
F(C)-SP06	10	NA	NA	4.1 E-7	2.2 E-8	2.6 E-6	8.8 E-7	NA	NA	5.9 E-7	2.8 E-7	4.1 E-5	3.6 E-8	2.8 E-5	1.7 E-5	NA	5.0 E-6	3.0 E-6	NA	NA	1.0 E-3
F(C)-SP06	20	NA	NA	1.1 E-7	5.4 E-9	2.5 E-7	1.7 E-7	NA	NA	3.1 E-7	1.9 E-7	7.6 E-6	NA	5.9 E-6	4.9 E-6	NA	2.1 E-6	8.3 E-7	NA	NA	2.9 E-4
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	1.2 E-4	4.7 E-7	3.4 E-7	NA	NA	1.2 E-4
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	4.6 E-7	5.2 E-7	NA	NA	NA	5.3 E-5	8.1 E-7	4.4 E-7	NA	NA	5.8 E-5

		Adult Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
59F-SP33	10	NA	6.6 E-5	6.3 E-3	2.9 E-5	NA	7.3 E-6	1.7 E-7	8.7 E-4	8.0 E-6	9.6 E-8	2.5 E-6	4.9 E-6	NA	1.6 E-6	NA	NA
59F-SP33	20	NA	NA	2.7 E-2	NA	NA	NA	NA	2.0 E-4	NA	NA	1.4 E-6	NA	NA	1.3 E-6	NA	NA
59F-SP34	10	NA	5.4 E-5	6.7 E-2	NA	NA	4.9 E-6	NA	2.9 E-4	7.3 E-6	NA	6.0 E-6	NA	NA	1.9 E-6	NA	NA
59F-SP34	15	NA	NA	3.3 E-2	NA	NA	NA	NA	6.8 E-4	NA	8.3 E-8	2.2 E-6	NA	NA	6.2 E-7	NA	5.3 E-8
59F-SP35	10	1.2 E-5	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	1.1 E-6	NA	5.6 E-7
59F-SP35	20	NA	NA	2.5 E-1	NA	NA	3.3 E-6	NA	5.8 E-5	NA	NA	1.2 E-6	NA	NA	1.6 E-6	NA	1.0 E-7
59F-SP36	10	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	6.5 E-7	NA	NA
59F-SP36	20	NA	8.9 E-6	3.1 E-5	2.9 E-6	NA	NA	NA	NA	5.7 E-7	NA	1.0 E-7	NA	NA	1.3 E-7	NA	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA	7.3 E-8	7.2 E-7	2.5 E-6	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	5.7 E-9	5.9 E-7	1.3 E-6	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	NA	NA	NA
60F-SP08	20	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	2.7 E-7	2.2 E-8	1.1 E-7	6.4 E-7	NA	4.6 E-7	NA	NA
61F-SP03	10	NA	NA	1.2 E-3	NA	NA	NA	3.1 E-8	2.4 E-5	NA	2.3 E-8	1.0 E-6	1.1 E-6	NA	1.6 E-7	NA	NA
61F-SP03	20	NA	NA	2.7 E-4	NA	NA	NA	1.4 E-8	1.2 E-5	NA	1.1 E-8	4.2 E-7	1.3 E-6	NA	6.8 E-8	NA	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	7.6 E-8	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	6.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	1.2 E-6	NA	8.0 E-8	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	4.3 E-7	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	9.6 E-7	NA	6.3 E-8	NA	NA
62F-SP01	20	NA	2.3 E-4	NA	9.3 E-5	NA	2.7 E-6	4.7 E-8	5.4 E-5	2.3 E-5	1.6 E-8	4.5 E-7	NA	NA	8.0 E-8	NA	NA
62F-SP02	20	NA	7.3 E-6	NA	NA	NA	NA	2.1 E-8	2.2 E-5	5.0 E-7	3.0 E-8	6.6 E-7	NA	NA	2.1 E-7	NA	NA
62F-SP03	20	NA	8.0 E-6	NA	NA	NA	NA	1.6 E-8	3.3 E-5	6.0 E-7	1.5 E-8	5.3 E-7	NA	NA	2.2 E-7	NA	NA
62F-SP04	10	NA	1.2 E-5	NA	4.3 E-6	NA	1.2 E-6	NA	2.8 E-5	7.3 E-7	1.3 E-8	2.5 E-7	NA	NA	1.5 E-7	NA	NA
62F-SP05	10	NA	6.6 E-4	NA	2.9 E-4	NA	1.5 E-5	1.6 E-7	1.4 E-4	6.7 E-5	1.6 E-8	2.3 E-6	2.7 E-6	NA	6.8 E-7	NA	NA
62F-SP05	20	NA	3.1 E-4	NA	1.5 E-4	NA	5.3 E-6	6.8 E-8	6.2 E-5	3.7 E-5	3.7 E-8	7.8 E-7	1.1 E-6	NA	9.7 E-8	NA	NA
62F-SP06	10	NA	8.6 E-6	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	NA	9.3 E-8	NA	NA
62F-SP06	20	NA	3.6 E-6	NA	NA	NA	2.7 E-7	NA	6.2 E-6	2.5 E-7	2.4 E-8	1.5 E-7	1.7 E-6	NA	4.2 E-7	NA	NA
62F-SP07	10	NA	NA	NA	NA	5.1 E-8	NA	NA	1.8 E-5	NA	NA	3.3 E-7	1.1 E-6	5.5 E-7	1.7 E-7	NA	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	4.3 E-8	NA	NA
CP2-07-SP01	10	1.6 E-5	NA	3.7 E-1	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA
CP2-07-SP01	20	NA	NA	7.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP01	40	NA	NA	8.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	1.6 E-8	5.4 E-7	1.0 E-6	NA	1.1 E-7	NA	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	8.3 E-7	NA	3.5 E-5	NA	NA	2.7 E-7	1.8 E-6	NA	5.4 E-7	NA	NA
CP2-07-SP04	10	NA	NA	2.8 E-4	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	3.1 E-6	NA	2.4 E-6	NA	NA
CP2-07-SP04	20	NA	NA	1.5 E-4	NA	NA	1.3 E-6	NA	NA	NA	NA	2.3 E-7	3.9 E-6	NA	1.8 E-6	NA	NA
CP2-07-SP05	10	NA	NA	2.0 E-5	NA	NA	3.0 E-6	NA	NA	NA	NA	NA	5.6 E-6	NA	4.1 E-7	3.4 E-6	NA
CP2-07-SP05	20	NA	NA	8.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	1.9 E-7	1.0 E-6	NA
CP2-07-SP06	10	2.4 E-6	6.2 E-6	7.2 E-4	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	2.7 E-6	NA	5.0 E-7	1.4 E-5	NA
CP2-07-SP06	20	1.1 E-6	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	4.0 E-7	7.5 E-6	NA
CP2-07-SP07	10	NA	NA	NA	NA	NA	1.0 E-6	NA	2.2 E-5	NA	3.4 E-8	4.2 E-7	2.9 E-6	NA	2.2 E-7	NA	NA
CP2-07-SP07	20	NA	NA	6.5 E-6	NA	NA	NA	NA	6.5 E-6	NA	1.5 E-8	1.4 E-7	7.2 E-7	NA	1.4 E-7	NA	NA
CP2-07-SP08	10	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	7.1 E-8	NA	NA
CP2-07-SP08	20	NA	NA	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	9.7 E-8	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	3.1 E-8	NA	1.2 E-8	4.8 E-6	NA	NA	6.5 E-7	NA	NA	6.4 E-8	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	2.3 E-7	3.8 E-6	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	9.8 E-8	4.0 E-8	NA	NA	NA	5.7 E-7	3.9 E-6	NA	1.6 E-8	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	2.6 E-7	7.6 E-6	NA	6.3 E-7	NA	NA
CP2-07-SP10	20	NA	NA	7.3 E-6	NA	NA	NA	5.3 E-8	7.2 E-6	NA	NA	3.9 E-7	1.0 E-5	NA	2.6 E-7	NA	NA
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	6.8 E-9	2.2 E-6	NA	NA	6.2 E-8	9.0 E-7	NA	7.7 E-8	NA	NA

		Adult Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	4.2 E-8	1.2 E-5	NA	NA	6.6 E-7	1.1 E-6	NA	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	1.7 E-6	NA	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	2.9 E-7	5.6 E-6	NA	6.9 E-7	NA	NA
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.0 E-6	NA	5.7 E-8	NA	NA
CP2-07-SP12	40	4.2 E-7	NA	2.9 E-5	NA	NA	NA	1.5 E-8	3.3 E-6	NA	NA	1.5 E-7	3.6 E-6	NA	6.0 E-7	NA	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	2.4 E-7	3.1 E-6	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	3.8 E-7	2.0 E-6	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-7	NA	NA	8.8 E-8	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	3.7 E-8	NA	1.9 E-8	4.7 E-6	NA	NA	8.3 E-7	NA	NA	2.4 E-7	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	9.2 E-7	NA	3.5 E-7	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	2.9 E-5	2.1 E-4	9.3 E-6	NA	8.0 E-7	2.8 E-8	1.3 E-4	2.8 E-6	3.1 E-8	1.4 E-6	1.1 E-6	NA	2.8 E-7	NA	NA
CP2-08-SP11	20	NA	1.3 E-5	2.9 E-5	NA	NA	5.3 E-7	3.2 E-8	2.3 E-4	1.3 E-6	5.1 E-8	1.7 E-6	8.6 E-7	NA	1.5 E-7	NA	NA
CP2-08-SP12	10	NA	1.2 E-5	1.6 E-5	NA	NA	NA	NA	1.4 E-4	8.7 E-7	4.0 E-8	9.0 E-7	9.9 E-7	NA	1.7 E-7	NA	NA
CP2-08-SP12	20	NA	NA	1.8 E-3	NA	NA	NA	NA	9.4 E-6	NA	1.1 E-8	1.8 E-7	NA	NA	1.5 E-7	NA	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-7	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA
CP2-RE05-SP01	10	NA	NA	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	20	NA	NA	8.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	40	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA
CP2-RE05-SP02	10	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA
CP2-RE05-SP02	20	NA	NA	8.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	40	2.2 E-7	NA	NA	NA	1.8 E-8	NA	6.2 E-9	2.2 E-6	NA	NA	2.0 E-7	1.5 E-6	NA	2.5 E-7	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA
CP2-RE05-SP03	20	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	1.8 E-7	NA	NA	7.4 E-8	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	4.2 E-8	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	2.3 E-8	NA	NA
CP2-RE05-SP05	10	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-7	NA	1.6 E-7	NA	NA
CP2-RE05-SP05	20	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	NA	NA
CP2-RE05-SP05	40	NA	NA	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA
CP2-RE05-SP06	10	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA
CP2-RE05-SP06	20	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	NA
CP2-RE05-SP06	40	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	4.3 E-8	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	8.3 E-6	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
CP2-RE05-SP08	10	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	3.2 E-7	NA	NA
CP2-RE05-SP08	20	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-7	NA	2.7 E-7	NA	NA
CP2-RE05-SP08	40	NA	NA	4.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA
CP2-RE05-SP09	10	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	5.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	1.1 E-5	NA	NA	NA	NA	5.8 E-6	NA	6.7 E-9	NA	NA	NA	5.7 E-8	NA	NA
F(C)-SP06	10	NA	2.3 E-4	NA	9.3 E-5	NA	2.0 E-6	4.6 E-8	5.7 E-5	2.1 E-5	2.9 E-8	3.6 E-7	NA	NA	3.2 E-7	NA	NA
F(C)-SP06	20	NA	7.3 E-5	NA	2.7 E-5	NA	2.3 E-7	NA	7.2 E-6	6.0 E-6	1.7 E-8	1.2 E-7	6.9 E-7	NA	2.1 E-7	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	2.3 E-7	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	5.7 E-7	NA	1.1 E-7	NA	NA

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SP33	10	NA	NA	3.8 E-8	2.5 E-6	4.3 E-7	7.3 E-7	NA	7.4 E-6	2.0 E-6	1.5 E-5	NA	8.0 E-6	3.4 E-6	NA	4.8 E-6	4.7 E-6	NA	8.5 E-7	7.4 E-3
59F-SP33	20	NA	NA	NA	9.3 E-7	NA	1.6 E-5	NA	6.4 E-7	1.6 E-6	NA	NA	NA	NA	NA	2.3 E-6	1.1 E-6	NA	2.1 E-6	2.7 E-2
59F-SP34	10	NA	NA	NA	1.9 E-6	NA	NA	NA	1.3 E-6	4.6 E-6	7.1 E-6	NA	NA	NA	NA	4.8 E-6	2.4 E-6	NA	3.1 E-6	6.7 E-2
59F-SP34	15	NA	NA	NA	6.9 E-7	NA	NA	NA	6.0 E-7	9.3 E-7	NA	NA	NA	NA	NA	6.1 E-6	1.3 E-6	NA	2.2 E-6	3.3 E-2
59F-SP35	10	NA	NA	6.7 E-8	9.6 E-7	NA	NA	NA	1.6 E-6	1.3 E-5	NA	NA	NA	NA	NA	4.8 E-6	NA	3.4 E-6	3.3 E-5	1.4 E-1
59F-SP35	20	1.4 E-5	NA	3.0 E-8	4.8 E-7	NA	NA	NA	1.4 E-6	4.6 E-6	NA	NA	NA	NA	NA	2.3 E-6	6.9 E-7	7.1 E-7	2.5 E-5	2.5 E-1
59F-SP36	10	2.1 E-5	NA	NA	2.9 E-7	NA	1.0 E-5	NA	1.7 E-7	9.2 E-7	6.5 E-7	NA	NA	NA	NA	NA	8.0 E-7	3.3 E-7	NA	5.4 E-5
59F-SP36	20	1.9 E-6	NA	NA	1.7 E-7	NA	7.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	5.9 E-8	NA	NA	4.7 E-5
59F-SP37	10	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	1.9 E-7	4.0 E-7	NA	NA	NA	NA	6.7 E-7	6.4 E-7	NA	NA	5.4 E-6
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	8.0 E-5	2.9 E-7	1.6 E-7	9.5 E-8	NA	8.1 E-5
59F-SP38	20	NA	NA	NA	5.1 E-8	NA	NA	NA	7.9 E-8	3.3 E-7	2.3 E-7	NA	NA	NA	3.0 E-5	4.4 E-7	3.1 E-7	6.1 E-8	NA	3.3 E-5
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	3.4 E-7
59F-SP39	20	1.4 E-6	NA	NA	NA	NA	2.2 E-6	1.8 E-9	NA	NA	NA	2.1 E-8	NA	NA	5.4 E-6	NA	5.4 E-8	2.8 E-7	NA	2.4 E-5
60F-SP08	10	NA	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	7.4 E-7
60F-SP08	20	1.1 E-6	NA	3.7 E-9	2.9 E-7	NA	NA	NA	1.8 E-7	1.4 E-7	NA	NA	NA	NA	NA	3.1 E-7	3.2 E-7	NA	NA	8.1 E-6
61F-SP03	10	NA	NA	6.4 E-9	2.0 E-7	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	5.9 E-7	5.3 E-7	1.5 E-7	NA	1.3 E-3
61F-SP03	20	7.6 E-7	5.1 E-8	2.6 E-9	1.0 E-7	NA	NA	NA	NA	7.7 E-8	2.9 E-7	NA	NA	NA	NA	3.2 E-7	3.7 E-7	2.1 E-7	NA	2.8 E-4
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	2.9 E-7	2.9 E-7	NA	NA	1.1 E-5
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	1.6 E-7	NA	NA	6.4 E-6
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	1.4 E-7	8.8 E-8	NA	2.1 E-6
61F-SP05	20	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	7.4 E-7
61F-SP06	10	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	1.5 E-7	NA	7.3 E-7
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	2.0 E-7	1.8 E-7	NA	NA	NA	NA	NA	1.7 E-7	5.1 E-8	NA	1.9 E-6
62F-SP01	20	NA	1.9 E-7	8.2 E-9	5.8 E-7	7.2 E-7	NA	2.3 E-9	1.2 E-7	5.1 E-8	3.2 E-5	1.2 E-8	1.7 E-5	8.5 E-6	1.2 E-6	1.2 E-6	3.3 E-6	NA	NA	4.6 E-4
62F-SP02	20	NA	NA	5.6 E-9	2.3 E-7	NA	NA	NA	1.4 E-7	NA	2.4 E-7	NA	NA	NA	NA	5.9 E-7	2.2 E-7	NA	NA	3.2 E-5
62F-SP03	20	NA	NA	4.1 E-9	2.0 E-7	NA	2.3 E-7	1.3 E-8	6.7 E-8	NA	2.6 E-7	NA	2.0 E-7	NA	NA	4.4 E-7	1.2 E-7	4.0 E-8	NA	4.3 E-5
62F-SP04	10	NA	NA	6.5 E-9	3.8 E-7	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	4.5 E-7	8.9 E-8	NA	NA	4.8 E-5
62F-SP05	10	NA	5.6 E-7	2.9 E-8	2.1 E-6	2.6 E-6	3.3 E-7	NA	4.3 E-7	3.7 E-7	1.2 E-4	5.5 E-8	5.9 E-5	2.6 E-5	5.2 E-6	3.7 E-6	1.9 E-5	NA	NA	1.4 E-3
62F-SP05	20	NA	3.2 E-7	1.7 E-8	9.6 E-7	1.4 E-6	1.1 E-7	NA	4.1 E-7	1.3 E-7	5.9 E-5	2.0 E-8	3.1 E-5	1.4 E-5	2.4 E-6	2.4 E-6	7.7 E-6	NA	NA	6.9 E-4
62F-SP06	10	NA	NA	NA	5.4 E-7	NA	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	4.0 E-7	2.4 E-7	NA	NA	1.1 E-5
62F-SP06	20	NA	NA	1.3 E-8	2.2 E-7	NA	NA	2.1 E-9	4.1 E-7	4.0 E-7	1.7 E-7	NA	NA	NA	NA	5.3 E-7	5.4 E-7	NA	NA	1.5 E-5
62F-SP07	10	1.2 E-6	NA	4.8 E-9	1.5 E-7	NA	NA	NA	3.0 E-7	2.0 E-6	NA	NA	NA	NA	NA	2.0 E-6	4.4 E-7	7.1 E-8	NA	2.6 E-5
62F-SP07	20	NA	NA	NA	NA	NA	1.7 E-7	4.1 E-9	2.1 E-8	3.0 E-7	4.4 E-7	NA	2.1 E-7	NA	NA	9.6 E-8	1.3 E-7	NA	NA	1.8 E-6
CP2-07-SP01	10	6.5 E-4	NA	NA	6.6 E-6	NA	1.6 E-5	NA	NA	5.3 E-5	NA	NA	NA	NA	NA	7.5 E-5	4.2 E-6	1.6 E-6	3.9 E-3	3.8 E-1
CP2-07-SP01	20	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-3	7.0 E+0
CP2-07-SP01	40	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-1
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	2.3 E-4
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	3.3 E-6	NA	NA	1.5 E-7	NA	8.0 E-6	NA	1.5 E-7	1.4 E-7	NA	NA	NA	NA	3.2 E-6	7.5 E-7	5.1 E-7	NA	NA	6.4 E-5
CP2-07-SP03	20	8.6 E-7	NA	NA	6.9 E-8	NA	7.3 E-7	NA	3.1 E-7	9.3 E-7	NA	NA	NA	NA	NA	1.0 E-6	3.4 E-7	NA	NA	4.3 E-5
CP2-07-SP04	10	3.3 E-5	NA	5.4 E-8	1.9 E-7	NA	NA	NA	1.5 E-6	9.4 E-6	NA	NA	NA	NA	NA	NA	5.1 E-7	8.1 E-8	NA	3.3 E-4
CP2-07-SP04	20	6.0 E-5	NA	1.1 E-8	7.6 E-8	NA	NA	NA	6.0 E-7	2.4 E-6	NA	NA	NA	NA	NA	2.1 E-7	3.6 E-7	NA	NA	2.3 E-4
CP2-07-SP05	10	3.2 E-5	NA	NA	1.2 E-7	NA	8.7 E-6	NA	9.0 E-8	1.1 E-6	7.1 E-7	1.5 E-7	NA	NA	1.2 E-5	NA	5.8 E-7	2.2 E-7	NA	8.7 E-5
CP2-07-SP05	20	2.9 E-5	NA	NA	NA	NA	7.3 E-6	NA	5.6 E-8	2.3 E-7	2.8 E-7	2.4 E-8	NA	NA	5.5 E-6	NA	3.8 E-7	1.4 E-7	NA	5.4 E-5
CP2-07-SP06	10	2.3 E-4	NA	NA	NA	6.9 E-8	4.7 E-6	NA	NA	5.5 E-7	2.5 E-6	1.9 E-6	8.7 E-7	NA	3.0 E-5	NA	1.1 E-6	9.7 E-7	NA	1.0 E-3
CP2-07-SP06	20	4.2 E-5	NA	NA	NA	NA	7.0 E-6	NA	NA	6.3 E-7	5.3 E-7	3.0 E-7	NA	NA	4.6 E-6	NA	4.9 E-7	2.1 E-7	NA	2.0 E-4
CP2-07-SP07	10	1.8 E-6	NA	NA	2.1 E-7	NA	3.3 E-6	NA	3.6 E-7	5.3 E-7	5.1 E-7	NA	NA	NA	2.0 E-5	9.6 E-7	9.3 E-7	NA	NA	5.5 E-5
CP2-07-SP07	20	1.4 E-6	NA	NA	6.2 E-8	NA	1.8 E-6	NA	1.4 E-7	1.8 E-7	2.8 E-7	NA	NA	NA	1.0 E-6	4.7 E-7	2.7 E-7	NA	NA	2.0 E-5
CP2-07-SP08	10	NA	NA	NA	7.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-5
CP2-07-SP08	20	NA	NA	NA	6.9 E-8	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6
CP2-07-SP08	30	NA	NA	NA	1.1 E-7	NA	NA	3.6 E-8	4.7 E-8	3.1 E-7	1.5 E-7	NA	NA	NA	1.1 E-6	4.0 E-7	3.0 E-7	9.2 E-7	NA	8.9 E-6
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	4.7 E-6	1.8 E-7	2.0 E-7	NA	NA	5.3 E-6
CP2-07-SP09	20	NA	NA	NA	3.3 E-8	NA	NA	NA	2.1 E-7	5.9 E-7	2.5 E-7	NA	NA	NA	3.6 E-6	2.4 E-7	5.6 E-7	NA	NA	9.6 E-6
CP2-07-SP09	34	NA	NA	2.2 E-9	5.0 E-8	1.4 E-8	NA	NA	2.2 E-7	8.4 E-7	2.3 E-7	NA	1.0 E-7	NA	2.3 E-6	2.7 E-7	5.9 E-7	NA	NA	9.2 E-6
CP2-07-SP10	10	1.2 E-6	NA	8.6 E-9	8.2 E-8	NA	NA	NA	1.1 E-6	6.3 E-6	5.1 E-7	NA	NA	NA	NA	1.6 E-7	4.9 E-7	NA	NA	1.8 E-5
CP2-07-SP10	20	3.0 E-6	NA	NA	3.0 E-7	NA	NA	NA	2.0 E-6	2.0 E-5	2.7 E-7	NA	NA	NA	NA	2.5 E-7	3.8 E-7	NA	NA	5.1 E-5
CP2-07-SP10	40	NA	NA	NA	7.4 E-8	NA	NA	NA	1.8 E-7	9.3 E-7	1.5 E-7	NA	NA	NA	NA	3.9 E-8	7.8 E-8	NA	NA	4.7 E-6

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	2.7 E-6	NA	1.8 E-7	NA	NA	1.7 E-5
CP2-07-SP11	20	NA	NA	NA	NA	1.7 E-8	NA	NA	9.4 E-8	4.6 E-7	2.3 E-7	NA	NA	NA	1.7 E-6	1.6 E-7	3.8 E-7	NA	NA	4.9 E-6
CP2-07-SP12	10	1.7 E-6	NA	1.4 E-8	2.2 E-7	3.0 E-8	2.8 E-7	NA	1.2 E-6	8.5 E-6	7.7 E-7	NA	NA	NA	NA	1.5 E-7	4.7 E-7	NA	NA	2.0 E-5
CP2-07-SP12	20	NA	NA	NA	3.8 E-8	NA	2.7 E-7	NA	5.2 E-8	2.0 E-7	2.6 E-7	NA	NA	NA	NA	NA	1.3 E-7	6.1 E-8	NA	2.2 E-6
CP2-07-SP12	40	1.8 E-6	NA	NA	1.7 E-7	NA	2.3 E-7	NA	8.8 E-7	8.8 E-6	2.1 E-7	NA	NA	NA	NA	NA	1.6 E-7	3.8 E-8	NA	5.0 E-5
CP2-07-SP13	10	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	NA	9.8 E-6	6.4 E-7	3.3 E-7	NA	NA	2.4 E-5
CP2-07-SP13	20	NA	NA	NA	7.6 E-8	1.5 E-8	NA	NA	7.1 E-8	3.4 E-7	2.5 E-7	NA	NA	NA	8.7 E-7	2.1 E-7	4.3 E-7	NA	NA	4.7 E-6
CP2-07-SP14	10	NA	NA	NA	1.5 E-7	NA	NA	5.4 E-8	5.5 E-8	2.4 E-7	NA	NA	NA	NA	1.4 E-6	3.2 E-7	1.5 E-6	1.0 E-6	NA	5.7 E-6
CP2-07-SP14	18.5	NA	NA	4.7 E-9	1.4 E-7	NA	NA	2.0 E-8	4.0 E-8	2.1 E-6	3.2 E-7	NA	NA	NA	NA	5.1 E-7	2.4 E-6	3.5 E-7	NA	1.2 E-5
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	8.6 E-9	7.6 E-7	9.8 E-8	NA	NA	4.9 E-7	1.4 E-7	3.8 E-6	1.1 E-7	1.7 E-6	1.1 E-6	NA	2.9 E-6	1.2 E-6	8.9 E-8	NA	4.0 E-4
CP2-08-SP11	20	NA	NA	1.3 E-8	5.5 E-7	4.0 E-8	NA	NA	5.2 E-7	1.0 E-7	1.7 E-6	2.7 E-8	7.0 E-7	NA	NA	3.2 E-6	9.4 E-7	NA	NA	2.9 E-4
CP2-08-SP12	10	2.1 E-6	NA	8.6 E-9	4.8 E-7	NA	NA	NA	2.0 E-7	1.1 E-7	1.0 E-6	4.2 E-8	5.5 E-7	NA	NA	1.1 E-6	6.0 E-7	1.8 E-7	NA	1.7 E-4
CP2-08-SP12	20	8.8 E-7	NA	3.1 E-9	7.6 E-8	NA	NA	NA	NA	6.9 E-8	2.4 E-7	1.2 E-8	NA	NA	NA	3.1 E-7	1.6 E-7	9.7 E-8	NA	1.8 E-3
CP2-08-SP13	10	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-7
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	5.9 E-7
CP2-RE05-SP01	10	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	NA	1.5 E-5	4.9 E-1
CP2-RE05-SP01	20	1.1 E-4	NA	NA	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	1.7 E-6	2.7 E-6	NA	1.8 E-6	9.0 E-2
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6
CP2-RE05-SP02	10	7.0 E-5	NA	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	6.2 E-2
CP2-RE05-SP02	20	1.1 E-5	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	1.9 E-6	6.9 E-7	NA	NA	8.1 E-3
CP2-RE05-SP02	40	NA	NA	5.9 E-9	4.5 E-8	8.0 E-9	NA	4.7 E-8	7.1 E-7	8.2 E-6	1.2 E-7	NA	NA	NA	1.0 E-6	NA	3.3 E-7	1.1 E-6	NA	1.6 E-5
CP2-RE05-SP03	10	NA	NA	NA	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7
CP2-RE05-SP03	20	NA	NA	NA	3.3 E-8	NA	NA	NA	5.2 E-8	9.3 E-8	3.5 E-7	NA	2.1 E-7	NA	NA	NA	9.5 E-8	NA	NA	4.4 E-6
CP2-RE05-SP04	10	NA	NA	NA	6.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7
CP2-RE05-SP04	20	NA	NA	NA	4.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	5.5 E-4
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	NA	NA	1.7 E-5
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	9.0 E-9	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	7.1 E-6
CP2-RE05-SP06	10	8.8 E-6	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	1.5 E-7	1.8 E-7	NA	NA	2.0 E-2
CP2-RE05-SP06	20	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.4 E-7	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	3.7 E-4
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	7.0 E-7	NA	NA	NA	NA	NA	2.0 E-7	2.0 E-7	NA	NA	3.1 E-5
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	5.8 E-7	NA	NA	NA	NA	NA	2.5 E-7	3.1 E-7	3.7 E-8	NA	9.8 E-6
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	5.0 E-7	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	3.7 E-5
CP2-RE05-SP08	20	NA	NA	4.1 E-9	NA	NA	NA	NA	1.1 E-7	7.0 E-7	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA	1.4 E-5
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-6
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5
CP2-RE05-SP09	20	NA	NA	2.4 E-9	NA	NA	NA	NA	1.3 E-7	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7
F(C)-SP05	20	NA	NA	2.8 E-9	4.8 E-8	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	2.8 E-7	8.1 E-8	NA	NA	1.7 E-5
F(C)-SP06	10	NA	1.7 E-7	9.4 E-9	1.1 E-6	3.8 E-7	NA	NA	2.5 E-7	1.2 E-7	1.8 E-5	1.5 E-8	1.2 E-5	7.5 E-6	NA	2.2 E-6	1.3 E-6	NA	NA	4.5 E-4
F(C)-SP06	20	NA	4.8 E-8	2.3 E-9	1.1 E-7	7.5 E-8	NA	NA	1.3 E-7	8.1 E-8	3.2 E-6	NA	2.5 E-6	2.1 E-6	NA	9.1 E-7	3.6 E-7	NA	NA	1.2 E-4
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	5.2 E-5	2.0 E-7	1.5 E-7	NA	NA	5.3 E-5
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	2.0 E-7	2.2 E-7	NA	NA	NA	2.3 E-5	3.5 E-7	1.9 E-7	NA	NA	2.5 E-5

		Incremental Lifetime Cancer Risk															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
59F-SP33	10	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA
59F-SP33	20	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	10	NA	NA	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	15	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	10	NA	NA	9.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	20	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP36	10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA
59F-SP36	20	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA
61F-SP03	10	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA
61F-SP03	20	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	NA	NA	NA
62F-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA
62F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-10	NA	NA	NA	NA
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	NA	NA	NA	NA
62F-SP07	10	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	5.1 E-10	7.8 E-10	NA	NA	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA
CP2-07-SP01	10	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA
CP2-07-SP01	20	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP01	40	NA	NA	6.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	NA	NA
CP2-07-SP04	10	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA
CP2-07-SP04	20	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA
CP2-07-SP05	10	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	3.2 E-9	NA
CP2-07-SP05	20	NA	NA	6.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	9.7 E-10	NA
CP2-07-SP06	10	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	1.3 E-8	NA
CP2-07-SP06	20	NA	NA	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	6.9 E-9	NA
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA
CP2-07-SP07	20	NA	NA	4.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA
CP2-07-SP08	10	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	20	NA	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA
CP2-07-SP10	20	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-9	NA	NA	NA	NA
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	NA	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	NA
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA
CP2-07-SP12	40	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-10	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	4.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA
CP2-08-SP11	20	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA
CP2-08-SP12	10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	NA	NA
CP2-08-SP12	20	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	10	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	20	NA	NA	6.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	40	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	10	NA	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	20	NA	NA	5.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	40	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	NA	NA	NA	7.1 E-10	NA	NA	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	10	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	NA
CP2-RE05-SP05	20	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	40	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	10	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	20	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	40	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	10	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-10	NA	NA	NA	NA
CP2-RE05-SP08	20	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA
CP2-RE05-SP08	40	NA	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	10	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
59F-SP33	10	NA	NA	NA	NA	5.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	3.5 E-9	4 E-7
59F-SP33	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	NA	9.0 E-9	2 E-6
59F-SP34	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	1.3 E-8	5 E-6
59F-SP34	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	9.3 E-9	2 E-6
59F-SP35	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	2.2 E-9	1.4 E-7	1 E-5
59F-SP35	20	8.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	4.6 E-10	1.1 E-7	2 E-5
59F-SP36	10	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	1 E-8
59F-SP36	20	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	NA	3 E-9
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	1 E-9
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	9.3 E-11	NA	6.1 E-11	NA	9 E-9
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	1.4 E-10	NA	3.9 E-11	NA	4 E-9
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-11	NA	NA	NA	NA	4 E-11
59F-SP39	20	8.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-12	NA	NA	6.2 E-10	NA	NA	1.8 E-10	NA	3 E-9
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
60F-SP08	20	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-11	NA	NA	NA	1 E-9
61F-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	9.9 E-11	NA	9 E-8
61F-SP03	20	4.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	1.3 E-10	NA	2 E-8
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	9 E-11
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	NA	NA	3 E-11
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-11	NA	6 E-10
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	NA	1 E-10
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	5 E-10
62F-SP01	20	NA	NA	NA	NA	9.7 E-10	NA	NA	NA	NA	NA	5.1 E-12	NA	NA	1.3 E-10	3.9 E-10	NA	NA	NA	1 E-9
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	2 E-10
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	2.6 E-11	NA	2 E-10
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	1 E-10
62F-SP05	10	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	5.9 E-10	1.2 E-9	NA	NA	NA	7 E-9
62F-SP05	20	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	8.3 E-12	NA	NA	2.8 E-10	7.6 E-10	NA	NA	NA	3 E-9
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	1 E-10
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	1 E-9
62F-SP07	10	6.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-10	NA	4.6 E-11	NA	3 E-9
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	NA	NA	2 E-10
CP2-07-SP01	10	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	1.1 E-9	1.6 E-5	4 E-5
CP2-07-SP01	20	6.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	5 E-4
CP2-07-SP01	40	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-5
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	NA	NA	2 E-7
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-07-SP03	10	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	2.4 E-10	NA	NA	NA	3 E-9
CP2-07-SP03	20	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	2 E-9
CP2-07-SP04	10	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-11	NA	4 E-8
CP2-07-SP04	20	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	NA	NA	5 E-8
CP2-07-SP05	10	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-11	NA	NA	1.3 E-9	NA	NA	1.4 E-10	NA	3 E-8
CP2-07-SP05	20	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	6.3 E-10	NA	NA	9.2 E-11	NA	2 E-8
CP2-07-SP06	10	1.3 E-7	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	NA	8.1 E-10	NA	NA	3.4 E-9	NA	NA	6.2 E-10	NA	2 E-7
CP2-07-SP06	20	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	5.3 E-10	NA	NA	1.3 E-10	NA	4 E-8
CP2-07-SP07	10	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	3.1 E-10	NA	NA	NA	5 E-9
CP2-07-SP07	20	8.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	1.5 E-10	NA	NA	NA	2 E-9
CP2-07-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
CP2-07-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
CP2-07-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	1.3 E-10	NA	5.9 E-10	NA	1 E-9
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	5.8 E-11	NA	NA	NA	6 E-10
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	7.6 E-11	NA	NA	NA	2 E-9
CP2-07-SP09	34	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	8.5 E-11	NA	NA	NA	2 E-9
CP2-07-SP10	10	6.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	4 E-9
CP2-07-SP10	20	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-11	NA	NA	NA	7 E-9
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	4 E-10

Table 5.6-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	NA	NA	8 E-10
CP2-07-SP11	20	NA	NA	NA	NA	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	5.1 E-11	NA	NA	NA	1 E-9
CP2-07-SP12	10	9.8 E-10	NA	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-11	NA	NA	NA	4 E-9
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-11	NA	5 E-10
CP2-07-SP12	40	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	NA	5 E-9
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	2.0 E-10	NA	NA	NA	3 E-9
CP2-07-SP13	20	NA	NA	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	6.8 E-11	NA	NA	NA	1 E-9
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	1.0 E-10	NA	6.5 E-10	NA	9 E-10
CP2-07-SP14	18.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	2.3 E-10	NA	9 E-10
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP11	10	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	4.8 E-11	NA	NA	NA	9.3 E-10	NA	5.8 E-11	NA	2 E-8
CP2-08-SP11	20	NA	NA	NA	NA	5.4 E-11	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	1.0 E-9	NA	NA	NA	4 E-9
CP2-08-SP12	10	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	NA	3.6 E-10	NA	1.2 E-10	NA	3 E-9
CP2-08-SP12	20	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-12	NA	NA	NA	9.8 E-11	NA	6.2 E-11	NA	1 E-7
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP01	10	3.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-10	NA	NA	6.1 E-8	3 E-5
CP2-RE05-SP01	20	6.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-10	NA	NA	7.3 E-9	6 E-6
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
CP2-RE05-SP02	10	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-10	NA	NA	NA	4 E-6
CP2-RE05-SP02	20	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	6 E-7
CP2-RE05-SP02	40	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	7.4 E-10	NA	2 E-9
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-11	NA	5 E-10
CP2-RE05-SP06	10	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-11	NA	NA	NA	1 E-6
CP2-RE05-SP06	20	9.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-11	NA	NA	NA	6 E-11
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-11	NA	2.4 E-11	NA	1 E-10
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
CP2-RE05-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
CP2-RE05-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
F(C)-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-11	NA	NA	NA	8 E-10
F(C)-SP06	10	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	6.5 E-12	NA	NA	NA	6.9 E-10	NA	NA	NA	1 E-9
F(C)-SP06	20	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	7 E-10
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-9	6.4 E-11	NA	NA	NA	6 E-9
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	1.1 E-10	NA	NA	NA	3 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.6-7) x the unit hazard or unit risk for the chemical).

Table 5.6-13 ***Unit Soil Hazard and Unit Cancer Risk Results - Construction Worker***
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Antimony	1.0 E+0	8.1 E-3	0.0 E+0	2.4 E-4	8.3 E-3	NA	NA	NA	NA
Barium	1.0 E+0	1.6 E-5	0.0 E+0	7.0 E-4	7.2 E-4	NA	NA	NA	NA
Cadmium	1.0 E+0	3.2 E-3	3.9 E-4	9.8 E-5	3.7 E-3	NA	NA	2.1 E-8	2.1 E-8
Chromium VI	1.0 E+0	1.1 E-3	0.0 E+0	4.4 E-2	4.6 E-2	NA	NA	7.1 E-7	7.1 E-7
Iron	1.0 E+0	4.6 E-6	0.0 E+0	NA	4.6 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	1.1 E-2	0.0 E+0	1.1 E-3	1.2 E-2	NA	NA	NA	NA
Molybdenum	1.0 E+0	6.5 E-4	0.0 E+0	2.0 E-5	6.7 E-4	NA	NA	NA	NA
Perchlorate	1.0 E+0	4.6 E-3	0.0 E+0	NA	4.6 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds									
4,4'-DDD	1.0 E+0	NA	NA	NA	NA	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
4,4'-DDT	1.0 E+0	6.5 E-3	5.8 E-4	2.0 E-4	7.2 E-3	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
Aldrin	1.0 E+0	1.1 E-1	1.3 E-2	3.3 E-3	1.2 E-1	7.8 E-7	9.4 E-8	2.4 E-8	9.0 E-7
delta-BHC	1.0 E+0	1.1 E-2	1.3 E-3	3.3 E-4	1.2 E-2	6.0 E-8	7.2 E-9	1.8 E-9	6.9 E-8
Dieldrin	1.0 E+0	6.5 E-2	7.7 E-3	2.0 E-3	7.4 E-2	7.4 E-7	8.9 E-8	2.2 E-8	8.5 E-7
Endosulfan II	1.0 E+0	5.4 E-4	1.6 E-4	1.6 E-5	7.2 E-4	NA	NA	NA	NA
Endrin	1.0 E+0	1.1 E-2	1.3 E-3	3.3 E-4	1.2 E-2	NA	NA	NA	NA
Heptachlor epoxide	1.0 E+0	2.5 E-1	3.0 E-2	7.5 E-3	2.9 E-1	4.2 E-7	5.0 E-8	1.3 E-8	4.8 E-7
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-8	1.3 E-8	1.0 E-9	4.8 E-8
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-7	2.2 E-7	5.5 E-9	7.7 E-7
Benzo(b & k)fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Benzo(b)fluoranthene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Benzo(ghi)perylene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Benzo(k)fluoranthene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
Chrysene	1.0 E+0	NA	NA	NA	NA	5.5 E-9	2.2 E-9	5.5 E-11	7.7 E-9
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-7	1.3 E-7	5.7 E-9	4.7 E-7
Di-n-butyl phthalate	1.0 E+0	3.2 E-5	9.7 E-6	9.8 E-7	4.3 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
Hexanedioic Acid, dioctylester	1.0 E+0	5.4 E-6	1.6 E-6	1.6 E-7	7.2 E-6	5.5 E-11	1.7 E-11	1.7 E-12	7.4 E-11
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	5.5 E-8	2.2 E-8	5.5 E-10	7.7 E-8
PCB-1248	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
PCB-1254	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
Pendimethalin (Prowl)	1.0 E+0	8.1 E-5	2.4 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
Pentachlorophenol	1.0 E+0	1.1 E-4	3.2 E-5	3.3 E-6	1.4 E-4	5.5 E-9	1.7 E-9	2.5 E-11	7.2 E-9

Table 5.6-13 *Unit Soil Hazard and Unit Cancer Risk Results - Construction Worker*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Phenanthrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Volatile Organic Compounds									
1,2-Dichloroethane	1.0 E+0	1.6 E-4	0.0 E+0	3.6 E-2	3.6 E-2	4.2 E-9	0.0 E+0	6.5 E-8	6.9 E-8

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.6-14 *Inhalation Unit Hazard and Unit Cancer Risk Results-Construction Worker*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	2.5 E-4
1,4-Dioxane	1.0 E+0	2.3 E-1	7.5 E-5
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
Bromodichloromethane	1.0 E+0	9.8 E+0	3.6 E-4
Carbon Tetrachloride	1.0 E+0	1.7 E+1	4.2 E-4
Chloroform	1.0 E+0	1.5 E+1	2.3 E-4
Chloroethane	1.0 E+0	6.8 E-2	NA
Ethylbenzene	1.0 E+0	6.8 E-1	2.4 E-5
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Methyl tert-butyl ether	1.0 E+0	2.3 E-1	2.5 E-6
Tetrachloroethylene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
Trichloroethylene	1.0 E+0	1.2 E+0	2.0 E-5
Vinyl Chloride	1.0 E+0	6.8 E+0	7.5 E-4
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cumene	1.0 E+0	1.7 E+0	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Freon 11	1.0 E+0	3.4 E+0	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard		3.6 E-2	NA	NA	7.2 E-3	1.2 E-1	8.3 E-3	7.2 E-4	NA	NA	NA	NA	1.5 E-4	NA	3.7 E-3	NA	1.2 E-2	NA
Unit Risk		6.9 E-8	1.8 E-8	1.8 E-8	1.8 E-8	9.0 E-7	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	7.7 E-8	2.1 E-8	7.7 E-9	6.9 E-8	4.7 E-7
25F-HA01	1						0.21	52	0.0089	0.01	0.022				0.74	0.012		
25F-HA01	5						0.32	250							0.87			
25F-HA02	1						0.25	210							0.74			
25F-HA02	3						0.25	220							0.73			
25F-HA02	5						0.31	180							0.7			
25F-HA03	1						0.26	200							0.69			
25F-HA03	3						0.23	210							0.71			
25F-HA03	5						0.28	210							0.65			
25F-HA04	1						0.26	160							0.58			
25F-HA04	3						0.28	170							0.57			
25F-HA04	5						0.28	190							0.68			
25F-SB04	1							140							0.57			
25F-SB04	5							74							0.49			
25F-SB05	1							110							0.33			
25F-SB05	5							120							0.38			
25F-SB06	1							90	0.012	0.014	0.036		0.015		0.33	0.016		
25F-SB06	5							97	0.016	0.02	0.04		0.017		0.32	0.018		
25F-SB07	1						0.14	100							0.44			
25F-SB07	5						0.18	130							0.74			
25F-SB08	1																	
25F-SB09	1																	
25F-SB10	1																	
25F-SB11	1																	
25F-SB12	1																	
25F-SB13	1																	
25F-SB14	1																	
25F-SD01	0.25						0.27	170							0.85			
25F-SD01	1.5					0.0012	0.25	170							0.84			
25F-SD01	5	0.0041					0.27	210							0.91			
25F-SD02	0.25						0.33	220										
25F-SD02	1.5						0.32	200										
25F-SD02	5						0.3	200										
25F-SPB01	1							139										
25F-SPB01	5							137										
25F-SPB01	10							109										
25F-SPB02	1							87.9										
25F-SPB02	5							92.9										
25F-SPB02	10							82										
25F-SPB03	1							70.7										
25F-SPB03	5																	
25F-SPB03	6							113										
25F-SPB03	10							109										
59F-SB11	1						0.19	74							0.31			
59F-SB11	5					0.00085	0.22	120							0.46			
59F-SB12	1						0.16	90	0.02	0.014	0.038		0.0077		0.39	0.02		
59F-SB12	5						0.15	76							0.31			
59F-SB13	1						0.3	120										
59F-SB13	5						0.44	220							0.84			
59F-SB14	1						1.3	110										
59F-SB14	5.5						1	110										
59F-SB15	1				0.0015		0.13	85							0.31			
59F-SB15	5						0.11	72	0.019	0.013	0.041		0.0089		0.32	0.022		
59F-SB16	1				0.0024	0.00025	1	690							0.32			
59F-SB16	5					0.00059	0.14	120							0.3			
59F-SB17	1						0.18	85							0.36			
59F-SB17	5						0.33	84							0.45			
59F-SB18	1						0.18	110							0.51			
59F-SB18	5						0.37	98							0.45			
59F-SB19	1				0.046		0.42	91							0.5		0.035	
59F-SB19	5						0.25	94							0.4			
59F-SB20	1			0.002	0.0054		0.29	210										
59F-SB20	5.5							130										
59F-SB21	1			0.0041			0.2	620										
59F-SB21	5.5						0.89	100										

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard		3.6 E-2	NA	NA	7.2 E-3	1.2 E-1	8.3 E-3	7.2 E-4	NA	NA	NA	NA	1.5 E-4	NA	3.7 E-3	NA	1.2 E-2	NA
Unit Risk		6.9 E-8	1.8 E-8	1.8 E-8	1.8 E-8	9.0 E-7	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	7.7 E-8	2.1 E-8	7.7 E-9	6.9 E-8	4.7 E-7
59F-SB22	1		2.3		1.2		0.42	1100	0.051	0.039	0.084		0.017		0.61	0.06	0.51	
59F-SB22	5.5						0.3	100							0.41			
59F-SB23	1					0.001	0.29	120										
59F-SB23	5						0.25	94										
59F-SB25	1		0.0035	0.00065											0.2			
59F-SB26	1			0.0069	0.013				0.17	0.15		0.23	0.084	0.11	0.22	0.2		
59F-SB27	1		0.0025	0.001											0.25			
59F-SB28	1					0.0027									0.21			
59F-SD01	0.25						0.29	440	0.005		0.015					0.0083		
59F-SD01	1.5						0.31	200										
59F-SD01	5						1.1	180										
59F-SD02	0.25						0.37	220										
59F-SD02	1.5						2.5	260										
59F-SD02	5						0.26	220										
59F-SD03	0.25																	
59F-SD03	1.5																	
59F-SD04	0.25																	
59F-SD04	1.5																	
59F-SD05	0.25																	
59F-SD05	1.5																	
59F-SD06	0.25																	
59F-SD06	1.5																	
59F-SD07	0.25		0.003												0.19			
59F-SNS01	0.5				0.0081			350	0.016	0.019	0.048		0.0091		0.82	0.028	0.002	
59F-SNS01	2.5				0.0053			320							0.59			
59F-SNS02	0.5				0.0029			490							0.96	0.0057		
59F-SNS02	2.5							250							0.8			
59F-SNS03	0.5				0.026			160	0.0068	0.0068	0.013				0.45	0.0079		
59F-SNS03	2.5							180							0.83			
59F-SNS04	0.5							180							0.46	0.0076		
59F-SPB01	1							147										
59F-SPB01	5																	
59F-SPB01	10																	
59F-SPB02	1							4620										
59F-SPB02	5							267										
59F-SPB02	10							74.5										
59F-SPB03	1							130										
59F-SPB03	5							131										
59F-SPB03	10							87.3										
59F-SPB04	1							99.5										
59F-SPB04A	5							82.2										
59F-SPB05	1							111										
59F-SPB05	5							101										
59F-SPB05	10							112										
59F-SPB06	1							80.9										
59F-SPB06	2																	
59F-SPB06	5							115										
59F-SPB06	10							114										
59F-SPB07	1							121										
59F-SPB07	2																	
59F-SPB07	5							108										
59F-SPB07	10							93										
59F-SPB08	1							112										
59F-SPB08	5							124										
59F-SPB08	10																	
60F-SB01	1							121										
60F-SB01	5							102										
60F-SB01	10							123										
60F-SB02	1			0.044	0.088		0.14	63										
60F-SB02	5				0.12		0.72	83										
60F-SB03	1						0.1	67										
60F-SB03	5						0.12	93										
60F-SB04	1						0.08	89										
60F-SB04	5						0.26	120										

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard		3.6 E-2	NA	NA	7.2 E-3	1.2 E-1	8.3 E-3	7.2 E-4	NA	NA	NA	NA	1.5 E-4	NA	3.7 E-3	NA	1.2 E-2	NA
Unit Risk		6.9 E-8	1.8 E-8	1.8 E-8	1.8 E-8	9.0 E-7	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	7.7 E-8	2.1 E-8	7.7 E-9	6.9 E-8	4.7 E-7
60F-SB05	1						0.21	97										
60F-SB05	5						0.16	68										
60F-SNS01	0.5				0.023			110	0.013	0.014	0.058				0.44	0.021		
61F-SB02	1																	
61F-SB02	3							129										
61F-SB02	5							101										
61F-SB02	10							118										
61F-SB03	1						0.17	120							0.38			
61F-SB03	5						0.15	110	0.014						0.42	0.011		
61F-SB04	1			0.039	0.034													
61F-SB05	1			0.0041	0.0048													
61F-SNS01	0.5						1.1	190	0.023	0.033	0.13				1.6	0.045		
61F-SNS02	0.5							240							1			
61F-SPB01	1							132										
61F-SPB01	5							114										
61F-SPB01	10							102										
62F-SB04	1						0.13	100										
62F-SB04	5						0.12	62										
62F-SB05	1			0.0011			0.25	10										
62F-SB05	5						0.19	97										
62F-SB06	2			0.014	0.0028		0.12	64	0.0056	0.0075	0.012				0.082	0.0074	0.0074	
62F-SB06	5.5							78							0.42			
62F-SB07	5						0.31	77	0.012	0.0081	0.017				0.38	0.015		
62F-SB08	1						0.22	270										
62F-SB08	5						0.22	79										
62F-SB09	1						0.17	110										
62F-SB09	5						0.21	91										
62F-SB10	1						0.28	100										
62F-SB10	5						0.25	110										
62F-SD01	0.25																	
62F-SD01	1.5																	
62F-SD01	5																	
62F-SNS01	0.5							140	0.0049	0.007	0.029				0.68	0.027		
62F-SNS01	2.5							190							0.63			
62F-SNS02	0.5				0.0087		0.31	150			0.039				0.66	0.02		
C201-SPB01	1							157										
C201-SPB01	5							138										
C201-SPB01	10							122										
C207-SB01	1																	
C207-SB01	5																	
C207-SB01	10																	
C208-SB02	1																	
C208-SB02	3																	
C208-SB02	5																	
C208-SB02	10																	
C208-SB03	1						5.67	98.2										
C208-SB03	5							91.9										
C208-SB03	10							109										
C208-SB04	1																	
C208-SB04	3																	
C208-SB04	5																	
C208-SB04	10																	
C208-SB05	1																	
C208-SB05	3																	
C208-SB05	5																	
C208-SB05	10																	
C208-SPB01	1							86.8										
C208-SPB01	3																	
C208-SPB01	6							122										
C208-SPB01	10							88.4										
C208-SPB06	1																	
C208-SPB06	3																	
C208-SPB06	5																	
C208-SPB06	10																	

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard		3.6 E-2	NA	NA	7.2 E-3	1.2 E-1	8.3 E-3	7.2 E-4	NA	NA	NA	NA	1.5 E-4	NA	3.7 E-3	NA	1.2 E-2	NA
Unit Risk		6.9 E-8	1.8 E-8	1.8 E-8	1.8 E-8	9.0 E-7	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	7.7 E-8	2.1 E-8	7.7 E-9	6.9 E-8	4.7 E-7
CP2-07-SB02	1						0.16	110							0.37			
CP2-07-SB02	5						0.21	120							0.47			
CP2-07-SB03	1						0.21	110										
CP2-07-SB03	5						0.17	100							0.54			
CP2-07-SB04	1			0.0025	0.005		0.19	110							0.39			
CP2-07-SB04	5																	
CP2-07-SB05	1							120							0.42			
CP2-07-SB05	5							75							0.31			
CP2-07-SB06	1						0.3	77							0.32			
CP2-07-SB08	1						0.2	130							0.57			
CP2-07-SB08	5						0.24	86							0.39			
CP2-07-SB09	1						0.1	47							0.24	0.013		
CP2-07-SB09	5						0.18	81							0.48			
CP2-07-SB10	1							99							0.38			
CP2-07-SB10	5							92							0.26			
CP2-07-SB11	1							110							0.35			
CP2-07-SB11	5							130							0.33			
CP2-07-SB12	1						0.078	79							0.28			
CP2-07-SB12	5						0.12	98							0.36			
CP2-07-SB13	1							87							0.31			
CP2-07-SB13	5							120							0.33			
CP2-07-SB14	1						0.24	80										
CP2-07-SB14	5						0.21	77										
CP2-07-SB15	1						0.17	68							0.29			
CP2-07-SB15	5						0.11	140							0.46			
CP2-07-SB16	1						0.24	110										
CP2-07-SB16	5						0.16	62										
CP2-07-SB17	1						0.22	140										
CP2-07-SB17	5						0.7	130										
CP2-07-SB18	1						0.14	130										
CP2-07-SB18	5						0.13	93										
CP2-07-SB19	1						0.18	100							0.24			
CP2-07-SB19	5						0.17	76										
CP2-07-SB20	1																	
CP2-07-SB20	5																	
CP2-07-SB21	1																	
CP2-07-SB21	5																	
CP2-07-SB22	1																	
CP2-07-SB22	5																	
CP2-07-SB23	1																	
CP2-07-SB23	5																	
CP2-07-SB24	1																	
CP2-07-SB24	5																	
CP2-08-SB09	1						0.24	76										
CP2-08-SB09	5						0.2	130										
CP2-08-SB10	2						0.17	100							0.09			
CP2-08-SB10	6						0.14	110							0.2			
CP2-08-SB11	1						0.34	92							0.46			
CP2-08-SB11	5						0.37	88							0.48			
CP2-08-SB12	1				0.044			63		0.011	0.029		0.0087		0.3	0.02	0.014	
CP2-08-SB12	5						0.72	150										
CP2-08-SB13	1						0.87	120										
CP2-08-SB13	5						0.7	88										
CP2-08-SB14	1						1.4	290										
CP2-08-SB14	5						0.22	120										
CP2-08-SB15	1						0.2	160										
CP2-08-SB15	5							110							0.39			
CP2-08-SNS01	0.5						0.3	220							0.48			
CP2-08-SNS01	2.5						0.39	140							0.4			
CP2-08-SNS02	0.5			0.0042			0.24	97	0.0076	0.0072	0.023				0.4	0.01		
CP2-08-SNS02	2.5						0.19	100							0.42			
CP2-08-SNS03	0.5			0.0051			0.24	83	0.005						0.29	0.0064		
CP2-08-SNS03	2.5						0.25	120							0.43			
CP2-08-SNS04	0.5					0.0074		120	0.12	0.094	0.22		0.027		1.0	0.16		0.0084

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard		3.6 E-2	NA	NA	7.2 E-3	1.2 E-1	8.3 E-3	7.2 E-4	NA	NA	NA	NA	1.5 E-4	NA	3.7 E-3	NA	1.2 E-2	NA
Unit Risk		6.9 E-8	1.8 E-8	1.8 E-8	1.8 E-8	9.0 E-7	NA	NA	4.8 E-8	7.7 E-7	7.7 E-8	7.7 E-8	NA	7.7 E-8	2.1 E-8	7.7 E-9	6.9 E-8	4.7 E-7
CP2-08-SNS04	2.5							120							0.43			
CP2-RE01-SB01	1				0.0015		0.26	76										
CP2-RE01-SB01	5						0.19	120										
CP2-RE05-SB01	1						0.43	120			0.016				0.38	0.01		
CP2-RE05-SB01	5						1.7	78										
CP2-RE05-SB02	1						1.7	110							0.32			
CP2-RE05-SB02	5						1.6	120										
CP2-RE05-SB03	1						2.1	110							0.32			
CP2-RE05-SB03	5						0.23	77										
CP2-RE05-SB04	1				0.0024		0.27	130										
CP2-RE05-SB04	5			0.0012			0.24	76							0.43			
CP2-RE05-SB05	1						0.22	130										
CP2-RE05-SB05	5						0.20	90							0.51			
CP2-ST07-SB01	1				0.0044			100			0.02				0.38	0.0088		
CP2-ST07-SB01	5							110							0.41			
F(C)-SB01	1							99										
F(C)-SB01	5							115										
F(C)-SB01	10							102										
F(c)-SB02	1							71			0.015							
F(c)-SB02	5							100										
F(c)-SB03	1							150										
F(c)-SB03	5						0.7	67										
F(c)-SB04	1						1.5	97							0.37			
F(c)-SB04	5						1.4	65							0.23			
F(c)-SNS01	0.5						0.54	100		0.0080	0.014		0.024		0.75	0.0062		
F(c)-SNS02	0.5						0.19	110	0.014	0.014	0.033		0.016		0.46	0.021		
F(c)-SNS03	0.5						0.17	100	0.011	0.012	0.03		0.0099		0.42	0.02		
OS1-F2-SB02	1			0.0021		0.0014												
OS1-F2-SB03	1		0.0036	0.00083														
OS1-F2-SB04	1					0.0009												
OS1-F2-SNS01	0.5				0.004	0.00083	0.21	250							0.079			
OS1-F2-SNS01	2.5			0.048	0.018	0.00084		550							0.32		0.0012	
OS1-F2-SNS02	0.5		0.0071	0.028	0.02	0.0013	0.33	710							0.22			
OS1-F2-SNS02	2.5				0.0072	0.00087	0.21	98							0.071		0.00091	
OS1-F2-SNS03	0.5			0.0067	0.028		0.79	320	0.0079	0.012	0.022		0.0094		0.48	0.013	0.0028	
OS1-F2-SNS03	2.5						0.4	130							0.065		0.0011	
OS1-F2-SNS04	0.5		0.0024				0.32	99							0.062		0.00068	
OS1-F2-SNS04	2.5		0.029	0.0056	0.025		0.36	220							0.24		0.0026	
OS1-F3-SD01	0.25			0.0021											0.19			

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		7.4 E-2	4.3 E-5	7.2 E-4	1.2 E-2	1.1 E-4	2.9 E-1	7.2 E-6	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	2.3 E-1	2.3 E-1	1.1 E-4	1.4 E-4	1.5 E-4	1.6 E-5	1.5 E-4
Unit Risk		8.5 E-7	NA	NA	NA	NA	4.8 E-7	7.4 E-11	7.7 E-8	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	7.2 E-9	NA	NA	NA
25F-HA01	1					0.035					15	1.5	130			27		0.011	1.2	0.029
25F-HA01	5										16	2.1	0.41			0.029			2.8	
25F-HA02	1										11	0.05	0.41						1.8	
25F-HA02	3										11	0.039	0.14						0.91	
25F-HA02	5										10	0.037							0.47	
25F-HA03	1										11	0.051							0.88	
25F-HA03	3										11	0.043	0.19			0.0049			0.62	
25F-HA03	5										9.9	0.056							1.1	
25F-HA04	1										8.4	0.062							4.6	
25F-HA04	3										8.5	0.052							2.2	
25F-HA04	5										10	0.094							1.7	
25F-SB04	1										5.5	0.0071	0.57			0.024				
25F-SB04	5										3.3	0.013	0.21			0.05				
25F-SB05	1					0.008					5.4	0.076	0.89			0.4		0.011		0.01
25F-SB05	5										6.2	0.097	0.4			0.27				
25F-SB06	1					0.024			0.012		5	0.79	0.95			11		0.0091		0.019
25F-SB06	5					0.029			0.013		4.9	0.68	0.71			6.6		0.0089		0.025
25F-SB07	1										11	34	0.2			0.11				
25F-SB07	5										6.2	0.62	0.3			0.066				
25F-SB08	1																			
25F-SB09	1																			
25F-SB10	1																			
25F-SB11	1																			
25F-SB12	1												0.59			0.37				
25F-SB13	1												0.11			0.038				
25F-SB14	1											0.069	0.33			770				
25F-SD01	0.25										21	2.6	0.54			11				
25F-SD01	1.5										11	5.7	0.49			18			0.5	
25F-SD01	5										12	3.1	0.29			0.25				
25F-SD02	0.25										13	0.064	1.1						2.9	
25F-SD02	1.5										13	0.049	1.1			0.013			0.74	
25F-SD02	5										12	0.076	0.42						2	
25F-SPB01	1									30900	21.5	0.801				520				
25F-SPB01	5									26000	3.44	0.165				0.41				
25F-SPB01	10		1.03							38200	2.48					0.53				
25F-SPB02	1									24800	10.1	1.33				2300				
25F-SPB02	5									22400	2.63	42				3				
25F-SPB02	10									22500	2.24	2.1				24				
25F-SPB03	1									17200	1.45	0.218				17000				
25F-SPB03	5															320				
25F-SPB03	6		7.52							26700	3.75	0.331								
25F-SPB03	10		3.39							21000	15.5	1.77				0.44				
59F-SB11	1										3.3	0.0072	0.55						0.48	
59F-SB11	5				0.0017	0.0039					5.6	0.018	0.54			0.62		0.0025	2.7	
59F-SB12	1					0.046			0.0077		4.7	0.014	4			0.092		0.045	0.76	0.036
59F-SB12	5										3.4	0.025	0.42			0.0074			0.42	
59F-SB13	1										8.9	0.028	0.78						3.7	
59F-SB13	5										10	0.14	0.73							
59F-SB14	1										11	0.068	0.63						2.4	
59F-SB14	5.5										12	0.014	0.47							
59F-SB15	1				0.00052	0.0021					4.8	0.015	0.23			0.19				
59F-SB15	5					0.052			0.0074		4	0.013	0.36			0.043		0.06		0.047
59F-SB16	1					0.0055	0.00099				4.3	0.0085	0.44			0.19		0.0038	0.62	
59F-SB16	5										4.8	0.025	0.66			0.086				
59F-SB17	1										5.1		1			0.03			0.58	
59F-SB17	5										8.3	0.018	0.63			0.086			0.98	
59F-SB18	1										6.2	0.02	0.33						0.32	
59F-SB18	5										5.6	0.015	0.31			0.0081			0.27	
59F-SB19	1										14	0.041	1.3			11			2.6	
59F-SB19	5										6.9	0.021	0.56						1.6	
59F-SB20	1			0.0011	0.0011	0.0038					17	0.088	0.51			0.022		0.0069	0.95	0.0092
59F-SB20	5.5										10	0.028	0.62						0.18	
59F-SB21	1			0.0012	0.00072						7.8	0.0084	0.43			0.27			1.1	
59F-SB21	5.5										11	0.02	0.58			0.094			0.61	

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		7.4 E-2	4.3 E-5	7.2 E-4	1.2 E-2	1.1 E-4	2.9 E-1	7.2 E-6	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	2.3 E-1	2.3 E-1	1.1 E-4	1.4 E-4	1.5 E-4	1.6 E-5	1.5 E-4
Unit Risk		8.5 E-7	NA	NA	NA	NA	4.8 E-7	7.4 E-11	7.7 E-8	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	7.2 E-9	NA	NA	NA
59F-SB22	1				0.22	0.089			0.016		14	0.076	0.6			19		0.024	4.1	0.075
59F-SB22	5.5										8.2	0.019	0.35							
59F-SB23	1										8	0.033	0.73			12			1.2	
59F-SB23	5										9.9	0.024	0.6						2.5	
59F-SB25	1	0.0014									10.6	0.082			0.016	0.015				
59F-SB26	1			0.0025	0.0063	0.46			0.1		7.6	0.042			1.1	0.15		0.43		0.35
59F-SB27	1	0.0015		0.0012							12.1	0.07			0.35	0.0051				
59F-SB28	1	0.0054									22.5	0.077			2.8	0.21				0.042
59F-SD01	0.25					0.062					140	0.079	0.73	16		49		0.005	14	0.0083
59F-SD01	1.5										11	0.085	0.54			0.024			3.3	
59F-SD01	5										11	0.042	0.71			0.0039			4.1	
59F-SD02	0.25										13	0.16	0.73	0.54					0.75	
59F-SD02	1.5										18	0.13	1.1		0.32				0.95	
59F-SD02	5										10	0.019	0.43		0.44				0.49	
59F-SD03	0.25										10									
59F-SD03	1.5										9.1									
59F-SD04	0.25										9.9									
59F-SD04	1.5										10									
59F-SD05	0.25										9.5									
59F-SD05	1.5										12									
59F-SD06	0.25										18									
59F-SD06	1.5										11									
59F-SD07	0.25				0.00084		0.00073				12.6	0.086				0.017				
59F-SNS01	0.5				0.0023	0.047					16	0.1	0.99			0.31		0.015		0.033
59F-SNS01	2.5										9.3	0.085				0.05				
59F-SNS02	0.5					0.01					14	0.096	0.11			0.0035		0.005		0.0088
59F-SNS02	2.5					0.0038					10	0.13								
59F-SNS03	0.5					0.014					11	0.043	0.13					0.006		0.014
59F-SNS03	2.5										13	0.16	0.15							
59F-SNS04	0.5					0.014					23	0.076	0.86					0.0064		0.01
59F-SPB01	1							2		26800	7.18	0.136								
59F-SPB01	5							1												
59F-SPB01	10							2												
59F-SPB02	1							1		17700	295	0.151				1.6				
59F-SPB02	5							1		28100	165	0.112				0.2				
59F-SPB02	10							1		25600	12.8									
59F-SPB03	1									25400	5.49					0.6				
59F-SPB03	5									27500	5.48					0.6				
59F-SPB03	10									19700	2.86									
59F-SPB04	1									21600	4.88					0.2				
59F-SPB04A	5									20700	4					0.6				
59F-SPB05	1									25600	4.97					0.2				
59F-SPB05	5									24700	3.9					0.3				
59F-SPB05	10									26400	7.11					0.1				
59F-SPB06	1									15400	3.31					1.8				
59F-SPB06	2																			
59F-SPB06	5									21500	4.06					1				
59F-SPB06	10									30600	7.85									
59F-SPB07	1									23700	4.12					0.2				
59F-SPB07	2																			
59F-SPB07	5									23400	5.2									
59F-SPB07	10									27200	11.8									
59F-SPB08	1									25100	6.89									
59F-SPB08	5									31600	5.83									
59F-SPB08	10																			
60F-SB01	1									22700	12.5	3.45								
60F-SB01	5									22500	5.07	0.127								
60F-SB01	10									24300	10.7									
60F-SB02	1					0.0021					6.7	0.13	0.79			0.07				
60F-SB02	5										5.3	0.023	0.88			0.25				
60F-SB03	1										3.3	0.047	0.64			0.0051			2.5	
60F-SB03	5										3.2	0.023	1.3						0.34	
60F-SB04	1						0.00049				3.7	0.016	0.47						3.6	
60F-SB04	5						0.00085				4.9	0.01	0.51						0.14	

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		7.4 E-2	4.3 E-5	7.2 E-4	1.2 E-2	1.1 E-4	2.9 E-1	7.2 E-6	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	2.3 E-1	2.3 E-1	1.1 E-4	1.4 E-4	1.5 E-4	1.6 E-5	1.5 E-4
Unit Risk		8.5 E-7	NA	NA	NA	NA	4.8 E-7	7.4 E-11	7.7 E-8	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	7.2 E-9	NA	NA	NA
60F-SB05	1										3.9	0.012	0.43						2.2	
60F-SB05	5										3.5	0.014	0.51						0.093	
60F-SNS01	0.5			0.0027		0.047					9.5	0.26	0.91					0.018		0.041
61F-SB02	1															1.4				
61F-SB02	3									20400	3.38									
61F-SB02	5		1.27							19600	3.45									
61F-SB02	10		1.19							18200	2.97	0.142								
61F-SB03	1										3.9		0.9							
61F-SB03	5					0.0029					4.2		6.5			0.011		0.012		0.013
61F-SB04	1						0.041					0.45								
61F-SB05	1						0.0026					0.073								
61F-SNS01	0.5					0.081					50	1.6	0.48				2.8	0.033		0.1
61F-SNS02	0.5					0.0038					16	0.21				0.0053				
61F-SPB01	1		14.2							24400	8.84									
61F-SPB01	5									28400	3.09									
61F-SPB01	10									20100	4.7									
62F-SB04	1										3.8	0.0094	0.78							
62F-SB04	5										2.9	0.012	1.1							
62F-SB05	1										0.51	0.098	0.11						0.32	
62F-SB05	5										3	0.0086	1.5							
62F-SB06	2	0.00092		0.00099	0.0018	0.0058	0.033				2.9	0.014	0.54							0.006
62F-SB06	5.5										5.5	0.047								
62F-SB07	5					0.021					5.2	0.037	0.83					0.013		0.026
62F-SB08	1										9.6	0.0073	0.39							
62F-SB08	5										5.3	0.018	1.4							
62F-SB09	1										3.8	0.0072	0.39							
62F-SB09	5										4.1	0.02	0.49							
62F-SB10	1										6.5	0.038	0.48							
62F-SB10	5										4.9	0.025	0.49							
62F-SD01	0.25																		1.2	
62F-SD01	1.5																		1.6	
62F-SD01	5																		2.2	
62F-SNS01	0.5					0.076					14	0.031				0.0048		0.021		0.041
62F-SNS01	2.5										8.9	0.09				0.013				
62F-SNS02	0.5					0.034					13	0.17				0.12		0.008		0.028
C201-SPB01	1									25500	4.27									
C201-SPB01	5									25000	2.99									
C201-SPB01	10									21400	3.23									
C207-SB01	1																			
C207-SB01	5																			
C207-SB01	10																			
C208-SB02	1														1.21					
C208-SB02	3														0.416					
C208-SB02	5																			
C208-SB02	10																			
C208-SB03	1		1.51							21500	3.68									
C208-SB03	5									23200	3.74									
C208-SB03	10		2.34							20000	1.98									
C208-SB04	1																			
C208-SB04	3																			
C208-SB04	5																			
C208-SB04	10																			
C208-SB05	1													1.33						
C208-SB05	3													0.65						
C208-SB05	5													0.256						
C208-SB05	10													0.0913						
C208-SPB01	1									17400	5.95				1.48					
C208-SPB01	3																			
C208-SPB01	6		1.08							24300	3.92				0.16					
C208-SPB01	10									16700	3.94									
C208-SPB06	1		0.828											0.377						
C208-SPB06	3													0.47						
C208-SPB06	5		0.684																	
C208-SPB06	10																			

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		7.4 E-2	4.3 E-5	7.2 E-4	1.2 E-2	1.1 E-4	2.9 E-1	7.2 E-6	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	2.3 E-1	2.3 E-1	1.1 E-4	1.4 E-4	1.5 E-4	1.6 E-5	1.5 E-4
Unit Risk		8.5 E-7	NA	NA	NA	NA	4.8 E-7	7.4 E-11	7.7 E-8	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	7.2 E-9	NA	NA	NA
CP2-07-SB02	1										3.9		0.58							
CP2-07-SB02	5										5.5	0.022	0.28							
CP2-07-SB03	1										7	0.038	0.84			0.0018			2.6	
CP2-07-SB03	5										5.4	0.13	0.26							
CP2-07-SB04	1										4.8	0.023	0.37						1.2	
CP2-07-SB04	5																			
CP2-07-SB05	1										5.1		1.1							
CP2-07-SB05	5										4.3	0.0081	0.23							
CP2-07-SB06	1										9.4	0.028	0.5						0.43	
CP2-07-SB08	1										8.9	0.12	0.45						0.28	
CP2-07-SB08	5										7.4		0.19							
CP2-07-SB09	1					0.0021					2.9		1.2					0.011	0.99	0.0063
CP2-07-SB09	5										5.1	0.007	0.32							
CP2-07-SB10	1										3.3	0.0099	0.74			0.0063			0.97	
CP2-07-SB10	5										2.1	0.0039	0.31						0.38	
CP2-07-SB11	1										2.5	0.0037	0.56						0.56	
CP2-07-SB11	5										3.8	0.0078	0.37			0.0088			1.6	
CP2-07-SB12	1										2.4	0.013	0.32						5	
CP2-07-SB12	5										4.9		0.44						1.7	
CP2-07-SB13	1										5.3		0.64						0.29	
CP2-07-SB13	5										3.6		6			0.0078			0.13	
CP2-07-SB14	1										4.5	0.032	1.3							
CP2-07-SB14	5					0.0033					7	0.017	1.4							
CP2-07-SB15	1										9.1	0.019	0.61							
CP2-07-SB15	5										6.8		2							
CP2-07-SB16	1										7	0.021	0.68							
CP2-07-SB16	5										3	0.013	1							
CP2-07-SB17	1										5.7	0.013	0.41							
CP2-07-SB17	5										4.7	0.013	0.61							
CP2-07-SB18	1										30	0.02	0.87							
CP2-07-SB18	5										8.4		1.4							
CP2-07-SB19	1										8	0.029	0.19							
CP2-07-SB19	5										4.7	0.0076	0.41							
CP2-07-SB20	1															0.0037				
CP2-07-SB20	5																			
CP2-07-SB21	1															0.0094				
CP2-07-SB21	5																			
CP2-07-SB22	1																			
CP2-07-SB22	5															0.0021				
CP2-07-SB23	1															0.066				
CP2-07-SB23	5																			
CP2-07-SB24	1															0.004				
CP2-07-SB24	5																			
CP2-08-SB09	1										5.6	0.013	0.5					0.0083	2.3	
CP2-08-SB09	5										3.8	0.008	0.3						0.46	
CP2-08-SB10	2										6.1	0.028	0.2	0.23						
CP2-08-SB10	6										3.7	0.041	0.24							
CP2-08-SB11	1										5.5	0.0051	0.49							
CP2-08-SB11	5										6.3		0.55							
CP2-08-SB12	1										2.5		0.23		1.9	0.043		0.017	2.2	0.011
CP2-08-SB12	5										3.6	0.0034	0.75							
CP2-08-SB13	1										6	0.024	0.95		0.068				3.3	
CP2-08-SB13	5										3.8	0.034	0.49						0.71	
CP2-08-SB14	1										8.2	0.019	0.55							
CP2-08-SB14	5										4.3	0.016	0.69							
CP2-08-SB15	1										6.1	0.019	0.73			0.56				
CP2-08-SB15	5										4.5									
CP2-08-SNS01	0.5					0.0035					8.1	0.047	0.27		0.068	0.019				
CP2-08-SNS01	2.5										6.5	0.038	0.46			0.0019				
CP2-08-SNS02	0.5					0.012					5.8	0.024	0.23		0.12					0.016
CP2-08-SNS02	2.5										6.3	0.032	0.21							
CP2-08-SNS03	0.5					0.0096					4.3	0.015	0.14		0.075			0.005		0.0082
CP2-08-SNS03	2.5										7	0.081	0.37		0.045					
CP2-08-SNS04	0.5					0.21			0.025		16	0.036			0.48	3.6		0.045		0.35

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																		
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		7.4 E-2	4.3 E-5	7.2 E-4	1.2 E-2	1.1 E-4	2.9 E-1	7.2 E-6	NA	4.6 E-6	NA	1.2 E-2	6.7 E-4	2.3 E-1	2.3 E-1	1.1 E-4	1.4 E-4	1.5 E-4	1.6 E-5	1.5 E-4
Unit Risk		8.5 E-7	NA	NA	NA	NA	4.8 E-7	7.4 E-11	7.7 E-8	NA	NA	NA	NA	3.3 E-7	3.3 E-7	NA	7.2 E-9	NA	NA	NA
CP2-08-SNS04	2.5										7.4	0.066				0.015				
CP2-RE01-SB01	1										3.1	0.021	0.41			0.011				
CP2-RE01-SB01	5										4.6	0.027	0.70						0.84	
CP2-RE05-SB01	1					0.030					3.7	0.023	0.21			0.0084		0.037	0.29	0.026
CP2-RE05-SB01	5										3.0		2.5							
CP2-RE05-SB02	1					0.0025					3.3	0.013	0.53						0.93	
CP2-RE05-SB02	5										4.0		0.85							
CP2-RE05-SB03	1			0.0023			0.0082				4.3	0.010	0.73			0.042			1.5	
CP2-RE05-SB03	5										3.3	0.0092	1.3							
CP2-RE05-SB04	1										4.9	0.0088	0.75							
CP2-RE05-SB04	5										3.1	0.0043	0.67			0.0078				
CP2-RE05-SB05	1										4.9	0.023	1.1							
CP2-RE05-SB05	5										2.5	0.022	2.4							
CP2-ST07-SB01	1					0.015					8.9		0.79			0.036		0.0056		0.012
CP2-ST07-SB01	5										7.3	0.016	0.45							
F(C)-SB01	1									20000	4.36	1.5								
F(C)-SB01	5									22000	5.79									
F(C)-SB01	10									20500	3.49	0.35								
F(c)-SB02	1					0.0039					3.1		1.3		0.077			0.015	0.75	0.016
F(c)-SB02	5										3.9	0.0068	0.69							
F(c)-SB03	1										6.8	0.090	0.31							
F(c)-SB03	5										2.5	0.012	0.53							
F(c)-SB04	1					0.0018					4.6	0.0097	1.1	120				0.0036	0.75	
F(c)-SB04	5										2.3	0.013	1.6	0.013					0.87	
F(c)-SNS01	0.5					0.011			0.011		15	0.15	0.61					0.0036		0.013
F(c)-SNS02	0.5					0.028			0.011		8.9	0.021	0.27		0.20			0.0057		0.028
F(c)-SNS03	0.5					0.031			0.0099		5.2	0.066	0.12		0.23			0.011		0.027
OS1-F2-SB02	1															0.025				
OS1-F2-SB03	1														0.061	0.0020				
OS1-F2-SB04	1			0.0008											0.093	0.0071				
OS1-F2-SNS01	0.5				0.0022						7.7	0.15	0.47							
OS1-F2-SNS01	2.5				0.0018	0.0025					16	0.097				0.46				
OS1-F2-SNS02	0.5	0.0083		0.0031	0.0038		0.028				19	0.086	0.54			0.048				
OS1-F2-SNS02	2.5				0.0019		0.0018				7.9		0.50							
OS1-F2-SNS03	0.5	0.0051		0.0038		0.020					26	0.18	0.72			0.26		0.0064	0.32	0.019
OS1-F2-SNS03	2.5										8.7	0.020	0.58							
OS1-F2-SNS04	0.5					0.006					7.0	0.015	0.60					0.0034	0.12	
OS1-F2-SNS04	2.5	0.0029		0.0029							10	0.091	0.60			0.060			0.18	
OS1-F3-SD01	0.25	0.00091		0.0011	0.0015						11.9	0.094			0.16	0.034				

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
25F-HA01	1	NA	NA	NA	NA	NA	1.7 E-3	3.7 E-2	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA
25F-HA01	5	NA	NA	NA	NA	NA	2.7 E-3	1.8 E-1	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	NA
25F-HA02	1	NA	NA	NA	NA	NA	2.1 E-3	1.5 E-1	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA
25F-HA02	3	NA	NA	NA	NA	NA	2.1 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA
25F-HA02	5	NA	NA	NA	NA	NA	2.6 E-3	1.3 E-1	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA
25F-HA03	1	NA	NA	NA	NA	NA	2.2 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA
25F-HA03	3	NA	NA	NA	NA	NA	1.9 E-3	1.5 E-1	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA
25F-HA03	5	NA	NA	NA	NA	NA	2.3 E-3	1.5 E-1	NA	NA	NA	NA	NA	NA	2.4 E-3	NA	NA	NA
25F-HA04	1	NA	NA	NA	NA	NA	2.2 E-3	1.1 E-1	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA
25F-HA04	3	NA	NA	NA	NA	NA	2.3 E-3	1.2 E-1	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA
25F-HA04	5	NA	NA	NA	NA	NA	2.3 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	NA
25F-SB04	1	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA
25F-SB04	5	NA	NA	NA	NA	NA	NA	5.3 E-2	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA
25F-SB05	1	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
25F-SB05	5	NA	NA	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
25F-SB06	1	NA	NA	NA	NA	NA	NA	6.4 E-2	NA	NA	NA	NA	2.3 E-6	NA	1.2 E-3	NA	NA	NA
25F-SB06	5	NA	NA	NA	NA	NA	NA	6.9 E-2	NA	NA	NA	NA	2.6 E-6	NA	1.2 E-3	NA	NA	NA
25F-SB07	1	NA	NA	NA	NA	NA	1.2 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
25F-SB07	5	NA	NA	NA	NA	NA	1.5 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	2.2 E-3	1.2 E-1	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	NA
25F-SD01	1.5	NA	NA	NA	NA	1.5 E-4	2.1 E-3	1.2 E-1	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA
25F-SD01	5	1.5 E-4	NA	NA	NA	NA	2.2 E-3	1.5 E-1	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA
25F-SD02	0.25	NA	NA	NA	NA	NA	2.7 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	1.5	NA	NA	NA	NA	NA	2.7 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	5	NA	NA	NA	NA	NA	2.5 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	1	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	5	NA	NA	NA	NA	NA	NA	9.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	10	NA	NA	NA	NA	NA	NA	7.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	1	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	5	NA	NA	NA	NA	NA	NA	6.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	10	NA	NA	NA	NA	NA	NA	5.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	1	NA	NA	NA	NA	NA	NA	5.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	8.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	10	NA	NA	NA	NA	NA	NA	7.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB11	1	NA	NA	NA	NA	NA	1.6 E-3	5.3 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
59F-SB11	5	NA	NA	NA	NA	1.1 E-4	1.8 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
59F-SB12	1	NA	NA	NA	NA	NA	1.3 E-3	6.4 E-2	NA	NA	NA	NA	1.2 E-6	NA	1.4 E-3	NA	NA	NA
59F-SB12	5	NA	NA	NA	NA	NA	1.2 E-3	5.4 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
59F-SB13	1	NA	NA	NA	NA	NA	2.5 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB13	5	NA	NA	NA	NA	NA	3.7 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA
59F-SB14	1	NA	NA	NA	NA	NA	1.1 E-2	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB14	5.5	NA	NA	NA	NA	NA	8.3 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB15	1	NA	NA	NA	1.1 E-5	NA	1.1 E-3	6.1 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
59F-SB15	5	NA	NA	NA	NA	NA	9.1 E-4	5.1 E-2	NA	NA	NA	NA	1.4 E-6	NA	1.2 E-3	NA	NA	NA
59F-SB16	1	NA	NA	NA	1.7 E-5	3.1 E-5	8.3 E-3	4.9 E-1	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
59F-SB16	5	NA	NA	NA	NA	7.3 E-5	1.2 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA
59F-SB17	1	NA	NA	NA	NA	NA	1.5 E-3	6.1 E-2	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA
59F-SB17	5	NA	NA	NA	NA	NA	2.7 E-3	6.0 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
59F-SB18	1	NA	NA	NA	NA	NA	1.5 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA
59F-SB18	5	NA	NA	NA	NA	NA	3.1 E-3	7.0 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
59F-SB19	1	NA	NA	NA	3.3 E-4	NA	3.5 E-3	6.5 E-2	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	4.3 E-4	NA
59F-SB19	5	NA	NA	NA	NA	NA	2.1 E-3	6.7 E-2	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA
59F-SB20	1	NA	NA	NA	3.9 E-5	NA	2.4 E-3	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	1	NA	NA	NA	NA	NA	1.7 E-3	4.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	5.5	NA	NA	NA	NA	NA	7.4 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene
Unit Hazard																		
Unit Risk																		
59F-SB22	1	NA	NA	NA	8.7 E-3	NA	3.5 E-3	7.9 E-1	NA	NA	NA	NA	2.6 E-6	NA	2.3 E-3	NA	6.3 E-3	NA
59F-SB22	5.5	NA	NA	NA	NA	NA	2.5 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA
59F-SB23	1	NA	NA	NA	NA	1.2 E-4	2.4 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB23	5	NA	NA	NA	NA	NA	2.1 E-3	6.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB25	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	NA	NA	NA
59F-SB26	1	NA	NA	NA	9.4 E-5	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	8.2 E-4	NA	NA	NA
59F-SB27	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	NA
59F-SB28	1	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA
59F-SD01	0.25	NA	NA	NA	NA	NA	2.4 E-3	3.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	1.5	NA	NA	NA	NA	NA	2.6 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	5	NA	NA	NA	NA	NA	9.1 E-3	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	0.25	NA	NA	NA	NA	NA	3.1 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	1.5	NA	NA	NA	NA	NA	2.1 E-2	1.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	5	NA	NA	NA	NA	NA	2.2 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA
59F-SNS01	0.5	NA	NA	NA	5.9 E-5	NA	NA	2.5 E-1	NA	NA	NA	NA	1.4 E-6	NA	3.0 E-3	NA	2.5 E-5	NA
59F-SNS01	2.5	NA	NA	NA	3.8 E-5	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	NA
59F-SNS02	0.5	NA	NA	NA	2.1 E-5	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	NA
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	NA
59F-SNS03	0.5	NA	NA	NA	1.9 E-4	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	3.1 E-3	NA	NA	NA
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
59F-SPB01	1	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	3.3 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	5	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	10	NA	NA	NA	NA	NA	NA	5.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	1	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	5	NA	NA	NA	NA	NA	NA	9.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	10	NA	NA	NA	NA	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04	1	NA	NA	NA	NA	NA	NA	7.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	5.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	1	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	5	NA	NA	NA	NA	NA	NA	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	10	NA	NA	NA	NA	NA	NA	8.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	1	NA	NA	NA	NA	NA	NA	5.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	8.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	10	NA	NA	NA	NA	NA	NA	8.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	1	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	7.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	10	NA	NA	NA	NA	NA	NA	6.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	1	NA	NA	NA	NA	NA	NA	8.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	5	NA	NA	NA	NA	NA	NA	8.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	5	NA	NA	NA	NA	NA	NA	7.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	10	NA	NA	NA	NA	NA	NA	8.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	1	NA	NA	NA	6.4 E-4	NA	1.2 E-3	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	5	NA	NA	NA	8.7 E-4	NA	6.0 E-3	5.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	1	NA	NA	NA	NA	NA	8.3 E-4	4.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	5	NA	NA	NA	NA	NA	1.0 E-3	6.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	1	NA	NA	NA	NA	NA	6.7 E-4	6.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	5	NA	NA	NA	NA	NA	2.2 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene
Unit Hazard																		
Unit Risk																		
60F-SB05	1	NA	NA	NA	NA	NA	1.7 E-3	6.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	5	NA	NA	NA	NA	NA	1.3 E-3	4.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SNS01	0.5	NA	NA	NA	1.7 E-4	NA	NA	7.9 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	3	NA	NA	NA	NA	NA	NA	9.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	5	NA	NA	NA	NA	NA	NA	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	10	NA	NA	NA	NA	NA	NA	8.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB03	1	NA	NA	NA	NA	NA	1.4 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
61F-SB03	5	NA	NA	NA	NA	NA	1.2 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
61F-SB04	1	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB05	1	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	9.1 E-3	1.4 E-1	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	NA
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	3.7 E-3	NA	NA	NA
61F-SPB01	1	NA	NA	NA	NA	NA	NA	9.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	5	NA	NA	NA	NA	NA	NA	8.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	10	NA	NA	NA	NA	NA	NA	7.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	1	NA	NA	NA	NA	NA	1.1 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	5	NA	NA	NA	NA	NA	1.0 E-3	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	1	NA	NA	NA	NA	NA	2.1 E-3	7.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	5	NA	NA	NA	NA	NA	1.6 E-3	6.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB06	2	NA	NA	NA	2.0 E-5	NA	1.0 E-3	4.6 E-2	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	9.2 E-5	NA
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	5.6 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
62F-SB07	5	NA	NA	NA	NA	NA	2.6 E-3	5.5 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
62F-SB08	1	NA	NA	NA	NA	NA	1.8 E-3	1.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB08	5	NA	NA	NA	NA	NA	1.8 E-3	5.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	1	NA	NA	NA	NA	NA	1.4 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	5	NA	NA	NA	NA	NA	1.7 E-3	6.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	1	NA	NA	NA	NA	NA	2.3 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	5	NA	NA	NA	NA	NA	2.1 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	NA
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	2.3 E-3	NA	NA	NA
62F-SNS02	0.5	NA	NA	NA	6.3 E-5	NA	2.6 E-3	1.1 E-1	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	NA
C201-SPB01	1	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	5	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	10	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	4.7 E-2	7.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	5	NA	NA	NA	NA	NA	NA	6.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	10	NA	NA	NA	NA	NA	NA	7.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	10	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
CP2-07-SB02	1	NA	NA	NA	NA	NA	1.3 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
CP2-07-SB02	5	NA	NA	NA	NA	NA	1.7 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
CP2-07-SB03	1	NA	NA	NA	NA	NA	1.7 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB03	5	NA	NA	NA	NA	NA	1.4 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA
CP2-07-SB04	1	NA	NA	NA	3.6 E-5	NA	1.6 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
CP2-07-SB06	1	NA	NA	NA	NA	NA	2.5 E-3	5.5 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
CP2-07-SB08	1	NA	NA	NA	NA	NA	1.7 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	2.1 E-3	NA	NA	NA
CP2-07-SB08	5	NA	NA	NA	NA	NA	2.0 E-3	6.1 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
CP2-07-SB09	1	NA	NA	NA	NA	NA	8.3 E-4	3.4 E-2	NA	NA	NA	NA	NA	NA	8.9 E-4	NA	NA	NA
CP2-07-SB09	5	NA	NA	NA	NA	NA	1.5 E-3	5.8 E-2	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	7.1 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	6.6 E-2	NA	NA	NA	NA	NA	NA	9.7 E-4	NA	NA	NA
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
CP2-07-SB12	1	NA	NA	NA	NA	NA	6.5 E-4	5.6 E-2	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA
CP2-07-SB12	5	NA	NA	NA	NA	NA	1.0 E-3	7.0 E-2	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
CP2-07-SB14	1	NA	NA	NA	NA	NA	2.0 E-3	5.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB14	5	NA	NA	NA	NA	NA	1.7 E-3	5.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB15	1	NA	NA	NA	NA	NA	1.4 E-3	4.9 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA
CP2-07-SB15	5	NA	NA	NA	NA	NA	9.1 E-4	1.0 E-1	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
CP2-07-SB16	1	NA	NA	NA	NA	NA	2.0 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB16	5	NA	NA	NA	NA	NA	1.3 E-3	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	1	NA	NA	NA	NA	NA	1.8 E-3	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	5	NA	NA	NA	NA	NA	5.8 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	1	NA	NA	NA	NA	NA	1.2 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	5	NA	NA	NA	NA	NA	1.1 E-3	6.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB19	1	NA	NA	NA	NA	NA	1.5 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	8.9 E-4	NA	NA	NA
CP2-07-SB19	5	NA	NA	NA	NA	NA	1.4 E-3	5.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	2.0 E-3	5.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	5	NA	NA	NA	NA	NA	1.7 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB10	2	NA	NA	NA	NA	NA	1.4 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA
CP2-08-SB10	6	NA	NA	NA	NA	NA	1.2 E-3	7.9 E-2	NA	NA	NA	NA	NA	NA	7.4 E-4	NA	NA	NA
CP2-08-SB11	1	NA	NA	NA	NA	NA	2.8 E-3	6.6 E-2	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA
CP2-08-SB11	5	NA	NA	NA	NA	NA	3.1 E-3	6.3 E-2	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA
CP2-08-SB12	1	NA	NA	NA	3.2 E-4	NA	NA	4.5 E-2	NA	NA	NA	NA	1.3 E-6	NA	1.1 E-3	NA	1.7 E-4	NA
CP2-08-SB12	5	NA	NA	NA	NA	NA	6.0 E-3	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	1	NA	NA	NA	NA	NA	7.2 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	5	NA	NA	NA	NA	NA	5.8 E-3	6.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	1	NA	NA	NA	NA	NA	1.2 E-2	2.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	5	NA	NA	NA	NA	NA	1.8 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	1	NA	NA	NA	NA	NA	1.7 E-3	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	2.5 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	NA
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	3.2 E-3	1.0 E-1	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA
CP2-08-SNS02	0.5	NA	NA	NA	NA	NA	2.0 E-3	6.9 E-2	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	1.6 E-3	7.2 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
CP2-08-SNS03	0.5	NA	NA	NA	NA	NA	2.0 E-3	5.9 E-2	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	2.1 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
CP2-08-SNS04	0.5	NA	NA	NA	NA	9.2 E-4	NA	8.6 E-2	NA	NA	NA	NA	4.1 E-6	NA	3.7 E-3	NA	NA	NA

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
CP2-RE01-SB01	1	NA	NA	NA	1.1 E-5	NA	2.2 E-3	5.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	1.6 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	3.6 E-3	8.6 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	1.4 E-2	5.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	1.4 E-2	7.9 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	1.3 E-2	8.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	1.7 E-2	7.9 E-2	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	1.9 E-3	5.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	1	NA	NA	NA	1.7 E-5	NA	2.2 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	2.0 E-3	5.4 E-2	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	1.8 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	1.7 E-3	6.4 E-2	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA
CP2-ST07-SB01	1	NA	NA	NA	3.2 E-5	NA	NA	7.2 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	7.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	8.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	7.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	5.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	7.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	5	NA	NA	NA	NA	NA	5.8 E-3	4.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB04	1	NA	NA	NA	NA	NA	1.2 E-2	6.9 E-2	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA
F(c)-SB04	5	NA	NA	NA	NA	NA	1.2 E-2	4.6 E-2	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	4.5 E-3	7.2 E-2	NA	NA	NA	NA	3.7 E-6	NA	2.8 E-3	NA	NA	NA
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	1.6 E-3	7.9 E-2	NA	NA	NA	NA	2.4 E-6	NA	1.7 E-3	NA	NA	NA
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	1.4 E-3	7.2 E-2	NA	NA	NA	NA	1.5 E-6	NA	1.6 E-3	NA	NA	NA
OS1-F2-SB02	1	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	2.9 E-5	1.0 E-4	1.7 E-3	1.8 E-1	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA
OS1-F2-SNS01	2.5	NA	NA	NA	1.3 E-4	1.0 E-4	NA	3.9 E-1	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	1.5 E-5	NA
OS1-F2-SNS02	0.5	NA	NA	NA	1.4 E-4	1.6 E-4	2.7 E-3	5.1 E-1	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA
OS1-F2-SNS02	2.5	NA	NA	NA	5.2 E-5	1.1 E-4	1.7 E-3	7.0 E-2	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	1.1 E-5	NA
OS1-F2-SNS03	0.5	NA	NA	NA	2.0 E-4	NA	6.6 E-3	2.3 E-1	NA	NA	NA	NA	1.4 E-6	NA	1.8 E-3	NA	3.5 E-5	NA
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	3.3 E-3	9.3 E-2	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	1.4 E-5	NA
OS1-F2-SNS04	0.5	NA	NA	NA	NA	NA	2.7 E-3	7.1 E-2	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	8.4 E-6	NA
OS1-F2-SNS04	2.5	NA	NA	NA	1.8 E-4	NA	3.0 E-3	1.6 E-1	NA	NA	NA	NA	NA	NA	8.9 E-4	NA	3.2 E-5	NA
OS1-F3-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard																					
Unit Risk																					
25F-HA01	1	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	1.8 E-2	8.6 E-2	NA	NA	2.9 E-3	NA	1.7 E-6	1.9 E-5	4.4 E-6	1.5 E-1
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-2	2.7 E-4	NA	NA	3.1 E-6	NA	NA	4.4 E-5	NA	2.1 E-1
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	2.7 E-4	NA	NA	NA	NA	NA	2.8 E-5	NA	1.6 E-1
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	9.3 E-5	NA	NA	NA	NA	NA	1.4 E-5	NA	1.6 E-1
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	7.4 E-6	NA	1.3 E-1
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	1.5 E-1
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-4	1.3 E-4	NA	NA	5.3 E-7	NA	NA	9.7 E-6	NA	1.6 E-1
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	1.6 E-1
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	1.2 E-1
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	1.3 E-1
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	1.4 E-1
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-5	3.8 E-4	NA	NA	2.6 E-6	NA	NA	NA	NA	1.0 E-1
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	1.4 E-4	NA	NA	5.4 E-6	NA	NA	NA	NA	5.5 E-2
25F-SB05	1	NA	NA	NA	NA	9.2 E-7	NA	NA	NA	NA	NA	9.0 E-4	5.9 E-4	NA	NA	4.3 E-5	NA	1.7 E-6	NA	1.5 E-6	8.1 E-2
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	2.7 E-4	NA	NA	2.9 E-5	NA	NA	NA	NA	8.9 E-2
25F-SB06	1	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	9.4 E-3	6.3 E-4	NA	NA	1.2 E-3	NA	1.4 E-6	NA	2.9 E-6	7.7 E-2
25F-SB06	5	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	8.1 E-3	4.7 E-4	NA	NA	7.1 E-4	NA	1.4 E-6	NA	3.8 E-6	8.0 E-2
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-1	1.3 E-4	NA	NA	1.2 E-5	NA	NA	NA	NA	4.8 E-1
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-3	2.0 E-4	NA	NA	7.1 E-6	NA	NA	NA	NA	1.0 E-1
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	4.0 E-5	NA	NA	NA	NA	4.3 E-4
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	NA	4.1 E-6	NA	NA	NA	NA	7.7 E-5
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-4	2.2 E-4	NA	NA	8.3 E-2	NA	NA	NA	NA	8.4 E-2
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	3.6 E-4	NA	NA	1.2 E-3	NA	NA	NA	NA	1.6 E-1
25F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-2	3.3 E-4	NA	NA	1.9 E-3	NA	NA	7.9 E-6	NA	2.0 E-1
25F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	1.9 E-4	NA	NA	2.7 E-5	NA	NA	NA	NA	1.9 E-1
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-4	7.3 E-4	NA	NA	NA	NA	NA	4.6 E-5	NA	1.6 E-1
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4	7.3 E-4	NA	NA	1.4 E-6	NA	NA	1.2 E-5	NA	1.5 E-1
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	2.8 E-4	NA	NA	NA	NA	NA	3.1 E-5	NA	1.5 E-1
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	9.5 E-3	NA	NA	NA	5.6 E-2	NA	NA	NA	NA	3.1 E-1
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	2.0 E-3	NA	NA	NA	4.4 E-5	NA	NA	NA	NA	2.2 E-1
25F-SPB01	10	NA	4.4 E-5	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	NA	NA	2.5 E-1
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	1.6 E-2	NA	NA	NA	2.5 E-1	NA	NA	NA	NA	4.4 E-1
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	5.0 E-1	NA	NA	NA	3.2 E-4	NA	NA	NA	NA	6.7 E-1
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	2.5 E-2	NA	NA	NA	2.6 E-3	NA	NA	NA	NA	1.9 E-1
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	2.6 E-3	NA	NA	NA	1.8 E+0	NA	NA	NA	NA	2.0 E+0
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	3.4 E-2
25F-SPB03	6	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1
25F-SPB03	10	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	9.7 E-2	NA	2.1 E-2	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	2.0 E-1
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	3.7 E-4	NA	NA	NA	NA	NA	7.5 E-6	NA	5.6 E-2
59F-SB11	5	NA	NA	NA	2.1 E-5	4.5 E-7	NA	NA	NA	NA	NA	2.1 E-4	3.6 E-4	NA	NA	6.7 E-5	NA	3.8 E-7	4.2 E-5	NA	9.0 E-2
59F-SB12	1	NA	NA	NA	NA	5.3 E-6	NA	NA	NA	NA	NA	1.7 E-4	2.7 E-3	NA	NA	9.9 E-6	NA	6.9 E-6	1.2 E-5	5.5 E-6	7.0 E-2
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	2.8 E-4	NA	NA	7.9 E-7	NA	NA	6.6 E-6	NA	5.7 E-2
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	5.2 E-4	NA	NA	NA	NA	NA	5.8 E-5	NA	8.9 E-2
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	4.2 E-4	NA	NA	NA	NA	NA	3.8 E-5	NA	9.1 E-2
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	8.7 E-2
59F-SB15	1	NA	NA	NA	6.4 E-6	2.4 E-7	NA	NA	NA	NA	NA	1.8 E-4	1.5 E-4	NA	NA	2.0 E-5	NA	NA	NA	NA	6.3 E-2
59F-SB15	5	NA	NA	NA	NA	6.0 E-6	NA	NA	NA	NA	NA	1.5 E-4	2.4 E-4	NA	NA	4.6 E-6	NA	9.2 E-6	NA	7.2 E-6	5.4 E-2
59F-SB16	1	NA	NA	NA	NA	6.3 E-7	2.8 E-4	NA	NA	NA	NA	1.0 E-4	2.9 E-4	NA	NA	2.0 E-5	NA	5.8 E-7	9.7 E-6	NA	5.0 E-1
59F-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	4.4 E-4	NA	NA	9.2 E-6	NA	NA	NA	NA	8.9 E-2
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	3.2 E-6	NA	NA	9.1 E-6	NA	6.4 E-2
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	4.2 E-4	NA	NA	9.2 E-6	NA	NA	1.5 E-5	NA	6.5 E-2
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	2.2 E-4	NA	NA	NA	NA	NA	5.0 E-6	NA	8.3 E-2
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	2.1 E-4	NA	NA	8.7 E-7	NA	NA	4.2 E-6	NA	7.5 E-2
59F-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	8.6 E-4	NA	NA	1.2 E-3	NA	NA	4.1 E-5	NA	7.4 E-2
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	3.7 E-4	NA	NA	NA	NA	NA	2.5 E-5	NA	7.1 E-2
59F-SB20	1	NA	NA	7.9 E-7	1.4 E-5	4.4 E-7	NA	NA	NA	NA	NA	1.0 E-3	3.4 E-4	NA	NA	2.4 E-6	NA	1.1 E-6	1.5 E-5	1.4 E-6	1.5 E-1
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	4.1 E-4	NA	NA	NA	NA	NA	2.8 E-6	NA	9.4 E-2
59F-SB21	1	NA	NA	8.6 E-7	8.9 E-6	NA	NA	NA	NA	NA	NA	1.0 E-4	2.9 E-4	NA	NA	2.9 E-5	NA	NA	1.7 E-5	NA	4.5 E-1
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	3.9 E-4	NA	NA	1.0 E-5	NA	NA	9.6 E-6	NA	8.0 E-2

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard																					
Unit Risk																					
59F-SB22	1	NA	NA	NA	2.7 E-3	1.0 E-5	NA	NA	NA	NA	NA	9.0 E-4	4.0 E-4	NA	NA	2.0 E-3	NA	3.7 E-6	6.4 E-5	1.1 E-5	8.1 E-1
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.6 E-2
59F-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	4.9 E-4	NA	NA	1.3 E-3	NA	NA	1.9 E-5	NA	9.1 E-2
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	4.0 E-4	NA	NA	NA	NA	NA	3.9 E-5	NA	7.0 E-2
59F-SB25	1	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-4	NA	NA	3.7 E-3	1.6 E-6	NA	NA	NA	NA	5.6 E-3
59F-SB26	1	NA	NA	1.8 E-6	7.8 E-5	5.3 E-5	NA	NA	NA	NA	NA	5.0 E-4	NA	NA	2.6 E-1	1.6 E-5	NA	6.6 E-5	NA	5.4 E-5	2.6 E-1
59F-SB27	1	1.1 E-4	NA	8.6 E-7	NA	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	8.2 E-2	5.5 E-7	NA	NA	NA	NA	8.4 E-2
59F-SB28	1	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	NA	6.6 E-1	2.3 E-5	NA	NA	NA	6.4 E-6	6.6 E-1
59F-SD01	0.25	NA	NA	NA	NA	7.1 E-6	NA	NA	NA	NA	NA	9.4 E-4	4.9 E-4	3.7 E+0	NA	5.3 E-3	NA	7.6 E-7	2.2 E-4	1.3 E-6	4.1 E+0
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	3.6 E-4	NA	NA	2.6 E-6	NA	NA	5.2 E-5	NA	1.5 E-1
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-4	4.7 E-4	NA	NA	4.2 E-7	NA	NA	6.4 E-5	NA	1.4 E-1
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	4.9 E-4	1.3 E-1	NA	NA	NA	NA	1.2 E-5	NA	2.9 E-1
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	7.3 E-4	NA	7.5 E-2	NA	NA	NA	1.5 E-5	NA	2.8 E-1
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	2.9 E-4	NA	1.0 E-1	NA	NA	NA	7.7 E-6	NA	2.6 E-1
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	NA	NA	1.0 E-5	NA	2.1 E-4	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	2.0 E-3
59F-SNS01	0.5	NA	NA	NA	2.8 E-5	5.4 E-6	NA	NA	NA	NA	NA	1.2 E-3	6.6 E-4	NA	NA	3.3 E-5	NA	2.3 E-6	NA	5.0 E-6	2.6 E-1
59F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	5.4 E-6	NA	NA	NA	NA	2.3 E-1
59F-SNS02	0.5	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	1.1 E-3	7.3 E-5	NA	NA	3.8 E-7	NA	7.6 E-7	NA	1.3 E-6	3.6 E-1
59F-SNS02	2.5	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1
59F-SNS03	0.5	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	5.1 E-4	8.6 E-5	NA	NA	NA	NA	9.2 E-7	NA	2.1 E-6	1.2 E-1
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-1
59F-SNS04	0.5	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	9.0 E-4	5.7 E-4	NA	NA	NA	NA	9.8 E-7	NA	1.5 E-6	1.3 E-1
59F-SPB01	1	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	1.2 E-1	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1
59F-SPB01	5	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-6
59F-SPB01	10	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5
59F-SPB02	1	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	8.2 E-2	NA	1.8 E-3	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	3.4 E+0
59F-SPB02	5	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	1.3 E-1	NA	1.3 E-3	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	3.2 E-1
59F-SPB02	10	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	2.1 E-1
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	2.2 E-1
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	1.7 E-1
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-2	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	1.5 E-1
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	2.0 E-1
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	1.9 E-1
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	2.0 E-1
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-2	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	1.3 E-1
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	1.8 E-1
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	2.0 E-1
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	4.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1
60F-SB02	1	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	1.5 E-3	5.3 E-4	NA	NA	7.5 E-6	NA	NA	NA	NA	4.9 E-2
60F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	5.9 E-4	NA	NA	2.7 E-5	NA	NA	NA	NA	6.7 E-2
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	4.3 E-4	NA	NA	5.5 E-7	NA	NA	3.9 E-5	NA	5.0 E-2
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	8.6 E-4	NA	NA	NA	NA	NA	5.3 E-6	NA	6.9 E-2
60F-SB04	1	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	1.9 E-4	3.1 E-4	NA	NA	NA	NA	NA	5.7 E-5	NA	6.5 E-2
60F-SB04	5	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	1.2 E-4	3.4 E-4	NA	NA	NA	NA	NA	2.2 E-6	NA	8.9 E-2

		Non-Cancer Hazard Index																			
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard																					
Unit Risk																					
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	2.9 E-4	NA	NA	NA	NA	NA	3.5 E-5	NA	7.2 E-2
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	3.4 E-4	NA	NA	NA	NA	NA	1.5 E-6	NA	5.0 E-2
60F-SNS01	0.5	NA	NA	1.9 E-6	NA	5.4 E-6	NA	NA	NA	NA	NA	3.1 E-3	6.1 E-4	NA	NA	NA	NA	2.8 E-6	NA	6.3 E-6	8.4 E-2
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	1.5 E-4
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1
61F-SB02	5	NA	5.5 E-5	NA	NA	NA	NA	NA	NA	9.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1
61F-SB02	10	NA	5.1 E-5	NA	NA	NA	NA	NA	NA	8.4 E-2	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	8.9 E-2
61F-SB03	5	NA	NA	NA	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	4.3 E-3	NA	NA	1.2 E-6	NA	1.8 E-6	NA	2.0 E-6	8.6 E-2
61F-SB04	1	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	5.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
61F-SB05	1	NA	NA	NA	NA	NA	7.4 E-4	NA	NA	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
61F-SNS01	0.5	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	NA	1.9 E-2	3.2 E-4	NA	NA	NA	4.0 E-4	5.0 E-6	NA	1.5 E-5	1.7 E-1
61F-SNS02	0.5	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	NA	5.7 E-7	NA	NA	NA	NA	1.8 E-1
61F-SPB01	1	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	7.3 E-2
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	4.6 E-2
62F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	7.3 E-5	NA	NA	NA	NA	NA	5.0 E-6	NA	1.0 E-2
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	NA	7.2 E-2
62F-SB06	2	6.8 E-5	NA	7.1 E-7	2.2 E-5	6.6 E-7	9.4 E-3	NA	NA	NA	NA	1.7 E-4	3.6 E-4	NA	NA	NA	NA	NA	NA	9.2 E-7	5.7 E-2
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-2
62F-SB07	5	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	4.4 E-4	5.5 E-4	NA	NA	NA	NA	2.0 E-6	NA	4.0 E-6	6.0 E-2
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-1
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	5.9 E-2
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	8.0 E-2
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.7 E-2
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	7.5 E-2
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	8.1 E-2
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	1.9 E-5
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	2.5 E-5
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	3.5 E-5
62F-SNS01	0.5	NA	NA	NA	NA	8.7 E-6	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	5.2 E-7	NA	3.2 E-6	NA	6.3 E-6	1.0 E-1
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	1.4 E-1
62F-SNS02	0.5	NA	NA	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA	1.3 E-5	NA	1.2 E-6	NA	4.3 E-6	1.1 E-1
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-1
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	2.8 E-1
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-2	NA	NA	NA	NA	NA	9.7 E-2
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	6.5 E-5	NA	NA	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
C208-SB03	10	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	9.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	NA	NA	NA	NA	3.1 E-1
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	1.5 E-1
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-2	NA	NA	NA	NA	NA	NA	6.0 E-2
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	2.1 E-2
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-2	NA	NA	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	4.9 E-1
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	4.6 E-5	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	2.4 E-1
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1
C208-SPB06	1	NA	3.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-2	NA	NA	NA	NA	NA	NA	8.8 E-2
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	1.1 E-1
C208-SPB06	5	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard																					
Unit Risk																					
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	8.2 E-2
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	9.0 E-2
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	5.6 E-4	NA	NA	1.9 E-7	NA	NA	4.1 E-5	NA	8.1 E-2
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	7.7 E-2
CP2-07-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	2.5 E-4	NA	NA	NA	NA	NA	1.9 E-5	NA	8.2 E-2
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	8.8 E-2
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	5.5 E-2
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	3.3 E-4	NA	NA	NA	NA	NA	6.8 E-6	NA	5.9 E-2
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	3.0 E-4	NA	NA	NA	NA	NA	4.4 E-6	NA	9.8 E-2
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.5 E-2
CP2-07-SB09	1	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	8.0 E-4	NA	NA	NA	NA	1.7 E-6	1.6 E-5	9.6 E-7	3.6 E-2
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-5	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	6.1 E-2
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	4.9 E-4	NA	NA	6.8 E-7	NA	NA	1.5 E-5	NA	7.3 E-2
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	2.1 E-4	NA	NA	NA	NA	NA	6.0 E-6	NA	6.7 E-2
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-5	3.7 E-4	NA	NA	NA	NA	NA	8.8 E-6	NA	8.0 E-2
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-5	2.5 E-4	NA	NA	9.5 E-7	NA	NA	2.5 E-5	NA	9.5 E-2
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	2.1 E-4	NA	NA	NA	NA	NA	7.9 E-5	NA	5.9 E-2
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	NA	NA	2.7 E-5	NA	7.3 E-2
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	4.6 E-6	NA	6.4 E-2
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	8.4 E-7	NA	NA	2.0 E-6	NA	9.1 E-2
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	6.0 E-2
CP2-07-SB14	5	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	2.0 E-4	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	5.8 E-2
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	5.2 E-2
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	1.0 E-1
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	8.1 E-2
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	4.6 E-2
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-1
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	9.9 E-2
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	9.5 E-2
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.9 E-2
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-4	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.4 E-2
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-5	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	5.6 E-2
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	NA	NA	4.0 E-7
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	1.0 E-6
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	2.3 E-7
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	NA	NA	NA	7.1 E-6
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	4.3 E-7
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	3.3 E-4	NA	NA	NA	NA	1.3 E-6	3.6 E-5	NA	5.7 E-2
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-5	2.0 E-4	NA	NA	NA	NA	NA	7.2 E-6	NA	9.5 E-2
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	1.3 E-4	5.4 E-2	NA	NA	NA	NA	NA	NA	1.3 E-1
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	8.1 E-2
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.1 E-2
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	6.8 E-2
CP2-08-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	4.4 E-1	4.6 E-6	NA	2.6 E-6	3.5 E-5	1.7 E-6	4.9 E-1
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	5.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-1
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	6.3 E-4	NA	1.6 E-2	NA	NA	NA	5.2 E-5	NA	1.1 E-1
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	3.3 E-4	NA	NA	NA	NA	NA	1.1 E-5	NA	6.9 E-2
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	2.2 E-1
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	8.8 E-2
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	4.9 E-4	NA	NA	6.0 E-5	NA	NA	NA	NA	1.2 E-1
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-2
CP2-08-SNS01	0.5	NA	NA	NA	NA	4.0 E-7	NA	NA	NA	NA	NA	5.6 E-4	1.8 E-4	NA	1.6 E-2	2.0 E-6	NA	NA	NA	NA	1.8 E-1
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	3.1 E-4	NA	NA	2.0 E-7	NA	NA	NA	NA	1.1 E-1
CP2-08-SNS02	0.5	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	2.9 E-4	1.5 E-4	NA	2.8 E-2	NA	NA	NA	NA	2.4 E-6	1.0 E-1
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	7.5 E-2
CP2-08-SNS03	0.5	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	1.8 E-4	9.3 E-5	NA	1.8 E-2	NA	NA	7.6 E-7	NA	1.3 E-6	8.0 E-2
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-4	2.5 E-4	NA	1.1 E-2	NA	NA	NA	NA	NA	1.0 E-1
CP2-08-SNS04	0.5	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	1.1 E-1	3.9 E-4	NA	6.9 E-6	NA	5.4 E-5	2.0 E-1

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard																					
Unit Risk																					
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-4	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	8.8 E-2
CP2-RE01-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	2.7 E-4	NA	NA	1.2 E-6	NA	NA	NA	NA	5.7 E-2
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	4.7 E-4	NA	NA	NA	NA	NA	1.3 E-5	NA	8.8 E-2
CP2-RE05-SB01	1	NA	NA	NA	NA	3.4 E-6	NA	NA	NA	NA	NA	2.7 E-4	1.4 E-4	NA	NA	9.0 E-7	NA	5.7 E-6	4.6 E-6	4.0 E-6	9.1 E-2
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	7.2 E-2
CP2-RE05-SB02	1	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	1.5 E-4	3.5 E-4	NA	NA	NA	NA	NA	1.5 E-5	NA	9.5 E-2
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-1
CP2-RE05-SB03	1	NA	NA	1.6 E-6	NA	NA	2.3 E-3	NA	NA	NA	NA	1.2 E-4	4.9 E-4	NA	NA	4.5 E-6	NA	NA	2.4 E-5	NA	1.0 E-1
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	5.8 E-2
CP2-RE05-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	5.0 E-4	NA	NA	NA	NA	NA	NA	NA	9.6 E-2
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-5	4.5 E-4	NA	NA	8.4 E-7	NA	NA	NA	NA	5.8 E-2
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	9.6 E-2
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	7.0 E-2
CP2-ST07-SB01	1	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	3.9 E-6	NA	8.6 E-7	NA	1.8 E-6	7.3 E-2
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	8.1 E-2
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-2	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-2	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1
F(c)-SB02	1	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	NA	8.6 E-4	NA	1.8 E-2	NA	NA	2.3 E-6	1.2 E-5	2.4 E-6	7.0 E-2
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-5	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	7.2 E-2
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-1
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	5.4 E-2
F(c)-SB04	1	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	1.2 E-4	7.3 E-4	2.8 E+1	NA	NA	NA	5.5 E-7	1.2 E-5	NA	2.8 E+1
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	1.1 E-3	3.0 E-3	NA	NA	NA	NA	1.4 E-5	NA	6.3 E-2
F(c)-SNS01	0.5	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	1.8 E-3	4.1 E-4	NA	NA	NA	NA	5.5 E-7	NA	2.0 E-6	8.1 E-2
F(c)-SNS02	0.5	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	2.5 E-4	1.8 E-4	NA	4.7 E-2	NA	NA	8.7 E-7	NA	4.3 E-6	1.3 E-1
F(c)-SNS03	0.5	NA	NA	NA	NA	3.6 E-6	NA	NA	NA	NA	NA	7.9 E-4	8.0 E-5	NA	5.4 E-2	NA	NA	1.7 E-6	NA	4.1 E-6	1.3 E-1
OS1-F2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	1.8 E-4
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	2.1 E-7	NA	NA	NA	NA	1.4 E-2
OS1-F2-SB04	1	NA	NA	5.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	7.6 E-7	NA	NA	NA	NA	2.2 E-2
OS1-F2-SNS01	0.5	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	NA	1.8 E-3	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-1
OS1-F2-SNS01	2.5	NA	NA	NA	2.2 E-5	2.9 E-7	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	4.9 E-5	NA	NA	NA	NA	4.0 E-1
OS1-F2-SNS02	0.5	6.2 E-4	NA	2.2 E-6	4.7 E-5	NA	8.0 E-3	NA	NA	NA	NA	1.0 E-3	3.6 E-4	NA	NA	5.2 E-6	NA	NA	NA	NA	5.2 E-1
OS1-F2-SNS02	2.5	NA	NA	NA	2.4 E-5	NA	5.1 E-4	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.3 E-2
OS1-F2-SNS03	0.5	3.8 E-4	NA	2.7 E-6	NA	2.3 E-6	NA	NA	NA	NA	NA	2.1 E-3	4.8 E-4	NA	NA	2.8 E-5	NA	9.8 E-7	5.0 E-6	2.9 E-6	2.4 E-1
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	9.7 E-2
OS1-F2-SNS04	0.5	NA	NA	NA	NA	6.9 E-7	NA	NA	NA	NA	NA	1.8 E-4	4.0 E-4	NA	NA	NA	NA	5.2 E-7	1.9 E-6	NA	7.4 E-2
OS1-F2-SNS04	2.5	2.2 E-4	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	4.0 E-4	NA	NA	6.4 E-6	NA	NA	2.8 E-6	NA	1.6 E-1
OS1-F3-SD01	0.25	6.8 E-5	NA	7.9 E-7	1.9 E-5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	3.7 E-2	3.7 E-6	NA	NA	NA	NA	3.9 E-2

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h)anthracene
Unit Hazard																		
Unit Risk																		
25F-HA01	1	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	7.7 E-9	1.7 E-9	NA	NA	NA	1.6 E-8	9.3 E-11	NA	NA
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA
25F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	NA
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	NA	NA
25F-SB06	1	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	1.1 E-8	2.8 E-9	NA	NA	NA	6.9 E-9	1.2 E-10	NA	NA
25F-SB06	5	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	1.5 E-8	3.1 E-9	NA	NA	NA	6.7 E-9	1.4 E-10	NA	NA
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	NA
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA
25F-SD01	1.5	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA
25F-SD01	5	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA
59F-SB11	5	NA	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	NA
59F-SB12	1	NA	NA	NA	NA	NA	NA	NA	9.6 E-10	1.1 E-8	2.9 E-9	NA	NA	NA	8.2 E-9	1.5 E-10	NA	NA
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB15	1	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA
59F-SB15	5	NA	NA	NA	NA	NA	NA	NA	9.1 E-10	1.0 E-8	3.2 E-9	NA	NA	NA	6.7 E-9	1.7 E-10	NA	NA
59F-SB16	1	NA	NA	NA	4.2 E-11	2.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA
59F-SB16	5	NA	NA	NA	NA	5.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	NA
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-9	NA	NA	NA
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA
59F-SB19	1	NA	NA	NA	8.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	2.4 E-9	NA
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA
59F-SB20	1	NA	NA	3.5 E-11	9.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	1	NA	NA	7.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard																		
Unit Risk																		
59F-SB22	1	NA	4.0 E-8	NA	2.1 E-8	NA	NA	NA	2.4 E-9	3.0 E-8	6.5 E-9	NA	NA	NA	1.3 E-8	4.6 E-10	3.5 E-8	NA
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-9	NA	NA	NA
59F-SB23	1	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB25	1	NA	6.1 E-11	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA
59F-SB26	1	NA	NA	1.2 E-10	2.3 E-10	NA	NA	NA	8.1 E-9	1.2 E-7	NA	1.8 E-8	NA	8.5 E-9	4.6 E-9	1.5 E-9	NA	NA
59F-SB27	1	NA	4.4 E-11	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	NA
59F-SB28	1	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA
59F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	1.2 E-9	NA	NA	NA	NA	6.4 E-11	NA	NA
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	5.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA
59F-SNS01	0.5	NA	NA	NA	1.4 E-10	NA	NA	NA	7.7 E-10	1.5 E-8	3.7 E-9	NA	NA	NA	1.7 E-8	2.2 E-10	1.4 E-10	NA
59F-SNS01	2.5	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA
59F-SNS02	0.5	NA	NA	NA	5.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	4.4 E-11	NA	NA
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA
59F-SNS03	0.5	NA	NA	NA	4.6 E-10	NA	NA	NA	3.3 E-10	5.3 E-9	1.0 E-9	NA	NA	NA	9.4 E-9	6.1 E-11	NA	NA
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	5.9 E-11	NA	NA
59F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	1	NA	NA	7.7 E-10	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	5	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard																		
Unit Risk																		
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SNS01	0.5	NA	NA	NA	4.0 E-10	NA	NA	NA	6.2 E-10	1.1 E-8	4.5 E-9	NA	NA	NA	9.2 E-9	1.6 E-10	NA	NA
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	NA	NA
61F-SB03	5	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	NA	NA	NA	8.8 E-9	8.5 E-11	NA	NA
61F-SB04	1	NA	NA	6.9 E-10	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB05	1	NA	NA	7.2 E-11	8.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	2.6 E-8	1.0 E-8	NA	NA	NA	3.4 E-8	3.5 E-10	NA	NA
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA
61F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	1	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB06	2	NA	NA	2.5 E-10	4.9 E-11	NA	NA	NA	2.7 E-10	5.8 E-9	9.3 E-10	NA	NA	NA	1.7 E-9	5.7 E-11	5.1 E-10	NA
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-9	NA	NA	NA
62F-SB07	5	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	6.3 E-9	1.3 E-9	NA	NA	NA	8.0 E-9	1.2 E-10	NA	NA
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	5.4 E-9	2.2 E-9	NA	NA	NA	1.4 E-8	2.1 E-10	NA	NA
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA
62F-SNS02	0.5	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	1.4 E-8	1.5 E-10	NA	NA
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard																		
Unit Risk																		
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA
CP2-07-SB04	1	NA	NA	4.4 E-11	8.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	NA	NA
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-9	NA	NA	NA
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	NA	NA
CP2-07-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	1.0 E-10	NA	NA
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	NA	NA
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	NA	NA
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-9	NA	NA	NA
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	NA
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-9	NA	NA	NA
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-9	NA	NA	NA
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-9	NA	NA	NA
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	NA	NA
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	NA
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	NA
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA
CP2-08-SB12	1	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	8.5 E-9	2.2 E-9	NA	NA	NA	6.3 E-9	1.5 E-10	9.7 E-10	NA
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	NA	NA
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	NA
CP2-08-SNS02	0.5	NA	NA	7.4 E-11	NA	NA	NA	NA	3.6 E-10	5.6 E-9	1.8 E-9	NA	NA	NA	8.4 E-9	7.7 E-11	NA	NA
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-9	NA	NA	NA
CP2-08-SNS03	0.5	NA	NA	9.0 E-11	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	NA	NA	6.1 E-9	5.0 E-11	NA	NA
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-9	NA	NA	NA
CP2-08-SNS04	0.5	NA	NA	NA	NA	6.7 E-9	NA	NA	5.7 E-9	7.3 E-8	1.7 E-8	NA	NA	NA	2.1 E-8	1.2 E-9	NA	4.0 E-9

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**
Unit Hazard																		
Unit Risk																		
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-9	NA	NA	NA
CP2-RE01-SB01	1	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	8.0 E-9	7.7 E-11	NA	NA
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	1	NA	NA	NA	4.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	5	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-9	NA	NA	NA
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA
CP2-ST07-SB01	1	NA	NA	NA	7.7 E-11	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	8.0 E-9	6.8 E-11	NA	NA
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-9	NA	NA	NA
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	NA	NA
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	NA
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-9	1.1 E-9	NA	NA	NA	1.6 E-8	4.8 E-11	NA	NA
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	1.1 E-8	2.6 E-9	NA	NA	NA	9.6 E-9	1.6 E-10	NA	NA
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	9.3 E-9	2.3 E-9	NA	NA	NA	8.8 E-9	1.5 E-10	NA	NA
OS1-F2-SB02	1	NA	NA	3.7 E-11	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB03	1	NA	6.3 E-11	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	8.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	7.0 E-11	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA
OS1-F2-SNS01	2.5	NA	NA	8.4 E-10	3.2 E-10	7.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	8.3 E-11	NA
OS1-F2-SNS02	0.5	NA	1.2 E-10	4.9 E-10	3.5 E-10	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	NA	NA	NA
OS1-F2-SNS02	2.5	NA	NA	NA	1.3 E-10	7.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	6.3 E-11	NA
OS1-F2-SNS03	0.5	NA	NA	1.2 E-10	4.9 E-10	NA	NA	NA	3.8 E-10	9.3 E-9	1.7 E-9	NA	NA	NA	1.0 E-8	1.0 E-10	1.9 E-10	NA
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	7.6 E-11	NA
OS1-F2-SNS04	0.5	NA	4.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	4.7 E-11	NA
OS1-F2-SNS04	2.5	NA	5.1 E-10	9.8 E-11	4.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	1.8 E-10	NA
OS1-F3-SD01	0.25	NA	NA	3.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Blood Lead
Unit Hazard																						
Unit Risk																						
25F-HA01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.5
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
25F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
25F-SB06	1	NA	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
25F-SB06	5	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.4
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.6
25F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
25F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
25F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
25F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
59F-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
59F-SB12	1	NA	NA	NA	NA	NA	NA	NA	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59F-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
59F-SB15	5	NA	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
59F-SB16	1	NA	NA	NA	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
59F-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
59F-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.5
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
59F-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	3.5
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11	3.4
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Blood Lead
Unit Hazard																						
Unit Risk																						
59F-SB22	1	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.5
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
59F-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	3.4
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SB25	1	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-9	NA	NA	NA	NA	NA	1 E-8	3.4
59F-SB26	1	NA	NA	NA	NA	NA	NA	NA	7.7 E-9	NA	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	5 E-7	3.4
59F-SB27	1	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	1 E-7	3.5
59F-SB28	1	4.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-7	NA	NA	NA	NA	NA	9 E-7	3.6
59F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-6	NA	NA	NA	NA	NA	NA	5 E-6	5.1
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	2 E-7	3.5
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	1 E-7	3.5
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	1 E-7	3.4
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD07	0.25	NA	NA	NA	NA	NA	3.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.5
59F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	3.5
59F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
59F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
59F-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.6
59F-SPB01	1	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	3.4
59F-SPB01	5	NA	NA	NA	NA	NA	NA	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11	7.0
59F-SPB02	5	NA	NA	NA	NA	NA	NA	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11	5.4
59F-SPB02	10	NA	NA	NA	NA	NA	NA	7.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11	3.5
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
60F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
60F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SB04	1	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.4
60F-SB04	5	NA	NA	NA	NA	NA	4.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.4

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Blood Lead
Unit Hazard																						
Unit Risk																						
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
60F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.4
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
61F-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
61F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
61F-SB04	1	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	NA
61F-SB05	1	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	9 E-8	3.9
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
61F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11	3.3
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB06	2	7.8 E-10	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
62F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
62F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	NA	NA	NA	4 E-7	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	1 E-7	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
C208-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	4 E-7	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	NA	8 E-8	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	NA	NA	3 E-8	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	NA	NA	NA	NA	5 E-7	3.4
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	NA	NA	5 E-8	3.4
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	1 E-7	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	2 E-7	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**ILCR**	**Blood Lead**
Unit Hazard																						
Unit Risk																						
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-07-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.4
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
CP2-07-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.4
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.4
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.4
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.4
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-8	NA	NA	NA	NA	NA	NA	8 E-8	3.4
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.4
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-08-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-7	NA	NA	NA	NA	NA	6 E-7	3.3
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	2 E-8	3.4
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	3 E-8	3.4
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
CP2-08-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	6 E-8	3.4
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
CP2-08-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	3 E-8	3.4
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	2 E-8	3.4
CP2-08-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	3 E-7	3.5

Table 5.6-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**ILCR**	**Blood Lead**
Unit Hazard																						
Unit Risk																						
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
CP2-RE01-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11	3.3
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	4.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-RE05-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11	3.4
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.3
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
CP2-ST07-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.4
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	3 E-8	3.3
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
F(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	NA	NA	NA	NA	4 E-5	3.4
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	NA	NA	NA	NA	NA	9 E-9	3.3
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.5
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	NA	NA	9 E-8	3.4
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	7.7 E-10	NA	NA	NA	NA	NA	7.6 E-8	NA	NA	NA	NA	NA	1 E-7	3.4
OS1-F2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	2 E-8	NA
OS1-F2-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	3 E-8	NA
OS1-F2-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
OS1-F2-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.5
OS1-F2-SNS02	0.5	7.0 E-9	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.5
OS1-F2-SNS02	2.5	NA	NA	NA	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.4
OS1-F2-SNS03	0.5	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.6
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.4
OS1-F2-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.4
OS1-F2-SNS04	2.5	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-9	3.4
OS1-F3-SD01	0.25	7.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA	NA	NA	6 E-8	3.5

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard		9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	6.8 E-2
Unit Risk		NA	NA	2.5 E-4	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	2.8 E-4	3.6 E-4	NA	4.2 E-4	NA
59F-SP33	10		100	3900	37		110	140	1200	120	50	820	22		140		
59F-SP33	20			33000					550			920			230		
59F-SP34	10		82	41000			74		400	110		2000			170		
59F-SP34	15			30000					1400		65	1100			82		38
59F-SP35	10	120		88000								760			100		270
59F-SP35	20			310000			100		160			770			280		100
59F-SP36	10			10									14		57		
59F-SP36	20		27	38	7.6					17		69			23		
59F-SP37	10							70			38	240	11				
59F-SP38	10														4.5		
59F-SP38	20							82			6.0	390	12				
59F-SP38	40																
59F-SP39	20			18											26		
60F-SP08	10											98					
60F-SP08	20		13							8.2	23	74	5.7		80		
61F-SP03	10			760				25	33		12	340	5.0		14		
61F-SP03	20			330				23	32		12	280	12		12		
61F-SP04	10								14						6.7		
61F-SP04	20								17								
61F-SP05	10											130	5.4		7		
61F-SP05	20											120	3.8				
61F-SP06	10											78					
61F-SP06	20											130	8.6		11		
62F-SP01	20		680		240		80	76	150	680	17	300			14		
62F-SP02	20		22					34	60	15	31	440			37		
62F-SP03	20		24					26	90	18	16	350			39		
62F-SP04	10		18		5.5		18		39	11	6.7	82			13		
62F-SP05	10		1000		370		220	130	190	1000	8.4	750	12		60		
62F-SP05	20		950		380		160	110	170	1100	39	520	9.5		17		
62F-SP06	10		13							8.3					8.2		
62F-SP06	20		11				8.1		17	7.4	25	100	15		73		
62F-SP07	10					20			25			110	4.9	17	15		
62F-SP07	20												3.7		7.6		
CP2-07-SP01	10	160		230000			160						100				
CP2-07-SP01	20			8600000													
CP2-07-SP01	40			2200000													
CP2-07-SP02	10															1500	
CP2-07-SP02	20																
CP2-07-SP03	10								64		8.2	180	4.5		10		
CP2-07-SP03	20						25		97			180	16		95		
CP2-07-SP04	10			170			58						14		210		
CP2-07-SP04	20			190			40					150	35		310		
CP2-07-SP05	10			12			45						25		36	23	
CP2-07-SP05	20			11									12		33	14	
CP2-07-SP06	10	24	9.3	440						8.0			12		44	96	
CP2-07-SP06	20	22		160									23		70	100	
CP2-07-SP07	10						15		30		18	140	13		19		
CP2-07-SP07	20			8.0					18		16	94	6.4		24		
CP2-07-SP08	10			20								120			6.2		
CP2-07-SP08	20			5.6								170			17		
CP2-07-SP08	30					37		29	20			650			17		
CP2-07-SP09	10																
CP2-07-SP09	20							28				150	34				
CP2-07-SP09	34						5.0	110				640	59		4.8		
CP2-07-SP10	10							34				85	34		55		
CP2-07-SP10	20			9.0				85	20			260	89		45		
CP2-07-SP10	40							22	12			82	16		27		
CP2-07-SP11	10							34	16			220	5.0				
CP2-07-SP11	20											150	15				
CP2-07-SP12	10							29				96	25		61		

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard		9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	6.8 E-2
Unit Risk		NA	NA	2.5 E-4	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	2.8 E-4	3.6 E-4	NA	4.2 E-4	NA
CP2-07-SP12	20											86	8.9		10		
CP2-07-SP12	40	17		72				48	18			200	64		210		
CP2-07-SP13	10								13			78	14				
CP2-07-SP13	20							43				250	18				
CP2-07-SP14	10											310			7.7		
CP2-07-SP14	18.5					27		28	12			510			39		
CP2-07-SP15	10											70	4.1		31		
CP2-07-SP15	20																
CP2-08-SP11	10		44	130	12		12	23	180	42	16	470	4.9		25		
CP2-08-SP11	20		40	36			16	51	640	38	53	1100	7.7		27		
CP2-08-SP12	10		18	9.8					190	13	21	300	4.4		15		
CP2-08-SP12	20			2200					26		11	120			26		
CP2-08-SP13	10											200					
CP2-08-SP14	10														4.5		
CP2-RE05-SP01	10			300000													
CP2-RE05-SP01	20			110000													
CP2-RE05-SP01	40			9.6											14		
CP2-RE05-SP02	10			38000											49		
CP2-RE05-SP02	20			9900													
CP2-RE05-SP02	40	8.9				29		20	12			270	27		88		
CP2-RE05-SP03	10														4		
CP2-RE05-SP03	20		9.4							6.3		120			13		
CP2-RE05-SP04	10											91			3.7		
CP2-RE05-SP04	20											84			4.1		
CP2-RE05-SP05	10			340									4.2		14		
CP2-RE05-SP05	20			21											16		
CP2-RE05-SP05	40			17											26		
CP2-RE05-SP06	10			12000											15		
CP2-RE05-SP06	20			4300											8.4		
CP2-RE05-SP06	40			910									7.0		15		
CP2-RE05-SP07	10								41						9.3		
CP2-RE05-SP07	20								23						26		
CP2-RE05-SP08	10			21									5.7		28		
CP2-RE05-SP08	20			15									7.7		48		
CP2-RE05-SP08	40			11											8.1		
CP2-RE05-SP09	10			7.7													
CP2-RE05-SP09	20			7.2											27		
CP2-RE05-SP10	10											110					
CP2-RE05-SP10	20											130					
F(C)-SP05	20			13					16		7.0				10		
F(C)-SP06	10		350		120		30	37	79	310	15	120			28		
F(C)-SP06	20		220		70		6.8		20	180	18	77	6.2		37		
OS1-F1-SP01	10											75			20		
OS1-F1-SP01	20											100	5.1		20		

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m3)																	
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.5 E+1	1.7 E+0	1.1 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.3 E-1	6.8 E+0	2.0 E+1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		2.3 E-4	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5	7.5 E-4
59F-SP33	10			37	370	75	22		990	93	260		120	26		180	210		14
59F-SP33	20				270		930		170	150						170	100		71
59F-SP34	10				280				180	210	120					180	110		51
59F-SP34	15				150				120	64						340	90		55
59F-SP35	10			66	140				220	580						180		330	540
59F-SP35	20	160		59	140				380	420						170	62	140	830
59F-SP36	10	120			42		300		23	42	11						36	32	
59F-SP36	20	22			49		44									6.6	5.3		
59F-SP37	10				22					8.6	6.8					25	29		
59F-SP38	10									7.3					510	11	7.4	9.3	
59F-SP38	20				15				21	30	7.9				380	33	28	12	
59F-SP38	40														8.7				
59F-SP39	20	16					130	18				16			69		4.9	55	
60F-SP08	10				46												6		
60F-SP08	20	12		7.3	84				48	13						23	29		
61F-SP03	10			6.3	29						10					22	24	15	
61F-SP03	20	8.7	8.2	5.0	30					7.0	10					24	33	41	
61F-SP04	10									14						11	13		
61F-SP04	20															7.9	14		
61F-SP05	10									7.7							6.3	8.7	
61F-SP05	20				20												5.9		
61F-SP06	10				22												8.8	15	
61F-SP06	20								13	18	6.1						15	10	
62F-SP01	20		30	16	170	250		23	32	4.7	1100	9.3	520	130	15	92	300		
62F-SP02	20			11	66				38		8.0					44	20		
62F-SP03	20			8.1	59		14	130	18		8.7		6.1			33	11	7.9	
62F-SP04	10			6.4	55				14							17	4		
62F-SP05	10		45	28	300	460	10		58	17	2000	21	880	200	33	140	840		
62F-SP05	20		52	34	280	480	6.7		110	12	2000	15	940	220	31	180	690		
62F-SP06	10				79				10							15	11		
62F-SP06	20			25	64			21	110	37	5.7					40	49		
62F-SP07	10	6.7		4.7	22				40	93						73	20	7.0	
62F-SP07	20						10	41	5.6	27	15		6.2			7.2	12		
CP2-07-SP01	10	3700			960		480			2400						2800	190	160	64000
CP2-07-SP01	20	120000																	120000
CP2-07-SP01	40	12000																	
CP2-07-SP02	10								71							91			
CP2-07-SP02	20																		
CP2-07-SP03	10	19			22		240		20	6.2					20	28	23		
CP2-07-SP03	20	9.8			20		44		82	85						75	31		
CP2-07-SP04	10	190		53	27				200	430							23	8.0	
CP2-07-SP04	20	690		21	22				160	220						16	32		
CP2-07-SP05	10	180			17		260		12	48	12	59			74		26	22	
CP2-07-SP05	20	330					440		15	21	9.5	18			70		34	28	
CP2-07-SP06	10	1300				12	140			25	42	730	13		190		50	95	
CP2-07-SP06	20	480					420			58	18	230			59		44	41	
CP2-07-SP07	10	10			30		100		48	24	8.6				130	36	42		
CP2-07-SP07	20	16			18		110		38	16	9.5				13	35	24		
CP2-07-SP08	10				11														
CP2-07-SP08	20				20		13												
CP2-07-SP08	30				47			550	19	43	7.6				20	45	40	270	
CP2-07-SP09	10									7.3					30	6.8	9.1		
CP2-07-SP09	20				9.6				57	54	8.6				46	18	50		
CP2-07-SP09	34			7.3	25	8.5			100	130	13		5.2		50	34	90		
CP2-07-SP10	10	6.9		8.4	12				150	290	8.6					6	22		
CP2-07-SP10	20	34			88				540	1800	9.3					19	34		
CP2-07-SP10	40				43				98	170	10					5.8	14		
CP2-07-SP11	10									11					17		8.2		
CP2-07-SP11	20					5.9			25	42	7.7				21	12	34		
CP2-07-SP12	10	9.9		14	32	5.2	8.5		160	390	13					5.7	21		

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m3)																	
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.5 E+1	1.7 E+0	1.1 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.3 E-1	6.8 E+0	2.0 E+1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		2.3 E-4	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5	7.5 E-4
CP2-07-SP12	20				11		16		14	18	8.9						12	12	
CP2-07-SP12	40	41			98		28		470	1600	14						29	15	
CP2-07-SP13	10				14					25					62	24	15		
CP2-07-SP13	20				22	5.3			19	31	8.4				11	16	39		
CP2-07-SP14	10				22			270	7.4	11					8.8	12	67	99	
CP2-07-SP14	18.5			8.5	38			190	10	180	10					35	200	64	
CP2-07-SP15	10																		
CP2-07-SP15	20																		
CP2-08-SP11	10			8.4	110	17			66	6.3	64	43	26	8.2		110	55	8.8	
CP2-08-SP11	20			26	160	14			140	9.5	59	21	21			240	85		
CP2-08-SP12	10	12		8.4	70				27	4.8	17	16	8.2			43	27	18	
CP2-08-SP12	20	10		6.0	22					6.3	8.2	8.9				23	14	19	
CP2-08-SP13	10				20														
CP2-08-SP14	10										6.4						7.5		
CP2-RE05-SP01	10	3000														98			240
CP2-RE05-SP01	20	1200							120							130	240		58
CP2-RE05-SP01	40																		
CP2-RE05-SP02	10	400							78							86			
CP2-RE05-SP02	20	120							110							140	62		
CP2-RE05-SP02	40			23	26	5.6		940	380	1500	8.3				26		60	450	
CP2-RE05-SP03	10				8.8														
CP2-RE05-SP03	20				9.7				14	8.5	12		6.2				8.6		
CP2-RE05-SP04	10				9.1														
CP2-RE05-SP04	20				14														
CP2-RE05-SP05	10									6.8							5.4		
CP2-RE05-SP05	20								6.2								5.3		
CP2-RE05-SP05	40								4.8	7.0								13	
CP2-RE05-SP06	10	50								11						5.7	8.2		
CP2-RE05-SP06	20	19								6.7	5.4								
CP2-RE05-SP06	40									23	9.8						9.2		
CP2-RE05-SP07	10								28	32						7.4	9.1		
CP2-RE05-SP07	20								27	53						19	28	7.2	
CP2-RE05-SP08	10								23	23							5.6		
CP2-RE05-SP08	20			8.0					29	64							7.8		
CP2-RE05-SP08	40									12									
CP2-RE05-SP09	10																		
CP2-RE05-SP09	20			4.7					35	44									
CP2-RE05-SP10	10																		
CP2-RE05-SP10	20																		
F(C)-SP05	20			5.5	14				13							21	7.3		
F(C)-SP06	10		14	9.2	160	66			34	5.4	300	5.9	180	57		81	58		
F(C)-SP06	20		7.7	4.5	31	26			36	7.4	110		76	32		68	32		
OS1-F1-SP01	10									4.5					330	7.5	6.6		
OS1-F1-SP01	20								7.0	18	7.6				290	26	17		

		Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard																	
Unit Risk																	
59F-SP33	10	NA	4.7 E-5	4.5 E-3	2.0 E-5	NA	5.2 E-6	1.2 E-7	6.2 E-4	5.7 E-6	6.8 E-8	1.8 E-6	3.5 E-6	NA	1.1 E-6	NA	NA
59F-SP33	20	NA	NA	1.9 E-2	NA	NA	NA	NA	1.4 E-4	NA	NA	9.9 E-7	NA	NA	9.3 E-7	NA	NA
59F-SP34	10	NA	3.9 E-5	4.8 E-2	NA	NA	3.5 E-6	NA	2.1 E-4	5.2 E-6	NA	4.3 E-6	NA	NA	1.4 E-6	NA	NA
59F-SP34	15	NA	NA	2.3 E-2	NA	NA	NA	NA	4.8 E-4	NA	5.9 E-8	1.6 E-6	NA	NA	4.4 E-7	NA	3.8 E-8
59F-SP35	10	8.4 E-6	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	8.1 E-7	NA	4.0 E-7
59F-SP35	20	NA	NA	1.8 E-1	NA	NA	2.4 E-6	NA	4.1 E-5	NA	NA	8.3 E-7	NA	NA	1.1 E-6	NA	7.4 E-8
59F-SP36	10	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	4.6 E-7	NA	NA
59F-SP36	20	NA	6.4 E-6	2.2 E-5	2.1 E-6	NA	NA	NA	NA	4.0 E-7	NA	7.4 E-8	NA	NA	9.3 E-8	NA	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	5.2 E-8	5.2 E-7	1.8 E-6	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	4.1 E-9	4.2 E-7	9.6 E-7	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA
60F-SP08	20	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	2.0 E-7	1.6 E-8	8.0 E-8	4.6 E-7	NA	3.3 E-7	NA	NA
61F-SP03	10	NA	NA	8.8 E-4	NA	NA	NA	2.2 E-8	1.7 E-5	NA	1.6 E-8	7.3 E-7	8.0 E-7	NA	1.1 E-7	NA	NA
61F-SP03	20	NA	NA	1.9 E-4	NA	NA	NA	1.0 E-8	8.3 E-6	NA	8.2 E-9	3.0 E-7	9.6 E-7	NA	4.9 E-8	NA	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	NA	NA	5.4 E-8	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	8.6 E-7	NA	5.7 E-8	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	3.0 E-7	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	6.9 E-7	NA	4.5 E-8	NA	NA
62F-SP01	20	NA	1.6 E-4	NA	6.6 E-5	NA	1.9 E-6	3.4 E-8	3.9 E-5	1.6 E-5	1.2 E-8	3.2 E-7	NA	NA	5.7 E-8	NA	NA
62F-SP02	20	NA	5.2 E-6	NA	NA	NA	NA	1.5 E-8	1.6 E-5	3.6 E-7	2.1 E-8	4.7 E-7	NA	NA	1.5 E-7	NA	NA
62F-SP03	20	NA	5.7 E-6	NA	NA	NA	NA	1.1 E-8	2.3 E-5	4.3 E-7	1.1 E-8	3.8 E-7	NA	NA	1.6 E-7	NA	NA
62F-SP04	10	NA	8.5 E-6	NA	3.0 E-6	NA	8.6 E-7	NA	2.0 E-5	5.2 E-7	9.2 E-9	1.8 E-7	NA	NA	1.1 E-7	NA	NA
62F-SP05	10	NA	4.7 E-4	NA	2.0 E-4	NA	1.0 E-5	1.1 E-7	9.8 E-5	4.8 E-5	1.1 E-8	1.6 E-6	1.9 E-6	NA	4.9 E-7	NA	NA
62F-SP05	20	NA	2.2 E-4	NA	1.1 E-4	NA	3.8 E-6	4.9 E-8	4.4 E-5	2.6 E-5	2.7 E-8	5.6 E-7	7.6 E-7	NA	6.9 E-8	NA	NA
62F-SP06	10	NA	6.2 E-6	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	6.7 E-8	NA	NA
62F-SP06	20	NA	2.6 E-6	NA	NA	NA	1.9 E-7	NA	4.4 E-6	1.8 E-7	1.7 E-8	1.1 E-7	1.2 E-6	NA	3.0 E-7	NA	NA
62F-SP07	10	NA	NA	NA	NA	3.6 E-8	NA	NA	1.3 E-5	NA	NA	2.4 E-7	7.8 E-7	4.0 E-7	1.2 E-7	NA	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	3.1 E-8	NA	NA
CP2-07-SP01	10	1.1 E-5	NA	2.7 E-1	NA	NA	7.6 E-6	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA
CP2-07-SP01	20	NA	NA	5.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP01	40	NA	NA	6.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	1.1 E-8	3.9 E-7	7.2 E-7	NA	8.1 E-8	NA	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	5.9 E-7	NA	2.5 E-5	NA	NA	1.9 E-7	1.3 E-6	NA	3.9 E-7	NA	NA
CP2-07-SP04	10	NA	NA	2.0 E-4	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	2.2 E-6	NA	1.7 E-6	NA	NA
CP2-07-SP04	20	NA	NA	1.1 E-4	NA	NA	9.5 E-7	NA	NA	NA	NA	1.6 E-7	2.8 E-6	NA	1.3 E-6	NA	NA
CP2-07-SP05	10	NA	NA	1.4 E-5	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	4.0 E-6	NA	2.9 E-7	2.5 E-6	NA
CP2-07-SP05	20	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	1.3 E-7	7.5 E-7	NA
CP2-07-SP06	10	1.7 E-6	4.4 E-6	5.1 E-4	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	1.9 E-6	NA	3.6 E-7	1.0 E-5	NA
CP2-07-SP06	20	7.7 E-7	NA	9.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	2.8 E-7	5.3 E-6	NA
CP2-07-SP07	10	NA	NA	NA	NA	NA	7.1 E-7	NA	1.6 E-5	NA	2.5 E-8	3.0 E-7	2.1 E-6	NA	1.5 E-7	NA	NA
CP2-07-SP07	20	NA	NA	4.6 E-6	NA	NA	NA	NA	4.7 E-6	NA	1.1 E-8	1.0 E-7	5.1 E-7	NA	9.8 E-8	NA	NA
CP2-07-SP08	10	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	5.0 E-8	NA	NA
CP2-07-SP08	20	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	6.9 E-8	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	2.2 E-8	NA	8.5 E-9	3.4 E-6	NA	NA	4.7 E-7	NA	NA	4.6 E-8	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	1.6 E-7	2.7 E-6	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	7.0 E-8	2.9 E-8	NA	NA	NA	4.1 E-7	2.8 E-6	NA	1.1 E-8	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	1.8 E-7	5.4 E-6	NA	4.5 E-7	NA	NA
CP2-07-SP10	20	NA	NA	5.2 E-6	NA	NA	NA	3.8 E-8	5.2 E-6	NA	NA	2.8 E-7	7.1 E-6	NA	1.8 E-7	NA	NA
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	4.9 E-9	1.6 E-6	NA	NA	4.4 E-8	6.4 E-7	NA	5.5 E-8	NA	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	3.0 E-8	8.3 E-6	NA	NA	4.7 E-7	8.0 E-7	NA	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	1.2 E-6	NA	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	2.1 E-7	4.0 E-6	NA	5.0 E-7	NA	NA

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index															
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**
Unit Hazard																	
Unit Risk																	
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	7.1 E-7	NA	4.1 E-8	NA	NA
CP2-07-SP12	40	3.0 E-7	NA	2.1 E-5	NA	NA	NA	1.1 E-8	2.3 E-6	NA	NA	1.1 E-7	2.6 E-6	NA	4.3 E-7	NA	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	1.7 E-7	2.2 E-6	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	2.7 E-7	1.4 E-6	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	6.3 E-8	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	2.6 E-8	NA	1.3 E-8	3.4 E-6	NA	NA	5.9 E-7	NA	NA	1.7 E-7	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	6.6 E-7	NA	2.5 E-7	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	2.1 E-5	1.5 E-4	6.6 E-6	NA	5.7 E-7	2.0 E-8	9.3 E-5	2.0 E-6	2.2 E-8	1.0 E-6	7.8 E-7	NA	2.0 E-7	NA	NA
CP2-08-SP11	20	NA	9.5 E-6	2.1 E-5	NA	NA	3.8 E-7	2.3 E-8	1.7 E-4	9.0 E-7	3.6 E-8	1.2 E-6	6.2 E-7	NA	1.1 E-7	NA	NA
CP2-08-SP12	10	NA	8.5 E-6	1.1 E-5	NA	NA	NA	NA	9.8 E-5	6.2 E-7	2.9 E-8	6.5 E-7	7.0 E-7	NA	1.2 E-7	NA	NA
CP2-08-SP12	20	NA	NA	1.3 E-3	NA	NA	NA	NA	6.7 E-6	NA	7.5 E-9	1.3 E-7	NA	NA	1.1 E-7	NA	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA
CP2-RE05-SP01	10	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	20	NA	NA	6.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	40	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA
CP2-RE05-SP02	10	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA
CP2-RE05-SP02	20	NA	NA	5.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	40	1.6 E-7	NA	NA	NA	1.3 E-8	NA	4.4 E-9	1.6 E-6	NA	NA	1.5 E-7	1.1 E-6	NA	1.8 E-7	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA
CP2-RE05-SP03	20	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	1.3 E-7	NA	NA	5.3 E-8	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	3.0 E-8	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	NA	NA	1.7 E-8	NA	NA
CP2-RE05-SP05	10	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	1.1 E-7	NA	NA
CP2-RE05-SP05	20	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA
CP2-RE05-SP05	40	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA
CP2-RE05-SP06	10	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA
CP2-RE05-SP06	20	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA
CP2-RE05-SP06	40	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	3.0 E-8	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	7.6 E-8	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	5.9 E-6	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
CP2-RE05-SP08	10	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-7	NA	2.3 E-7	NA	NA
CP2-RE05-SP08	20	NA	NA	8.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	NA	2.0 E-7	NA	NA
CP2-RE05-SP08	40	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA
CP2-RE05-SP09	10	NA	NA	8.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	7.5 E-6	NA	NA	NA	NA	4.1 E-6	NA	4.8 E-9	NA	NA	NA	4.1 E-8	NA	NA
F(C)-SP06	10	NA	1.7 E-4	NA	6.6 E-5	NA	1.4 E-6	3.3 E-8	4.1 E-5	1.5 E-5	2.1 E-8	2.6 E-7	NA	NA	2.3 E-7	NA	NA
F(C)-SP06	20	NA	5.2 E-5	NA	1.9 E-5	NA	1.6 E-7	NA	5.2 E-6	4.3 E-6	1.2 E-8	8.3 E-8	5.0 E-7	NA	1.5 E-7	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	1.6 E-7	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	4.1 E-7	NA	8.1 E-8	NA	NA

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard																				
Unit Risk																				
59F-SP33	10	NA	NA	2.7 E-8	1.8 E-6	3.1 E-7	5.2 E-7	NA	5.3 E-6	1.5 E-6	1.1 E-5	NA	5.7 E-6	2.4 E-6	NA	3.4 E-6	3.3 E-6	NA	6.0 E-7	5.3 E-3
59F-SP33	20	NA	NA	NA	6.6 E-7	NA	1.1 E-5	NA	4.5 E-7	1.2 E-6	NA	NA	NA	NA	NA	1.6 E-6	7.9 E-7	NA	1.5 E-6	1.9 E-2
59F-SP34	10	NA	NA	NA	1.4 E-6	NA	NA	NA	9.6 E-7	3.3 E-6	5.0 E-6	NA	NA	NA	NA	3.4 E-6	1.7 E-6	NA	2.2 E-6	4.8 E-2
59F-SP34	15	NA	NA	NA	4.9 E-7	NA	NA	NA	4.3 E-7	6.7 E-7	NA	NA	NA	NA	NA	4.3 E-6	9.5 E-7	NA	1.6 E-6	2.4 E-2
59F-SP35	10	NA	NA	4.8 E-8	6.9 E-7	NA	NA	NA	1.2 E-6	9.1 E-6	NA	NA	NA	NA	NA	3.4 E-6	NA	2.4 E-6	2.3 E-5	1.0 E-1
59F-SP35	20	1.0 E-5	NA	2.2 E-8	3.4 E-7	NA	NA	NA	1.0 E-6	3.3 E-6	NA	NA	NA	NA	NA	1.6 E-6	4.9 E-7	5.1 E-7	1.8 E-5	1.8 E-1
59F-SP36	10	1.5 E-5	NA	NA	2.1 E-7	NA	7.2 E-6	NA	1.2 E-7	6.6 E-7	4.6 E-7	NA	NA	NA	NA	NA	5.7 E-7	2.3 E-7	NA	3.9 E-5
59F-SP36	20	1.4 E-6	NA	NA	1.2 E-7	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	4.2 E-8	NA	NA	3.3 E-5
59F-SP37	10	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	1.3 E-7	2.9 E-7	NA	NA	NA	NA	4.8 E-7	4.6 E-7	NA	NA	3.9 E-6
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	5.7 E-5	2.1 E-7	1.2 E-7	6.8 E-8	NA	5.8 E-5
59F-SP38	20	NA	NA	NA	3.7 E-8	NA	NA	NA	5.6 E-8	2.3 E-7	1.7 E-7	NA	NA	NA	2.1 E-5	3.1 E-7	2.2 E-7	4.4 E-8	NA	2.4 E-5
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	2.4 E-7
59F-SP39	20	1.0 E-6	NA	NA	NA	NA	1.6 E-6	1.3 E-9	NA	NA	NA	1.5 E-8	NA	NA	3.9 E-6	NA	3.9 E-8	2.0 E-7	NA	1.7 E-5
60F-SP08	10	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	5.3 E-7
60F-SP08	20	7.5 E-7	NA	2.7 E-9	2.1 E-7	NA	NA	NA	1.3 E-7	1.0 E-7	NA	NA	NA	NA	NA	2.2 E-7	2.3 E-7	NA	NA	5.8 E-6
61F-SP03	10	NA	NA	4.6 E-9	1.4 E-7	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	4.2 E-7	3.8 E-7	1.1 E-7	NA	9.0 E-4
61F-SP03	20	5.4 E-7	3.6 E-8	1.8 E-9	7.4 E-8	NA	NA	NA	NA	5.5 E-8	2.1 E-7	NA	NA	NA	NA	2.3 E-7	2.6 E-7	1.5 E-7	NA	2.0 E-4
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	2.1 E-7	2.1 E-7	NA	NA	7.9 E-6
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	1.1 E-7	NA	NA	4.6 E-6
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	1.0 E-7	6.3 E-8	NA	1.5 E-6
61F-SP05	20	NA	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	5.3 E-7
61F-SP06	10	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	1.1 E-7	NA	5.2 E-7
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	1.4 E-7	1.3 E-7	NA	NA	NA	NA	NA	1.2 E-7	3.6 E-8	NA	1.3 E-6
62F-SP01	20	NA	1.3 E-7	5.8 E-9	4.2 E-7	5.1 E-7	NA	1.6 E-9	8.6 E-8	3.7 E-8	2.3 E-5	8.7 E-9	1.2 E-5	6.1 E-6	8.4 E-7	8.8 E-7	2.4 E-6	NA	NA	3.3 E-4
62F-SP02	20	NA	NA	4.0 E-9	1.6 E-7	NA	NA	NA	1.0 E-7	NA	1.7 E-7	NA	NA	NA	NA	4.2 E-7	1.6 E-7	NA	NA	2.3 E-5
62F-SP03	20	NA	NA	3.0 E-9	1.4 E-7	NA	1.7 E-7	9.2 E-9	4.8 E-8	NA	1.8 E-7	NA	1.5 E-7	NA	NA	3.1 E-7	8.7 E-8	2.9 E-8	NA	3.1 E-5
62F-SP04	10	NA	NA	4.7 E-9	2.7 E-7	NA	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	3.2 E-7	6.3 E-8	NA	NA	3.4 E-5
62F-SP05	10	NA	4.0 E-7	2.0 E-8	1.5 E-6	1.9 E-6	2.4 E-7	NA	3.1 E-7	2.7 E-7	8.4 E-5	3.9 E-8	4.2 E-5	1.9 E-5	3.7 E-6	2.7 E-6	1.3 E-5	NA	NA	1.0 E-3
62F-SP05	20	NA	2.3 E-7	1.2 E-8	6.9 E-7	9.8 E-7	8.0 E-8	NA	2.9 E-7	9.4 E-8	4.2 E-5	1.4 E-8	2.2 E-5	1.0 E-5	1.7 E-6	1.7 E-6	5.5 E-6	NA	NA	4.9 E-4
62F-SP06	10	NA	NA	NA	3.9 E-7	NA	NA	NA	5.3 E-8	NA	NA	NA	NA	NA	NA	2.9 E-7	1.7 E-7	NA	NA	7.5 E-6
62F-SP06	20	NA	NA	9.1 E-9	1.6 E-7	NA	NA	1.5 E-9	2.9 E-7	2.9 E-7	1.2 E-7	NA	NA	NA	NA	3.8 E-7	3.9 E-7	NA	NA	1.1 E-5
62F-SP07	10	8.4 E-7	NA	3.4 E-9	1.1 E-7	NA	NA	NA	2.1 E-7	1.5 E-6	NA	NA	NA	NA	NA	1.4 E-6	3.2 E-7	5.1 E-8	NA	1.9 E-5
62F-SP07	20	NA	NA	NA	NA	NA	1.2 E-7	2.9 E-9	1.5 E-8	2.1 E-7	3.2 E-7	NA	1.5 E-7	NA	NA	6.9 E-8	9.5 E-8	NA	NA	1.3 E-6
CP2-07-SP01	10	4.6 E-4	NA	NA	4.7 E-6	NA	1.1 E-5	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	5.3 E-5	3.0 E-6	1.2 E-6	2.8 E-3	2.7 E-1
CP2-07-SP01	20	7.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	5.0 E+0
CP2-07-SP01	40	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-1
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	1.6 E-4
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	2.4 E-6	NA	NA	1.1 E-7	NA	5.7 E-6	NA	1.1 E-7	9.7 E-8	NA	NA	NA	NA	2.3 E-6	5.3 E-7	3.6 E-7	NA	NA	4.6 E-5
CP2-07-SP03	20	6.1 E-7	NA	NA	4.9 E-8	NA	5.2 E-7	NA	2.2 E-7	6.6 E-7	NA	NA	NA	NA	NA	7.2 E-7	2.5 E-7	NA	NA	3.1 E-5
CP2-07-SP04	10	2.4 E-5	NA	3.9 E-8	1.3 E-7	NA	NA	NA	1.1 E-6	6.7 E-6	NA	NA	NA	NA	NA	NA	3.6 E-7	5.8 E-8	NA	2.4 E-4
CP2-07-SP04	20	4.3 E-5	NA	7.7 E-9	5.4 E-8	NA	NA	NA	4.3 E-7	1.7 E-6	NA	NA	NA	NA	NA	1.5 E-7	2.5 E-7	NA	NA	1.6 E-4
CP2-07-SP05	10	2.3 E-5	NA	NA	8.3 E-8	NA	6.2 E-6	NA	6.4 E-8	7.5 E-7	5.0 E-7	1.1 E-7	NA	NA	8.3 E-6	NA	4.1 E-7	1.6 E-7	NA	6.2 E-5
CP2-07-SP05	20	2.1 E-5	NA	NA	NA	NA	5.2 E-6	NA	4.0 E-8	1.6 E-7	2.0 E-7	1.7 E-8	NA	NA	3.9 E-6	NA	2.7 E-7	1.0 E-7	NA	3.9 E-5
CP2-07-SP06	10	1.6 E-4	NA	NA	NA	4.9 E-8	3.3 E-6	NA	NA	3.9 E-7	1.8 E-6	1.4 E-6	6.2 E-7	NA	2.1 E-5	NA	7.9 E-7	6.9 E-7	NA	7.2 E-4
CP2-07-SP06	20	3.0 E-5	NA	NA	NA	NA	5.0 E-6	NA	NA	4.5 E-7	3.8 E-7	2.1 E-7	NA	NA	3.3 E-6	NA	3.5 E-7	1.5 E-7	NA	1.4 E-4
CP2-07-SP07	10	1.3 E-6	NA	NA	1.5 E-7	NA	2.4 E-6	NA	2.6 E-7	3.8 E-7	3.6 E-7	NA	NA	NA	1.5 E-5	6.9 E-7	6.7 E-7	NA	NA	4.0 E-5
CP2-07-SP07	20	1.0 E-6	NA	NA	4.4 E-8	NA	1.3 E-6	NA	1.0 E-7	1.3 E-7	2.0 E-7	NA	NA	NA	7.3 E-7	3.3 E-7	1.9 E-7	NA	NA	1.4 E-5
CP2-07-SP08	10	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5
CP2-07-SP08	20	NA	NA	NA	4.9 E-8	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6
CP2-07-SP08	30	NA	NA	NA	7.7 E-8	NA	NA	2.6 E-8	3.4 E-8	2.2 E-7	1.1 E-7	NA	NA	NA	7.5 E-7	2.9 E-7	2.1 E-7	6.5 E-7	NA	6.4 E-6
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	3.4 E-6	1.3 E-7	1.4 E-7	NA	NA	3.8 E-6
CP2-07-SP09	20	NA	NA	NA	2.4 E-8	NA	NA	NA	1.5 E-7	4.2 E-7	1.8 E-7	NA	NA	NA	2.6 E-6	1.7 E-7	4.0 E-7	NA	NA	6.8 E-6
CP2-07-SP09	34	NA	NA	1.6 E-9	3.6 E-8	1.0 E-8	NA	NA	1.6 E-7	6.0 E-7	1.6 E-7	NA	7.3 E-8	NA	1.7 E-6	1.9 E-7	4.2 E-7	NA	NA	6.6 E-6
CP2-07-SP10	10	8.6 E-7	NA	6.1 E-9	5.9 E-8	NA	NA	NA	8.0 E-7	4.5 E-6	3.6 E-7	NA	NA	NA	NA	1.1 E-7	3.5 E-7	NA	NA	1.3 E-5
CP2-07-SP10	20	2.1 E-6	NA	NA	2.2 E-7	NA	NA	NA	1.4 E-6	1.4 E-5	2.0 E-7	NA	NA	NA	NA	1.8 E-7	2.7 E-7	NA	NA	3.7 E-5
CP2-07-SP10	40	NA	NA	NA	5.3 E-8	NA	NA	NA	1.3 E-7	6.6 E-7	1.1 E-7	NA	NA	NA	NA	2.8 E-8	5.6 E-8	NA	NA	3.3 E-6
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	1.9 E-6	NA	1.3 E-7	NA	NA	1.2 E-5
CP2-07-SP11	20	NA	NA	NA	NA	1.2 E-8	NA	NA	6.7 E-8	3.3 E-7	1.6 E-7	NA	NA	NA	1.2 E-6	1.1 E-7	2.7 E-7	NA	NA	3.5 E-6
CP2-07-SP12	10	1.2 E-6	NA	1.0 E-8	1.6 E-7	2.1 E-8	2.0 E-7	NA	8.6 E-7	6.1 E-6	5.5 E-7	NA	NA	NA	NA	1.1 E-7	3.3 E-7	NA	NA	1.4 E-5

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard																				
Unit Risk																				
CP2-07-SP12	20	NA	NA	NA	2.7 E-8	NA	1.9 E-7	NA	3.7 E-8	1.4 E-7	1.9 E-7	NA	NA	NA	NA	NA	9.5 E-8	4.4 E-8	NA	1.6 E-6
CP2-07-SP12	40	1.3 E-6	NA	NA	1.2 E-7	NA	1.7 E-7	NA	6.3 E-7	6.3 E-6	1.5 E-7	NA	NA	NA	NA	NA	1.2 E-7	2.7 E-8	NA	3.5 E-5
CP2-07-SP13	10	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	7.0 E-6	4.6 E-7	2.4 E-7	NA	NA	1.7 E-5
CP2-07-SP13	20	NA	NA	NA	5.4 E-8	1.1 E-8	NA	NA	5.1 E-8	2.4 E-7	1.8 E-7	NA	NA	NA	6.2 E-7	1.5 E-7	3.1 E-7	NA	NA	3.3 E-6
CP2-07-SP14	10	NA	NA	NA	1.1 E-7	NA	NA	3.8 E-8	4.0 E-8	1.7 E-7	NA	NA	NA	NA	9.9 E-7	2.3 E-7	1.1 E-6	7.2 E-7	NA	4.1 E-6
CP2-07-SP14	18.5	NA	NA	3.4 E-9	1.0 E-7	NA	NA	1.5 E-8	2.9 E-8	1.5 E-6	2.3 E-7	NA	NA	NA	NA	3.6 E-7	1.7 E-6	2.5 E-7	NA	8.4 E-6
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	6.1 E-9	5.4 E-7	7.0 E-8	NA	NA	3.5 E-7	9.8 E-8	2.7 E-6	8.0 E-8	1.2 E-6	7.7 E-7	NA	2.1 E-6	8.7 E-7	6.4 E-8	NA	2.8 E-4
CP2-08-SP11	20	NA	NA	9.5 E-9	3.9 E-7	2.9 E-8	NA	NA	3.7 E-7	7.4 E-8	1.2 E-6	2.0 E-8	5.0 E-7	NA	NA	2.3 E-6	6.7 E-7	NA	NA	2.0 E-4
CP2-08-SP12	10	1.5 E-6	NA	6.1 E-9	3.4 E-7	NA	NA	NA	1.4 E-7	7.5 E-8	7.2 E-7	3.0 E-8	3.9 E-7	NA	NA	8.2 E-7	4.3 E-7	1.3 E-7	NA	1.2 E-4
CP2-08-SP12	20	6.3 E-7	NA	2.2 E-9	5.4 E-8	NA	NA	NA	NA	4.9 E-8	1.7 E-7	8.3 E-9	NA	NA	NA	2.2 E-7	1.1 E-7	6.9 E-8	NA	1.3 E-3
CP2-08-SP13	10	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	4.2 E-7
CP2-RE05-SP01	10	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	1.0 E-5	3.5 E-1
CP2-RE05-SP01	20	7.5 E-5	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	1.2 E-6	1.9 E-6	NA	1.3 E-6	6.4 E-2
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6
CP2-RE05-SP02	10	5.0 E-5	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	4.4 E-2
CP2-RE05-SP02	20	7.5 E-6	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	1.3 E-6	4.9 E-7	NA	NA	5.8 E-3
CP2-RE05-SP02	40	NA	NA	4.2 E-9	3.2 E-8	5.7 E-9	NA	3.3 E-8	5.1 E-7	5.9 E-6	8.7 E-8	NA	NA	NA	7.3 E-7	NA	2.4 E-7	8.2 E-7	NA	1.1 E-5
CP2-RE05-SP03	10	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-8
CP2-RE05-SP03	20	NA	NA	NA	2.4 E-8	NA	NA	NA	3.7 E-8	6.6 E-8	2.5 E-7	NA	1.5 E-7	NA	NA	NA	6.8 E-8	NA	NA	3.2 E-6
CP2-RE05-SP04	10	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7
CP2-RE05-SP04	20	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	8.6 E-8	NA	NA	4.0 E-4
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	1.2 E-5
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	6.4 E-9	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	5.0 E-6
CP2-RE05-SP06	10	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	1.1 E-7	1.3 E-7	NA	NA	1.4 E-2
CP2-RE05-SP06	20	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	1.0 E-7	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	2.6 E-4
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	5.0 E-7	NA	NA	NA	NA	NA	1.4 E-7	1.4 E-7	NA	NA	2.2 E-5
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	7.2 E-8	4.1 E-7	NA	NA	NA	NA	NA	1.8 E-7	2.2 E-7	2.6 E-8	NA	7.0 E-6
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	3.6 E-7	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	2.6 E-5
CP2-RE05-SP08	20	NA	NA	2.9 E-9	NA	NA	NA	NA	7.8 E-8	5.0 E-7	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	1.0 E-5
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-6
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-6
CP2-RE05-SP09	20	NA	NA	1.7 E-9	NA	NA	NA	NA	9.4 E-8	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-6
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7
F(C)-SP05	20	NA	NA	2.0 E-9	3.4 E-8	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	2.0 E-7	5.8 E-8	NA	NA	1.2 E-5
F(C)-SP06	10	NA	1.2 E-7	6.7 E-9	7.8 E-7	2.7 E-7	NA	NA	1.8 E-7	8.4 E-8	1.3 E-5	1.1 E-8	8.6 E-6	5.4 E-6	NA	1.5 E-6	9.2 E-7	NA	NA	3.2 E-4
F(C)-SP06	20	NA	3.4 E-8	1.6 E-9	7.6 E-8	5.3 E-8	NA	NA	9.6 E-8	5.8 E-8	2.3 E-6	NA	1.8 E-6	1.5 E-6	NA	6.5 E-7	2.5 E-7	NA	NA	8.9 E-5
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-8	NA	NA	NA	NA	3.7 E-5	1.4 E-7	1.0 E-7	NA	NA	3.8 E-5
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	1.4 E-7	1.6 E-7	NA	NA	NA	1.6 E-5	2.5 E-7	1.3 E-7	NA	NA	1.8 E-5

		Incremental Lifetime Cancer Risk														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard																
Unit Risk																
59F-SP33	10	NA	NA	8.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-11	NA	NA	NA
59F-SP33	20	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	10	NA	NA	8.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	15	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	10	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	20	NA	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP36	10	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	NA
59F-SP36	20	NA	NA	4.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-12	NA	NA	NA
61F-SP03	10	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-12	NA	NA	NA
61F-SP03	20	NA	NA	3.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-12	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-12	NA	NA	NA
62F-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	NA
62F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-12	NA	NA	NA
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA
62F-SP07	10	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	9.6 E-12	1.5 E-11	NA	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-12	NA	NA	NA
CP2-07-SP01	10	NA	NA	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA
CP2-07-SP01	20	NA	NA	9.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP01	40	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-12	NA	NA	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA
CP2-07-SP04	10	NA	NA	3.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	NA
CP2-07-SP04	20	NA	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-11	NA	NA	NA
CP2-07-SP05	10	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	NA	NA	6.0 E-11
CP2-07-SP05	20	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	1.8 E-11
CP2-07-SP06	10	NA	NA	9.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	2.5 E-10
CP2-07-SP06	20	NA	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	1.3 E-10
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA
CP2-07-SP07	20	NA	NA	8.5 E-12	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-12	NA	NA	NA
CP2-07-SP08	10	NA	NA	4.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	20	NA	NA	5.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	7.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-11	NA	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-11	NA	NA	NA
CP2-07-SP10	20	NA	NA	9.5 E-12	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-11	NA	NA	NA
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-12	NA	NA	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-12	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	NA	NA	NA

		Incremental Lifetime Cancer Risk														
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**
Unit Hazard																
Unit Risk																
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-12	NA	NA	NA
CP2-07-SP12	40	NA	NA	3.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	NA	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	8.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-12	NA	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-12	NA	NA	NA
CP2-08-SP11	20	NA	NA	3.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-12	NA	NA	NA
CP2-08-SP12	10	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-12	NA	NA	NA
CP2-08-SP12	20	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	10	NA	NA	6.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	20	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	40	NA	NA	5.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	10	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	20	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	40	NA	NA	NA	NA	4.3 E-12	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	10	NA	NA	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-12	NA	NA	NA
CP2-RE05-SP05	20	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	40	NA	NA	9.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	10	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	20	NA	NA	4.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	40	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-12	NA	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	10	NA	NA	4.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA
CP2-RE05-SP08	20	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-12	NA	NA	NA
CP2-RE05-SP08	40	NA	NA	5.8 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	10	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	7.6 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-12	NA	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-12	NA	NA	NA

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																					
Unit Risk																					
59F-SP33	10	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	6.7 E-11	8 E-9
59F-SP33	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	1.7 E-10	4 E-8
59F-SP34	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	2.4 E-10	9 E-8
59F-SP34	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	NA	1.7 E-10	4 E-8
59F-SP35	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	4.1 E-11	2.6 E-9	2 E-7
59F-SP35	20	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	8.6 E-12	2.0 E-9	3 E-7
59F-SP36	10	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-12	NA	3 E-10
59F-SP36	20	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-13	NA	NA	NA	6 E-11
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-12	NA	NA	NA	3 E-11
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	1.8 E-12	NA	1.1 E-12	NA	2 E-10
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-11	2.6 E-12	NA	7.4 E-13	NA	8 E-11
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-13	NA	NA	NA	NA	7 E-13
59F-SP39	20	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-13	NA	NA	1.2 E-11	NA	NA	3.4 E-12	NA	5 E-11
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
60F-SP08	20	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-12	NA	NA	NA	2 E-11
61F-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-12	NA	1.9 E-12	NA	2 E-9
61F-SP03	20	NA	8.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-12	NA	2.5 E-12	NA	4 E-10
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-12	NA	NA	NA	2 E-12
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-13	NA	NA	NA	6 E-13
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-12	NA	1 E-11
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-12
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-12	NA	2 E-12
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-13	NA	9 E-12
62F-SP01	20	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	9.7 E-14	NA	NA	2.5 E-12	7.3 E-12	NA	NA	NA	3 E-11
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-12	NA	NA	NA	4 E-12
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-12	NA	4.9 E-13	NA	3 E-12
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-12	NA	NA	NA	3 E-12
62F-SP05	10	NA	NA	NA	NA	NA	6.7 E-11	NA	NA	NA	NA	NA	4.4 E-13	NA	NA	1.1 E-11	2.2 E-11	NA	NA	NA	1 E-10
62F-SP05	20	NA	NA	NA	NA	NA	3.5 E-11	NA	NA	NA	NA	NA	1.6 E-13	NA	NA	5.2 E-12	1.4 E-11	NA	NA	NA	6 E-11
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-12	NA	NA	NA	2 E-12
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-12	NA	NA	NA	2 E-11
62F-SP07	10	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	8.6 E-13	NA	6 E-11
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-13	NA	NA	NA	4 E-12
CP2-07-SP01	10	NA	6.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-10	NA	2.0 E-11	3.0 E-7	8 E-7
CP2-07-SP01	20	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-7	9 E-6
CP2-07-SP01	40	NA	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	4 E-9
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-07-SP03	10	NA	3.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-12	4.5 E-12	NA	NA	NA	6 E-11
CP2-07-SP03	20	NA	9.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-12	NA	NA	NA	3 E-11
CP2-07-SP04	10	NA	3.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-13	NA	7 E-10
CP2-07-SP04	20	NA	6.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-12	NA	NA	NA	9 E-10
CP2-07-SP05	10	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-12	NA	NA	2.5 E-11	NA	NA	2.7 E-12	NA	5 E-10
CP2-07-SP05	20	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-13	NA	NA	1.2 E-11	NA	NA	1.7 E-12	NA	4 E-10
CP2-07-SP06	10	NA	2.4 E-9	NA	NA	NA	1.7 E-12	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	6.4 E-11	NA	NA	1.2 E-11	NA	4 E-9
CP2-07-SP06	20	NA	4.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-12	NA	NA	1.0 E-11	NA	NA	2.5 E-12	NA	8 E-10
CP2-07-SP07	10	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-11	5.7 E-12	NA	NA	NA	9 E-11
CP2-07-SP07	20	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	2.8 E-12	NA	NA	NA	3 E-11
CP2-07-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
CP2-07-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-12
CP2-07-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-12	2.4 E-12	NA	1.1 E-11	NA	2 E-11
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	1.1 E-12	NA	NA	NA	1 E-11
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-12	1.4 E-12	NA	NA	NA	4 E-11
CP2-07-SP09	34	NA	NA	NA	NA	NA	3.6 E-13	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-12	1.6 E-12	NA	NA	NA	4 E-11
CP2-07-SP10	10	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-13	NA	NA	NA	8 E-11
CP2-07-SP10	20	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-12	NA	NA	NA	1 E-10
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-13	NA	NA	NA	8 E-12
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-12	NA	NA	NA	NA	2 E-11
CP2-07-SP11	20	NA	NA	NA	NA	NA	4.3 E-13	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-12	9.6 E-13	NA	NA	NA	2 E-11
CP2-07-SP12	10	NA	1.9 E-11	NA	NA	NA	7.6 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-13	NA	NA	NA	7 E-11

Table 5.6-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**Chloroethane**	**Chloroform**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																					
Unit Risk																					
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-13	NA	9 E-12
CP2-07-SP12	40	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-13	NA	9 E-11
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-11	3.8 E-12	NA	NA	NA	5 E-11
CP2-07-SP13	20	NA	NA	NA	NA	NA	3.9 E-13	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-12	1.3 E-12	NA	NA	NA	2 E-11
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-12	1.9 E-12	NA	1.2 E-11	NA	2 E-11
CP2-07-SP14	18.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-12	NA	4.3 E-12	NA	2 E-11
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-12
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP11	10	NA	NA	NA	NA	NA	2.5 E-12	NA	NA	NA	NA	NA	8.9 E-13	NA	NA	NA	1.8 E-11	NA	1.1 E-12	NA	3 E-10
CP2-08-SP11	20	NA	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	NA	NA	2.2 E-13	NA	NA	NA	1.9 E-11	NA	NA	NA	7 E-11
CP2-08-SP12	10	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-13	NA	NA	NA	6.9 E-12	NA	2.2 E-12	NA	6 E-11
CP2-08-SP12	20	NA	9.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-14	NA	NA	NA	1.8 E-12	NA	1.2 E-12	NA	2 E-9
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP01	10	NA	5.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	1.1 E-9	6 E-7
CP2-RE05-SP01	20	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	1.4 E-10	1 E-7
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-12
CP2-RE05-SP02	10	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	8 E-8
CP2-RE05-SP02	20	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	1 E-8
CP2-RE05-SP02	40	NA	NA	NA	NA	NA	2.0 E-13	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	NA	1.4 E-11	NA	3 E-11
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-13	NA	9 E-12
CP2-RE05-SP06	10	NA	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-13	NA	NA	NA	3 E-8
CP2-RE05-SP06	20	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-12	NA	NA	NA	1 E-12
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-12	NA	4.4 E-13	NA	2 E-12
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11
CP2-RE05-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-12
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
CP2-RE05-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-12
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
F(C)-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-12	NA	NA	NA	2 E-11
F(C)-SP06	10	NA	NA	NA	NA	NA	9.6 E-12	NA	NA	NA	NA	NA	1.2 E-13	NA	NA	NA	1.3 E-11	NA	NA	NA	2 E-11
F(C)-SP06	20	NA	NA	NA	NA	NA	1.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-12	NA	NA	NA	1 E-11
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	1.2 E-12	NA	NA	NA	1 E-10
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	2.1 E-12	NA	NA	NA	6 E-11

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.6-7) x the unit hazard or unit risk for the chemical).

Table 5.6-17 ***Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker***
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Antimony	1.0 E+0	2.4 E-3	0.0 E+0	4 E-7	2.4 E-3	NA	NA	NA	NA
Barium	1.0 E+0	4.9 E-6	0.0 E+0	1 E-6	5.9 E-6	NA	NA	NA	NA
Cadmium	1.0 E+0	9.8 E-4	2.6 E-4	1 E-7	1.2 E-3	NA	NA	7.7 E-10	7.7 E-10
Chromium VI	1.0 E+0	3.3 E-4	0.0 E+0	7 E-5	3.9 E-4	NA	NA	2.6 E-8	2.6 E-8
Iron	1.0 E+0	1.4 E-6	0.0 E+0	NA	1.4 E-6	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	1.0 E+0	3.3 E-3	0.0 E+0	2 E-6	3.3 E-3	NA	NA	NA	NA
Molybdenum	1.0 E+0	2.0 E-4	0.0 E+0	3 E-8	2.0 E-4	NA	NA	NA	NA
Perchlorate	1.0 E+0	1.4 E-3	0.0 E+0	NA	1.4 E-3	NA	NA	NA	NA
Semivolatile Organic Compounds									
4,4'-DDD	1.0 E+0	NA	NA	NA	NA	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
4,4'-DDT	1.0 E+0	2.0 E-3	3.9 E-4	3 E-7	2.3 E-3	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
Aldrin	1.0 E+0	3.3 E-2	8.6 E-3	5 E-6	4.1 E-2	5.9 E-6	1.6 E-6	8.7 E-10	7.5 E-6
delta-BHC	1.0 E+0	3.3 E-3	8.6 E-4	5 E-7	4.1 E-3	4.5 E-7	1.2 E-7	6.7 E-11	5.7 E-7
Dieldrin	1.0 E+0	2.0 E-2	5.2 E-3	3 E-6	2.5 E-2	5.6 E-6	1.5 E-6	8.2 E-10	7.1 E-6
Endosulfan II	1.0 E+0	1.6 E-4	1.1 E-4	2 E-8	2.7 E-4	NA	NA	NA	NA
Endrin	1.0 E+0	3.3 E-3	8.6 E-4	5 E-7	4.1 E-3	NA	NA	NA	NA
Heptachlor epoxide	1.0 E+0	7.5 E-2	2.0 E-2	1 E-5	9.5 E-2	3.2 E-6	8.4 E-7	4.7 E-10	4.0 E-6
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	2.6 E-7	2.2 E-7	3.8 E-11	4.7 E-7
Benzo(a)pyrene	1.0 E+0	NA	NA	NA	NA	4.2 E-6	3.6 E-6	2.0 E-10	7.8 E-6
Benzo(b & k)fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Benzo(b)fluoranthene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Benzo(ghi)perylene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Benzo(k)fluoranthene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
Chrysene	1.0 E+0	NA	NA	NA	NA	4.2 E-8	3.6 E-8	2.0 E-12	7.8 E-8
Dibenz(a,h)anthracene	1.0 E+0	NA	NA	NA	NA	2.6 E-6	2.2 E-6	2.1 E-10	4.7 E-6
Di-n-butyl phthalate	1.0 E+0	9.8 E-6	6.5 E-6	1 E-9	1.6 E-5	NA	NA	NA	NA
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	4 E-9	4.5 E-5	NA	NA	NA	NA
Hexanedioic Acid, dioctylester	1.0 E+0	1.6 E-6	1.1 E-6	2 E-10	2.7 E-6	4.2 E-10	2.8 E-10	6.2 E-14	7.0 E-10
Indeno(1,2,3-cd)pyrene	1.0 E+0	NA	NA	NA	NA	4.2 E-7	3.6 E-7	2.0 E-11	7.8 E-7
PCB-1248	1.0 E+0	4.9 E-2	4.5 E-2	7 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
PCB-1254	1.0 E+0	4.9 E-2	4.5 E-2	7 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
Pendimethalin (Prowl)	1.0 E+0	2.4 E-5	1.6 E-5	4 E-9	4.1 E-5	NA	NA	NA	NA
Pentachlorophenol	1.0 E+0	3.3 E-5	2.2 E-5	5 E-9	5.4 E-5	4.2 E-8	2.8 E-8	9.3 E-13	7.0 E-8

Table 5.6-17 ***Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker***
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Phenanthrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	3 E-9	5.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Volatile Organic Compounds									
1,2-Dichloroethane	1.0 E+0	4.9 E-5	0.0 E+0	4 E-2	3.6 E-2	3.2 E-8	0.0 E+0	1.6 E-6	1.7 E-6

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.6-18 *Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker*
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Bromodichloromethane	1.0 E+0	9.8 E+0	9.1 E-3
Carbon Tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
Chloroethane	1.0 E+0	6.8 E-2	NA
Ethylbenzene	1.0 E+0	6.8 E-1	6.1 E-4
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Methyl tert-butyl ether	1.0 E+0	2.3 E-1	6.4 E-5
Tetrachloroethylene	1.0 E+0	2.0 E+1	1.5 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	4.8 E-4
Trichloroethylene	1.0 E+0	1.2 E+0	4.9 E-4
Vinyl Chloride	1.0 E+0	6.8 E+0	1.9 E-2
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cumene	1.0 E+0	1.7 E+0	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
Freon 11	1.0 E+0	3.4 E+0	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = hazard quotient
ILCR = incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard		3.6 E-2	NA	NA	2.3 E-3	4.1 E-2	2.4 E-3	5.9 E-6	NA	NA	NA	NA	6.1 E-5	NA	1.2 E-3	NA	4.1 E-3	NA	2.5 E-2
Unit Risk		1.7 E-6	1.4 E-7	1.4 E-7	1.4 E-7	7.5 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.8 E-7	7.7 E-10	7.8 E-8	5.7 E-7	4.7 E-6	7.1 E-6
25F-HA01	1						0.21	52	0.0089	0.010	0.022				0.74	0.012			
25F-HA01	5						0.32	250							0.87				
25F-HA02	1						0.25	210							0.74				
25F-HA02	3						0.25	220							0.73				
25F-HA02	5						0.31	180							0.70				
25F-HA03	1						0.26	200							0.69				
25F-HA03	3						0.23	210							0.71				
25F-HA03	5						0.28	210							0.65				
25F-HA04	1						0.26	160							0.58				
25F-HA04	3						0.28	170							0.57				
25F-HA04	5						0.28	190							0.68				
25F-SB04	1							140							0.57				
25F-SB04	5							74							0.49				
25F-SB05	1							110							0.33				
25F-SB05	5							120							0.38				
25F-SB06	1							90	0.012	0.014	0.036		0.015		0.33	0.016			
25F-SB06	5							97	0.016	0.020	0.040		0.017		0.32	0.018			
25F-SB07	1						0.14	100							0.44				
25F-SB07	5						0.18	130							0.74				
25F-SB08	1																		
25F-SB09	1																		
25F-SB10	1																		
25F-SB11	1																		
25F-SB12	1																		
25F-SB13	1																		
25F-SB14	1																		
25F-SD01	0.25						0.27	170							0.85				
25F-SD01	1.5					0.0012	0.25	170							0.84				
25F-SD01	5	0.0041					0.27	210							0.91				
25F-SD02	0.25						0.33	220											
25F-SD02	1.5						0.32	200											
25F-SD02	5						0.30	200											
25F-SPB01	1							139											
25F-SPB01	5							137											
25F-SPB01	10							109											
25F-SPB02	1							88											
25F-SPB02	5							93											
25F-SPB02	10							82											
25F-SPB03	1							71											
25F-SPB03	5																		
25F-SPB03	6							113											
25F-SPB03	10							109											
59F-SB11	1						0.19	74							0.31				
59F-SB11	5					0.00085	0.22	120							0.46				
59F-SB12	1						0.16	90	0.020	0.014	0.038		0.0077		0.39	0.020			
59F-SB12	5						0.15	76							0.31				
59F-SB13	1						0.30	120											
59F-SB13	5						0.44	220							0.84				
59F-SB14	1						1.3	110											
59F-SB14	5.5						1.0	110											
59F-SB15	1				0.0015		0.13	85							0.31				
59F-SB15	5						0.11	72	0.019	0.013	0.041		0.0089		0.32	0.022			
59F-SB16	1				0.0024	0.00025	1.0	690							0.32				
59F-SB16	5					0.00059	0.14	120							0.30				
59F-SB17	1						0.18	85							0.36				
59F-SB17	5						0.33	84							0.45				
59F-SB18	1						0.18	110							0.51				
59F-SB18	5						0.37	98							0.45				
59F-SB19	1				0.046		0.42	91							0.5		0.035		
59F-SB19	5						0.25	94							0.4				
59F-SB20	1			0.0020	0.0054		0.29	210											
59F-SB20	5.5							130											
59F-SB21	1			0.0041			0.20	620											
59F-SB21	5.5						0.89	100											
59F-SB22	1		2.3		1.2		0.42	1100	0.051	0.039	0.084		0.017		0.61	0.060	0.51		
59F-SB22	5.5						0.30	100							0.41				

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard		3.6 E-2	NA	NA	2.3 E-3	4.1 E-2	2.4 E-3	5.9 E-6	NA	NA	NA	NA	6.1 E-5	NA	1.2 E-3	NA	4.1 E-3	NA	2.5 E-2
Unit Risk		1.7 E-6	1.4 E-7	1.4 E-7	1.4 E-7	7.5 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.8 E-7	7.7 E-10	7.8 E-8	5.7 E-7	4.7 E-6	7.1 E-6
59F-SB23	1					0.001	0.29	120											
59F-SB23	5						0.25	94											
59F-SB25	1		0.0035	0.00065											0.20				0.0014
59F-SB26	1			0.0069	0.013				0.17	0.15		0.23	0.084	0.11	0.22	0.20			
59F-SB27	1		0.0025	0.0010											0.25				0.0015
59F-SB28	1					0.0027									0.21				0.0054
59F-SD01	0.25						0.29	440	0.005		0.015					0.0083			
59F-SD01	1.5						0.31	200											
59F-SD01	5						1.1	180											
59F-SD02	0.25						0.37	220											
59F-SD02	1.5						2.5	260											
59F-SD02	5						0.26	220											
59F-SD03	0.25																		
59F-SD03	1.5																		
59F-SD04	0.25																		
59F-SD04	1.5																		
59F-SD05	0.25																		
59F-SD05	1.5																		
59F-SD06	0.25																		
59F-SD06	1.5																		
59F-SD07	0.25		0.003												0.19				
59F-SNS01	0.5				0.0081			350	0.016	0.019	0.048		0.0091		0.82	0.028	0.0020		
59F-SNS01	2.5				0.0053			320							0.59				
59F-SNS02	0.5				0.0029			490							0.96	0.0057			
59F-SNS02	2.5							250							0.80				
59F-SNS03	0.5				0.026			160	0.0068	0.0068	0.013				0.45	0.0079			
59F-SNS03	2.5							180							0.83				
59F-SNS04	0.5							180							0.46	0.0076			
59F-SPB01	1							147											
59F-SPB01	5																		
59F-SPB01	10																		
59F-SPB02	1							4620											
59F-SPB02	5							267											
59F-SPB02	10							75											
59F-SPB03	1							130											
59F-SPB03	5							131											
59F-SPB03	10							87											
59F-SPB04	1							100											
59F-SPB04A	5							82											
59F-SPB05	1							111											
59F-SPB05	5							101											
59F-SPB05	10							112											
59F-SPB06	1							81											
59F-SPB06	2																		
59F-SPB06	5							115											
59F-SPB06	10							114											
59F-SPB07	1							121											
59F-SPB07	2																		
59F-SPB07	5							108											
59F-SPB07	10							93											
59F-SPB08	1							112											
59F-SPB08	5							124											
59F-SPB08	10																		
60F-SB01	1							121											
60F-SB01	5							102											
60F-SB01	10							123											
60F-SB02	1			0.044	0.088		0.14	63											
60F-SB02	5				0.12		0.72	83											
60F-SB03	1						0.10	67											
60F-SB03	5						0.12	93											
60F-SB04	1						0.08	89											
60F-SB04	5						0.26	120											
60F-SB05	1						0.21	97											
60F-SB05	5						0.16	68											
60F-SNS01	0.5				0.023			110	0.013	0.014	0.058				0.44	0.021			
61F-SB02	1																		

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard		3.6 E-2	NA	NA	2.3 E-3	4.1 E-2	2.4 E-3	5.9 E-6	NA	NA	NA	NA	6.1 E-5	NA	1.2 E-3	NA	4.1 E-3	NA	2.5 E-2
Unit Risk		1.7 E-6	1.4 E-7	1.4 E-7	1.4 E-7	7.5 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.8 E-7	7.7 E-10	7.8 E-8	5.7 E-7	4.7 E-6	7.1 E-6
61F-SB02	3							129											
61F-SB02	5							101											
61F-SB02	10							118											
61F-SB03	1						0.17	120							0.38				
61F-SB03	5						0.15	110	0.014						0.42	0.011			
61F-SB04	1			0.039	0.034														
61F-SB05	1			0.0041	0.0048														
61F-SNS01	0.5						1.1	190	0.023	0.033	0.13				1.6	0.045			
61F-SNS02	0.5							240							1.0				
61F-SPB01	1							132											
61F-SPB01	5							114											
61F-SPB01	10							102											
62F-SB04	1						0.13	100											
62F-SB04	5						0.12	62											
62F-SB05	1			0.0011			0.25	10											
62F-SB05	5						0.19	97											
62F-SB06	2			0.014	0.0028		0.12	64	0.0056	0.0075	0.012				0.082	0.0074	0.0074		0.00092
62F-SB06	5.5							78							0.42				
62F-SB07	5						0.31	77	0.012	0.0081	0.017				0.38	0.015			
62F-SB08	1						0.22	270											
62F-SB08	5						0.22	79											
62F-SB09	1						0.17	110											
62F-SB09	5						0.21	91											
62F-SB10	1						0.28	100											
62F-SB10	5						0.25	110											
62F-SD01	0.25																		
62F-SD01	1.5																		
62F-SD01	5																		
62F-SNS01	0.5							140	0.0049	0.007	0.029				0.68	0.027			
62F-SNS01	2.5							190							0.63				
62F-SNS02	0.5				0.0087		0.31	150			0.039				0.66	0.020			
C201-SPB01	1							157											
C201-SPB01	5							138											
C201-SPB01	10							122											
C207-SB01	1																		
C207-SB01	5																		
C207-SB01	10																		
C208-SB02	1																		
C208-SB02	3																		
C208-SB02	5																		
C208-SB02	10																		
C208-SB03	1						5.67	98											
C208-SB03	5							92											
C208-SB03	10							109											
C208-SB04	1																		
C208-SB04	3																		
C208-SB04	5																		
C208-SB04	10																		
C208-SB05	1																		
C208-SB05	3																		
C208-SB05	5																		
C208-SB05	10																		
C208-SPB01	1							87											
C208-SPB01	3																		
C208-SPB01	6							122											
C208-SPB01	10							88											
C208-SPB06	1																		
C208-SPB06	3																		
C208-SPB06	5																		
C208-SPB06	10																		
CP2-07-SB02	1						0.16	110							0.37				
CP2-07-SB02	5						0.21	120							0.47				
CP2-07-SB03	1						0.21	110											
CP2-07-SB03	5						0.17	100							0.54				
CP2-07-SB04	1			0.0025	0.005		0.19	110							0.39				
CP2-07-SB04	5																		

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard		3.6 E-2	NA	NA	2.3 E-3	4.1 E-2	2.4 E-3	5.9 E-6	NA	NA	NA	NA	6.1 E-5	NA	1.2 E-3	NA	4.1 E-3	NA	2.5 E-2
Unit Risk		1.7 E-6	1.4 E-7	1.4 E-7	1.4 E-7	7.5 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.8 E-7	7.7 E-10	7.8 E-8	5.7 E-7	4.7 E-6	7.1 E-6
CP2-07-SB05	1							120							0.42				
CP2-07-SB05	5							75							0.31				
CP2-07-SB06	1						0.30	77							0.32				
CP2-07-SB08	1						0.20	130							0.57				
CP2-07-SB08	5						0.24	86							0.39				
CP2-07-SB09	1						0.10	47							0.24	0.013			
CP2-07-SB09	5						0.18	81							0.48				
CP2-07-SB10	1							99							0.38				
CP2-07-SB10	5							92							0.26				
CP2-07-SB11	1							110							0.35				
CP2-07-SB11	5							130							0.33				
CP2-07-SB12	1						0.078	79							0.28				
CP2-07-SB12	5						0.12	98							0.36				
CP2-07-SB13	1							87							0.31				
CP2-07-SB13	5							120							0.33				
CP2-07-SB14	1						0.24	80											
CP2-07-SB14	5						0.21	77											
CP2-07-SB15	1						0.17	68							0.29				
CP2-07-SB15	5						0.11	140							0.46				
CP2-07-SB16	1						0.24	110											
CP2-07-SB16	5						0.16	62											
CP2-07-SB17	1						0.22	140											
CP2-07-SB17	5						0.7	130											
CP2-07-SB18	1						0.14	130											
CP2-07-SB18	5						0.13	93											
CP2-07-SB19	1						0.18	100							0.24				
CP2-07-SB19	5						0.17	76											
CP2-07-SB20	1																		
CP2-07-SB20	5																		
CP2-07-SB21	1																		
CP2-07-SB21	5																		
CP2-07-SB22	1																		
CP2-07-SB22	5																		
CP2-07-SB23	1																		
CP2-07-SB23	5																		
CP2-07-SB24	1																		
CP2-07-SB24	5																		
CP2-08-SB09	1						0.24	76											
CP2-08-SB09	5						0.20	130											
CP2-08-SB10	2						0.17	100							0.09				
CP2-08-SB10	6						0.14	110							0.2				
CP2-08-SB11	1						0.34	92							0.46				
CP2-08-SB11	5						0.37	88							0.48				
CP2-08-SB12	1				0.044			63		0.011	0.029		0.0087		0.30	0.020	0.014		
CP2-08-SB12	5						0.72	150											
CP2-08-SB13	1						0.87	120											
CP2-08-SB13	5						0.7	88											
CP2-08-SB14	1						1.4	290											
CP2-08-SB14	5						0.22	120											
CP2-08-SB15	1						0.2	160											
CP2-08-SB15	5							110							0.39				
CP2-08-SNS01	0.5						0.3	220							0.48				
CP2-08-SNS01	2.5						0.39	140							0.40				
CP2-08-SNS02	0.5			0.0042			0.24	97	0.0076	0.0072	0.023				0.40	0.010			
CP2-08-SNS02	2.5						0.19	100							0.42				
CP2-08-SNS03	0.5			0.0051			0.24	83	0.005						0.29	0.0064			
CP2-08-SNS03	2.5						0.25	120							0.43				
CP2-08-SNS04	0.5					0.0074		120	0.12	0.094	0.22		0.027		1.0	0.16		0.0084	
CP2-08-SNS04	2.5							120							0.43				
CP2-RE01-SB01	1				0.0015		0.26	76											
CP2-RE01-SB01	5						0.19	120											
CP2-RE05-SB01	1						0.43	120			0.016				0.38	0.01			
CP2-RE05-SB01	5						1.7	78											
CP2-RE05-SB02	1						1.7	110							0.32				
CP2-RE05-SB02	5						1.6	120											
CP2-RE05-SB03	1						2.1	110							0.32				

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h)anthracene**	**Dieldrin**
Unit Hazard		3.6 E-2	NA	NA	2.3 E-3	4.1 E-2	2.4 E-3	5.9 E-6	NA	NA	NA	NA	6.1 E-5	NA	1.2 E-3	NA	4.1 E-3	NA	2.5 E-2
Unit Risk		1.7 E-6	1.4 E-7	1.4 E-7	1.4 E-7	7.5 E-6	NA	NA	4.7 E-7	7.8 E-6	7.8 E-7	7.8 E-7	NA	7.8 E-7	7.7 E-10	7.8 E-8	5.7 E-7	4.7 E-6	7.1 E-6
CP2-RE05-SB03	5						0.23	77											
CP2-RE05-SB04	1				0.0024		0.27	130											
CP2-RE05-SB04	5			0.0012			0.24	76							0.43				
CP2-RE05-SB05	1						0.22	130											
CP2-RE05-SB05	5						0.2	90							0.51				
CP2-ST07-SB01	1				0.0044			100			0.020				0.38	0.0088			
CP2-ST07-SB01	5							110							0.41				
F(C)-SB01	1							98.7											
F(C)-SB01	5							115											
F(C)-SB01	10							102											
F(c)-SB02	1							71			0.015								
F(c)-SB02	5							100											
F(c)-SB03	1							150											
F(c)-SB03	5						0.7	67											
F(c)-SB04	1						1.5	97							0.37				
F(c)-SB04	5						1.4	65							0.23				
F(c)-SNS01	0.5						0.54	100		0.008	0.014		0.024		0.75	0.0062			
F(c)-SNS02	0.5						0.19	110	0.014	0.014	0.033		0.016		0.46	0.021			
F(c)-SNS03	0.5						0.17	100	0.011	0.012	0.030		0.0099		0.42	0.02			
OS1-F2-SB02	1			0.0021		0.0014													
OS1-F2-SB03	1		0.0036	0.00083															
OS1-F2-SB04	1					0.0009													
OS1-F2-SNS01	0.5				0.004	0.00083	0.21	250							0.079				
OS1-F2-SNS01	2.5			0.048	0.018	0.00084		550							0.32		0.0012		
OS1-F2-SNS02	0.5		0.0071	0.028	0.020	0.0013	0.33	710							0.22				0.0083
OS1-F2-SNS02	2.5				0.0072	0.00087	0.21	98							0.071		0.00091		
OS1-F2-SNS03	0.5			0.0067	0.028		0.79	320	0.0079	0.012	0.022		0.0094		0.48	0.013	0.0028		0.0051
OS1-F2-SNS03	2.5						0.4	130							0.065		0.0011		
OS1-F2-SNS04	0.5		0.0024				0.32	99							0.062		0.00068		
OS1-F2-SNS04	2.5		0.029	0.0056	0.025		0.36	220							0.24		0.0026		0.0029
OS1-F3-SD01	0.25			0.0021											0.19				0.00091

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		1.6 E-5	2.7 E-4	4.1 E-3	4.5 E-5	9.5 E-2	2.7 E-6	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	9.4 E-2	9.4 E-2	4.1 E-5	5.4 E-5	6.1 E-5	5.4 E-6	6.1 E-5
Unit Risk		NA	NA	NA	NA	4.0 E-6	7.0 E-10	7.8 E-7	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	7.0 E-8	NA	NA	NA
25F-HA01	1				0.035					15	1.5	130			27		0.011	1.2	0.029
25F-HA01	5									16	2.1	0.41			0.029			2.8	
25F-HA02	1									11	0.05	0.41						1.8	
25F-HA02	3									11	0.039	0.14						0.91	
25F-HA02	5									10	0.037							0.47	
25F-HA03	1									11	0.051							0.88	
25F-HA03	3									11	0.043	0.19			0.0049			0.62	
25F-HA03	5									9.9	0.056							1.1	
25F-HA04	1									8.4	0.062							4.6	
25F-HA04	3									8.5	0.052							2.2	
25F-HA04	5									10	0.094							1.7	
25F-SB04	1									5.5	0.0071	0.57			0.024				
25F-SB04	5									3.3	0.013	0.21			0.05				
25F-SB05	1				0.0080					5.4	0.076	0.89			0.4		0.011		0.010
25F-SB05	5									6.2	0.097	0.4			0.27				
25F-SB06	1				0.024			0.012		5.0	0.79	0.95			11		0.0091		0.019
25F-SB06	5				0.029			0.013		4.9	0.68	0.71			6.6		0.0089		0.025
25F-SB07	1									11	34	0.2			0.11				
25F-SB07	5									6.2	0.62	0.3			0.066				
25F-SB08	1																		
25F-SB09	1																		
25F-SB10	1																		
25F-SB11	1																		
25F-SB12	1											0.59			0.37				
25F-SB13	1											0.11			0.038				
25F-SB14	1										0.069	0.33			770				
25F-SD01	0.25									21	2.6	0.54			11				
25F-SD01	1.5									11	5.7	0.49			18			0.5	
25F-SD01	5									12	3.1	0.29			0.25				
25F-SD02	0.25									13	0.064	1.1						2.9	
25F-SD02	1.5									13	0.049	1.1			0.013			0.74	
25F-SD02	5									12	0.076	0.42						2.0	
25F-SPB01	1								30900	22	0.801				520				
25F-SPB01	5								26000	3.4	0.165				0.41				
25F-SPB01	10	1.0							38200	2.5					0.53				
25F-SPB02	1								24800	10.1	1.3				2300				
25F-SPB02	5								22400	2.6	42				3				
25F-SPB02	10								22500	2.2	2.1				24				
25F-SPB03	1								17200	1.5	0.218				17000				
25F-SPB03	5														320				
25F-SPB03	6	7.5							26700	3.75	0.331								
25F-SPB03	10	3.4							21000	15.5	1.8				0.44				
59F-SB11	1									3.3	0.0072	0.55						0.48	
59F-SB11	5			0.0017	0.0039					5.6	0.018	0.54			0.62		0.0025	2.7	
59F-SB12	1				0.046			0.0077		4.7	0.014	4.0			0.092		0.045	0.76	0.036
59F-SB12	5									3.4	0.025	0.42			0.0074			0.42	
59F-SB13	1									8.9	0.028	0.78						3.7	
59F-SB13	5									10	0.14	0.73							
59F-SB14	1									11	0.068	0.63						2.4	
59F-SB14	5.5									12	0.014	0.47							
59F-SB15	1			0.00052	0.0021					4.8	0.015	0.23			0.19				
59F-SB15	5				0.052			0.0074		4	0.013	0.36			0.043		0.060		0.047
59F-SB16	1				0.0055	0.00099				4.3	0.0085	0.44			0.19		0.0038	0.62	
59F-SB16	5									4.8	0.025	0.66			0.086				
59F-SB17	1									5.1		1.0			0.03			0.58	
59F-SB17	5									8.3	0.018	0.63			0.086			0.98	
59F-SB18	1									6.2	0.02	0.33						0.32	
59F-SB18	5									5.6	0.015	0.31			0.0081			0.27	
59F-SB19	1									14	0.041	1.3			11			2.6	
59F-SB19	5									6.9	0.021	0.56						1.6	
59F-SB20	1		0.0011	0.0011	0.0038					17	0.088	0.51			0.022		0.0069	0.95	0.0092
59F-SB20	5.5									10	0.028	0.62						0.18	
59F-SB21	1		0.0012	0.00072						7.8	0.0084	0.43			0.27			1.1	
59F-SB21	5.5									11	0.02	0.58			0.094			0.61	
59F-SB22	1			0.22	0.089			0.016		14	0.076	0.6			19		0.024	4.1	0.075
59F-SB22	5.5									8.2	0.019	0.35							

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		1.6 E-5	2.7 E-4	4.1 E-3	4.5 E-5	9.5 E-2	2.7 E-6	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	9.4 E-2	9.4 E-2	4.1 E-5	5.4 E-5	6.1 E-5	5.4 E-6	6.1 E-5
Unit Risk		NA	NA	NA	NA	4.0 E-6	7.0 E-10	7.8 E-7	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	7.0 E-8	NA	NA	NA
59F-SB23	1									8.0	0.033	0.73			12			1.2	
59F-SB23	5									9.9	0.024	0.60						2.5	
59F-SB25	1									10.6	0.082			0.016	0.015				
59F-SB26	1		0.0025	0.0063	0.46			0.1		7.6	0.042			1.1	0.15		0.43		0.35
59F-SB27	1		0.0012							12.1	0.070			0.35	0.0051				
59F-SB28	1									22.5	0.077			2.8	0.21				0.042
59F-SD01	0.25				0.062					140	0.079	0.73	16		49		0.005	14	0.0083
59F-SD01	1.5									11	0.085	0.54			0.024			3.3	
59F-SD01	5									11	0.042	0.71			0.0039			4.1	
59F-SD02	0.25									13	0.16	0.73	0.54					0.75	
59F-SD02	1.5									18	0.13	1.1		0.32				0.95	
59F-SD02	5									10	0.019	0.43		0.44				0.49	
59F-SD03	0.25									10									
59F-SD03	1.5									9.1									
59F-SD04	0.25									9.9									
59F-SD04	1.5									10									
59F-SD05	0.25									9.5									
59F-SD05	1.5									12									
59F-SD06	0.25									18									
59F-SD06	1.5									11									
59F-SD07	0.25			0.00084		0.00073				13	0.086				0.017				
59F-SNS01	0.5			0.0023	0.047					16	0.10	0.99			0.31		0.015		0.033
59F-SNS01	2.5									9.3	0.085				0.05				
59F-SNS02	0.5				0.010					14	0.096	0.11			0.0035		0.0050		0.0088
59F-SNS02	2.5				0.0038					10	0.13								
59F-SNS03	0.5				0.014					11	0.043	0.13					0.0060		0.014
59F-SNS03	2.5									13	0.16	0.15							
59F-SNS04	0.5				0.014					23.0	0.076	0.86					0.0064		0.01
59F-SPB01	1						2		26800	7.18	0.136								
59F-SPB01	5						1												
59F-SPB01	10						2												
59F-SPB02	1						1		17700	295	0.151				1.6				
59F-SPB02	5						1		28100	165	0.112				0.20				
59F-SPB02	10						1		25600	12.8									
59F-SPB03	1								25400	5.5					0.60				
59F-SPB03	5								27500	5.5					0.60				
59F-SPB03	10								19700	2.9									
59F-SPB04	1								21600	4.9					0.20				
59F-SPB04A	5								20700	4.0					0.60				
59F-SPB05	1								25600	5.0					0.20				
59F-SPB05	5								24700	3.9					0.30				
59F-SPB05	10								26400	7.1					0.10				
59F-SPB06	1								15400	3.3					1.8				
59F-SPB06	2																		
59F-SPB06	5								21500	4.1					1.0				
59F-SPB06	10								30600	7.9									
59F-SPB07	1								23700	4.1					0.20				
59F-SPB07	2																		
59F-SPB07	5								23400	5.2									
59F-SPB07	10								27200	12									
59F-SPB08	1								25100	6.9									
59F-SPB08	5								31600	5.8									
59F-SPB08	10																		
60F-SB01	1								22700	13	3.5								
60F-SB01	5								22500	5.1	0.13								
60F-SB01	10								24300	11									
60F-SB02	1				0.0021					6.7	0.13	0.79			0.07				
60F-SB02	5									5.3	0.023	0.88			0.25				
60F-SB03	1									3.3	0.047	0.64			0.0051			2.5	
60F-SB03	5									3.2	0.023	1.3						0.34	
60F-SB04	1					0.00049				3.7	0.016	0.47						3.6	
60F-SB04	5					0.00085				4.9	0.01	0.51						0.14	
60F-SB05	1									3.9	0.012	0.43						2.2	
60F-SB05	5									3.5	0.014	0.51						0.093	
60F-SNS01	0.5		0.0027		0.047					9.5	0.26	0.91					0.018		0.041
61F-SB02	1														1.4				

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		1.6 E-5	2.7 E-4	4.1 E-3	4.5 E-5	9.5 E-2	2.7 E-6	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	9.4 E-2	9.4 E-2	4.1 E-5	5.4 E-5	6.1 E-5	5.4 E-6	6.1 E-5
Unit Risk		NA	NA	NA	NA	4.0 E-6	7.0 E-10	7.8 E-7	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	7.0 E-8	NA	NA	NA
61F-SB02	3								20400	3.4									
61F-SB02	5	1.3							19600	3.5									
61F-SB02	10	1.2							18200	3.0	0.142								
61F-SB03	1									3.9		0.90							
61F-SB03	5				0.0029					4.2		6.5			0.011		0.012		0.013
61F-SB04	1					0.041					0.45								
61F-SB05	1					0.0026					0.073								
61F-SNS01	0.5				0.081					50	1.6	0.48				2.8	0.033		0.10
61F-SNS02	0.5				0.0038					16	0.21				0.0053				
61F-SPB01	1	14							24400	8.8									
61F-SPB01	5								28400	3.1									
61F-SPB01	10								20100	4.7									
62F-SB04	1									3.8	0.0094	0.78							
62F-SB04	5									2.9	0.012	1.1							
62F-SB05	1									0.51	0.098	0.11						0.32	
62F-SB05	5									3	0.0086	1.5							
62F-SB06	2		0.00099	0.0018	0.0058	0.033				2.9	0.014	0.54							0.0060
62F-SB06	5.5									5.5	0.047								
62F-SB07	5				0.021					5.2	0.037	0.83					0.013		0.026
62F-SB08	1									9.6	0.0073	0.39							
62F-SB08	5									5.3	0.018	1.4							
62F-SB09	1									3.8	0.0072	0.39							
62F-SB09	5									4.1	0.02	0.49							
62F-SB10	1									6.5	0.038	0.48							
62F-SB10	5									4.9	0.025	0.49							
62F-SD01	0.25																	1.2	
62F-SD01	1.5																	1.6	
62F-SD01	5																	2.2	
62F-SNS01	0.5				0.076					14	0.031				0.0048		0.021		0.041
62F-SNS01	2.5									8.9	0.090				0.013				
62F-SNS02	0.5				0.034					13	0.17				0.12		0.0080		0.028
C201-SPB01	1								25500	4.3									
C201-SPB01	5								25000	3.0									
C201-SPB01	10								21400	3.2									
C207-SB01	1																		
C207-SB01	5																		
C207-SB01	10																		
C208-SB02	1													1.21					
C208-SB02	3													0.416					
C208-SB02	5																		
C208-SB02	10																		
C208-SB03	1	1.5							21500	3.7									
C208-SB03	5								23200	3.7									
C208-SB03	10	2.3							20000	2.0									
C208-SB04	1																		
C208-SB04	3																		
C208-SB04	5																		
C208-SB04	10																		
C208-SB05	1												1.33						
C208-SB05	3												0.65						
C208-SB05	5												0.256						
C208-SB05	10												0.0913						
C208-SPB01	1								17400	6.0				1.48					
C208-SPB01	3																		
C208-SPB01	6	1.1							24300	3.9				0.16					
C208-SPB01	10								16700	3.9									
C208-SPB06	1	0.83											0.377						
C208-SPB06	3												0.47						
C208-SPB06	5	0.68																	
C208-SPB06	10																		
CP2-07-SB02	1									3.9		0.58							
CP2-07-SB02	5									5.5	0.022	0.28							
CP2-07-SB03	1									7	0.038	0.84			0.0018			2.6	
CP2-07-SB03	5									5.4	0.13	0.26							
CP2-07-SB04	1									4.8	0.023	0.37						1.2	
CP2-07-SB04	5																		

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		1.6 E-5	2.7 E-4	4.1 E-3	4.5 E-5	9.5 E-2	2.7 E-6	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	9.4 E-2	9.4 E-2	4.1 E-5	5.4 E-5	6.1 E-5	5.4 E-6	6.1 E-5
Unit Risk		NA	NA	NA	NA	4.0 E-6	7.0 E-10	7.8 E-7	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	7.0 E-8	NA	NA	NA
CP2-07-SB05	1									5.1		1.1							
CP2-07-SB05	5									4.3	0.0081	0.23							
CP2-07-SB06	1									9.4	0.028	0.5						0.43	
CP2-07-SB08	1									8.9	0.12	0.45						0.28	
CP2-07-SB08	5									7.4		0.19							
CP2-07-SB09	1				0.0021					2.9		1.2					0.011	0.99	0.0063
CP2-07-SB09	5									5.1	0.007	0.32							
CP2-07-SB10	1									3.3	0.0099	0.74			0.0063			0.97	
CP2-07-SB10	5									2.1	0.0039	0.31						0.38	
CP2-07-SB11	1									2.5	0.0037	0.56						0.56	
CP2-07-SB11	5									3.8	0.0078	0.37			0.0088			1.6	
CP2-07-SB12	1									2.4	0.013	0.32						5.0	
CP2-07-SB12	5									4.9		0.44						1.7	
CP2-07-SB13	1									5.3		0.64						0.29	
CP2-07-SB13	5									3.6		6.0			0.0078			0.13	
CP2-07-SB14	1									4.5	0.032	1.3							
CP2-07-SB14	5				0.0033					7.0	0.017	1.4							
CP2-07-SB15	1									9.1	0.019	0.61							
CP2-07-SB15	5									6.8		2.0							
CP2-07-SB16	1									7.0	0.021	0.68							
CP2-07-SB16	5									3.0	0.013	1.0							
CP2-07-SB17	1									5.7	0.013	0.41							
CP2-07-SB17	5									4.7	0.013	0.61							
CP2-07-SB18	1									30	0.02	0.87							
CP2-07-SB18	5									8.4		1.4							
CP2-07-SB19	1									8.0	0.029	0.19							
CP2-07-SB19	5									4.7	0.0076	0.41							
CP2-07-SB20	1														0.0037				
CP2-07-SB20	5																		
CP2-07-SB21	1														0.0094				
CP2-07-SB21	5																		
CP2-07-SB22	1																		
CP2-07-SB22	5														0.0021				
CP2-07-SB23	1														0.066				
CP2-07-SB23	5																		
CP2-07-SB24	1														0.004				
CP2-07-SB24	5																		
CP2-08-SB09	1									5.6	0.013	0.5					0.0083	2.3	
CP2-08-SB09	5									3.8	0.008	0.3						0.46	
CP2-08-SB10	2									6.1	0.028	0.2	0.23						
CP2-08-SB10	6									3.7	0.041	0.24							
CP2-08-SB11	1									5.5	0.0051	0.49							
CP2-08-SB11	5									6.3		0.55							
CP2-08-SB12	1									2.5		0.23		1.9	0.043		0.017	2.2	0.011
CP2-08-SB12	5									3.6	0.0034	0.75							
CP2-08-SB13	1									6.0	0.024	0.95		0.068				3.3	
CP2-08-SB13	5									3.8	0.034	0.49						0.71	
CP2-08-SB14	1									8.2	0.019	0.55							
CP2-08-SB14	5									4.3	0.016	0.69							
CP2-08-SB15	1									6.1	0.019	0.73			0.56				
CP2-08-SB15	5									4.5									
CP2-08-SNS01	0.5				0.0035					8.1	0.047	0.27		0.068	0.019				
CP2-08-SNS01	2.5									6.5	0.038	0.46			0.0019				
CP2-08-SNS02	0.5				0.012					5.8	0.024	0.23		0.12					0.016
CP2-08-SNS02	2.5									6.3	0.032	0.21							
CP2-08-SNS03	0.5				0.0096					4.3	0.015	0.14		0.075			0.005		0.0082
CP2-08-SNS03	2.5									7.0	0.081	0.37		0.045					
CP2-08-SNS04	0.5				0.21			0.025		16	0.036			0.48	3.6		0.045		0.35
CP2-08-SNS04	2.5									7.4	0.066				0.015				
CP2-RE01-SB01	1									3.1	0.021	0.41			0.011				
CP2-RE01-SB01	5									4.6	0.027	0.7						0.84	
CP2-RE05-SB01	1				0.030					3.7	0.023	0.21			0.0084		0.037	0.29	0.026
CP2-RE05-SB01	5									3.0		2.5							
CP2-RE05-SB02	1				0.0025					3.3	0.013	0.53						0.93	
CP2-RE05-SB02	5									4		0.85							
CP2-RE05-SB03	1		0.0023			0.0082				4.3	0.010	0.73			0.042			1.5	

		Concentrations (mg/kg)																	
Sample Name	**Depth**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**
Unit Hazard		1.6 E-5	2.7 E-4	4.1 E-3	4.5 E-5	9.5 E-2	2.7 E-6	NA	1.4 E-6	NA	3.3 E-3	2.0 E-4	9.4 E-2	9.4 E-2	4.1 E-5	5.4 E-5	6.1 E-5	5.4 E-6	6.1 E-5
Unit Risk		NA	NA	NA	NA	4.0 E-6	7.0 E-10	7.8 E-7	NA	NA	NA	NA	3.4 E-6	3.4 E-6	NA	7.0 E-8	NA	NA	NA
CP2-RE05-SB03	5									3.3	0.0092	1.3							
CP2-RE05-SB04	1									4.9	0.0088	0.75							
CP2-RE05-SB04	5									3.1	0.0043	0.67			0.0078				
CP2-RE05-SB05	1									4.9	0.023	1.1							
CP2-RE05-SB05	5									2.5	0.022	2.4							
CP2-ST07-SB01	1				0.015					8.9		0.79			0.036		0.0056		0.012
CP2-ST07-SB01	5									7.3	0.016	0.45							
F(C)-SB01	1								20000	4.4	1.5								
F(C)-SB01	5								22000	5.8									
F(C)-SB01	10								20500	3.5	0.4								
F(c)-SB02	1				0.0039					3.1		1.3		0.077			0.015	0.75	0.016
F(c)-SB02	5									3.9	0.0068	0.69							
F(c)-SB03	1									6.8	0.09	0.31							
F(c)-SB03	5									2.5	0.012	0.53							
F(c)-SB04	1				0.0018					4.6	0.0097	1.1	120				0.0036	0.75	
F(c)-SB04	5									2.3	0.013	1.6	0.013					0.87	
F(c)-SNS01	0.5				0.011			0.011		15	0.15	0.61					0.0036		0.013
F(c)-SNS02	0.5				0.028			0.011		8.9	0.021	0.27		0.2			0.0057		0.028
F(c)-SNS03	0.5				0.031			0.0099		5.2	0.066	0.12		0.23			0.011		0.027
OS1-F2-SB02	1														0.025				
OS1-F2-SB03	1													0.061	0.0020				
OS1-F2-SB04	1		0.0008											0.093	0.0071				
OS1-F2-SNS01	0.5			0.0022						7.7	0.15	0.47							
OS1-F2-SNS01	2.5			0.0018	0.0025					16	0.097				0.46				
OS1-F2-SNS02	0.5		0.0031	0.0038		0.028				19	0.086	0.54			0.048				
OS1-F2-SNS02	2.5			0.0019		0.0018				7.9		0.5							
OS1-F2-SNS03	0.5		0.0038		0.020					26	0.18	0.72			0.26		0.0064	0.32	0.019
OS1-F2-SNS03	2.5									8.7	0.02	0.58							
OS1-F2-SNS04	0.5				0.006					7	0.015	0.6					0.0034	0.12	
OS1-F2-SNS04	2.5		0.0029							10	0.091	0.6			0.06			0.18	
OS1-F3-SD01	0.25		0.0011	0.0015						12	0.094			0.16	0.034				

		Non-Cancer Hazard Index																
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene
Unit Hazard																		
Unit Risk																		
25F-HA01	1	NA	NA	NA	NA	NA	5.1 E-4	3.1 E-4	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	NA	NA
25F-HA01	5	NA	NA	NA	NA	NA	7.8 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA
25F-HA02	1	NA	NA	NA	NA	NA	6.1 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	NA	NA
25F-HA02	3	NA	NA	NA	NA	NA	6.1 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	NA	NA
25F-HA02	5	NA	NA	NA	NA	NA	7.6 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	8.7 E-4	NA	NA	NA
25F-HA03	1	NA	NA	NA	NA	NA	6.4 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA
25F-HA03	3	NA	NA	NA	NA	NA	5.6 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	8.8 E-4	NA	NA	NA
25F-HA03	5	NA	NA	NA	NA	NA	6.9 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	8.0 E-4	NA	NA	NA
25F-HA04	1	NA	NA	NA	NA	NA	6.4 E-4	9.5 E-4	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA
25F-HA04	3	NA	NA	NA	NA	NA	6.9 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA
25F-HA04	5	NA	NA	NA	NA	NA	6.9 E-4	1.1 E-3	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	NA	NA
25F-SB04	1	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA
25F-SB04	5	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	6.1 E-4	NA	NA	NA
25F-SB05	1	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA
25F-SB05	5	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA
25F-SB06	1	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	NA	NA	9.1 E-7	NA	4.1 E-4	NA	NA	NA
25F-SB06	5	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA	NA	1.0 E-6	NA	4.0 E-4	NA	NA	NA
25F-SB07	1	NA	NA	NA	NA	NA	3.4 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA
25F-SB07	5	NA	NA	NA	NA	NA	4.4 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	9.2 E-4	NA	NA	NA
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	6.6 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA
25F-SD01	1.5	NA	NA	NA	NA	4.9 E-5	6.1 E-4	1.0 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA
25F-SD01	5	1.5 E-4	NA	NA	NA	NA	6.6 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA
25F-SD02	0.25	NA	NA	NA	NA	NA	8.1 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	1.5	NA	NA	NA	NA	NA	7.8 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	5	NA	NA	NA	NA	NA	7.3 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	1	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	5	NA	NA	NA	NA	NA	NA	8.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	10	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	1	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	5	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	10	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	1	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	10	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB11	1	NA	NA	NA	NA	NA	4.6 E-4	4.4 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA
59F-SB11	5	NA	NA	NA	NA	3.5 E-5	5.4 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA
59F-SB12	1	NA	NA	NA	NA	NA	3.9 E-4	5.3 E-4	NA	NA	NA	NA	4.7 E-7	NA	4.8 E-4	NA	NA	NA
59F-SB12	5	NA	NA	NA	NA	NA	3.7 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA
59F-SB13	1	NA	NA	NA	NA	NA	7.3 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB13	5	NA	NA	NA	NA	NA	1.1 E-3	1.3 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA
59F-SB14	1	NA	NA	NA	NA	NA	3.2 E-3	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB14	5.5	NA	NA	NA	NA	NA	2.4 E-3	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB15	1	NA	NA	NA	3.5 E-6	NA	3.2 E-4	5.0 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA
59F-SB15	5	NA	NA	NA	NA	NA	2.7 E-4	4.3 E-4	NA	NA	NA	NA	5.4 E-7	NA	4.0 E-4	NA	NA	NA
59F-SB16	1	NA	NA	NA	5.6 E-6	1.0 E-5	2.4 E-3	4.1 E-3	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA
59F-SB16	5	NA	NA	NA	NA	2.4 E-5	3.4 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA
59F-SB17	1	NA	NA	NA	NA	NA	4.4 E-4	5.0 E-4	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	NA	NA
59F-SB17	5	NA	NA	NA	NA	NA	8.1 E-4	5.0 E-4	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA
59F-SB18	1	NA	NA	NA	NA	NA	4.4 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	NA
59F-SB18	5	NA	NA	NA	NA	NA	9.1 E-4	5.8 E-4	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA
59F-SB19	1	NA	NA	NA	1.1 E-4	NA	1.0 E-3	5.4 E-4	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	1.4 E-4	NA
59F-SB19	5	NA	NA	NA	NA	NA	6.1 E-4	5.6 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA
59F-SB20	1	NA	NA	NA	1.3 E-5	NA	7.1 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	1	NA	NA	NA	NA	NA	4.9 E-4	3.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	5.5	NA	NA	NA	NA	NA	2.2 E-3	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB22	1	NA	NA	NA	2.8 E-3	NA	1.0 E-3	6.5 E-3	NA	NA	NA	NA	1.0 E-6	NA	7.5 E-4	NA	2.1 E-3	NA
59F-SB22	5.5	NA	NA	NA	NA	NA	7.3 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
59F-SB23	1	NA	NA	NA	NA	4.1 E-5	7.1 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB23	5	NA	NA	NA	NA	NA	6.1 E-4	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB25	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA
59F-SB26	1	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	2.7 E-4	NA	NA	NA
59F-SB27	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA
59F-SB28	1	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA
59F-SD01	0.25	NA	NA	NA	NA	NA	7.1 E-4	2.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	1.5	NA	NA	NA	NA	NA	7.6 E-4	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	5	NA	NA	NA	NA	NA	2.7 E-3	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	0.25	NA	NA	NA	NA	NA	9.1 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	1.5	NA	NA	NA	NA	NA	6.1 E-3	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	5	NA	NA	NA	NA	NA	6.4 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA
59F-SNS01	0.5	NA	NA	NA	1.9 E-5	NA	NA	2.1 E-3	NA	NA	NA	NA	5.5 E-7	NA	1.0 E-3	NA	8.2 E-6	NA
59F-SNS01	2.5	NA	NA	NA	1.2 E-5	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA
59F-SNS02	0.5	NA	NA	NA	6.8 E-6	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	9.9 E-4	NA	NA	NA
59F-SNS03	0.5	NA	NA	NA	6.1 E-5	NA	NA	9.5 E-4	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	NA	NA
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA
59F-SPB01	1	NA	NA	NA	NA	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	5	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	10	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	1	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	5	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	10	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04	1	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	1	NA	NA	NA	NA	NA	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	5	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	10	NA	NA	NA	NA	NA	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	1	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	10	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	1	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	6.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	10	NA	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	1	NA	NA	NA	NA	NA	NA	6.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	5	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	5	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	10	NA	NA	NA	NA	NA	NA	7.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	1	NA	NA	NA	2.1 E-4	NA	3.4 E-4	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	5	NA	NA	NA	2.8 E-4	NA	1.8 E-3	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	1	NA	NA	NA	NA	NA	2.4 E-4	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	5	NA	NA	NA	NA	NA	2.9 E-4	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	1	NA	NA	NA	NA	NA	2.0 E-4	5.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	5	NA	NA	NA	NA	NA	6.4 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	1	NA	NA	NA	NA	NA	5.1 E-4	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	5	NA	NA	NA	NA	NA	3.9 E-4	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SNS01	0.5	NA	NA	NA	5.4 E-5	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
61F-SB02	3	NA	NA	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	5	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	10	NA	NA	NA	NA	NA	NA	7.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB03	1	NA	NA	NA	NA	NA	4.2 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA
61F-SB03	5	NA	NA	NA	NA	NA	3.7 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA
61F-SB04	1	NA	NA	NA	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB05	1	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	2.7 E-3	1.1 E-3	NA	NA	NA	NA	NA	NA	2.0 E-3	NA	NA	NA
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA
61F-SPB01	1	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	5	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	10	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	1	NA	NA	NA	NA	NA	3.2 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	5	NA	NA	NA	NA	NA	2.9 E-4	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	1	NA	NA	NA	NA	NA	6.1 E-4	5.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	5	NA	NA	NA	NA	NA	4.6 E-4	5.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB06	2	NA	NA	NA	6.6 E-6	NA	2.9 E-4	3.8 E-4	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	3.1 E-5	NA
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA
62F-SB07	5	NA	NA	NA	NA	NA	7.6 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA
62F-SB08	1	NA	NA	NA	NA	NA	5.4 E-4	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB08	5	NA	NA	NA	NA	NA	5.4 E-4	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	1	NA	NA	NA	NA	NA	4.2 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	5	NA	NA	NA	NA	NA	5.1 E-4	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	1	NA	NA	NA	NA	NA	6.9 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	5	NA	NA	NA	NA	NA	6.1 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	NA	NA
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA
62F-SNS02	0.5	NA	NA	NA	2.0 E-5	NA	7.6 E-4	8.9 E-4	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA
C201-SPB01	1	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	5	NA	NA	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	10	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	1.4 E-2	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	5	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	10	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	10	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	3.9 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA
CP2-07-SB02	5	NA	NA	NA	NA	NA	5.1 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	5.8 E-4	NA	NA	NA
CP2-07-SB03	1	NA	NA	NA	NA	NA	5.1 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB03	5	NA	NA	NA	NA	NA	4.2 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	6.7 E-4	NA	NA	NA
CP2-07-SB04	1	NA	NA	NA	1.2 E-5	NA	4.6 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA
CP2-07-SB06	1	NA	NA	NA	NA	NA	7.3 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA
CP2-07-SB08	1	NA	NA	NA	NA	NA	4.9 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA
CP2-07-SB08	5	NA	NA	NA	NA	NA	5.9 E-4	5.1 E-4	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA
CP2-07-SB09	1	NA	NA	NA	NA	NA	2.4 E-4	2.8 E-4	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA
CP2-07-SB09	5	NA	NA	NA	NA	NA	4.4 E-4	4.8 E-4	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	5.4 E-4	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	4.3 E-4	NA	NA	NA
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA
CP2-07-SB12	1	NA	NA	NA	NA	NA	1.9 E-4	4.7 E-4	NA	NA	NA	NA	NA	NA	3.5 E-4	NA	NA	NA
CP2-07-SB12	5	NA	NA	NA	NA	NA	2.9 E-4	5.8 E-4	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	NA	NA
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	4.1 E-4	NA	NA	NA
CP2-07-SB14	1	NA	NA	NA	NA	NA	5.9 E-4	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB14	5	NA	NA	NA	NA	NA	5.1 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB15	1	NA	NA	NA	NA	NA	4.2 E-4	4.0 E-4	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	NA
CP2-07-SB15	5	NA	NA	NA	NA	NA	2.7 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA
CP2-07-SB16	1	NA	NA	NA	NA	NA	5.9 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB16	5	NA	NA	NA	NA	NA	3.9 E-4	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	1	NA	NA	NA	NA	NA	5.4 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	5	NA	NA	NA	NA	NA	1.7 E-3	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	1	NA	NA	NA	NA	NA	3.4 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	5	NA	NA	NA	NA	NA	3.2 E-4	5.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB19	1	NA	NA	NA	NA	NA	4.4 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA
CP2-07-SB19	5	NA	NA	NA	NA	NA	4.2 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	5.9 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	5	NA	NA	NA	NA	NA	4.9 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB10	2	NA	NA	NA	NA	NA	4.2 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA
CP2-08-SB10	6	NA	NA	NA	NA	NA	3.4 E-4	6.5 E-4	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA
CP2-08-SB11	1	NA	NA	NA	NA	NA	8.3 E-4	5.4 E-4	NA	NA	NA	NA	NA	NA	5.7 E-4	NA	NA	NA
CP2-08-SB11	5	NA	NA	NA	NA	NA	9.1 E-4	5.2 E-4	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA
CP2-08-SB12	1	NA	NA	NA	1.0 E-4	NA	NA	3.7 E-4	NA	NA	NA	NA	5.3 E-7	NA	3.7 E-4	NA	5.8 E-5	NA
CP2-08-SB12	5	NA	NA	NA	NA	NA	1.8 E-3	8.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	1	NA	NA	NA	NA	NA	2.1 E-3	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	5	NA	NA	NA	NA	NA	1.7 E-3	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	1	NA	NA	NA	NA	NA	3.4 E-3	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	5	NA	NA	NA	NA	NA	5.4 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	1	NA	NA	NA	NA	NA	4.9 E-4	9.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	7.3 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	9.5 E-4	8.3 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA
CP2-08-SNS02	0.5	NA	NA	NA	NA	NA	5.9 E-4	5.7 E-4	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	4.6 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA
CP2-08-SNS03	0.5	NA	NA	NA	NA	NA	5.9 E-4	4.9 E-4	NA	NA	NA	NA	NA	NA	3.6 E-4	NA	NA	NA
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	6.1 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	NA
CP2-08-SNS04	0.5	NA	NA	NA	NA	3.1 E-4	NA	7.1 E-4	NA	NA	NA	NA	1.6 E-6	NA	1.2 E-3	NA	NA	NA
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	NA
CP2-RE01-SB01	1	NA	NA	NA	3.5 E-6	NA	6.4 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	4.6 E-4	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	1.1 E-3	7.1 E-4	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	4.2 E-3	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	4.2 E-3	6.5 E-4	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	3.9 E-3	7.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	5.1 E-3	6.5 E-4	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	NA	NA

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	5.6 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	1	NA	NA	NA	5.6 E-6	NA	6.6 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	5.9 E-4	4.5 E-4	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	NA
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	5.4 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	4.9 E-4	5.3 E-4	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	NA
CP2-ST07-SB01	1	NA	NA	NA	1.0 E-5	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	6.5 E-4	NA	NA	NA	NA	NA	NA	5.1 E-4	NA	NA	NA
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	5.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	6.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	8.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	5	NA	NA	NA	NA	NA	1.7 E-3	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB04	1	NA	NA	NA	NA	NA	3.7 E-3	5.7 E-4	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA
F(c)-SB04	5	NA	NA	NA	NA	NA	3.4 E-3	3.8 E-4	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	1.3 E-3	5.9 E-4	NA	NA	NA	NA	1.5 E-6	NA	9.3 E-4	NA	NA	NA
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	4.6 E-4	6.5 E-4	NA	NA	NA	NA	9.7 E-7	NA	5.7 E-4	NA	NA	NA
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	4.2 E-4	5.9 E-4	NA	NA	NA	NA	6.0 E-7	NA	5.2 E-4	NA	NA	NA
OS1-F2-SB02	1	NA	NA	NA	NA	5.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	9.4 E-6	3.4 E-5	5.1 E-4	1.5 E-3	NA	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA
OS1-F2-SNS01	2.5	NA	NA	NA	4.2 E-5	3.5 E-5	NA	3.3 E-3	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	4.9 E-6	NA
OS1-F2-SNS02	0.5	NA	NA	NA	4.7 E-5	5.4 E-5	8.1 E-4	4.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA
OS1-F2-SNS02	2.5	NA	NA	NA	1.7 E-5	3.6 E-5	5.1 E-4	5.8 E-4	NA	NA	NA	NA	NA	NA	8.8 E-5	NA	3.8 E-6	NA
OS1-F2-SNS03	0.5	NA	NA	NA	6.6 E-5	NA	1.9 E-3	1.9 E-3	NA	NA	NA	NA	5.7 E-7	NA	5.9 E-4	NA	1.2 E-5	NA
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	9.8 E-4	7.7 E-4	NA	NA	NA	NA	NA	NA	8.0 E-5	NA	4.5 E-6	NA
OS1-F2-SNS04	0.5	NA	NA	NA	NA	NA	7.8 E-4	5.9 E-4	NA	NA	NA	NA	NA	NA	7.7 E-5	NA	2.8 E-6	NA
OS1-F2-SNS04	2.5	NA	NA	NA	5.9 E-5	NA	8.8 E-4	1.3 E-3	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	1.1 E-5	NA
OS1-F3-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard																					
Unit Risk																					
25F-HA01	1	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	4.9 E-3	2.5 E-2	NA	NA	1.1 E-3	NA	6.7 E-7	6.5 E-6	1.8 E-6	3.3 E-2
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-3	8.0 E-5	NA	NA	1.2 E-6	NA	NA	1.5 E-5	NA	1.0 E-2
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	8.0 E-5	NA	NA	NA	NA	NA	9.8 E-6	NA	3.0 E-3
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.7 E-5	NA	NA	NA	NA	NA	4.9 E-6	NA	3.0 E-3
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	2.8 E-3
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	2.8 E-3
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	3.7 E-5	NA	NA	2.0 E-7	NA	NA	3.4 E-6	NA	2.9 E-3
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	6.0 E-6	NA	2.9 E-3
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	2.5 E-3
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	2.6 E-3
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	NA	NA	NA	9.2 E-6	NA	3.0 E-3
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	1.1 E-4	NA	NA	9.7 E-7	NA	NA	NA	NA	1.7 E-3
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	4.1 E-5	NA	NA	2.0 E-6	NA	NA	NA	NA	1.1 E-3
25F-SB05	1	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	2.5 E-4	1.7 E-4	NA	NA	1.6 E-5	NA	6.7 E-7	NA	6.1 E-7	1.5 E-3
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	7.8 E-5	NA	NA	1.1 E-5	NA	NA	NA	NA	1.6 E-3
25F-SB06	1	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	2.6 E-3	1.9 E-4	NA	NA	4.5 E-4	NA	5.5 E-7	NA	1.2 E-6	4.2 E-3
25F-SB06	5	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	2.2 E-3	1.4 E-4	NA	NA	2.7 E-4	NA	5.4 E-7	NA	1.5 E-6	3.6 E-3
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	3.9 E-5	NA	NA	4.5 E-6	NA	NA	NA	NA	1.1 E-1
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-3	5.9 E-5	NA	NA	2.7 E-6	NA	NA	NA	NA	4.2 E-3
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	1.5 E-5	NA	NA	NA	NA	1.3 E-4
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	1.5 E-6	NA	NA	NA	NA	2.3 E-5
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	6.5 E-5	NA	NA	3.1 E-2	NA	NA	NA	NA	3.2 E-2
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-3	1.1 E-4	NA	NA	4.5 E-4	NA	NA	NA	NA	1.2 E-2
25F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	9.6 E-5	NA	NA	7.3 E-4	NA	NA	2.7 E-6	NA	2.2 E-2
25F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	5.7 E-5	NA	NA	1.0 E-5	NA	NA	NA	NA	1.3 E-2
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	2.2 E-4	NA	NA	NA	NA	NA	1.6 E-5	NA	2.5 E-3
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	2.2 E-4	NA	NA	5.3 E-7	NA	NA	4.0 E-6	NA	2.3 E-3
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	8.2 E-5	NA	NA	NA	NA	NA	1.1 E-5	NA	2.3 E-3
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2	NA	2.6 E-3	NA	NA	NA	2.1 E-2	NA	NA	NA	NA	6.8 E-2
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	5.4 E-4	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	3.8 E-2
25F-SPB01	10	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	5.3 E-2	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	5.4 E-2
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	4.3 E-3	NA	NA	NA	9.3 E-2	NA	NA	NA	NA	1.3 E-1
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	1.4 E-1	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	1.7 E-1
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	6.9 E-3	NA	NA	NA	9.7 E-4	NA	NA	NA	NA	4.0 E-2
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	7.1 E-4	NA	NA	NA	6.9 E-1	NA	NA	NA	NA	7.2 E-1
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	1.3 E-2
25F-SPB03	6	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
25F-SPB03	10	NA	5.5 E-5	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	5.8 E-3	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	3.6 E-2
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	1.1 E-4	NA	NA	NA	NA	NA	2.6 E-6	NA	1.4 E-3
59F-SB11	5	NA	NA	NA	7.0 E-6	1.8 E-7	NA	NA	NA	NA	NA	5.9 E-5	1.1 E-4	NA	NA	2.5 E-5	NA	1.5 E-7	1.5 E-5	NA	2.1 E-3
59F-SB12	1	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	4.6 E-5	7.8 E-4	NA	NA	3.7 E-6	NA	2.7 E-6	4.1 E-6	2.2 E-6	2.3 E-3
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	8.2 E-5	NA	NA	3.0 E-7	NA	NA	2.3 E-6	NA	1.4 E-3
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	1.5 E-4	NA	NA	NA	NA	NA	2.0 E-5	NA	1.7 E-3
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	4.0 E-3
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	1.2 E-4	NA	NA	NA	NA	NA	1.3 E-5	NA	4.2 E-3
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	9.2 E-5	NA	NA	NA	NA	NA	NA	NA	3.2 E-3
59F-SB15	1	NA	NA	NA	2.1 E-6	9.5 E-8	NA	NA	NA	NA	NA	4.9 E-5	4.5 E-5	NA	NA	7.7 E-6	NA	NA	NA	NA	1.3 E-3
59F-SB15	5	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	4.2 E-5	7.0 E-5	NA	NA	1.7 E-6	NA	3.6 E-6	NA	2.8 E-6	1.2 E-3
59F-SB16	1	NA	NA	NA	NA	2.5 E-7	9.4 E-5	NA	NA	NA	NA	2.8 E-5	8.6 E-5	NA	NA	7.7 E-6	NA	2.3 E-7	3.4 E-6	NA	7.2 E-3
59F-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	1.3 E-4	NA	NA	3.5 E-6	NA	NA	NA	NA	1.7 E-3
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	1.2 E-6	NA	NA	3.1 E-6	NA	1.6 E-3
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.2 E-4	NA	NA	3.5 E-6	NA	NA	5.3 E-6	NA	2.1 E-3
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	6.5 E-5	NA	NA	NA	NA	NA	1.7 E-6	NA	1.9 E-3
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	6.1 E-5	NA	NA	3.3 E-7	NA	NA	1.5 E-6	NA	2.2 E-3
59F-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	2.5 E-4	NA	NA	4.5 E-4	NA	NA	1.4 E-5	NA	3.3 E-3
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	1.1 E-4	NA	NA	NA	NA	NA	8.7 E-6	NA	1.8 E-3
59F-SB20	1	NA	NA	3.0 E-7	4.5 E-6	1.7 E-7	NA	NA	NA	NA	NA	2.9 E-4	1.0 E-4	NA	NA	8.9 E-7	NA	4.2 E-7	5.1 E-6	5.6 E-7	2.4 E-3
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	1.2 E-4	NA	NA	NA	NA	NA	9.8 E-7	NA	9.8 E-4
59F-SB21	1	NA	NA	3.2 E-7	3.0 E-6	NA	NA	NA	NA	NA	NA	2.7 E-5	8.4 E-5	NA	NA	1.1 E-5	NA	NA	6.0 E-6	NA	4.3 E-3
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	1.1 E-4	NA	NA	3.8 E-6	NA	NA	3.3 E-6	NA	3.0 E-3
59F-SB22	1	NA	NA	NA	9.1 E-4	4.0 E-6	NA	NA	NA	NA	NA	2.5 E-4	1.2 E-4	NA	NA	7.7 E-4	NA	1.5 E-6	2.2 E-5	4.5 E-6	1.5 E-2
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	6.9 E-5	NA	NA	NA	NA	NA	NA	NA	2.0 E-3

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard																					
Unit Risk																					
59F-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	1.4 E-4	NA	NA	4.9 E-4	NA	NA	6.5 E-6	NA	2.2 E-3
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	1.2 E-4	NA	NA	NA	NA	NA	1.4 E-5	NA	1.4 E-3
59F-SB25	1	3.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	1.5 E-3	6.1 E-7	NA	NA	NA	NA	2.1 E-3
59F-SB26	1	NA	NA	6.8 E-7	2.6 E-5	2.1 E-5	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	1.0 E-1	6.1 E-6	NA	2.6 E-5	NA	2.1 E-5	1.0 E-1
59F-SB27	1	3.7 E-5	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	3.3 E-2	2.1 E-7	NA	NA	NA	NA	3.4 E-2
59F-SB28	1	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	2.6 E-1	8.5 E-6	NA	NA	NA	2.5 E-6	2.6 E-1
59F-SD01	0.25	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	2.6 E-4	1.4 E-4	1.5 E+0	NA	2.0 E-3	NA	3.0 E-7	7.6 E-5	5.0 E-7	1.5 E+0
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	1.1 E-4	NA	NA	9.7 E-7	NA	NA	1.8 E-5	NA	2.3 E-3
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	1.4 E-4	NA	NA	1.6 E-7	NA	NA	2.2 E-5	NA	4.1 E-3
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	1.4 E-4	5.1 E-2	NA	NA	NA	NA	4.1 E-6	NA	5.4 E-2
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	2.2 E-4	NA	3.0 E-2	NA	NA	NA	5.1 E-6	NA	3.8 E-2
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	8.4 E-5	NA	4.1 E-2	NA	NA	NA	2.7 E-6	NA	4.4 E-2
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	NA	NA	3.5 E-6	NA	6.9 E-5	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	6.9 E-7	NA	NA	NA	NA	5.9 E-4
59F-SNS01	0.5	NA	NA	NA	9.5 E-6	2.1 E-6	NA	NA	NA	NA	NA	3.3 E-4	1.9 E-4	NA	NA	1.3 E-5	NA	9.1 E-7	NA	2.0 E-6	3.7 E-3
59F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	2.9 E-3
59F-SNS02	0.5	NA	NA	NA	NA	4.5 E-7	NA	NA	NA	NA	NA	3.1 E-4	2.2 E-5	NA	NA	1.4 E-7	NA	3.0 E-7	NA	5.3 E-7	4.4 E-3
59F-SNS02	2.5	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3
59F-SNS03	0.5	NA	NA	NA	NA	6.4 E-7	NA	NA	NA	NA	NA	1.4 E-4	2.5 E-5	NA	NA	NA	NA	3.6 E-7	NA	8.5 E-7	1.7 E-3
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
59F-SNS04	0.5	NA	NA	NA	NA	6.4 E-7	NA	NA	NA	NA	NA	2.5 E-4	1.7 E-4	NA	NA	NA	NA	3.9 E-7	NA	6.1 E-7	2.1 E-3
59F-SPB01	1	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	3.7 E-2	NA	4.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
59F-SPB01	5	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6
59F-SPB01	10	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6
59F-SPB02	1	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	2.5 E-2	NA	4.9 E-4	NA	NA	NA	6.5 E-5	NA	NA	NA	NA	5.3 E-2
59F-SPB02	5	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	3.9 E-2	NA	3.7 E-4	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	4.1 E-2
59F-SPB02	10	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	3.6 E-2
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	3.9 E-2
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	3.1 E-2
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	2.9 E-2
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	3.6 E-2
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	3.5 E-2
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	NA	NA	3.8 E-2
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	7.3 E-5	NA	NA	NA	NA	2.2 E-2
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	3.1 E-2
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-2
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	3.4 E-2
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
60F-SB02	1	NA	NA	NA	NA	9.5 E-8	NA	NA	NA	NA	NA	4.2 E-4	1.5 E-4	NA	NA	2.8 E-6	NA	NA	NA	NA	1.5 E-3
60F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	1.7 E-4	NA	NA	1.0 E-5	NA	NA	NA	NA	2.8 E-3
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	1.3 E-4	NA	NA	2.1 E-7	NA	NA	1.4 E-5	NA	9.3 E-4
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	2.5 E-4	NA	NA	NA	NA	NA	1.8 E-6	NA	1.2 E-3
60F-SB04	1	NA	NA	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	5.2 E-5	9.2 E-5	NA	NA	NA	NA	NA	2.0 E-5	NA	9.3 E-4
60F-SB04	5	NA	NA	NA	NA	NA	8.1 E-5	NA	NA	NA	NA	3.3 E-5	1.0 E-4	NA	NA	NA	NA	NA	7.6 E-7	NA	1.6 E-3
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	8.4 E-5	NA	NA	NA	NA	NA	1.2 E-5	NA	1.2 E-3
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	1.0 E-4	NA	NA	NA	NA	NA	5.0 E-7	NA	9.4 E-4
60F-SNS01	0.5	NA	NA	7.3 E-7	NA	2.1 E-6	NA	NA	NA	NA	NA	8.5 E-4	1.8 E-4	NA	NA	NA	NA	1.1 E-6	NA	2.5 E-6	2.3 E-3
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	NA	NA	5.7 E-5

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard																					
Unit Risk																					
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
61F-SB02	5	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2
61F-SB02	10	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	2.5 E-2	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	1.8 E-3
61F-SB03	5	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	4.5 E-7	NA	7.3 E-7	NA	7.9 E-7	2.8 E-3
61F-SB04	1	NA	NA	NA	NA	NA	3.9 E-3	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-3
61F-SB05	1	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-4
61F-SNS01	0.5	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	NA	5.2 E-3	9.4 E-5	NA	NA	NA	1.5 E-4	2.0 E-6	NA	6.1 E-6	1.1 E-2
61F-SNS02	0.5	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	3.3 E-3
61F-SPB01	1	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	9.2 E-4
62F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	2.2 E-5	NA	NA	NA	NA	NA	1.7 E-6	NA	1.0 E-3
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
62F-SB06	2	2.3 E-5	NA	2.7 E-7	7.4 E-6	2.6 E-7	3.1 E-3	NA	NA	NA	NA	4.6 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	3.6 E-7	4.1 E-3
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
62F-SB07	5	NA	NA	NA	NA	9.5 E-7	NA	NA	NA	NA	NA	1.2 E-4	1.6 E-4	NA	NA	NA	NA	7.9 E-7	NA	1.6 E-6	2.0 E-3
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	7.6 E-5	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	7.6 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	9.4 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	6.5 E-6
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-6	NA	8.7 E-6
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	1.2 E-5
62F-SNS01	0.5	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	1.9 E-7	NA	1.3 E-6	NA	2.5 E-6	1.8 E-3
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	NA	NA	NA	5.3 E-7	NA	NA	NA	NA	2.2 E-3
62F-SNS02	0.5	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	5.5 E-4	NA	NA	NA	4.9 E-6	NA	4.8 E-7	NA	1.7 E-6	3.0 E-3
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-2
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	1.1 E-1
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	3.9 E-2
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
C208-SB03	10	NA	3.8 E-5	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	1.3 E-1
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2	NA	NA	NA	NA	NA	NA	6.1 E-2
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	2.4 E-2
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-3	NA	NA	NA	NA	NA	NA	8.6 E-3
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	1.6 E-1
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	3.4 E-2	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	5.0 E-2
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2
C208-SPB06	1	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	3.6 E-2
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	4.4 E-2
C208-SPB06	5	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	5.5 E-5	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.6 E-4	NA	NA	7.3 E-8	NA	NA	1.4 E-5	NA	1.5 E-3
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
CP2-07-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	7.2 E-5	NA	NA	NA	NA	NA	6.5 E-6	NA	1.8 E-3
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Non-Cancer Hazard Index																			
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	HI
Unit Hazard																					
Unit Risk																					
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	4.5 E-5	NA	NA	NA	NA	NA	NA	NA	9.0 E-4
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	9.8 E-5	NA	NA	NA	NA	NA	2.3 E-6	NA	1.8 E-3
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	8.8 E-5	NA	NA	NA	NA	NA	1.5 E-6	NA	2.4 E-3
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
CP2-07-SB09	1	NA	NA	NA	NA	9.5 E-8	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	NA	NA	6.7 E-7	5.4 E-6	3.8 E-7	1.1 E-3
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	6.3 E-5	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	1.4 E-4	NA	NA	2.6 E-7	NA	NA	5.3 E-6	NA	1.2 E-3
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	6.1 E-5	NA	NA	NA	NA	NA	2.1 E-6	NA	9.4 E-4
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	1.1 E-4	NA	NA	NA	NA	NA	3.0 E-6	NA	1.2 E-3
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	7.2 E-5	NA	NA	3.6 E-7	NA	NA	8.7 E-6	NA	1.3 E-3
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	6.3 E-5	NA	NA	NA	NA	NA	2.7 E-5	NA	1.1 E-3
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-5	NA	NA	NA	NA	NA	9.2 E-6	NA	1.4 E-3
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	1.6 E-6	NA	1.0 E-3
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	3.2 E-7	NA	NA	7.0 E-7	NA	2.3 E-3
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-07-SB14	5	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	5.5 E-5	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.0 E-3
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-5	3.7 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	8.0 E-5	NA	NA	NA	NA	NA	NA	NA	9.7 E-4
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	1.5 E-7
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	3.8 E-7
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	8.5 E-8
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	2.7 E-6
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	1.6 E-7
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	9.8 E-5	NA	NA	NA	NA	5.0 E-7	1.2 E-5	NA	1.2 E-3
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	5.9 E-5	NA	NA	NA	NA	NA	2.5 E-6	NA	1.3 E-3
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-5	3.9 E-5	2.2 E-2	NA	NA	NA	NA	NA	NA	2.3 E-2
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	9.6 E-5	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.1 E-3
CP2-08-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	1.8 E-1	1.7 E-6	NA	1.0 E-6	1.2 E-5	6.7 E-7	1.8 E-1
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	1.9 E-4	NA	6.4 E-3	NA	NA	NA	1.8 E-5	NA	9.5 E-3
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	9.6 E-5	NA	NA	NA	NA	NA	3.8 E-6	NA	2.4 E-3
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	5.3 E-3
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	1.4 E-3
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	1.4 E-4	NA	NA	2.3 E-5	NA	NA	NA	NA	1.7 E-3
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3
CP2-08-SNS01	0.5	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	1.5 E-4	5.3 E-5	NA	6.4 E-3	7.7 E-7	NA	NA	NA	NA	9.2 E-3
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	9.0 E-5	NA	NA	7.7 E-8	NA	NA	NA	NA	2.5 E-3
CP2-08-SNS02	0.5	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	NA	NA	7.8 E-5	4.5 E-5	NA	1.1 E-2	NA	NA	NA	NA	9.7 E-7	1.3 E-2
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.7 E-3
CP2-08-SNS03	0.5	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	4.9 E-5	2.7 E-5	NA	7.1 E-3	NA	NA	3.0 E-7	NA	5.0 E-7	8.6 E-3
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	7.2 E-5	NA	4.2 E-3	NA	NA	NA	NA	NA	6.4 E-3
CP2-08-SNS04	0.5	NA	NA	NA	NA	9.5 E-6	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	4.5 E-2	1.5 E-4	NA	2.7 E-6	NA	2.1 E-5	4.8 E-2
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	6.1 E-7	NA	NA	NA	NA	1.5 E-3
CP2-RE01-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	8.0 E-5	NA	NA	4.5 E-7	NA	NA	NA	NA	1.2 E-3
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-5	1.4 E-4	NA	NA	NA	NA	NA	4.6 E-6	NA	1.4 E-3
CP2-RE05-SB01	1	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	7.5 E-5	4.1 E-5	NA	NA	3.4 E-7	NA	2.2 E-6	1.6 E-6	1.6 E-6	2.4 E-3
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	5.1 E-3
CP2-RE05-SB02	1	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	4.2 E-5	1.0 E-4	NA	NA	NA	NA	NA	5.0 E-6	NA	5.4 E-3
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	4.8 E-3
CP2-RE05-SB03	1	NA	NA	6.2 E-7	NA	NA	7.8 E-4	NA	NA	NA	NA	3.3 E-5	1.4 E-4	NA	NA	1.7 E-6	NA	NA	8.1 E-6	NA	7.2 E-3

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**HI**
Unit Hazard																					
Unit Risk																					
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
CP2-RE05-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	1.3 E-4	NA	NA	3.2 E-7	NA	NA	NA	NA	1.7 E-3
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	2.2 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-3
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	2.2 E-3
CP2-ST07-SB01	1	NA	NA	NA	NA	6.8 E-7	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	1.5 E-6	NA	3.4 E-7	NA	7.3 E-7	1.2 E-3
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	8.8 E-5	NA	NA	NA	NA	NA	NA	NA	1.3 E-3
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	4.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-2
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-2
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-2	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2
F(c)-SB02	1	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	7.2 E-3	NA	NA	9.1 E-7	4.1 E-6	9.7 E-7	7.9 E-3
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	7.5 E-4
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	6.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.3 E-3
F(c)-SB04	1	NA	NA	NA	NA	8.2 E-8	NA	NA	NA	NA	NA	3.2 E-5	2.2 E-4	1.1 E+1	NA	NA	NA	2.2 E-7	4.1 E-6	NA	1.1 E+1
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	3.1 E-4	1.2 E-3	NA	NA	NA	NA	4.7 E-6	NA	5.7 E-3
F(c)-SNS01	0.5	NA	NA	NA	NA	5.0 E-7	NA	NA	NA	NA	NA	4.9 E-4	1.2 E-4	NA	NA	NA	NA	2.2 E-7	NA	7.9 E-7	3.5 E-3
F(c)-SNS02	0.5	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	6.9 E-5	5.3 E-5	NA	1.9 E-2	NA	NA	3.5 E-7	NA	1.7 E-6	2.1 E-2
F(c)-SNS03	0.5	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	2.2 E-4	2.3 E-5	NA	2.2 E-2	NA	NA	6.7 E-7	NA	1.6 E-6	2.3 E-2
OS1-F2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	5.9 E-5
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3	8.1 E-8	NA	NA	NA	NA	5.7 E-3
OS1-F2-SB04	1	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-3	2.9 E-7	NA	NA	NA	NA	8.8 E-3
OS1-F2-SNS01	0.5	NA	NA	NA	9.1 E-6	NA	NA	NA	NA	NA	NA	4.9 E-4	9.2 E-5	NA	NA	NA	NA	NA	NA	NA	2.7 E-3
OS1-F2-SNS01	2.5	NA	NA	NA	7.4 E-6	1.1 E-7	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	4.1 E-3
OS1-F2-SNS02	0.5	2.1 E-4	NA	8.4 E-7	1.6 E-5	NA	2.7 E-3	NA	NA	NA	NA	2.8 E-4	1.1 E-4	NA	NA	1.9 E-6	NA	NA	NA	NA	8.7 E-3
OS1-F2-SNS02	2.5	NA	NA	NA	7.8 E-6	NA	1.7 E-4	NA	NA	NA	NA	NA	9.8 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-3
OS1-F2-SNS03	0.5	1.3 E-4	NA	1.0 E-6	NA	9.1 E-7	NA	NA	NA	NA	NA	5.9 E-4	1.4 E-4	NA	NA	1.1 E-5	NA	3.9 E-7	1.7 E-6	1.2 E-6	5.4 E-3
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-5	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	2.0 E-3
OS1-F2-SNS04	0.5	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	4.9 E-5	1.2 E-4	NA	NA	NA	NA	2.1 E-7	6.5 E-7	NA	1.6 E-3
OS1-F2-SNS04	2.5	7.2 E-5	NA	7.9 E-7	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	1.2 E-4	NA	NA	2.4 E-6	NA	NA	9.8 E-7	NA	3.0 E-3
OS1-F3-SD01	0.25	2.3 E-5	NA	3.0 E-7	6.2 E-6	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	1.5 E-2	1.4 E-6	NA	NA	NA	NA	1.6 E-2

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
25F-HA01	1	NA	NA	NA	NA	NA	NA	NA	4 E-9	8 E-8	2 E-8	NA	NA	NA	6 E-10	9 E-10	NA	NA
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
25F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
25F-SB06	1	NA	NA	NA	NA	NA	NA	NA	6 E-9	1 E-7	3 E-8	NA	NA	NA	3 E-10	1 E-9	NA	NA
25F-SB06	5	NA	NA	NA	NA	NA	NA	NA	8 E-9	2 E-7	3 E-8	NA	NA	NA	2 E-10	1 E-9	NA	NA
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA
25F-SD01	1.5	NA	NA	NA	NA	9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA
25F-SD01	5	7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SB11	5	NA	NA	NA	NA	6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
59F-SB12	1	NA	NA	NA	NA	NA	NA	NA	9 E-9	1 E-7	3 E-8	NA	NA	NA	3 E-10	2 E-9	NA	NA
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB15	1	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SB15	5	NA	NA	NA	NA	NA	NA	NA	9 E-9	1 E-7	3 E-8	NA	NA	NA	2 E-10	2 E-9	NA	NA
59F-SB16	1	NA	NA	NA	3 E-10	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SB16	5	NA	NA	NA	NA	4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
59F-SB19	1	NA	NA	NA	7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	2 E-8	NA
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
59F-SB20	1	NA	NA	3 E-10	8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	1	NA	NA	6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB22	1	NA	3 E-7	NA	2 E-7	NA	NA	NA	2 E-8	3 E-7	7 E-8	NA	NA	NA	5 E-10	5 E-9	3 E-7	NA
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene
Unit Hazard																		
Unit Risk																		
59F-SB23	1	NA	NA	NA	NA	8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SB25	1	NA	5 E-10	9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SB26	1	NA	NA	1 E-9	2 E-9	NA	NA	NA	8 E-8	1 E-6	NA	2 E-7	NA	9 E-8	2 E-10	2 E-8	NA	NA
59F-SB27	1	NA	4 E-10	1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SB28	1	NA	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
59F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	2 E-9	NA	1 E-8	NA	NA	NA	NA	6 E-10	NA	NA
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SD07	0.25	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA	NA	NA
59F-SNS01	0.5	NA	NA	NA	1 E-9	NA	NA	NA	8 E-9	1 E-7	4 E-8	NA	NA	NA	6 E-10	2 E-9	1 E-9	NA
59F-SNS01	2.5	NA	NA	NA	8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA
59F-SNS02	0.5	NA	NA	NA	4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4 E-10	NA	NA
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA
59F-SNS03	0.5	NA	NA	NA	4 E-9	NA	NA	NA	3 E-9	5 E-8	1 E-8	NA	NA	NA	3 E-10	6 E-10	NA	NA
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	NA	NA	NA
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	6 E-10	NA	NA
59F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	1	NA	NA	6 E-9	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB02	5	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SNS01	0.5	NA	NA	NA	3 E-9	NA	NA	NA	6 E-9	1 E-7	5 E-8	NA	NA	NA	3 E-10	2 E-9	NA	NA
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
61F-SB03	5	NA	NA	NA	NA	NA	NA	NA	7 E-9	NA	NA	NA	NA	NA	3 E-10	9 E-10	NA	NA
61F-SB04	1	NA	NA	6 E-9	5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SB05	1	NA	NA	6 E-10	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	1 E-8	3 E-7	1 E-7	NA	NA	NA	1 E-9	4 E-9	NA	NA
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	NA	NA	NA
61F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	1	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB06	2	NA	NA	2 E-9	4 E-10	NA	NA	NA	3 E-9	6 E-8	9 E-9	NA	NA	NA	6 E-11	6 E-10	4 E-9	NA
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
62F-SB07	5	NA	NA	NA	NA	NA	NA	NA	6 E-9	6 E-8	1 E-8	NA	NA	NA	3 E-10	1 E-9	NA	NA
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	2 E-9	5 E-8	2 E-8	NA	NA	NA	5 E-10	2 E-9	NA	NA
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	NA	NA	NA
62F-SNS02	0.5	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	3 E-8	NA	NA	NA	5 E-10	2 E-9	NA	NA
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-07-SB04	1	NA	NA	4 E-10	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,2-Dichloroethane	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	Antimony	Barium	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b & k)fluoranthene (total)	Benzo(b)fluoranthene	Benzo(ghi) perylene	Benzo(k)fluoranthene	Cadmium	Chrysene	delta-BHC	Dibenz(a,h) anthracene
Unit Hazard																		
Unit Risk																		
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	1 E-9	NA	NA
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-11	NA	NA	NA
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-08-SB12	1	NA	NA	NA	6 E-9	NA	NA	NA	NA	9 E-8	2 E-8	NA	NA	NA	2 E-10	2 E-9	8 E-9	NA
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-08-SNS02	0.5	NA	NA	6 E-10	NA	NA	NA	NA	4 E-9	6 E-8	2 E-8	NA	NA	NA	3 E-10	8 E-10	NA	NA
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-08-SNS03	0.5	NA	NA	7 E-10	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA	2 E-10	5 E-10	NA	NA
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-08-SNS04	0.5	NA	NA	NA	NA	6 E-8	NA	NA	6 E-8	7 E-7	2 E-7	NA	NA	NA	8 E-10	1 E-8	NA	4 E-8
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-RE01-SB01	1	NA	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	NA	NA	NA	3 E-10	8 E-10	NA	NA
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,2-Dichloroethane**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**Antimony**	**Barium**	**Benzo(a)anthracene**	**Benzo(a)pyrene**	**Benzo(b & k)fluoranthene (total)**	**Benzo(b)fluoranthene**	**Benzo(ghi) perylene**	**Benzo(k)fluoranthene**	**Cadmium**	**Chrysene**	**delta-BHC**	**Dibenz(a,h) anthracene**
Unit Hazard																		
Unit Risk																		
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	1	NA	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB04	5	NA	NA	2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	NA	NA	NA
CP2-ST07-SB01	1	NA	NA	NA	6 E-10	NA	NA	NA	NA	NA	2 E-8	NA	NA	NA	3 E-10	7 E-10	NA	NA
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	NA	NA	NA
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	1 E-8	NA	NA	NA	6 E-10	5 E-10	NA	NA
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	7 E-9	1 E-7	3 E-8	NA	NA	NA	4 E-10	2 E-9	NA	NA
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	5 E-9	9 E-8	2 E-8	NA	NA	NA	3 E-10	2 E-9	NA	NA
OS1-F2-SB02	1	NA	NA	3 E-10	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB03	1	NA	5 E-10	1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SB04	1	NA	NA	NA	NA	7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F2-SNS01	0.5	NA	NA	NA	6 E-10	6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11	NA	NA	NA
OS1-F2-SNS01	2.5	NA	NA	7 E-9	3 E-9	6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	7 E-10	NA
OS1-F2-SNS02	0.5	NA	1 E-9	4 E-9	3 E-9	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	NA	NA
OS1-F2-SNS02	2.5	NA	NA	NA	1 E-9	7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11	NA	5 E-10	NA
OS1-F2-SNS03	0.5	NA	NA	1 E-9	4 E-9	NA	NA	NA	4 E-9	9 E-8	2 E-8	NA	NA	NA	4 E-10	1 E-9	2 E-9	NA
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11	NA	6 E-10	NA
OS1-F2-SNS04	0.5	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11	NA	4 E-10	NA
OS1-F2-SNS04	2.5	NA	4 E-9	8 E-10	4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	NA	1 E-9	NA
OS1-F3-SD01	0.25	NA	NA	3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Blood Lead
Unit Hazard																						
Unit Risk																						
25F-HA01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.4
25F-HA01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	3.4
25F-HA02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
25F-HA02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
25F-HA02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
25F-HA03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
25F-HA03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
25F-HA03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
25F-HA04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
25F-HA04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
25F-HA04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
25F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
25F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
25F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
25F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
25F-SB06	1	NA	NA	NA	NA	NA	NA	NA	9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
25F-SB06	5	NA	NA	NA	NA	NA	NA	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
25F-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
25F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
25F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	3.4
25F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
25F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.4
25F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
25F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
25F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
25F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
25F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SPB03	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
25F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
59F-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
59F-SB12	1	NA	NA	NA	NA	NA	NA	NA	6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
59F-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
59F-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
59F-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SB14	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
59F-SB15	5	NA	NA	NA	NA	NA	NA	NA	6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	3.3
59F-SB16	1	NA	NA	NA	NA	NA	4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9	3.3
59F-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	3.3
59F-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
59F-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
59F-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
59F-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
59F-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.4
59F-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
59F-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.4
59F-SB20	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
59F-SB21	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SB22	1	NA	NA	NA	NA	NA	NA	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	3.4
59F-SB22	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Blood Lead
Unit Hazard																						
Unit Risk																						
59F-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
59F-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SB25	1	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8	NA	NA	NA	NA	NA	6 E-8	3.3
59F-SB26	1	NA	NA	NA	NA	NA	NA	NA	8 E-8	NA	NA	NA	NA	NA	4 E-6	NA	NA	NA	NA	NA	5 E-6	3.3
59F-SB27	1	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	1 E-6	3.4
59F-SB28	1	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-6	NA	NA	NA	NA	NA	9 E-6	3.4
59F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5	NA	NA	NA	NA	NA	NA	5 E-5	3.9
59F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	NA	NA	NA	NA	NA	NA	2 E-6	3.4
59F-SD02	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	1 E-6	3.4
59F-SD02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	1 E-6	3.3
59F-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD03	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD04	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD05	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD05	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD06	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SD06	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SD07	0.25	NA	NA	NA	NA	NA	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	3.4
59F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
59F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.3
59F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.4
59F-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.3
59F-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	3.3
59F-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10	3.4
59F-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10	3.4
59F-SPB01	1	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.3
59F-SPB01	5	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	NA
59F-SPB01	10	NA	NA	NA	NA	NA	NA	1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	NA
59F-SPB02	1	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.5
59F-SPB02	5	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	4.0
59F-SPB02	10	NA	NA	NA	NA	NA	NA	7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	3.4
59F-SPB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB04A	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB06	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB07	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SPB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59F-SPB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59F-SPB08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
60F-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
60F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
60F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SB04	1	NA	NA	NA	NA	NA	2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	3.3
60F-SB04	5	NA	NA	NA	NA	NA	3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3.3
60F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
60F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
61F-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Blood Lead
Unit Hazard																						
Unit Risk																						
61F-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
61F-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9	3.3
61F-SB04	1	NA	NA	NA	NA	NA	2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA
61F-SB05	1	NA	NA	NA	NA	NA	1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	NA
61F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA	NA	6 E-7	3.5
61F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	3.4
61F-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
61F-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
62F-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB06	2	7 E-9	NA	NA	NA	NA	1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.3
62F-SB06	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
62F-SB07	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.3
62F-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
62F-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SD01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
62F-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
62F-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.4
C201-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C201-SPB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C201-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C207-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA	NA	NA	NA	4 E-6	NA
C208-SB02	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	1 E-6	NA
C208-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C208-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C208-SB03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C208-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	NA	NA	NA	NA	NA	NA	4 E-6	NA
C208-SB05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	NA	NA	NA	NA	NA	NA	2 E-6	NA
C208-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7	NA	NA	NA	NA	NA	NA	9 E-7	NA
C208-SB05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	NA	NA	NA	NA	NA	NA	3 E-7	NA
C208-SPB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	NA	NA	NA	NA	NA	5 E-6	3.3
C208-SPB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB01	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	NA	NA	NA	NA	NA	5 E-7	3.3
C208-SPB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
C208-SPB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	NA	NA	NA	NA	NA	NA	1 E-6	NA
C208-SPB06	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	NA	NA	NA	NA	NA	NA	2 E-6	NA
C208-SPB06	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208-SPB06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-07-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-07-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.3
CP2-07-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

		Incremental Lifetime Cancer Risk																				
Sample Name	Depth	Dieldrin	Di-n-butyl phthalate	Endosulfan II	Endrin	Fluoranthene	Heptachlor epoxide	Hexanedioic Acid, dioctylester	Indeno(1,2,3-cd)pyrene	Iron	Lead	Mercury	Molybdenum	PCB-1248	PCB-1254	Pendimethalin (Prowl)	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	ILCR	Blood Lead
Unit Hazard																						
Unit Risk																						
CP2-07-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-07-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-07-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-07-SB08	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9	3.3
CP2-07-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-07-SB10	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB10	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-07-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-07-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-07-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-07-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-07-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-07-SB16	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB16	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB17	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB17	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB18	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
CP2-07-SB18	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB19	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-07-SB19	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-07-SB20	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB20	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB21	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB22	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB23	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SB24	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SB09	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-08-SB09	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-08-SB10	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	NA	NA	NA	NA	NA	NA	8 E-7	3.3
CP2-08-SB10	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-08-SB11	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-08-SB11	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-08-SB12	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-6	NA	NA	NA	NA	NA	7 E-6	3.3
CP2-08-SB12	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-08-SB13	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA	NA	NA	NA	2 E-7	3.3
CP2-08-SB13	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-08-SB14	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-08-SB14	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-08-SB15	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-08-SB15	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-08-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA	NA	NA	NA	2 E-7	3.3
CP2-08-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-08-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	NA	NA	NA	NA	NA	5 E-7	3.3
CP2-08-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-08-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	NA	NA	NA	NA	NA	3 E-7	3.3
CP2-08-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA	NA	NA	NA	2 E-7	3.3
CP2-08-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	2 E-8	NA	NA	NA	NA	NA	2 E-6	NA	NA	NA	NA	NA	3 E-6	3.4
CP2-08-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-RE01-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-RE01-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-RE05-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	3.3
CP2-RE05-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-RE05-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.3
CP2-RE05-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-RE05-SB03	1	NA	NA	NA	NA	NA	3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3

Table 5.6-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	**Depth**	**Dieldrin**	**Di-n-butyl phthalate**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**Heptachlor epoxide**	**Hexanedioic Acid, dioctylester**	**Indeno(1,2,3-cd)pyrene**	**Iron**	**Lead**	**Mercury**	**Molybdenum**	**PCB-1248**	**PCB-1254**	**Pendimethalin (Prowl)**	**Pentachlorophenol**	**Phenanthrene**	**Phenol**	**Pyrene**	**ILCR**	**Blood Lead**
Unit Hazard																						
Unit Risk																						
CP2-RE05-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-RE05-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
CP2-RE05-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3.3
CP2-RE05-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
CP2-RE05-SB05	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	3.3
CP2-ST07-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
CP2-ST07-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	3.3
F(C)-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
F(C)-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
F(C)-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
F(c)-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	NA	NA	NA	NA	NA	3 E-7	3.3
F(c)-SB02	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
F(c)-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
F(c)-SB03	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
F(c)-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-4	NA	NA	NA	NA	NA	NA	4 E-4	3.3
F(c)-SB04	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	NA	NA	NA	NA	NA	NA	4 E-8	3.3
F(c)-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	3.4
F(c)-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	9 E-9	NA	NA	NA	NA	NA	7 E-7	NA	NA	NA	NA	NA	8 E-7	3.3
F(c)-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	8 E-9	NA	NA	NA	NA	NA	8 E-7	NA	NA	NA	NA	NA	9 E-7	3.3
OS1-F2-SB02	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	NA
OS1-F2-SB03	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA	NA	NA	NA	2 E-7	NA
OS1-F2-SB04	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	NA	NA	NA	NA	NA	3 E-7	NA
OS1-F2-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9	3.3
OS1-F2-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.4
OS1-F2-SNS02	0.5	6 E-8	NA	NA	NA	NA	1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
OS1-F2-SNS02	2.5	NA	NA	NA	NA	NA	7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	3.3
OS1-F2-SNS03	0.5	4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	3.4
OS1-F2-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	3.3
OS1-F2-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-10	3.3
OS1-F2-SNS04	2.5	2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3.3
OS1-F3-SD01	0.25	6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7	NA	NA	NA	NA	NA	5 E-7	3.4

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard		9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	6.8 E-2	1.5 E+1
Unit Risk		NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	NA	5.6 E-3
59F-SP33	10		100	3900	37		110	140	1200	120	50	820	22		140			
59F-SP33	20			33000					550			920			230			
59F-SP34	10		82	41000			74		400	110		2000			170			
59F-SP34	15			30000					1400		65	1100			82		38	
59F-SP35	10	120		88000								760			100		270	
59F-SP35	20			310000			100		160			770			280		100	160
59F-SP36	10			10									14		57			120
59F-SP36	20		27	38	7.6					17		69			23			22
59F-SP37	10							70			38	240	11					
59F-SP38	10														4.5			
59F-SP38	20							82			6.0	390	12					
59F-SP38	40																	
59F-SP39	20			18											26			16
60F-SP08	10											98						
60F-SP08	20		13							8.2	23	74	5.7		80			12
61F-SP03	10			760				25	33		12	340	5.0		14			
61F-SP03	20			330				23	32		12	280	12		12			8.7
61F-SP04	10								14						6.7			
61F-SP04	20								17									
61F-SP05	10											130	5.4		7.0			
61F-SP05	20											120	3.8					
61F-SP06	10											78						
61F-SP06	20											130	8.6		11			
62F-SP01	20		680		240		80	76	150	680	17	300			14			
62F-SP02	20		22					34	60	15	31	440			37			
62F-SP03	20		24					26	90	18	16	350			39			
62F-SP04	10		18		5.5		18		39	11	6.7	82			13			
62F-SP05	10		1000		370		220	130	190	1000	8.4	750	12		60			
62F-SP05	20		950		380		160	110	170	1100	39	520	9.5		17			
62F-SP06	10		13							8.3					8.2			
62F-SP06	20		11				8.1		17	7.4	25	100	15		73			
62F-SP07	10					20			25			110	4.9	17	15			6.7
62F-SP07	20												3.7		7.6			
CP2-07-SP01	10	160		230000			160						100					3700
CP2-07-SP01	20			8600000														120000
CP2-07-SP01	40			2200000														12000
CP2-07-SP02	10															1500		
CP2-07-SP02	20																	
CP2-07-SP03	10								64		8.2	180	4.5		10			19
CP2-07-SP03	20						25		97			180	16		95			9.8
CP2-07-SP04	10			170			58						14		210			190
CP2-07-SP04	20			190			40					150	35		310			690
CP2-07-SP05	10			12			45						25		36	23		180
CP2-07-SP05	20			11									12		33	14		330
CP2-07-SP06	10	24	9.3	440						8.0			12		44	96		1300
CP2-07-SP06	20	22		160									23		70	100		480
CP2-07-SP07	10						15		30		18	140	13		19			10
CP2-07-SP07	20			8.0					18		16	94	6.4		24			16
CP2-07-SP08	10			20								120			6.2			
CP2-07-SP08	20			5.6								170			17			
CP2-07-SP08	30					37		29	20			650			17			
CP2-07-SP09	10																	
CP2-07-SP09	20							28				150	34					
CP2-07-SP09	34						5.0	110				640	59		4.8			
CP2-07-SP10	10							34				85	34		55			6.9
CP2-07-SP10	20			9.0				85	20			260	89		45			34
CP2-07-SP10	40							22	12			82	16		27			
CP2-07-SP11	10							34	16			220	5					

		Concentrations																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard		9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	6.8 E-2	1.5 E+1
Unit Risk		NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	NA	5.6 E-3
CP2-07-SP11	20											150	15					
CP2-07-SP12	10							29				96	25		61			9.9
CP2-07-SP12	20											86	8.9		10			
CP2-07-SP12	40	17		72				48	18			200	64		210			41
CP2-07-SP13	10								13			78	14					
CP2-07-SP13	20							43				250	18					
CP2-07-SP14	10											310			7.7			
CP2-07-SP14	18.5					27		28	12			510			39			
CP2-07-SP15	10											70	4.1		31			
CP2-07-SP15	20																	
CP2-08-SP11	10		44	130	12		12	23	180	42	16	470	4.9		25			
CP2-08-SP11	20		40	36			16	51	640	38	53	1100	7.7		27			
CP2-08-SP12	10		18	9.8					190	13	21	300	4.4		15			12
CP2-08-SP12	20			2200					26		11	120			26			10
CP2-08-SP13	10											200						
CP2-08-SP14	10														4.5			
CP2-RE05-SP01	10			300000														3000
CP2-RE05-SP01	20			110000														1200
CP2-RE05-SP01	40			9.6											14			
CP2-RE05-SP02	10			38000											49			400
CP2-RE05-SP02	20			9900														120
CP2-RE05-SP02	40	8.9				29		20	12			270	27		88			
CP2-RE05-SP03	10														4.0			
CP2-RE05-SP03	20		9.4							6.3		120			13			
CP2-RE05-SP04	10											91			3.7			
CP2-RE05-SP04	20											84			4.1			
CP2-RE05-SP05	10			340									4.2		14			
CP2-RE05-SP05	20			21											16			
CP2-RE05-SP05	40			17											26			
CP2-RE05-SP06	10			12000											15			50
CP2-RE05-SP06	20			4300											8.4			19
CP2-RE05-SP06	40			910									7.0		15			
CP2-RE05-SP07	10								41						9.3			
CP2-RE05-SP07	20								23						26			
CP2-RE05-SP08	10			21									5.7		28			
CP2-RE05-SP08	20			15									7.7		48			
CP2-RE05-SP08	40			11											8.1			
CP2-RE05-SP09	10			7.7														
CP2-RE05-SP09	20			7.2											27			
CP2-RE05-SP10	10											110						
CP2-RE05-SP10	20											130						
F(C)-SP05	20			13					16		7.0				10			
F(C)-SP06	10		350		120		30	37	79	310	15	120			28			
F(C)-SP06	20		220		70		6.8		20	180	18	77	6.2		37			
OS1-F1-SP01	10											75			20			
OS1-F1-SP01	20											100	5.1		20			

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations																
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+0	1.1 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.3 E-1	6.8 E+0	2.0 E+1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
59F-SP33	10		37	370	75	22		990	93	260		120	26		180	210		14
59F-SP33	20			270		930		170	150						170	100		71
59F-SP34	10			280				180	210	120					180	110		51
59F-SP34	15			150				120	64						340	90		55
59F-SP35	10		66	140				220	580						180		330	540
59F-SP35	20		59	140				380	420						170	62	140	830
59F-SP36	10			42		300		23	42	11						36	32	
59F-SP36	20			49		44									6.6	5.3		
59F-SP37	10			22					8.6	6.8					25	29		
59F-SP38	10								7.3					510	11	7.4	9.3	
59F-SP38	20			15				21	30	7.9				380	33	28	12	
59F-SP38	40													8.7				
59F-SP39	20					130	18				16			69		4.9	55	
60F-SP08	10			46												6		
60F-SP08	20		7.3	84				48	13						23	29		
61F-SP03	10		6.3	29						10					22	24	15	
61F-SP03	20	8.2	5.0	30					7.0	10					24	33	41	
61F-SP04	10								14						11	13		
61F-SP04	20														7.9	14		
61F-SP05	10								7.7							6.3	8.7	
61F-SP05	20			20												5.9		
61F-SP06	10			22												8.8	15	
61F-SP06	20							13	18	6.1						15	10	
62F-SP01	20	30	16	170	250		23	32	4.7	1100	9.3	520	130	15	92	300		
62F-SP02	20		11	66				38		8					44	20		
62F-SP03	20		8.1	59		14	130	18		8.7		6.1			33	11	7.9	
62F-SP04	10		6.4	55				14							17	4		
62F-SP05	10	45	28	300	460	10		58	17	2000	21	880	200	33	140	840		
62F-SP05	20	52	34	280	480	6.7		110	12	2000	15	940	220	31	180	690		
62F-SP06	10			79				10							15	11		
62F-SP06	20		25	64			21	110	37	5.7					40	49		
62F-SP07	10		4.7	22				40	93						73	20	7.0	
62F-SP07	20					10	41	5.6	27	15		6.2			7.2	12		
CP2-07-SP01	10			960		480			2400						2800	190	160	64000
CP2-07-SP01	20																	120000
CP2-07-SP01	40																	
CP2-07-SP02	10							71							91			
CP2-07-SP02	20																	
CP2-07-SP03	10			22		240		20	6.2					20	28	23		
CP2-07-SP03	20			20		44		82	85						75	31		
CP2-07-SP04	10		53	27				200	430							23	8.0	
CP2-07-SP04	20		21	22				160	220						16	32		
CP2-07-SP05	10			17		260		12	48	12	59			74		26	22	
CP2-07-SP05	20					440		15	21	9.5	18			70		34	28	
CP2-07-SP06	10				12	140			25	42	730	13		190		50	95	
CP2-07-SP06	20					420			58	18	230			59		44	41	
CP2-07-SP07	10			30		100		48	24	8.6				130	36	42		
CP2-07-SP07	20			18		110		38	16	9.5				13	35	24		
CP2-07-SP08	10			11														
CP2-07-SP08	20			20		13												
CP2-07-SP08	30			47			550	19	43	7.6				20	45	40	270	
CP2-07-SP09	10								7.3					30	6.8	9.1		
CP2-07-SP09	20			9.6				57	54	8.6				46	18	50		
CP2-07-SP09	34		7.3	25	8.5			100	130	13		5.2		50	34	90		
CP2-07-SP10	10		8.4	12				150	290	8.6					6.0	22		
CP2-07-SP10	20			88				540	1800	9.3					19	34		
CP2-07-SP10	40			43				98	170	10					5.8	14		
CP2-07-SP11	10								11					17		8.2		

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations																
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+0	1.1 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.3 E-1	6.8 E+0	2.0 E+1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
CP2-07-SP11	20				5.9			25	42	7.7				21	12	34		
CP2-07-SP12	10		14	32	5.2	8.5		160	390	13					5.7	21		
CP2-07-SP12	20			11		16		14	18	8.9						12	12	
CP2-07-SP12	40			98		28		470	1600	14						29	15	
CP2-07-SP13	10			14					25					62	24	15		
CP2-07-SP13	20			22	5.3			19	31	8.4				11	16	39		
CP2-07-SP14	10			22			270	7.4	11					8.8	12	67	99	
CP2-07-SP14	18.5		8.5	38			190	10	180	10					35	200	64	
CP2-07-SP15	10																	
CP2-07-SP15	20																	
CP2-08-SP11	10		8.4	110	17			66	6.3	64	43	26	8.2		110	55	8.8	
CP2-08-SP11	20		26	160	14			140	9.5	59	21	21			240	85		
CP2-08-SP12	10		8.4	70				27	4.8	17	16	8.2			43	27	18	
CP2-08-SP12	20		6	22					6.3	8.2	8.9				23	14	19	
CP2-08-SP13	10			20														
CP2-08-SP14	10									6.4						7.5		
CP2-RE05-SP01	10														98			240
CP2-RE05-SP01	20							120							130	240		58
CP2-RE05-SP01	40																	
CP2-RE05-SP02	10							78							86			
CP2-RE05-SP02	20							110							140	62		
CP2-RE05-SP02	40		23	26	5.6		940	380	1500	8.3				26		60	450	
CP2-RE05-SP03	10			8.8														
CP2-RE05-SP03	20			9.7				14	8.5	12		6.2				8.6		
CP2-RE05-SP04	10			9.1														
CP2-RE05-SP04	20			14														
CP2-RE05-SP05	10								6.8							5.4		
CP2-RE05-SP05	20							6.2								5.3		
CP2-RE05-SP05	40							4.8	7								13	
CP2-RE05-SP06	10								11						5.7	8.2		
CP2-RE05-SP06	20								6.7	5.4								
CP2-RE05-SP06	40								23	9.8						9.2		
CP2-RE05-SP07	10							28	32						7.4	9.1		
CP2-RE05-SP07	20							27	53						19	28	7.2	
CP2-RE05-SP08	10							23	23							5.6		
CP2-RE05-SP08	20		8.0					29	64							7.8		
CP2-RE05-SP08	40								12									
CP2-RE05-SP09	10																	
CP2-RE05-SP09	20		4.7					35	44									
CP2-RE05-SP10	10																	
CP2-RE05-SP10	20																	
F(C)-SP05	20		5.5	14				13							21	7.3		
F(C)-SP06	10	14	9.2	160	66			34	5.4	300	5.9	180	57		81	58		
F(C)-SP06	20	7.7	4.5	31	26			36	7.4	110		76	32		68	32		
OS1-F1-SP01	10								4.5					330	7.5	6.6		
OS1-F1-SP01	20							7.0	18	7.6				290	26	17		

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard																		
Unit Risk																		
59F-SP33	10	NA	1.9 E-3	1.6 E-1	8.1 E-4	NA	1.9 E-4	4.7 E-6	2.4 E-2	2.1 E-4	2.6 E-6	6.0 E-5	1.3 E-4	NA	4.0 E-5	NA	NA	NA
59F-SP33	20	NA	NA	7.6 E-1	NA	NA	NA	NA	6.2 E-3	NA	NA	4.0 E-5	NA	NA	3.9 E-5	NA	NA	NA
59F-SP34	10	NA	1.5 E-3	1.7 E+0	NA	NA	1.3 E-4	NA	7.9 E-3	1.9 E-4	NA	1.5 E-4	NA	NA	4.9 E-5	NA	NA	NA
59F-SP34	15	NA	NA	8.8 E-1	NA	NA	NA	NA	2.0 E-2	NA	2.4 E-6	5.9 E-5	NA	NA	1.7 E-5	NA	1.1 E-6	NA
59F-SP35	10	3.1 E-4	NA	3.6 E+0	NA	NA	NA	NA	NA	NA	NA	5.6 E-5	NA	NA	2.9 E-5	NA	1.0 E-5	NA
59F-SP35	20	NA	NA	7.1 E+0	NA	NA	1.0 E-4	NA	1.8 E-3	NA	NA	3.4 E-5	NA	NA	4.7 E-5	NA	2.5 E-6	3.9 E-4
59F-SP36	10	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-5	NA	1.6 E-5	NA	NA	5.3 E-4
59F-SP36	20	NA	2.8 E-4	8.7 E-4	9.2 E-5	NA	NA	NA	NA	1.7 E-5	NA	3.0 E-6	NA	NA	3.9 E-6	NA	NA	5.4 E-5
59F-SP37	10	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	2.0 E-6	1.8 E-5	6.5 E-5	NA	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	1.8 E-7	1.7 E-5	3.9 E-5	NA	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	4.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	3.9 E-5
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	NA	NA	NA
60F-SP08	20	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	8.2 E-6	6.8 E-7	3.2 E-6	1.8 E-5	NA	1.3 E-5	NA	NA	3.0 E-5
61F-SP03	10	NA	NA	3.1 E-2	NA	NA	NA	8.3 E-7	6.5 E-4	NA	6.3 E-7	2.5 E-5	2.9 E-5	NA	4.0 E-6	NA	NA	NA
61F-SP03	20	NA	NA	7.6 E-3	NA	NA	NA	4.4 E-7	3.6 E-4	NA	3.5 E-7	1.2 E-5	3.9 E-5	NA	2.0 E-6	NA	NA	2.1 E-5
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-6	3.2 E-5	NA	2.0 E-6	NA	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	1.2 E-5	NA	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	2.8 E-5	NA	1.8 E-6	NA	NA	NA
62F-SP01	20	NA	7.1 E-3	NA	2.9 E-3	NA	8.0 E-5	1.4 E-6	1.7 E-3	6.8 E-4	5.0 E-7	1.3 E-5	NA	NA	2.3 E-6	NA	NA	NA
62F-SP02	20	NA	2.3 E-4	NA	NA	NA	NA	6.5 E-7	6.8 E-4	1.5 E-5	9.1 E-7	1.9 E-5	NA	NA	6.2 E-6	NA	NA	NA
62F-SP03	20	NA	2.5 E-4	NA	NA	NA	NA	4.9 E-7	1.0 E-3	1.8 E-5	4.7 E-7	1.5 E-5	NA	NA	6.5 E-6	NA	NA	NA
62F-SP04	10	NA	3.4 E-4	NA	1.2 E-4	NA	3.2 E-5	NA	7.7 E-4	1.9 E-5	3.5 E-7	6.0 E-6	NA	NA	3.7 E-6	NA	NA	NA
62F-SP05	10	NA	1.9 E-2	NA	8.1 E-3	NA	3.9 E-4	4.3 E-6	3.7 E-3	1.8 E-3	4.4 E-7	5.5 E-5	7.1 E-5	NA	1.7 E-5	NA	NA	NA
62F-SP05	20	NA	9.9 E-3	NA	4.6 E-3	NA	1.6 E-4	2.1 E-6	1.9 E-3	1.1 E-3	1.1 E-6	2.3 E-5	3.1 E-5	NA	2.9 E-6	NA	NA	NA
62F-SP06	10	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	2.4 E-6	NA	NA	NA
62F-SP06	20	NA	1.1 E-4	NA	NA	NA	8.1 E-6	NA	1.9 E-4	7.4 E-6	7.4 E-7	4.4 E-6	4.8 E-5	NA	1.2 E-5	NA	NA	NA
62F-SP07	10	NA	NA	NA	NA	1.4 E-6	NA	NA	4.9 E-4	NA	NA	8.1 E-6	2.9 E-5	1.7 E-5	4.3 E-6	NA	NA	3.0 E-5
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	1.3 E-6	NA	NA	NA
CP2-07-SP01	10	4.1 E-4	NA	9.5 E+0	NA	NA	2.8 E-4	NA	NA	NA	NA	NA	5.9 E-4	NA	NA	NA	NA	1.6 E-2
CP2-07-SP01	20	NA	NA	2.0 E+2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1
CP2-07-SP01	40	NA	NA	2.7 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	4.3 E-7	1.3 E-5	2.7 E-5	NA	2.9 E-6	NA	NA	8.4 E-5
CP2-07-SP03	20	NA	NA	NA	NA	NA	2.5 E-5	NA	1.1 E-3	NA	NA	7.9 E-6	5.2 E-5	NA	1.6 E-5	NA	NA	2.4 E-5
CP2-07-SP04	10	NA	NA	7.0 E-3	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	8.3 E-5	NA	6.1 E-5	NA	NA	8.4 E-4
CP2-07-SP04	20	NA	NA	4.4 E-3	NA	NA	4.0 E-5	NA	NA	NA	NA	6.5 E-6	1.1 E-4	NA	5.2 E-5	NA	NA	1.7 E-3
CP2-07-SP05	10	NA	NA	4.9 E-4	NA	NA	7.9 E-5	NA	NA	NA	NA	NA	1.5 E-4	NA	1.0 E-5	9.3 E-5	NA	8.0 E-4
CP2-07-SP05	20	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	5.5 E-6	3.0 E-5	NA	8.1 E-4
CP2-07-SP06	10	6.2 E-5	1.7 E-4	1.8 E-2	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	7.1 E-5	NA	1.3 E-5	3.9 E-4	NA	5.8 E-3
CP2-07-SP06	20	3.3 E-5	NA	3.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	NA	1.2 E-5	2.2 E-4	NA	1.2 E-3
CP2-07-SP07	10	NA	NA	NA	NA	NA	2.6 E-5	NA	5.9 E-4	NA	9.4 E-7	1.0 E-5	7.7 E-5	NA	5.5 E-6	NA	NA	4.4 E-5
CP2-07-SP07	20	NA	NA	1.8 E-4	NA	NA	NA	NA	2.0 E-4	NA	4.7 E-7	4.1 E-6	2.1 E-5	NA	4.0 E-6	NA	NA	3.9 E-5
CP2-07-SP08	10	NA	NA	8.2 E-4	NA	NA	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	1.8 E-6	NA	NA	NA
CP2-07-SP08	20	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	7.4 E-6	NA	NA	2.9 E-6	NA	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	9.6 E-7	NA	3.6 E-7	1.5 E-4	NA	NA	1.9 E-5	NA	NA	1.9 E-6	NA	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	5.3 E-7	NA	NA	NA	6.5 E-6	1.1 E-4	NA	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	2.9 E-6	1.2 E-6	NA	NA	NA	1.7 E-5	1.2 E-4	NA	4.7 E-7	NA	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	6.3 E-6	2.0 E-4	NA	1.6 E-5	NA	NA	3.1 E-5
CP2-07-SP10	20	NA	NA	2.1 E-4	NA	NA	NA	1.6 E-6	2.3 E-4	NA	NA	1.1 E-5	2.9 E-4	NA	7.5 E-6	NA	NA	8.4 E-5
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	2.1 E-7	6.8 E-5	NA	NA	1.8 E-6	2.7 E-5	NA	2.3 E-6	NA	NA	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	1.1 E-6	3.2 E-4	NA	NA	1.6 E-5	2.9 E-5	NA	NA	NA	NA	NA

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard																		
Unit Risk																		
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	4.8 E-5	NA	NA	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	9.7 E-7	NA	NA	NA	7.1 E-6	1.5 E-4	NA	1.8 E-5	NA	NA	4.4 E-5
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6	2.9 E-5	NA	1.7 E-6	NA	NA	NA
CP2-07-SP12	40	1.3 E-5	NA	8.7 E-4	NA	NA	NA	4.5 E-7	1.0 E-4	NA	NA	4.5 E-6	1.1 E-4	NA	1.8 E-5	NA	NA	5.4 E-5
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	5.7 E-6	8.3 E-5	NA	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	8.2 E-7	NA	NA	NA	1.1 E-5	5.8 E-5	NA	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	2.2 E-6	NA	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	1.1 E-6	NA	5.4 E-7	1.4 E-4	NA	NA	2.3 E-5	NA	NA	6.7 E-6	NA	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	2.4 E-5	NA	8.9 E-6	NA	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	8.2 E-4	5.4 E-3	2.6 E-4	NA	2.1 E-5	7.7 E-7	3.6 E-3	7.4 E-5	8.3 E-7	3.5 E-5	2.9 E-5	NA	7.2 E-6	NA	NA	NA
CP2-08-SP11	20	NA	4.2 E-4	8.2 E-4	NA	NA	1.6 E-5	9.7 E-7	7.2 E-3	3.8 E-5	1.6 E-6	4.8 E-5	2.5 E-5	NA	4.5 E-6	NA	NA	NA
CP2-08-SP12	10	NA	3.4 E-4	4.0 E-4	NA	NA	NA	NA	3.7 E-3	2.3 E-5	1.1 E-6	2.2 E-5	2.6 E-5	NA	4.3 E-6	NA	NA	5.3 E-5
CP2-08-SP12	20	NA	NA	5.0 E-2	NA	NA	NA	NA	2.9 E-4	NA	3.2 E-7	5.2 E-6	NA	NA	4.4 E-6	NA	NA	2.5 E-5
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA
CP2-RE05-SP01	10	NA	NA	1.2 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2
CP2-RE05-SP01	20	NA	NA	2.5 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-3
CP2-RE05-SP01	40	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA
CP2-RE05-SP02	10	NA	NA	1.6 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	1.8 E-3
CP2-RE05-SP02	20	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4
CP2-RE05-SP02	40	6.6 E-6	NA	NA	NA	5.8 E-7	NA	1.9 E-7	6.8 E-5	NA	NA	6.0 E-6	4.6 E-5	NA	7.5 E-6	NA	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA
CP2-RE05-SP03	20	NA	9.8 E-5	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	5.2 E-6	NA	NA	2.2 E-6	NA	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	1.1 E-6	NA	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	6.9 E-7	NA	NA	NA
CP2-RE05-SP05	10	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	4.0 E-6	NA	NA	NA
CP2-RE05-SP05	20	NA	NA	4.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA
CP2-RE05-SP05	40	NA	NA	2.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA
CP2-RE05-SP06	10	NA	NA	4.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-6	NA	NA	2.2 E-4
CP2-RE05-SP06	20	NA	NA	9.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	4.7 E-5
CP2-RE05-SP06	40	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	1.3 E-6	NA	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	8.1 E-4	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA
CP2-RE05-SP08	10	NA	NA	8.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	8.1 E-6	NA	NA	NA
CP2-RE05-SP08	20	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	8.1 E-6	NA	NA	NA
CP2-RE05-SP08	40	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-7	NA	NA	NA
CP2-RE05-SP09	10	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	NA	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-6	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	3.0 E-4	NA	NA	NA	NA	1.8 E-4	NA	2.1 E-7	NA	NA	NA	1.7 E-6	NA	NA	NA
F(C)-SP06	10	NA	6.5 E-3	NA	2.6 E-3	NA	5.3 E-5	1.2 E-6	1.6 E-3	5.4 E-4	7.8 E-7	8.8 E-6	NA	NA	8.1 E-6	NA	NA	NA
F(C)-SP06	20	NA	2.3 E-3	NA	8.5 E-4	NA	6.8 E-6	NA	2.3 E-4	1.8 E-4	5.3 E-7	3.4 E-6	2.0 E-5	NA	6.2 E-6	NA	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-6	NA	NA	5.8 E-6	NA	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	1.6 E-5	NA	3.4 E-6	NA	NA	NA

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																	
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard																			
Unit Risk																			
59F-SP33	10	NA	1.0 E-6	6.1 E-5	1.2 E-5	1.9 E-5	NA	4.5 E-4	4.2 E-5	4.1 E-4	NA	2.1 E-4	9.6 E-5	NA	1.2 E-4	1.2 E-4	NA	2.9 E-5	1.9 E-1
59F-SP33	20	NA	NA	2.7 E-5	NA	4.7 E-4	NA	4.9 E-5	4.1 E-5	NA	NA	NA	NA	NA	6.7 E-5	3.4 E-5	NA	8.5 E-5	7.6 E-1
59F-SP34	10	NA	NA	4.6 E-5	NA	NA	NA	8.2 E-5	9.5 E-5	1.9 E-4	NA	NA	NA	NA	1.2 E-4	6.4 E-5	NA	1.0 E-4	1.7 E+0
59F-SP34	15	NA	NA	1.8 E-5	NA	NA	NA	4.1 E-5	2.2 E-5	NA	NA	NA	NA	NA	1.7 E-4	3.7 E-5	NA	8.1 E-5	9.0 E-1
59F-SP35	10	NA	1.8 E-6	2.3 E-5	NA	NA	NA	1.0 E-4	2.6 E-4	NA	NA	NA	NA	NA	1.2 E-4	NA	9.0 E-5	1.1 E-3	3.6 E+0
59F-SP35	20	NA	9.2 E-7	1.4 E-5	NA	NA	NA	1.1 E-4	1.2 E-4	NA	NA	NA	NA	NA	6.7 E-5	2.1 E-5	2.2 E-5	9.9 E-4	7.1 E+0
59F-SP36	10	NA	NA	6.9 E-6	NA	2.6 E-4	NA	1.0 E-5	1.9 E-5	1.8 E-5	NA	NA	NA	NA	NA	2.1 E-5	8.8 E-6	NA	1.4 E-3
59F-SP36	20	NA	NA	5.0 E-6	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	1.8 E-6	NA	NA	1.4 E-3
59F-SP37	10	NA	NA	3.6 E-6	NA	NA	NA	NA	3.9 E-6	1.1 E-5	NA	NA	NA	NA	1.7 E-5	1.7 E-5	NA	NA	1.4 E-4
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	2.2 E-3	7.5 E-6	4.3 E-6	2.5 E-6	NA	2.2 E-3
59F-SP38	20	NA	NA	1.5 E-6	NA	NA	NA	6.0 E-6	8.2 E-6	7.1 E-6	NA	NA	NA	8.8 E-4	1.3 E-5	9.4 E-6	1.9 E-6	NA	9.8 E-4
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	1.0 E-5
59F-SP39	20	NA	NA	NA	NA	6.5 E-5	5.5 E-8	NA	NA	NA	6.2 E-7	NA	NA	1.6 E-4	NA	1.6 E-6	8.5 E-6	NA	6.9 E-4
60F-SP08	10	NA	NA	7.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	1.8 E-5
60F-SP08	20	NA	1.1 E-7	8.5 E-6	NA	NA	NA	1.4 E-5	3.6 E-6	NA	NA	NA	NA	NA	9.1 E-6	9.7 E-6	NA	NA	2.5 E-4
61F-SP03	10	NA	1.7 E-7	4.8 E-6	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	1.5 E-5	1.4 E-5	4.1 E-6	NA	3.2 E-2
61F-SP03	20	1.6 E-6	7.8 E-8	3.0 E-6	NA	NA	NA	NA	1.9 E-6	9.0 E-6	NA	NA	NA	NA	9.5 E-6	1.1 E-5	6.4 E-6	NA	8.0 E-3
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	7.5 E-6	7.6 E-6	NA	NA	3.0 E-4
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	4.7 E-6	NA	NA	2.0 E-4
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	3.7 E-6	2.4 E-6	NA	5.3 E-5
61F-SP05	20	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	2.1 E-5
61F-SP06	10	NA	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	4.1 E-6	NA	1.9 E-5
61F-SP06	20	NA	NA	NA	NA	NA	NA	3.7 E-6	4.9 E-6	5.5 E-6	NA	NA	NA	NA	NA	5.0 E-6	1.6 E-6	NA	5.6 E-5
62F-SP01	20	5.8 E-6	2.5 E-7	1.7 E-5	2.1 E-5	NA	7.0 E-8	9.1 E-6	1.3 E-6	9.9 E-4	3.6 E-7	5.2 E-4	2.7 E-4	3.5 E-5	3.6 E-5	1.0 E-4	NA	NA	1.4 E-2
62F-SP02	20	NA	1.7 E-7	6.7 E-6	NA	NA	NA	1.1 E-5	NA	7.2 E-6	NA	NA	NA	NA	1.7 E-5	6.7 E-6	NA	NA	1.0 E-3
62F-SP03	20	NA	1.3 E-7	6.0 E-6	NA	7.1 E-6	3.9 E-7	5.1 E-6	NA	7.8 E-6	NA	6.1 E-6	NA	NA	1.3 E-5	3.7 E-6	1.2 E-6	NA	1.4 E-3
62F-SP04	10	NA	1.8 E-7	9.1 E-6	NA	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	NA	1.2 E-5	2.3 E-6	NA	NA	1.3 E-3
62F-SP05	10	1.6 E-5	7.7 E-7	4.9 E-5	7.2 E-5	8.8 E-6	NA	2.6 E-5	7.7 E-6	3.2 E-3	1.4 E-6	1.5 E-3	7.4 E-4	1.4 E-4	9.5 E-5	4.9 E-4	NA	NA	3.9 E-2
62F-SP05	20	1.0 E-5	5.3 E-7	2.8 E-5	4.0 E-5	3.4 E-6	NA	3.1 E-5	3.3 E-6	1.8 E-3	5.8 E-7	9.4 E-4	4.5 E-4	7.2 E-5	7.1 E-5	2.3 E-4	NA	NA	2.1 E-2
62F-SP06	10	NA	NA	1.3 E-5	NA	NA	NA	4.5 E-6	NA	NA	NA	NA	NA	NA	1.0 E-5	6.4 E-6	NA	NA	2.9 E-4
62F-SP06	20	NA	3.9 E-7	6.5 E-6	NA	NA	6.4 E-8	3.1 E-5	1.0 E-5	5.1 E-6	NA	NA	NA	NA	1.6 E-5	1.6 E-5	NA	NA	4.7 E-4
62F-SP07	10	NA	1.3 E-7	3.6 E-6	NA	NA	NA	1.8 E-5	4.2 E-5	NA	NA	NA	NA	NA	5.0 E-5	1.2 E-5	1.9 E-6	NA	7.1 E-4
62F-SP07	20	NA	NA	NA	NA	5.0 E-6	1.2 E-7	1.6 E-6	7.4 E-6	1.4 E-5	NA	6.2 E-6	NA	NA	2.8 E-6	4.0 E-6	NA	NA	5.4 E-5
CP2-07-SP01	10	NA	NA	1.6 E-4	NA	4.2 E-4	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	1.9 E-3	1.1 E-4	4.4 E-5	1.3 E-1	9.6 E+0
CP2-07-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	2.0 E+2
CP2-07-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E+1
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	6.2 E-5	NA	NA	NA	6.1 E-3
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	3.6 E-6	NA	2.1 E-4	NA	9.1 E-6	2.8 E-6	NA	NA	NA	NA	8.6 E-5	1.9 E-5	1.3 E-5	NA	NA	1.7 E-3
CP2-07-SP03	20	NA	NA	2.0 E-6	NA	2.2 E-5	NA	2.3 E-5	2.3 E-5	NA	NA	NA	NA	NA	3.0 E-5	1.0 E-5	NA	NA	1.3 E-3
CP2-07-SP04	10	NA	1.5 E-6	4.4 E-6	NA	NA	NA	9.1 E-5	2.0 E-4	NA	NA	NA	NA	NA	NA	1.3 E-5	2.2 E-6	NA	8.4 E-3
CP2-07-SP04	20	NA	3.3 E-7	2.2 E-6	NA	NA	NA	4.6 E-5	6.0 E-5	NA	NA	NA	NA	NA	6.3 E-6	1.1 E-5	NA	NA	6.4 E-3
CP2-07-SP05	10	NA	NA	2.8 E-6	NA	2.3 E-4	NA	5.4 E-6	2.2 E-5	1.9 E-5	3.9 E-6	NA	NA	3.2 E-4	NA	1.5 E-5	6.0 E-6	NA	2.2 E-3
CP2-07-SP05	20	NA	NA	NA	NA	2.2 E-4	NA	4.3 E-6	5.8 E-6	8.6 E-6	7.0 E-7	NA	NA	1.6 E-4	NA	1.1 E-5	4.3 E-6	NA	1.6 E-3
CP2-07-SP06	10	NA	NA	NA	1.9 E-6	1.2 E-4	NA	NA	1.1 E-5	6.7 E-5	4.9 E-5	2.3 E-5	NA	8.2 E-4	NA	2.9 E-5	2.6 E-5	NA	2.6 E-2
CP2-07-SP06	20	NA	NA	NA	NA	2.1 E-4	NA	NA	1.6 E-5	1.6 E-5	8.9 E-6	NA	NA	1.4 E-4	NA	1.5 E-5	6.4 E-6	NA	5.6 E-3
CP2-07-SP07	10	NA	NA	4.9 E-6	NA	8.8 E-5	NA	2.2 E-5	1.1 E-5	1.4 E-5	NA	NA	NA	5.6 E-4	2.4 E-5	2.5 E-5	NA	NA	1.5 E-3
CP2-07-SP07	20	NA	NA	1.8 E-6	NA	5.5 E-5	NA	1.1 E-5	4.4 E-6	8.6 E-6	NA	NA	NA	3.0 E-5	1.4 E-5	8.0 E-6	NA	NA	5.9 E-4
CP2-07-SP08	10	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4
CP2-07-SP08	20	NA	NA	2.0 E-6	NA	6.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4
CP2-07-SP08	30	NA	NA	3.2 E-6	NA	NA	1.1 E-6	3.7 E-6	8.5 E-6	4.5 E-6	NA	NA	NA	3.2 E-5	1.2 E-5	8.8 E-6	2.7 E-5	NA	2.7 E-4
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	1.3 E-4	4.6 E-6	5.3 E-6	NA	NA	1.4 E-4
CP2-07-SP09	20	NA	NA	9.7 E-7	NA	NA	NA	1.6 E-5	1.5 E-5	7.7 E-6	NA	NA	NA	1.1 E-4	7.1 E-6	1.7 E-5	NA	NA	2.9 E-4
CP2-07-SP09	34	NA	6.6 E-8	1.5 E-6	4.3 E-7	NA	NA	1.8 E-5	2.3 E-5	6.8 E-6	NA	3.0 E-6	NA	7.0 E-5	7.9 E-6	1.8 E-5	NA	NA	2.9 E-4
CP2-07-SP10	10	NA	2.3 E-7	2.0 E-6	NA	NA	NA	6.8 E-5	1.3 E-4	1.4 E-5	NA	NA	NA	NA	4.1 E-6	1.3 E-5	NA	NA	4.9 E-4
CP2-07-SP10	20	NA	NA	8.9 E-6	NA	NA	NA	1.5 E-4	4.9 E-4	8.4 E-6	NA	NA	NA	NA	7.5 E-6	1.1 E-5	NA	NA	1.5 E-3
CP2-07-SP10	40	NA	NA	2.3 E-6	NA	NA	NA	1.5 E-5	2.6 E-5	4.5 E-6	NA	NA	NA	NA	1.2 E-6	2.3 E-6	NA	NA	1.5 E-4
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	NA	NA	7.3 E-5	NA	4.8 E-6	NA	NA	4.5 E-4

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																	
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**HI**
Unit Hazard																			
Unit Risk																			
CP2-07-SP11	20	NA	NA	NA	5.0 E-7	NA	NA	7.1 E-6	1.2 E-5	6.9 E-6	NA	NA	NA	4.9 E-5	4.7 E-6	1.1 E-5	NA	NA	1.5 E-4
CP2-07-SP12	10	NA	3.8 E-7	5.3 E-6	8.1 E-7	7.5 E-6	NA	7.3 E-5	1.8 E-4	2.1 E-5	NA	NA	NA	NA	3.9 E-6	1.2 E-5	NA	NA	5.2 E-4
CP2-07-SP12	20	NA	NA	1.1 E-6	NA	8.1 E-6	NA	4.0 E-6	4.9 E-6	8.0 E-6	NA	NA	NA	NA	NA	4.0 E-6	1.9 E-6	NA	6.6 E-5
CP2-07-SP12	40	NA	NA	5.2 E-6	NA	7.1 E-6	NA	7.2 E-5	2.5 E-4	6.3 E-6	NA	NA	NA	NA	NA	4.9 E-6	1.2 E-6	NA	1.5 E-3
CP2-07-SP13	10	NA	NA	2.3 E-6	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	2.7 E-4	1.6 E-5	8.8 E-6	NA	NA	6.5 E-4
CP2-07-SP13	20	NA	NA	2.2 E-6	4.5 E-7	NA	NA	5.4 E-6	8.5 E-6	7.6 E-6	NA	NA	NA	2.5 E-5	6.3 E-6	1.3 E-5	NA	NA	1.4 E-4
CP2-07-SP14	10	NA	NA	3.6 E-6	NA	NA	1.4 E-6	3.4 E-6	5.0 E-6	NA	NA	NA	NA	3.8 E-5	8.1 E-6	3.9 E-5	2.7 E-5	NA	1.5 E-4
CP2-07-SP14	18.5	NA	1.4 E-7	3.9 E-6	NA	NA	5.9 E-7	2.9 E-6	5.3 E-5	9.2 E-6	NA	NA	NA	NA	1.4 E-5	6.9 E-5	1.0 E-5	NA	3.3 E-4
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	2.3 E-7	1.8 E-5	2.7 E-6	NA	NA	3.0 E-5	2.9 E-6	1.0 E-4	2.9 E-6	4.6 E-5	3.0 E-5	NA	7.5 E-5	3.2 E-5	2.4 E-6	NA	1.1 E-2
CP2-08-SP11	20	NA	4.0 E-7	1.6 E-5	1.2 E-6	NA	NA	4.0 E-5	2.6 E-6	5.3 E-5	8.1 E-7	2.1 E-5	NA	NA	9.5 E-5	2.8 E-5	NA	NA	8.9 E-3
CP2-08-SP12	10	NA	2.3 E-7	1.2 E-5	NA	NA	NA	1.2 E-5	2.2 E-6	2.7 E-5	1.1 E-6	1.4 E-5	NA	NA	2.9 E-5	1.6 E-5	4.9 E-6	NA	4.7 E-3
CP2-08-SP12	20	NA	9.3 E-8	2.2 E-6	NA	NA	NA	NA	1.7 E-6	7.4 E-6	3.4 E-7	NA	NA	NA	9.1 E-6	4.7 E-6	2.9 E-6	NA	5.1 E-2
CP2-08-SP13	10	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	1.6 E-5
CP2-RE05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-5	NA	NA	4.9 E-4	1.2 E+1
CP2-RE05-SP01	20	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	5.1 E-5	8.0 E-5	NA	6.9 E-5	2.5 E+0
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4
CP2-RE05-SP02	10	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	NA	1.6 E+0
CP2-RE05-SP02	20	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	NA	NA	5.5 E-5	2.1 E-5	NA	NA	2.3 E-1
CP2-RE05-SP02	40	NA	1.8 E-7	1.4 E-6	2.4 E-7	NA	1.4 E-6	5.8 E-5	2.3 E-4	3.7 E-6	NA	NA	NA	3.1 E-5	NA	1.0 E-5	3.5 E-5	NA	5.1 E-4
CP2-RE05-SP03	10	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6
CP2-RE05-SP03	20	NA	NA	9.8 E-7	NA	NA	NA	4.0 E-6	2.3 E-6	1.1 E-5	NA	6.2 E-6	NA	NA	NA	2.9 E-6	NA	NA	1.4 E-4
CP2-RE05-SP04	10	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6
CP2-RE05-SP04	20	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-6
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	1.4 E-2
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	4.9 E-4
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	7.4 E-7	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	2.1 E-4
CP2-RE05-SP06	10	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA	NA	NA	NA	NA	3.9 E-6	4.8 E-6	NA	NA	4.9 E-1
CP2-RE05-SP06	20	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-2
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	4.4 E-6	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	1.1 E-2
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	1.3 E-5	1.5 E-5	NA	NA	NA	NA	NA	5.0 E-6	5.3 E-6	NA	NA	8.5 E-4
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	7.7 E-6	1.5 E-5	NA	NA	NA	NA	NA	7.5 E-6	9.4 E-6	1.1 E-6	NA	3.0 E-4
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	1.0 E-5	1.0 E-5	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	9.3 E-4
CP2-RE05-SP08	20	NA	1.2 E-7	NA	NA	NA	NA	8.3 E-6	1.8 E-5	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	NA	4.0 E-4
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4
CP2-RE05-SP09	20	NA	7.3 E-8	NA	NA	NA	NA	1.0 E-5	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-6
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-6
F(C)-SP05	20	NA	8.6 E-8	1.4 E-6	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	NA	NA	8.3 E-6	2.4 E-6	NA	NA	5.0 E-4
F(C)-SP06	10	4.9 E-6	2.5 E-7	2.6 E-5	1.0 E-5	NA	NA	1.5 E-5	2.5 E-6	4.8 E-4	3.9 E-7	3.2 E-4	2.1 E-4	NA	5.5 E-5	3.4 E-5	NA	NA	1.2 E-2
F(C)-SP06	20	1.5 E-6	7.0 E-8	3.1 E-6	2.2 E-6	NA	NA	1.0 E-5	2.0 E-6	9.9 E-5	NA	7.6 E-5	6.6 E-5	NA	2.7 E-5	1.1 E-5	NA	NA	3.9 E-3
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	1.4 E-3	5.1 E-6	3.9 E-6	NA	NA	1.4 E-3
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	2.0 E-6	4.9 E-6	6.8 E-6	NA	NA	NA	6.7 E-4	1.0 E-5	5.7 E-6	NA	NA	7.2 E-4

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	Depth	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroethane	Chloroform	Cumene
Unit Hazard																			
Unit Risk																			
59F-SP33	10	NA	NA	7.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA
59F-SP33	20	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	10	NA	NA	7.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	15	NA	NA	4.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	10	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	20	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA
59F-SP36	10	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	2.0 E-7	NA
59F-SP36	20	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	NA	NA	NA	1.1 E-8	NA
61F-SP03	10	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	NA	NA	NA	NA	NA
61F-SP03	20	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	8.0 E-9	NA
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-9	NA	NA	NA	NA	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-9	NA	NA	NA	NA	NA	NA
62F-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA
62F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA
62F-SP07	10	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	8.9 E-9	1.6 E-8	NA	NA	NA	1.1 E-8	NA
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA
CP2-07-SP01	10	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	6.1 E-6	NA
CP2-07-SP01	20	NA	NA	9.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA
CP2-07-SP01	40	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-6	NA
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	NA	NA	3.2 E-8	NA
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	9.0 E-9	NA
CP2-07-SP04	10	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	3.2 E-7	NA
CP2-07-SP04	20	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	6.4 E-7	NA
CP2-07-SP05	10	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	5.7 E-8	NA	3.0 E-7	NA
CP2-07-SP05	20	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	1.9 E-8	NA	3.0 E-7	NA
CP2-07-SP06	10	NA	NA	8.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	2.4 E-7	NA	2.2 E-6	NA
CP2-07-SP06	20	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	1.3 E-7	NA	4.4 E-7	NA
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	1.7 E-8	NA
CP2-07-SP07	20	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	NA	1.5 E-8	NA
CP2-07-SP08	10	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	20	NA	NA	5.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	7.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	NA	NA	1.1 E-8	NA
CP2-07-SP10	20	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	NA	NA	NA	NA	3.1 E-8	NA
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-9	NA	NA	NA	NA	NA	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	NA	NA	NA	NA	NA

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**	**Cumene**
Unit Hazard																			
Unit Risk																			
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	1.6 E-8	NA
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-9	NA	NA	NA	NA	NA	NA
CP2-07-SP12	40	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	2.0 E-8	NA
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	NA	NA	NA	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	NA	NA	NA
CP2-08-SP11	20	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	NA	NA	NA	NA
CP2-08-SP12	10	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	NA	NA	NA	2.0 E-8	NA
CP2-08-SP12	20	NA	NA	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	10	NA	NA	5.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-6	NA
CP2-RE05-SP01	20	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA
CP2-RE05-SP01	40	NA	NA	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	10	NA	NA	7.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-7	NA
CP2-RE05-SP02	20	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA
CP2-RE05-SP02	40	NA	NA	NA	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	10	NA	NA	6.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	20	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	40	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	10	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	NA
CP2-RE05-SP06	20	NA	NA	4.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA
CP2-RE05-SP06	40	NA	NA	5.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	NA	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	10	NA	NA	3.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	20	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-9	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	40	NA	NA	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	10	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	7.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	NA	NA	NA	NA	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																		
Unit Risk																		
59F-SP33	10	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	7.9 E-8	7 E-6
59F-SP33	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	2.3 E-7	3 E-5
59F-SP34	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	2.9 E-7	8 E-5
59F-SP34	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	2.2 E-7	4 E-5
59F-SP35	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	3.8 E-8	3.0 E-6	2 E-4
59F-SP35	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	9.2 E-9	2.7 E-6	3 E-4
59F-SP36	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	2 E-7
59F-SP36	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	6 E-8
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-9	NA	NA	NA	2 E-8
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	1.6 E-9	NA	1.1 E-9	NA	2 E-7
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	2.7 E-9	NA	7.9 E-10	NA	8 E-8
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-10	NA	NA	NA	NA	8 E-10
59F-SP39	20	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	NA	NA	1.2 E-8	NA	NA	3.6 E-9	NA	5 E-8
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	2 E-8
61F-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	1.7 E-9	NA	1 E-6
61F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	2.7 E-9	NA	4 E-7
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	2 E-9
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-10	NA	NA	NA	7 E-10
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	1 E-8
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	2 E-9
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-10	NA	9 E-9
62F-SP01	20	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	2.6 E-9	7.6 E-9	NA	NA	NA	3 E-8
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	4 E-9
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	5.2 E-10	NA	3 E-9
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	2 E-9
62F-SP05	10	NA	NA	6.4 E-8	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	1.1 E-8	2.0 E-8	NA	NA	NA	1 E-7
62F-SP05	20	NA	NA	3.6 E-8	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	5.4 E-9	1.5 E-8	NA	NA	NA	7 E-8
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	2 E-9
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	2 E-8
62F-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	8.1 E-10	NA	6 E-8
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	4 E-9
CP2-07-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	1.9 E-8	3.6 E-4	8 E-4
CP2-07-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	9 E-3
CP2-07-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-3
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	4 E-6
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	4.0 E-9	NA	NA	NA	5 E-8
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-9	NA	NA	NA	3 E-8
CP2-07-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-10	NA	7 E-7
CP2-07-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	9 E-7
CP2-07-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	2.4 E-8	NA	NA	2.6 E-9	NA	5 E-7
CP2-07-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	1.2 E-8	NA	NA	1.8 E-9	NA	4 E-7
CP2-07-SP06	10	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	6.1 E-8	NA	NA	1.1 E-8	NA	3 E-6
CP2-07-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	1.0 E-8	NA	NA	2.7 E-9	NA	8 E-7
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	5.1 E-9	NA	NA	NA	9 E-8
CP2-07-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	2.9 E-9	NA	NA	NA	3 E-8
CP2-07-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
CP2-07-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
CP2-07-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	2.5 E-9	NA	1.2 E-8	NA	2 E-8
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	9.6 E-10	NA	NA	NA	1 E-8
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	1.5 E-9	NA	NA	NA	4 E-8
CP2-07-SP09	34	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-9	1.7 E-9	NA	NA	NA	4 E-8
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	7 E-8
CP2-07-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	1 E-7
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	9 E-9
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	NA	NA	NA	1 E-8

Table 5.6-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																		
Unit Risk																		
CP2-07-SP11	20	NA	NA	4.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	9.9 E-10	NA	NA	NA	2 E-8
CP2-07-SP12	10	NA	NA	7.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-10	NA	NA	NA	6 E-8
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	1 E-8
CP2-07-SP12	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	9 E-8
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	3.4 E-9	NA	NA	NA	5 E-8
CP2-07-SP13	20	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	1.3 E-9	NA	NA	NA	2 E-8
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	1.7 E-9	NA	1.2 E-8	NA	2 E-8
CP2-07-SP14	18.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	4.3 E-9	NA	2 E-8
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP11	10	NA	NA	2.4 E-9	NA	NA	NA	NA	NA	8.0 E-10	NA	NA	NA	1.6 E-8	NA	1.0 E-9	NA	3 E-7
CP2-08-SP11	20	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	2.0 E-8	NA	NA	NA	7 E-8
CP2-08-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	6.1 E-9	NA	2.1 E-9	NA	5 E-8
CP2-08-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-11	NA	NA	NA	1.9 E-9	NA	1.3 E-9	NA	2 E-6
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	1.4 E-6	6 E-4
CP2-RE05-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	1.9 E-7	1 E-4
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
CP2-RE05-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	7 E-5
CP2-RE05-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	1 E-5
CP2-RE05-SP02	40	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	1.5 E-8	NA	4 E-8
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	1 E-8
CP2-RE05-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-10	NA	NA	NA	2 E-5
CP2-RE05-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-7
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	1 E-9
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	4.7 E-10	NA	2 E-9
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
CP2-RE05-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-9
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
CP2-RE05-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
F(C)-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	2 E-8
F(C)-SP06	10	NA	NA	9.1 E-9	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	1.1 E-8	NA	NA	NA	2 E-8
F(C)-SP06	20	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	NA	NA	1 E-8
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	1.1 E-9	NA	NA	NA	1 E-7
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	2.1 E-9	NA	NA	NA	6 E-8

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.6-6) x the unit hazard or unit risk for the chemical).

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard		9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	6.8 E-2	1.5 E+1
Unit Risk		NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	NA	5.6 E-3
59F-SP33	10		100	3900	37		110	140	1200	120	50	820	22		140			
59F-SP33	20			33000					550			920			230			
59F-SP34	10		82	41000			74		400	110		2000			170			
59F-SP34	15			30000					1400		65	1100			82		38	
59F-SP35	10	120		88000								760			100		270	
59F-SP35	20			310000			100		160			770			280		100	160
59F-SP36	10			10									14		57			120
59F-SP36	20		27	38	7.6					17		69			23			22
59F-SP37	10							70			38	240	11					
59F-SP38	10														4.5			
59F-SP38	20							82			6.0	390	12					
59F-SP38	40																	
59F-SP39	20			18											26			16
60F-SP08	10											98						
60F-SP08	20		13							8.2	23	74	5.7		80			12
61F-SP03	10			760				25	33		12	340	5		14			
61F-SP03	20			330				23	32		12	280	12		12			8.7
61F-SP04	10								14						6.7			
61F-SP04	20								17									
61F-SP05	10											130	5.4		7.0			
61F-SP05	20											120	3.8					
61F-SP06	10											78						
61F-SP06	20											130	8.6		11			
62F-SP01	20		680		240		80	76	150	680	17	300			14			
62F-SP02	20		22					34	60	15	31	440			37			
62F-SP03	20		24					26	90	18	16	350			39			
62F-SP04	10		18		5.5		18		39	11	6.7	82			13			
62F-SP05	10		1000		370		220	130	190	1000	8.4	750	12		60			
62F-SP05	20		950		380		160	110	170	1100	39	520	9.5		17			
62F-SP06	10		13							8.3					8.2			
62F-SP06	20		11				8.1		17	7.4	25	100	15		73			
62F-SP07	10					20			25			110	4.9	17	15			6.7
62F-SP07	20												3.7		7.6			
CP2-07-SP01	10	160		230000			160						100					3700
CP2-07-SP01	20			8600000														120000
CP2-07-SP01	40			2200000														12000
CP2-07-SP02	10															1500		
CP2-07-SP02	20																	
CP2-07-SP03	10								64		8.2	180	4.5		10			19
CP2-07-SP03	20						25		97			180	16		95			9.8
CP2-07-SP04	10			170			58						14		210			190
CP2-07-SP04	20			190			40					150	35		310			690
CP2-07-SP05	10			12			45						25		36	23		180
CP2-07-SP05	20			11									12		33	14		330
CP2-07-SP06	10	24	9.3	440						8.0			12		44	96		1300
CP2-07-SP06	20	22		160									23		70	100		480
CP2-07-SP07	10						15		30		18	140	13		19			10
CP2-07-SP07	20			8.0					18		16	94	6.4		24			16
CP2-07-SP08	10			20								120			6.2			
CP2-07-SP08	20			5.6								170			17			
CP2-07-SP08	30					37		29	20			650			17			
CP2-07-SP09	10																	
CP2-07-SP09	20							28				150	34					
CP2-07-SP09	34						5.0	110				640	59		4.8			
CP2-07-SP10	10							34				85	34		55			6.9
CP2-07-SP10	20			9.0				85	20			260	89		45			34
CP2-07-SP10	40							22	12			82	16		27			
CP2-07-SP11	10							34	16			220	5					
CP2-07-SP11	20											150	15					

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard		9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	6.8 E-2	1.5 E+1
Unit Risk		NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	NA	5.6 E-3
CP2-07-SP12	10							29				96	25		61			9.9
CP2-07-SP12	20											86	8.9		10			
CP2-07-SP12	40	17		72				48	18			200	64		210			41
CP2-07-SP13	10								13			78	14					
CP2-07-SP13	20							43				250	18					
CP2-07-SP14	10											310			7.7			
CP2-07-SP14	18.5					27		28	12			510			39			
CP2-07-SP15	10											70	4.1		31			
CP2-07-SP15	20																	
CP2-08-SP11	10		44	130	12		12	23	180	42	16	470	4.9		25			
CP2-08-SP11	20		40	36			16	51	640	38	53	1100	7.7		27			
CP2-08-SP12	10		18	9.8					190	13	21	300	4.4		15			12
CP2-08-SP12	20			2200					26		11	120			26			10
CP2-08-SP13	10											200						
CP2-08-SP14	10														4.5			
CP2-RE05-SP01	10			300000														3000
CP2-RE05-SP01	20			110000														1200
CP2-RE05-SP01	40			9.6											14			
CP2-RE05-SP02	10			38000											49			400
CP2-RE05-SP02	20			9900														120
CP2-RE05-SP02	40	8.9				29		20	12			270	27		88			
CP2-RE05-SP03	10														4.0			
CP2-RE05-SP03	20		9.4							6.3		120			13			
CP2-RE05-SP04	10											91			3.7			
CP2-RE05-SP04	20											84			4.1			
CP2-RE05-SP05	10			340									4.2		14			
CP2-RE05-SP05	20			21											16			
CP2-RE05-SP05	40			17											26			
CP2-RE05-SP06	10			12000											15			50
CP2-RE05-SP06	20			4300											8.4			19
CP2-RE05-SP06	40			910									7.0		15			
CP2-RE05-SP07	10								41						9.3			
CP2-RE05-SP07	20								23						26			
CP2-RE05-SP08	10			21									5.7		28			
CP2-RE05-SP08	20			15									7.7		48			
CP2-RE05-SP08	40			11											8.1			
CP2-RE05-SP09	10			7.7														
CP2-RE05-SP09	20			7.2											27			
CP2-RE05-SP10	10											110						
CP2-RE05-SP10	20											130						
F(C)-SP05	20			13					16		7.0				10			
F(C)-SP06	10		350		120		30	37	79	310	15	120			28			
F(C)-SP06	20		220		70		6.8		20	180	18	77	6.2		37			
OS1-F1-SP01	10											75			20			
OS1-F1-SP01	20											100	5.1		20			

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations																
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+0	1.1 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.3 E-1	6.8 E+0	2.0 E+1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
59F-SP33	10		37	370	75	22		990	93	260		120	26		180	210		14
59F-SP33	20			270		930		170	150						170	100		71
59F-SP34	10			280				180	210	120					180	110		51
59F-SP34	15			150				120	64						340	90		55
59F-SP35	10		66	140				220	580						180		330	540
59F-SP35	20		59	140				380	420						170	62	140	830
59F-SP36	10			42		300		23	42	11						36	32	
59F-SP36	20			49		44									6.6	5.3		
59F-SP37	10			22					8.6	6.8					25	29		
59F-SP38	10								7.3					510	11	7.4	9.3	
59F-SP38	20			15				21	30	7.9				380	33	28	12	
59F-SP38	40													8.7				
59F-SP39	20					130	18				16			69		4.9	55	
60F-SP08	10			46												6		
60F-SP08	20		7.3	84				48	13						23	29		
61F-SP03	10		6.3	29						10					22	24	15	
61F-SP03	20	8.2	5.0	30					7.0	10					24	33	41	
61F-SP04	10								14						11	13		
61F-SP04	20														7.9	14		
61F-SP05	10								7.7							6.3	8.7	
61F-SP05	20			20												5.9		
61F-SP06	10			22												8.8	15	
61F-SP06	20							13	18	6.1						15	10	
62F-SP01	20	30	16	170	250		23	32	4.7	1100	9.3	520	130	15	92	300		
62F-SP02	20		11	66				38		8					44	20		
62F-SP03	20		8.1	59		14	130	18		8.7		6.1			33	11	7.9	
62F-SP04	10		6.4	55				14							17	4		
62F-SP05	10	45	28	300	460	10		58	17	2000	21	880	200	33	140	840		
62F-SP05	20	52	34	280	480	6.7		110	12	2000	15	940	220	31	180	690		
62F-SP06	10			79				10							15	11		
62F-SP06	20		25	64			21	110	37	5.7					40	49		
62F-SP07	10		4.7	22				40	93						73	20	7	
62F-SP07	20					10	41	5.6	27	15		6.2			7.2	12		
CP2-07-SP01	10			960		480			2400						2800	190	160	64000
CP2-07-SP01	20																	120000
CP2-07-SP01	40																	
CP2-07-SP02	10							71							91			
CP2-07-SP02	20																	
CP2-07-SP03	10			22		240		20	6.2					20	28	23		
CP2-07-SP03	20			20		44		82	85						75	31		
CP2-07-SP04	10		53	27				200	430							23	8	
CP2-07-SP04	20		21	22				160	220						16	32		
CP2-07-SP05	10			17		260		12	48	12	59			74		26	22	
CP2-07-SP05	20					440		15	21	9.5	18			70		34	28	
CP2-07-SP06	10				12	140			25	42	730	13		190		50	95	
CP2-07-SP06	20					420			58	18	230			59		44	41	
CP2-07-SP07	10			30		100		48	24	8.6				130	36	42		
CP2-07-SP07	20			18		110		38	16	9.5				13	35	24		
CP2-07-SP08	10			11														
CP2-07-SP08	20			20		13												
CP2-07-SP08	30			47			550	19	43	7.6				20	45	40	270	
CP2-07-SP09	10								7.3					30	6.8	9.1		
CP2-07-SP09	20			9.6				57	54	8.6				46	18	50		
CP2-07-SP09	34		7.3	25	8.5			100	130	13		5.2		50	34	90		
CP2-07-SP10	10		8.4	12				150	290	8.6					6.0	22		
CP2-07-SP10	20			88				540	1800	9.3					19	34		
CP2-07-SP10	40			43				98	170	10					5.8	14		
CP2-07-SP11	10								11					17		8.2		
CP2-07-SP11	20				5.9			25	42	7.7				21	12	34		

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations																
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**
Unit Hazard		1.7 E+0	1.1 E-1	3.9 E-1	6.8 E-1	3.4 E+0	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.3 E-1	6.8 E+0	2.0 E+1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	6.4 E-5	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
CP2-07-SP12	10		14	32	5.2	8.5		160	390	13					5.7	21		
CP2-07-SP12	20			11		16		14	18	8.9						12	12	
CP2-07-SP12	40			98		28		470	1600	14						29	15	
CP2-07-SP13	10			14					25					62	24	15		
CP2-07-SP13	20			22	5.3			19	31	8.4				11	16	39		
CP2-07-SP14	10			22			270	7.4	11					8.8	12	67	99	
CP2-07-SP14	18.5		8.5	38			190	10	180	10					35	200	64	
CP2-07-SP15	10																	
CP2-07-SP15	20																	
CP2-08-SP11	10		8.4	110	17			66	6.3	64	43	26	8.2		110	55	8.8	
CP2-08-SP11	20		26	160	14			140	9.5	59	21	21			240	85		
CP2-08-SP12	10		8.4	70				27	4.8	17	16	8.2			43	27	18	
CP2-08-SP12	20		6.0	22					6.3	8.2	8.9				23	14	19	
CP2-08-SP13	10			20														
CP2-08-SP14	10									6.4						7.5		
CP2-RE05-SP01	10														98			240
CP2-RE05-SP01	20							120							130	240		58
CP2-RE05-SP01	40																	
CP2-RE05-SP02	10							78							86			
CP2-RE05-SP02	20							110							140	62		
CP2-RE05-SP02	40		23	26	5.6		940	380	1500	8.3				26		60	450	
CP2-RE05-SP03	10			8.8														
CP2-RE05-SP03	20			9.7				14	8.5	12		6.2				8.6		
CP2-RE05-SP04	10			9.1														
CP2-RE05-SP04	20			14														
CP2-RE05-SP05	10								6.8							5.4		
CP2-RE05-SP05	20							6.2								5.3		
CP2-RE05-SP05	40							4.8	7.0								13	
CP2-RE05-SP06	10								11						5.7	8.2		
CP2-RE05-SP06	20								6.7	5.4								
CP2-RE05-SP06	40								23	9.8						9.2		
CP2-RE05-SP07	10							28	32						7.4	9.1		
CP2-RE05-SP07	20							27	53						19	28	7.2	
CP2-RE05-SP08	10							23	23							5.6		
CP2-RE05-SP08	20		8.0					29	64							7.8		
CP2-RE05-SP08	40								12									
CP2-RE05-SP09	10																	
CP2-RE05-SP09	20		4.7					35	44									
CP2-RE05-SP10	10																	
CP2-RE05-SP10	20																	
F(C)-SP05	20		5.5	14				13							21	7.3		
F(C)-SP06	10	14	9.2	160	66			34	5.4	300	5.9	180	57		81	58		
F(C)-SP06	20	7.7	4.5	31	26			36	7.4	110		76	32		68	32		
OS1-F1-SP01	10								4.5					330	7.5	6.6		
OS1-F1-SP01	20							7.0	18	7.6				290	26	17		

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard																		
Unit Risk																		
59F-SP33	10	NA	4.7 E-5	4.5 E-3	2.0 E-5	NA	5.2 E-6	1.2 E-7	6.2 E-4	5.7 E-6	6.8 E-8	1.8 E-6	3.5 E-6	NA	1.1 E-6	NA	NA	NA
59F-SP33	20	NA	NA	1.9 E-2	NA	NA	NA	NA	1.4 E-4	NA	NA	9.9 E-7	NA	NA	9.3 E-7	NA	NA	NA
59F-SP34	10	NA	3.9 E-5	4.8 E-2	NA	NA	3.5 E-6	NA	2.1 E-4	5.2 E-6	NA	4.3 E-6	NA	NA	1.4 E-6	NA	NA	NA
59F-SP34	15	NA	NA	2.3 E-2	NA	NA	NA	NA	4.8 E-4	NA	5.9 E-8	1.6 E-6	NA	NA	4.4 E-7	NA	3.8 E-8	NA
59F-SP35	10	8.4 E-6	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	8.1 E-7	NA	4.0 E-7	NA
59F-SP35	20	NA	NA	1.8 E-1	NA	NA	2.4 E-6	NA	4.1 E-5	NA	NA	8.3 E-7	NA	NA	1.1 E-6	NA	7.4 E-8	1.0 E-5
59F-SP36	10	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	4.6 E-7	NA	NA	1.5 E-5
59F-SP36	20	NA	6.4 E-6	2.2 E-5	2.1 E-6	NA	NA	NA	NA	4.0 E-7	NA	7.4 E-8	NA	NA	9.3 E-8	NA	NA	1.4 E-6
59F-SP37	10	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	5.2 E-8	5.2 E-7	1.8 E-6	NA	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	4.1 E-9	4.2 E-7	9.6 E-7	NA	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	1.0 E-6
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA
60F-SP08	20	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	2.0 E-7	1.6 E-8	8.0 E-8	4.6 E-7	NA	3.3 E-7	NA	NA	7.5 E-7
61F-SP03	10	NA	NA	8.8 E-4	NA	NA	NA	2.2 E-8	1.7 E-5	NA	1.6 E-8	7.3 E-7	8.0 E-7	NA	1.1 E-7	NA	NA	NA
61F-SP03	20	NA	NA	1.9 E-4	NA	NA	NA	1.0 E-8	8.3 E-6	NA	8.2 E-9	3.0 E-7	9.6 E-7	NA	4.9 E-8	NA	NA	5.4 E-7
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	8.6 E-7	NA	5.7 E-8	NA	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	3.0 E-7	NA	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	6.9 E-7	NA	4.5 E-8	NA	NA	NA
62F-SP01	20	NA	1.6 E-4	NA	6.6 E-5	NA	1.9 E-6	3.4 E-8	3.9 E-5	1.6 E-5	1.2 E-8	3.2 E-7	NA	NA	5.7 E-8	NA	NA	NA
62F-SP02	20	NA	5.2 E-6	NA	NA	NA	NA	1.5 E-8	1.6 E-5	3.6 E-7	2.1 E-8	4.7 E-7	NA	NA	1.5 E-7	NA	NA	NA
62F-SP03	20	NA	5.7 E-6	NA	NA	NA	NA	1.1 E-8	2.3 E-5	4.3 E-7	1.1 E-8	3.8 E-7	NA	NA	1.6 E-7	NA	NA	NA
62F-SP04	10	NA	8.5 E-6	NA	3.0 E-6	NA	8.6 E-7	NA	2.0 E-5	5.2 E-7	9.2 E-9	1.8 E-7	NA	NA	1.1 E-7	NA	NA	NA
62F-SP05	10	NA	4.7 E-4	NA	2.0 E-4	NA	1.0 E-5	1.1 E-7	9.8 E-5	4.8 E-5	1.1 E-8	1.6 E-6	1.9 E-6	NA	4.9 E-7	NA	NA	NA
62F-SP05	20	NA	2.2 E-4	NA	1.1 E-4	NA	3.8 E-6	4.9 E-8	4.4 E-5	2.6 E-5	2.7 E-8	5.6 E-7	7.6 E-7	NA	6.9 E-8	NA	NA	NA
62F-SP06	10	NA	6.2 E-6	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	6.7 E-8	NA	NA	NA
62F-SP06	20	NA	2.6 E-6	NA	NA	NA	1.9 E-7	NA	4.4 E-6	1.8 E-7	1.7 E-8	1.1 E-7	1.2 E-6	NA	3.0 E-7	NA	NA	NA
62F-SP07	10	NA	NA	NA	NA	3.6 E-8	NA	NA	1.3 E-5	NA	NA	2.4 E-7	7.8 E-7	4.0 E-7	1.2 E-7	NA	NA	8.4 E-7
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	NA	3.1 E-8	NA	NA	NA
CP2-07-SP01	10	1.1 E-5	NA	2.7 E-1	NA	NA	7.6 E-6	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	4.6 E-4
CP2-07-SP01	20	NA	NA	5.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-3
CP2-07-SP01	40	NA	NA	6.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	1.1 E-8	3.9 E-7	7.2 E-7	NA	8.1 E-8	NA	NA	2.4 E-6
CP2-07-SP03	20	NA	NA	NA	NA	NA	5.9 E-7	NA	2.5 E-5	NA	NA	1.9 E-7	1.3 E-6	NA	3.9 E-7	NA	NA	6.1 E-7
CP2-07-SP04	10	NA	NA	2.0 E-4	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	2.2 E-6	NA	1.7 E-6	NA	NA	2.4 E-5
CP2-07-SP04	20	NA	NA	1.1 E-4	NA	NA	9.5 E-7	NA	NA	NA	NA	1.6 E-7	2.8 E-6	NA	1.3 E-6	NA	NA	4.3 E-5
CP2-07-SP05	10	NA	NA	1.4 E-5	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	4.0 E-6	NA	2.9 E-7	2.5 E-6	NA	2.3 E-5
CP2-07-SP05	20	NA	NA	6.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	1.3 E-7	7.5 E-7	NA	2.1 E-5
CP2-07-SP06	10	1.7 E-6	4.4 E-6	5.1 E-4	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	1.9 E-6	NA	3.6 E-7	1.0 E-5	NA	1.6 E-4
CP2-07-SP06	20	7.7 E-7	NA	9.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	2.8 E-7	5.3 E-6	NA	3.0 E-5
CP2-07-SP07	10	NA	NA	NA	NA	NA	7.1 E-7	NA	1.6 E-5	NA	2.5 E-8	3.0 E-7	2.1 E-6	NA	1.5 E-7	NA	NA	1.3 E-6
CP2-07-SP07	20	NA	NA	4.6 E-6	NA	NA	NA	NA	4.7 E-6	NA	1.1 E-8	1.0 E-7	5.1 E-7	NA	9.8 E-8	NA	NA	1.0 E-6
CP2-07-SP08	10	NA	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	5.0 E-8	NA	NA	NA
CP2-07-SP08	20	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	6.9 E-8	NA	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	2.2 E-8	NA	8.5 E-9	3.4 E-6	NA	NA	4.7 E-7	NA	NA	4.6 E-8	NA	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	1.6 E-7	2.7 E-6	NA	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	7.0 E-8	2.9 E-8	NA	NA	NA	4.1 E-7	2.8 E-6	NA	1.1 E-8	NA	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	1.8 E-7	5.4 E-6	NA	4.5 E-7	NA	NA	8.6 E-7
CP2-07-SP10	20	NA	NA	5.2 E-6	NA	NA	NA	3.8 E-8	5.2 E-6	NA	NA	2.8 E-7	7.1 E-6	NA	1.8 E-7	NA	NA	2.1 E-6
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	4.9 E-9	1.6 E-6	NA	NA	4.4 E-8	6.4 E-7	NA	5.5 E-8	NA	NA	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	3.0 E-8	8.3 E-6	NA	NA	4.7 E-7	8.0 E-7	NA	NA	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	1.2 E-6	NA	NA	NA	NA	NA

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard																		
Unit Risk																		
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	2.1 E-7	4.0 E-6	NA	5.0 E-7	NA	NA	1.2 E-6
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	7.1 E-7	NA	4.1 E-8	NA	NA	NA
CP2-07-SP12	40	3.0 E-7	NA	2.1 E-5	NA	NA	NA	1.1 E-8	2.3 E-6	NA	NA	1.1 E-7	2.6 E-6	NA	4.3 E-7	NA	NA	1.3 E-6
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	1.7 E-7	2.2 E-6	NA	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	2.7 E-7	1.4 E-6	NA	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	6.3 E-8	NA	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	2.6 E-8	NA	1.3 E-8	3.4 E-6	NA	NA	5.9 E-7	NA	NA	1.7 E-7	NA	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	6.6 E-7	NA	2.5 E-7	NA	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	2.1 E-5	1.5 E-4	6.6 E-6	NA	5.7 E-7	2.0 E-8	9.3 E-5	2.0 E-6	2.2 E-8	1.0 E-6	7.8 E-7	NA	2.0 E-7	NA	NA	NA
CP2-08-SP11	20	NA	9.5 E-6	2.1 E-5	NA	NA	3.8 E-7	2.3 E-8	1.7 E-4	9.0 E-7	3.6 E-8	1.2 E-6	6.2 E-7	NA	1.1 E-7	NA	NA	NA
CP2-08-SP12	10	NA	8.5 E-6	1.1 E-5	NA	NA	NA	NA	9.8 E-5	6.2 E-7	2.9 E-8	6.5 E-7	7.0 E-7	NA	1.2 E-7	NA	NA	1.5 E-6
CP2-08-SP12	20	NA	NA	1.3 E-3	NA	NA	NA	NA	6.7 E-6	NA	7.5 E-9	1.3 E-7	NA	NA	1.1 E-7	NA	NA	6.3 E-7
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-8	NA	NA	NA
CP2-RE05-SP01	10	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
CP2-RE05-SP01	20	NA	NA	6.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5
CP2-RE05-SP01	40	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA
CP2-RE05-SP02	10	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	5.0 E-5
CP2-RE05-SP02	20	NA	NA	5.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-6
CP2-RE05-SP02	40	1.6 E-7	NA	NA	NA	1.3 E-8	NA	4.4 E-9	1.6 E-6	NA	NA	1.5 E-7	1.1 E-6	NA	1.8 E-7	NA	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA
CP2-RE05-SP03	20	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	1.3 E-7	NA	NA	5.3 E-8	NA	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	3.0 E-8	NA	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	NA	NA	1.7 E-8	NA	NA	NA
CP2-RE05-SP05	10	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	1.1 E-7	NA	NA	NA
CP2-RE05-SP05	20	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	NA
CP2-RE05-SP05	40	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-8	NA	NA	NA
CP2-RE05-SP06	10	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	6.3 E-6
CP2-RE05-SP06	20	NA	NA	2.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	NA	1.2 E-6
CP2-RE05-SP06	40	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	3.0 E-8	NA	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	7.6 E-8	NA	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	5.9 E-6	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA
CP2-RE05-SP08	10	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-7	NA	2.3 E-7	NA	NA	NA
CP2-RE05-SP08	20	NA	NA	8.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	NA	2.0 E-7	NA	NA	NA
CP2-RE05-SP08	40	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA
CP2-RE05-SP09	10	NA	NA	8.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	4.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	7.5 E-6	NA	NA	NA	NA	4.1 E-6	NA	4.8 E-9	NA	NA	NA	4.1 E-8	NA	NA	NA
F(C)-SP06	10	NA	1.7 E-4	NA	6.6 E-5	NA	1.4 E-6	3.3 E-8	4.1 E-5	1.5 E-5	2.1 E-8	2.6 E-7	NA	NA	2.3 E-7	NA	NA	NA
F(C)-SP06	20	NA	5.2 E-5	NA	1.9 E-5	NA	1.6 E-7	NA	5.2 E-6	4.3 E-6	1.2 E-8	8.3 E-8	5.0 E-7	NA	1.5 E-7	NA	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	1.6 E-7	NA	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	4.1 E-7	NA	8.1 E-8	NA	NA	NA

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																	
Sample Name	Depth	Cumene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Heptane	Hexane	m,p-Xylene	Methyl tert-butyl ether	o-Xylene	Propylbenzene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																			
Unit Risk																			
59F-SP33	10	NA	2.7 E-8	1.8 E-6	3.1 E-7	5.2 E-7	NA	5.3 E-6	1.5 E-6	1.1 E-5	NA	5.7 E-6	2.4 E-6	NA	3.4 E-6	3.3 E-6	NA	6.0 E-7	5.3 E-3
59F-SP33	20	NA	NA	6.6 E-7	NA	1.1 E-5	NA	4.5 E-7	1.2 E-6	NA	NA	NA	NA	NA	1.6 E-6	7.9 E-7	NA	1.5 E-6	1.9 E-2
59F-SP34	10	NA	NA	1.4 E-6	NA	NA	NA	9.6 E-7	3.3 E-6	5.0 E-6	NA	NA	NA	NA	3.4 E-6	1.7 E-6	NA	2.2 E-6	4.8 E-2
59F-SP34	15	NA	NA	4.9 E-7	NA	NA	NA	4.3 E-7	6.7 E-7	NA	NA	NA	NA	NA	4.3 E-6	9.5 E-7	NA	1.6 E-6	2.4 E-2
59F-SP35	10	NA	4.8 E-8	6.9 E-7	NA	NA	NA	1.2 E-6	9.1 E-6	NA	NA	NA	NA	NA	3.4 E-6	NA	2.4 E-6	2.3 E-5	1.0 E-1
59F-SP35	20	NA	2.2 E-8	3.4 E-7	NA	NA	NA	1.0 E-6	3.3 E-6	NA	NA	NA	NA	NA	1.6 E-6	4.9 E-7	5.1 E-7	1.8 E-5	1.8 E-1
59F-SP36	10	NA	NA	2.1 E-7	NA	7.2 E-6	NA	1.2 E-7	6.6 E-7	4.6 E-7	NA	NA	NA	NA	NA	5.7 E-7	2.3 E-7	NA	3.9 E-5
59F-SP36	20	NA	NA	1.2 E-7	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	4.2 E-8	NA	NA	3.3 E-5
59F-SP37	10	NA	NA	1.1 E-7	NA	NA	NA	NA	1.3 E-7	2.9 E-7	NA	NA	NA	NA	4.8 E-7	4.6 E-7	NA	NA	3.9 E-6
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	5.7 E-5	2.1 E-7	1.2 E-7	6.8 E-8	NA	5.8 E-5
59F-SP38	20	NA	NA	3.7 E-8	NA	NA	NA	5.6 E-8	2.3 E-7	1.7 E-7	NA	NA	NA	2.1 E-5	3.1 E-7	2.2 E-7	4.4 E-8	NA	2.4 E-5
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	2.4 E-7
59F-SP39	20	NA	NA	NA	NA	1.6 E-6	1.3 E-9	NA	NA	NA	1.5 E-8	NA	NA	3.9 E-6	NA	3.9 E-8	2.0 E-7	NA	1.7 E-5
60F-SP08	10	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	5.3 E-7
60F-SP08	20	NA	2.7 E-9	2.1 E-7	NA	NA	NA	1.3 E-7	1.0 E-7	NA	NA	NA	NA	NA	2.2 E-7	2.3 E-7	NA	NA	5.8 E-6
61F-SP03	10	NA	4.6 E-9	1.4 E-7	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	4.2 E-7	3.8 E-7	1.1 E-7	NA	9.0 E-4
61F-SP03	20	3.6 E-8	1.8 E-9	7.4 E-8	NA	NA	NA	NA	5.5 E-8	2.1 E-7	NA	NA	NA	NA	2.3 E-7	2.6 E-7	1.5 E-7	NA	2.0 E-4
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	2.1 E-7	2.1 E-7	NA	NA	7.9 E-6
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	1.1 E-7	NA	NA	4.6 E-6
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	1.0 E-7	6.3 E-8	NA	1.5 E-6
61F-SP05	20	NA	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	5.3 E-7
61F-SP06	10	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	1.1 E-7	NA	5.2 E-7
61F-SP06	20	NA	NA	NA	NA	NA	NA	3.5 E-8	1.4 E-7	1.3 E-7	NA	NA	NA	NA	NA	1.2 E-7	3.6 E-8	NA	1.3 E-6
62F-SP01	20	1.3 E-7	5.8 E-9	4.2 E-7	5.1 E-7	NA	1.6 E-9	8.6 E-8	3.7 E-8	2.3 E-5	8.7 E-9	1.2 E-5	6.1 E-6	8.4 E-7	8.8 E-7	2.4 E-6	NA	NA	3.3 E-4
62F-SP02	20	NA	4.0 E-9	1.6 E-7	NA	NA	NA	1.0 E-7	NA	1.7 E-7	NA	NA	NA	NA	4.2 E-7	1.6 E-7	NA	NA	2.3 E-5
62F-SP03	20	NA	3.0 E-9	1.4 E-7	NA	1.7 E-7	9.2 E-9	4.8 E-8	NA	1.8 E-7	NA	1.5 E-7	NA	NA	3.1 E-7	8.7 E-8	2.9 E-8	NA	3.1 E-5
62F-SP04	10	NA	4.7 E-9	2.7 E-7	NA	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	3.2 E-7	6.3 E-8	NA	NA	3.4 E-5
62F-SP05	10	4.0 E-7	2.0 E-8	1.5 E-6	1.9 E-6	2.4 E-7	NA	3.1 E-7	2.7 E-7	8.4 E-5	3.9 E-8	4.2 E-5	1.9 E-5	3.7 E-6	2.7 E-6	1.3 E-5	NA	NA	1.0 E-3
62F-SP05	20	2.3 E-7	1.2 E-8	6.9 E-7	9.8 E-7	8.0 E-8	NA	2.9 E-7	9.4 E-8	4.2 E-5	1.4 E-8	2.2 E-5	1.0 E-5	1.7 E-6	1.7 E-6	5.5 E-6	NA	NA	4.9 E-4
62F-SP06	10	NA	NA	3.9 E-7	NA	NA	NA	5.3 E-8	NA	NA	NA	NA	NA	NA	2.9 E-7	1.7 E-7	NA	NA	7.5 E-6
62F-SP06	20	NA	9.1 E-9	1.6 E-7	NA	NA	1.5 E-9	2.9 E-7	2.9 E-7	1.2 E-7	NA	NA	NA	NA	3.8 E-7	3.9 E-7	NA	NA	1.1 E-5
62F-SP07	10	NA	3.4 E-9	1.1 E-7	NA	NA	NA	2.1 E-7	1.5 E-6	NA	NA	NA	NA	NA	1.4 E-6	3.2 E-7	5.1 E-8	NA	1.9 E-5
62F-SP07	20	NA	NA	NA	NA	1.2 E-7	2.9 E-9	1.5 E-8	2.1 E-7	3.2 E-7	NA	1.5 E-7	NA	NA	6.9 E-8	9.5 E-8	NA	NA	1.3 E-6
CP2-07-SP01	10	NA	NA	4.7 E-6	NA	1.1 E-5	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	5.3 E-5	3.0 E-6	1.2 E-6	2.8 E-3	2.7 E-1
CP2-07-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	5.0 E+0
CP2-07-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-1
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	1.6 E-4
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	1.1 E-7	NA	5.7 E-6	NA	1.1 E-7	9.7 E-8	NA	NA	NA	NA	2.3 E-6	5.3 E-7	3.6 E-7	NA	NA	4.6 E-5
CP2-07-SP03	20	NA	NA	4.9 E-8	NA	5.2 E-7	NA	2.2 E-7	6.6 E-7	NA	NA	NA	NA	NA	7.2 E-7	2.5 E-7	NA	NA	3.1 E-5
CP2-07-SP04	10	NA	3.9 E-8	1.3 E-7	NA	NA	NA	1.1 E-6	6.7 E-6	NA	NA	NA	NA	NA	NA	3.6 E-7	5.8 E-8	NA	2.4 E-4
CP2-07-SP04	20	NA	7.7 E-9	5.4 E-8	NA	NA	NA	4.3 E-7	1.7 E-6	NA	NA	NA	NA	NA	1.5 E-7	2.5 E-7	NA	NA	1.6 E-4
CP2-07-SP05	10	NA	NA	8.3 E-8	NA	6.2 E-6	NA	6.4 E-8	7.5 E-7	5.0 E-7	1.1 E-7	NA	NA	8.3 E-6	NA	4.1 E-7	1.6 E-7	NA	6.2 E-5
CP2-07-SP05	20	NA	NA	NA	NA	5.2 E-6	NA	4.0 E-8	1.6 E-7	2.0 E-7	1.7 E-8	NA	NA	3.9 E-6	NA	2.7 E-7	1.0 E-7	NA	3.9 E-5
CP2-07-SP06	10	NA	NA	NA	4.9 E-8	3.3 E-6	NA	NA	3.9 E-7	1.8 E-6	1.4 E-6	6.2 E-7	NA	2.1 E-5	NA	7.9 E-7	6.9 E-7	NA	7.2 E-4
CP2-07-SP06	20	NA	NA	NA	NA	5.0 E-6	NA	NA	4.5 E-7	3.8 E-7	2.1 E-7	NA	NA	3.3 E-6	NA	3.5 E-7	1.5 E-7	NA	1.4 E-4
CP2-07-SP07	10	NA	NA	1.5 E-7	NA	2.4 E-6	NA	2.6 E-7	3.8 E-7	3.6 E-7	NA	NA	NA	1.5 E-5	6.9 E-7	6.7 E-7	NA	NA	4.0 E-5
CP2-07-SP07	20	NA	NA	4.4 E-8	NA	1.3 E-6	NA	1.0 E-7	1.3 E-7	2.0 E-7	NA	NA	NA	7.3 E-7	3.3 E-7	1.9 E-7	NA	NA	1.4 E-5
CP2-07-SP08	10	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5
CP2-07-SP08	20	NA	NA	4.9 E-8	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6
CP2-07-SP08	30	NA	NA	7.7 E-8	NA	NA	2.6 E-8	3.4 E-8	2.2 E-7	1.1 E-7	NA	NA	NA	7.5 E-7	2.9 E-7	2.1 E-7	6.5 E-7	NA	6.4 E-6
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	3.4 E-6	1.3 E-7	1.4 E-7	NA	NA	3.8 E-6
CP2-07-SP09	20	NA	NA	2.4 E-8	NA	NA	NA	1.5 E-7	4.2 E-7	1.8 E-7	NA	NA	NA	2.6 E-6	1.7 E-7	4.0 E-7	NA	NA	6.8 E-6
CP2-07-SP09	34	NA	1.6 E-9	3.6 E-8	1.0 E-8	NA	NA	1.6 E-7	6.0 E-7	1.6 E-7	NA	7.3 E-8	NA	1.7 E-6	1.9 E-7	4.2 E-7	NA	NA	6.6 E-6
CP2-07-SP10	10	NA	6.1 E-9	5.9 E-8	NA	NA	NA	8.0 E-7	4.5 E-6	3.6 E-7	NA	NA	NA	NA	1.1 E-7	3.5 E-7	NA	NA	1.3 E-5
CP2-07-SP10	20	NA	NA	2.2 E-7	NA	NA	NA	1.4 E-6	1.4 E-5	2.0 E-7	NA	NA	NA	NA	1.8 E-7	2.7 E-7	NA	NA	3.7 E-5
CP2-07-SP10	40	NA	NA	5.3 E-8	NA	NA	NA	1.3 E-7	6.6 E-7	1.1 E-7	NA	NA	NA	NA	2.8 E-8	5.6 E-8	NA	NA	3.3 E-6
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	1.9 E-6	NA	1.3 E-7	NA	NA	1.2 E-5
CP2-07-SP11	20	NA	NA	NA	1.2 E-8	NA	NA	6.7 E-8	3.3 E-7	1.6 E-7	NA	NA	NA	1.2 E-6	1.1 E-7	2.7 E-7	NA	NA	3.5 E-6

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																	
Sample Name	Depth	Cumene	Cyclohexane	Ethanol	Ethylbenzene	Freon 11	Freon 113	Heptane	Hexane	m,p-Xylene	Methyl tert-butyl ether	o-Xylene	Propylbenzene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																			
Unit Risk																			
CP2-07-SP12	10	NA	1.0 E-8	1.6 E-7	2.1 E-8	2.0 E-7	NA	8.6 E-7	6.1 E-6	5.5 E-7	NA	NA	NA	NA	1.1 E-7	3.3 E-7	NA	NA	1.4 E-5
CP2-07-SP12	20	NA	NA	2.7 E-8	NA	1.9 E-7	NA	3.7 E-8	1.4 E-7	1.9 E-7	NA	NA	NA	NA	NA	9.5 E-8	4.4 E-8	NA	1.6 E-6
CP2-07-SP12	40	NA	NA	1.2 E-7	NA	1.7 E-7	NA	6.3 E-7	6.3 E-6	1.5 E-7	NA	NA	NA	NA	NA	1.2 E-7	2.7 E-8	NA	3.5 E-5
CP2-07-SP13	10	NA	NA	6.9 E-8	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	7.0 E-6	4.6 E-7	2.4 E-7	NA	NA	1.7 E-5
CP2-07-SP13	20	NA	NA	5.4 E-8	1.1 E-8	NA	NA	5.1 E-8	2.4 E-7	1.8 E-7	NA	NA	NA	6.2 E-7	1.5 E-7	3.1 E-7	NA	NA	3.3 E-6
CP2-07-SP14	10	NA	NA	1.1 E-7	NA	NA	3.8 E-8	4.0 E-8	1.7 E-7	NA	NA	NA	NA	9.9 E-7	2.3 E-7	1.1 E-6	7.2 E-7	NA	4.1 E-6
CP2-07-SP14	18.5	NA	3.4 E-9	1.0 E-7	NA	NA	1.5 E-8	2.9 E-8	1.5 E-6	2.3 E-7	NA	NA	NA	NA	3.6 E-7	1.7 E-6	2.5 E-7	NA	8.4 E-6
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	6.1 E-9	5.4 E-7	7.0 E-8	NA	NA	3.5 E-7	9.8 E-8	2.7 E-6	8.0 E-8	1.2 E-6	7.7 E-7	NA	2.1 E-6	8.7 E-7	6.4 E-8	NA	2.8 E-4
CP2-08-SP11	20	NA	9.5 E-9	3.9 E-7	2.9 E-8	NA	NA	3.7 E-7	7.4 E-8	1.2 E-6	2.0 E-8	5.0 E-7	NA	NA	2.3 E-6	6.7 E-7	NA	NA	2.0 E-4
CP2-08-SP12	10	NA	6.1 E-9	3.4 E-7	NA	NA	NA	1.4 E-7	7.5 E-8	7.2 E-7	3.0 E-8	3.9 E-7	NA	NA	8.2 E-7	4.3 E-7	1.3 E-7	NA	1.2 E-4
CP2-08-SP12	20	NA	2.2 E-9	5.4 E-8	NA	NA	NA	NA	4.9 E-8	1.7 E-7	8.3 E-9	NA	NA	NA	2.2 E-7	1.1 E-7	6.9 E-8	NA	1.3 E-3
CP2-08-SP13	10	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	4.2 E-7
CP2-RE05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	1.0 E-5	3.5 E-1
CP2-RE05-SP01	20	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	1.2 E-6	1.9 E-6	NA	1.3 E-6	6.4 E-2
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6
CP2-RE05-SP02	10	NA	NA	NA	NA	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	4.4 E-2
CP2-RE05-SP02	20	NA	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	1.3 E-6	4.9 E-7	NA	NA	5.8 E-3
CP2-RE05-SP02	40	NA	4.2 E-9	3.2 E-8	5.7 E-9	NA	3.3 E-8	5.1 E-7	5.9 E-6	8.7 E-8	NA	NA	NA	7.3 E-7	NA	2.4 E-7	8.2 E-7	NA	1.1 E-5
CP2-RE05-SP03	10	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-8
CP2-RE05-SP03	20	NA	NA	2.4 E-8	NA	NA	NA	3.7 E-8	6.6 E-8	2.5 E-7	NA	1.5 E-7	NA	NA	NA	6.8 E-8	NA	NA	3.2 E-6
CP2-RE05-SP04	10	NA	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7
CP2-RE05-SP04	20	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	8.6 E-8	NA	NA	4.0 E-4
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	1.2 E-5
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	6.4 E-9	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	5.0 E-6
CP2-RE05-SP06	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	1.1 E-7	1.3 E-7	NA	NA	1.4 E-2
CP2-RE05-SP06	20	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	1.0 E-7	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	2.6 E-4
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	1.5 E-7	5.0 E-7	NA	NA	NA	NA	NA	1.4 E-7	1.4 E-7	NA	NA	2.2 E-5
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	7.2 E-8	4.1 E-7	NA	NA	NA	NA	NA	1.8 E-7	2.2 E-7	2.6 E-8	NA	7.0 E-6
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	1.2 E-7	3.6 E-7	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	2.6 E-5
CP2-RE05-SP08	20	NA	2.9 E-9	NA	NA	NA	NA	7.8 E-8	5.0 E-7	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	NA	1.0 E-5
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-6
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-6
CP2-RE05-SP09	20	NA	1.7 E-9	NA	NA	NA	NA	9.4 E-8	3.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-6
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7
F(C)-SP05	20	NA	2.0 E-9	3.4 E-8	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	2.0 E-7	5.8 E-8	NA	NA	1.2 E-5
F(C)-SP06	10	1.2 E-7	6.7 E-9	7.8 E-7	2.7 E-7	NA	NA	1.8 E-7	8.4 E-8	1.3 E-5	1.1 E-8	8.6 E-6	5.4 E-6	NA	1.5 E-6	9.2 E-7	NA	NA	3.2 E-4
F(C)-SP06	20	3.4 E-8	1.6 E-9	7.6 E-8	5.3 E-8	NA	NA	9.6 E-8	5.8 E-8	2.3 E-6	NA	1.8 E-6	1.5 E-6	NA	6.5 E-7	2.5 E-7	NA	NA	8.9 E-5
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	7.0 E-8	NA	NA	NA	NA	3.7 E-5	1.4 E-7	1.0 E-7	NA	NA	3.8 E-5
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	1.9 E-8	1.4 E-7	1.6 E-7	NA	NA	NA	1.6 E-5	2.5 E-7	1.3 E-7	NA	NA	1.8 E-5

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	**Depth**	**1,1-Dichloroethene**	**1,2,4-Trimethylbenzene**	**1,2-Dichloroethane**	**1,3,5-Trimethylbenzene**	**1,4-Dioxane**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Bromodichloromethane**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Chloroethane**	**Chloroform**
Unit Hazard																		
Unit Risk																		
59F-SP33	10	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA
59F-SP33	20	NA	NA	8.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	10	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP34	15	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	10	NA	NA	4.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP35	20	NA	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9
59F-SP36	10	NA	NA	5.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	5.6 E-9
59F-SP36	20	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	NA
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
59F-SP39	20	NA	NA	4.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	NA	2.8 E-10
61F-SP03	10	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA
61F-SP03	20	NA	NA	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	2.0 E-10
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	NA
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	NA	NA
62F-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA
62F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	NA	NA
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	NA	NA
62F-SP07	10	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	2.4 E-10	3.7 E-10	NA	NA	NA	3.1 E-10
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-11	NA	NA	NA	NA	NA
CP2-07-SP01	10	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA	NA	NA	1.7 E-7
CP2-07-SP01	20	NA	NA	2.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6
CP2-07-SP01	40	NA	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	8.9 E-10
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	2.3 E-10
CP2-07-SP04	10	NA	NA	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	8.9 E-9
CP2-07-SP04	20	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	NA	NA	1.6 E-8
CP2-07-SP05	10	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	1.5 E-9	NA	8.4 E-9
CP2-07-SP05	20	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	4.6 E-10	NA	7.7 E-9
CP2-07-SP06	10	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	6.3 E-9	NA	6.1 E-8
CP2-07-SP06	20	NA	NA	4.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	3.3 E-9	NA	1.1 E-8
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	NA	NA	NA	NA	4.7 E-10
CP2-07-SP07	20	NA	NA	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	3.7 E-10
CP2-07-SP08	10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	20	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP08	30	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	NA	NA	NA
CP2-07-SP09	34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	3.2 E-10
CP2-07-SP10	20	NA	NA	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	7.9 E-10
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	NA
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA
CP2-07-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-10	NA	NA	NA	NA	NA

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																
Sample Name	Depth	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroethane	Chloroform
Unit Hazard																		
Unit Risk																		
CP2-07-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	4.6 E-10
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	NA
CP2-07-SP12	40	NA	NA	9.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	4.8 E-10
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	NA
CP2-07-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10	NA	NA	NA	NA	NA
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP14	18.5	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	NA
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP11	10	NA	NA	6.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	NA	NA
CP2-08-SP11	20	NA	NA	9.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA
CP2-08-SP12	10	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	5.6 E-10
CP2-08-SP12	20	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP01	10	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7
CP2-RE05-SP01	20	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8
CP2-RE05-SP01	40	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP02	10	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8
CP2-RE05-SP02	20	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9
CP2-RE05-SP02	40	NA	NA	NA	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA	NA
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	10	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	NA	NA
CP2-RE05-SP05	20	NA	NA	5.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP05	40	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP06	10	NA	NA	6.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9
CP2-RE05-SP06	20	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-10
CP2-RE05-SP06	40	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-11	NA	NA	NA	NA	NA
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP08	10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA
CP2-RE05-SP08	20	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA
CP2-RE05-SP08	40	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	10	NA	NA	4.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP09	20	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP05	20	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F(C)-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																			
Unit Risk																			
59F-SP33	10	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	NA	1.7 E-9	2 E-7
59F-SP33	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	4.2 E-9	9 E-7
59F-SP34	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	NA	6.1 E-9	2 E-6
59F-SP34	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	NA	4.4 E-9	1 E-6
59F-SP35	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-10	NA	1.0 E-9	6.4 E-8	5 E-6
59F-SP35	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	2.2 E-10	4.9 E-8	8 E-6
59F-SP36	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	NA	7 E-9
59F-SP36	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	2 E-9
59F-SP37	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	6 E-10
59F-SP38	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	4.4 E-11	NA	2.9 E-11	NA	4 E-9
59F-SP38	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	6.6 E-11	NA	1.9 E-11	NA	2 E-9
59F-SP38	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	2 E-11
59F-SP39	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-12	NA	NA	2.9 E-10	NA	NA	8.5 E-11	NA	1 E-9
60F-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
60F-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	NA	NA	NA	5 E-10
61F-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-11	NA	4.6 E-11	NA	4 E-8
61F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-11	NA	6.3 E-11	NA	9 E-9
61F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-11	NA	NA	NA	4 E-11
61F-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	2 E-11
61F-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	3 E-10
61F-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-11
61F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	NA	5 E-11
61F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-11	NA	2 E-10
62F-SP01	20	NA	NA	NA	4.6 E-10	NA	NA	NA	NA	NA	2.4 E-12	NA	NA	6.3 E-11	1.8 E-10	NA	NA	NA	7 E-10
62F-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-11	NA	NA	NA	9 E-11
62F-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-11	NA	1.2 E-11	NA	8 E-11
62F-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	NA	NA	7 E-11
62F-SP05	10	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	2.8 E-10	5.6 E-10	NA	NA	NA	3 E-9
62F-SP05	20	NA	NA	NA	8.7 E-10	NA	NA	NA	NA	NA	3.9 E-12	NA	NA	1.3 E-10	3.6 E-10	NA	NA	NA	2 E-9
62F-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	NA	NA	NA	6 E-11
62F-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-11	NA	NA	NA	4 E-10
62F-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	2.2 E-11	NA	2 E-9
62F-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	1 E-10
CP2-07-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	4.9 E-10	7.6 E-6	2 E-5
CP2-07-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	2 E-4
CP2-07-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5
CP2-07-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-10	NA	NA	NA	1 E-7
CP2-07-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-07-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-10	1.1 E-10	NA	NA	NA	1 E-9
CP2-07-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	8 E-10
CP2-07-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	NA	2 E-8
CP2-07-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	NA	2 E-8
CP2-07-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	NA	6.2 E-10	NA	NA	6.8 E-11	NA	1 E-8
CP2-07-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-12	NA	NA	3.0 E-10	NA	NA	4.3 E-11	NA	9 E-9
CP2-07-SP06	10	NA	NA	NA	4.4 E-11	NA	NA	NA	NA	NA	3.8 E-10	NA	NA	1.6 E-9	NA	NA	2.9 E-10	NA	9 E-8
CP2-07-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	NA	NA	2.5 E-10	NA	NA	6.3 E-11	NA	2 E-8
CP2-07-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	1.4 E-10	NA	NA	NA	2 E-9
CP2-07-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	7.0 E-11	NA	NA	NA	9 E-10
CP2-07-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
CP2-07-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
CP2-07-SP08	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	6.0 E-11	NA	2.8 E-10	NA	6 E-10
CP2-07-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	2.7 E-11	NA	NA	NA	3 E-10
CP2-07-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	3.6 E-11	NA	NA	NA	1 E-9
CP2-07-SP09	34	NA	NA	NA	9.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	4.0 E-11	NA	NA	NA	1 E-9
CP2-07-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	NA	2 E-9
CP2-07-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-11	NA	NA	NA	3 E-9
CP2-07-SP10	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-12	NA	NA	NA	2 E-10
CP2-07-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	NA	4 E-10
CP2-07-SP11	20	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-11	2.4 E-11	NA	NA	NA	5 E-10

Table 5.6-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	**Depth**	**Cumene**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 11**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Methyl tert-butyl ether**	**o-Xylene**	**Propylbenzene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**Vinyl Chloride**	**ILCR**
Unit Hazard																			
Unit Risk																			
CP2-07-SP12	10	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	NA	2 E-9
CP2-07-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	2 E-10
CP2-07-SP12	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	2 E-9
CP2-07-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	9.6 E-11	NA	NA	NA	1 E-9
CP2-07-SP13	20	NA	NA	NA	9.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	3.2 E-11	NA	NA	NA	5 E-10
CP2-07-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-11	4.8 E-11	NA	3.1 E-10	NA	4 E-10
CP2-07-SP14	18.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-11	NA	1.1 E-10	NA	4 E-10
CP2-07-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
CP2-07-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP11	10	NA	NA	NA	6.2 E-11	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	4.4 E-10	NA	2.7 E-11	NA	8 E-9
CP2-08-SP11	20	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	5.5 E-12	NA	NA	NA	4.8 E-10	NA	NA	NA	2 E-9
CP2-08-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-12	NA	NA	NA	1.7 E-10	NA	5.6 E-11	NA	2 E-9
CP2-08-SP12	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-12	NA	NA	NA	4.6 E-11	NA	2.9 E-11	NA	6 E-8
CP2-08-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-08-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	2.9 E-8	2 E-5
CP2-RE05-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	NA	NA	3.5 E-9	3 E-6
CP2-RE05-SP01	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
CP2-RE05-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	2 E-6
CP2-RE05-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	3 E-7
CP2-RE05-SP02	40	NA	NA	NA	5.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	NA	NA	3.5 E-10	NA	8 E-10
CP2-RE05-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
CP2-RE05-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
CP2-RE05-SP05	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	2 E-10
CP2-RE05-SP06	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	NA	6 E-7
CP2-RE05-SP06	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
CP2-RE05-SP06	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
CP2-RE05-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	3 E-11
CP2-RE05-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-11	NA	1.1 E-11	NA	5 E-11
CP2-RE05-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
CP2-RE05-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
CP2-RE05-SP08	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
CP2-RE05-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
CP2-RE05-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
CP2-RE05-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
CP2-RE05-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
F(C)-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-11	NA	NA	NA	4 E-10
F(C)-SP06	10	NA	NA	NA	2.4 E-10	NA	NA	NA	NA	NA	3.1 E-12	NA	NA	NA	3.2 E-10	NA	NA	NA	6 E-10
F(C)-SP06	20	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	3 E-10
OS1-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	3.0 E-11	NA	NA	NA	3 E-9
OS1-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	5.2 E-11	NA	NA	NA	1 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.6-7) x the unit hazard or unit risk for the chemical).

Table 5.6-22 All Receptors Hazard Index and Cancer Risk Results - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
		Resident		Construction	Commercial		Construction	Commercial	Resident	Resident	Construction	Commercial
Sample Name	Depth	Child	Adult	Worker	Worker	Resident	Worker	Worker	Child	Adult	Worker	Worker
25F-HA01	1	4.3 E-1	4.6 E-2	1.5 E-1	3.3 E-2	3 E-7	3 E-8	1 E-7	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
25F-HA01	5	1.3 E-1	1.4 E-2	2.1 E-1	1.0 E-2	1 E-9	2 E-8	7 E-10	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
25F-HA02	1	3.6 E-2	4.1 E-3	1.6 E-1	3.0 E-3	1 E-9	2 E-8	6 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA02	3	3.5 E-2	4.1 E-3	1.6 E-1	3.0 E-3	1 E-9	2 E-8	6 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA02	5	3.4 E-2	3.8 E-3	1.3 E-1	2.8 E-3	1 E-9	1 E-8	5 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA03	1	3.4 E-2	3.9 E-3	1.5 E-1	2.8 E-3	1 E-9	1 E-8	5 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA03	3	3.4 E-2	3.9 E-3	1.6 E-1	2.9 E-3	1 E-9	1 E-8	5 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA03	5	3.5 E-2	4.0 E-3	1.6 E-1	2.9 E-3	1 E-9	1 E-8	5 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA04	1	3.0 E-2	3.5 E-3	1.2 E-1	2.5 E-3	1 E-9	1 E-8	4 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA04	3	3.1 E-2	3.5 E-3	1.3 E-1	2.6 E-3	9 E-10	1 E-8	4 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-HA04	5	3.6 E-2	4.1 E-3	1.4 E-1	3.0 E-3	1 E-9	1 E-8	5 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB04	1	1.9 E-2	2.3 E-3	1.0 E-1	1.7 E-3	9 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB04	5	1.3 E-2	1.5 E-3	5.5 E-2	1.1 E-3	8 E-10	1 E-8	4 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
25F-SB05	1	1.8 E-2	2.0 E-3	8.1 E-2	1.5 E-3	5 E-10	7 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB05	5	1.9 E-2	2.2 E-3	8.9 E-2	1.6 E-3	6 E-10	8 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB06	1	5.1 E-2	5.7 E-3	7.7 E-2	4.2 E-3	5 E-7	2 E-8	2 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB06	5	4.5 E-2	4.9 E-3	8.0 E-2	3.6 E-3	7 E-7	3 E-8	2 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB07	1	**1.5 E+0**	1.6 E-1	4.8 E-1	1.1 E-1	7 E-10	9 E-9	3 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB07	5	5.2 E-2	5.8 E-3	1.0 E-1	4.2 E-3	1 E-9	2 E-8	6 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SB08	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SB09	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SB10	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SB11	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SB12	1	1.7 E-3	1.8 E-4	4.3 E-4	1.3 E-4	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SB13	1	3.0 E-4	3.2 E-5	7.7 E-5	2.3 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SB14	1	3.2 E-1	3.7 E-2	8.4 E-2	3.2 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SD01	0.25	1.5 E-1	1.6 E-2	1.6 E-1	1.2 E-2	1 E-9	2 E-8	7 E-10	5.5 E+0	3.5 E+0	3.6 E+0	3.4 E+0
25F-SD01	1.5	2.8 E-1	3.1 E-2	2.0 E-1	2.2 E-2	4 E-8	2 E-8	1 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SD01	5	1.7 E-1	1.9 E-2	1.9 E-1	1.3 E-2	2 E-8	2 E-8	8 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
25F-SD02	0.25	3.1 E-2	3.6 E-3	1.6 E-1	2.5 E-3	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
25F-SD02	1.5	2.9 E-2	3.3 E-3	1.5 E-1	2.3 E-3	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
25F-SD02	5	2.7 E-2	3.2 E-3	1.5 E-1	2.3 E-3	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
25F-SPB01	1	8.2 E-1	9.0 E-2	3.1 E-1	6.8 E-2	**NA**	**NA**	**NA**	5.6 E+0	3.5 E+0	3.6 E+0	3.4 E+0
25F-SPB01	5	4.9 E-1	5.3 E-2	2.2 E-1	3.8 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SPB01	10	7.1 E-1	7.6 E-2	2.5 E-1	5.4 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
25F-SPB02	1	**1.5 E+0**	1.7 E-1	4.4 E-1	1.3 E-1	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SPB02	5	**2.2 E+0**	2.4 E-1	6.7 E-1	1.7 E-1	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
25F-SPB02	10	5.2 E-1	5.5 E-2	1.9 E-1	4.0 E-2	**NA**	**NA**	**NA**	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
25F-SPB03	1	**7.3 E+0**	8.5 E-1	**2.0 E+0**	7.2 E-1	**NA**	**NA**	**NA**	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
25F-SPB03	5	1.3 E-1	1.5 E-2	3.4 E-2	1.3 E-2	**NA**	**NA**	**NA**	**NA**	**NA**	NA	NA
25F-SPB03	6	5.1 E-1	5.5 E-2	2.1 E-1	3.9 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
25F-SPB03	10	4.7 E-1	5.0 E-2	2.0 E-1	3.6 E-2	**NA**	**NA**	**NA**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SB11	1	1.7 E-2	1.9 E-3	5.6 E-2	1.4 E-3	5 E-10	6 E-9	2 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
59F-SB11	5	2.5 E-2	2.8 E-3	9.0 E-2	2.1 E-3	3 E-8	1 E-8	7 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB12	1	2.8 E-2	3.1 E-3	7.0 E-2	2.3 E-3	5 E-7	2 E-8	2 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB12	5	1.6 E-2	1.9 E-3	5.7 E-2	1.4 E-3	5 E-10	6 E-9	2 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
59F-SB13	1	2.1 E-2	2.4 E-3	8.9 E-2	1.7 E-3	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB13	5	4.9 E-2	5.5 E-3	1.7 E-1	4.0 E-3	1 E-9	2 E-8	6 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB14	1	5.4 E-2	5.9 E-3	9.1 E-2	4.2 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB14	5.5	4.1 E-2	4.5 E-3	8.7 E-2	3.2 E-3	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SB15	1	1.6 E-2	1.8 E-3	6.3 E-2	1.3 E-3	1 E-9	7 E-9	5 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB15	5	1.4 E-2	1.7 E-3	5.4 E-2	1.2 E-3	5 E-7	2 E-8	1 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB16	1	8.6 E-2	1.0 E-2	5.0 E-1	7.2 E-3	3 E-8	7 E-9	6 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB16	5	2.0 E-2	2.3 E-3	8.9 E-2	1.7 E-3	2 E-8	7 E-9	5 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB17	1	1.9 E-2	2.2 E-3	6.4 E-2	1.6 E-3	6 E-10	8 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB17	5	2.5 E-2	2.8 E-3	6.5 E-2	2.1 E-3	7 E-10	9 E-9	3 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB18	1	2.2 E-2	2.5 E-3	8.3 E-2	1.9 E-3	8 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB18	5	2.6 E-2	3.0 E-3	7.5 E-2	2.2 E-3	7 E-10	9 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB19	1	3.9 E-2	4.4 E-3	7.4 E-2	3.3 E-3	1 E-7	1 E-8	3 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SB19	5	2.2 E-2	2.5 E-3	7.1 E-2	1.8 E-3	7 E-10	8 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB20	1	2.9 E-2	3.3 E-3	1.5 E-1	2.4 E-3	4 E-9	1 E-10	1 E-9	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SB20	5.5	1.2 E-2	1.4 E-3	9.4 E-2	9.8 E-4	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB21	1	5.0 E-2	6.0 E-3	4.5 E-1	4.3 E-3	2 E-9	7 E-11	6 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0

Table 5.6-22 All Receptors Hazard Index and Cancer Risk Results-Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
Sample Name	Depth	Resident Child	Resident Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker	Resident Child	Resident Adult	Construction Worker	Commercial Worker
59F-SB21	5.5	3.8 E-2	4.1 E-3	8.0 E-2	3.0 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB22	1	1.8 E-1	2.1 E-2	8.1 E-1	1.5 E-2	**5 E-6**	2 E-7	1 E-6	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SB22	5.5	2.4 E-2	2.7 E-3	7.6 E-2	2.0 E-3	7 E-10	9 E-9	3 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB23	1	2.6 E-2	3.0 E-3	9.1 E-2	2.2 E-3	3 E-8	9 E-10	8 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB23	5	1.7 E-2	1.9 E-3	7.0 E-2	1.4 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB25	1	2.1 E-2	2.4 E-3	5.6 E-3	2.1 E-3	2 E-7	1 E-8	6 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB26	1	9.9 E-1	1.2 E-1	2.6 E-1	1.0 E-1	**2 E-5**	5 E-7	**5 E-6**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SB27	1	3.2 E-1	3.8 E-2	8.4 E-2	3.4 E-2	**4 E-6**	1 E-7	1 E-6	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SB28	1	**2.5 E+0**	3.0 E-1	6.6 E-1	2.6 E-1	**3 E-5**	9 E-7	**9 E-6**	5.6 E+0	3.5 E+0	3.6 E+0	3.4 E+0
59F-SD01	0.25	**1.4 E+1**	**1.7 E+0**	**4.1 E+0**	**1.5 E+0**	**2 E-4**	**5 E-6**	**5 E-5**	**1.1 E+1**	4.1 E+0	5.1 E+0	3.9 E+0
59F-SD01	1.5	2.9 E-2	3.3 E-3	1.5 E-1	2.3 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD01	5	5.1 E-2	5.7 E-3	1.4 E-1	4.1 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD02	0.25	5.2 E-1	6.2 E-2	2.9 E-1	5.4 E-2	**6 E-6**	2 E-7	**2 E-6**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SD02	1.5	3.9 E-1	4.6 E-2	2.8 E-1	3.8 E-2	**4 E-6**	1 E-7	1 E-6	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SD02	5	4.2 E-1	5.0 E-2	2.6 E-1	4.4 E-2	**5 E-6**	1 E-7	1 E-6	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD03	0.25	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD03	1.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD04	0.25	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD04	1.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD05	0.25	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD05	1.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SD06	0.25	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.4 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SD06	1.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SD07	0.25	7.2 E-3	7.9 E-4	2.0 E-3	5.9 E-4	1 E-8	4 E-9	4 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SNS01	0.5	4.3 E-2	5.0 E-3	2.6 E-1	3.7 E-3	7 E-7	4 E-8	2 E-7	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SNS01	2.5	3.4 E-2	4.0 E-3	2.3 E-1	2.9 E-3	4 E-9	1 E-8	1 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SNS02	0.5	5.1 E-2	6.1 E-3	3.6 E-1	4.4 E-3	5 E-9	2 E-8	2 E-9	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SNS02	2.5	3.4 E-2	3.9 E-3	1.8 E-1	2.9 E-3	1 E-9	2 E-8	6 E-10	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SNS03	0.5	2.0 E-2	2.4 E-3	1.2 E-1	1.7 E-3	2 E-7	2 E-8	7 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SNS03	2.5	3.1 E-2	3.6 E-3	1.3 E-1	2.6 E-3	1 E-9	2 E-8	6 E-10	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SNS04	0.5	2.4 E-2	2.8 E-3	1.3 E-1	2.1 E-3	3 E-9	1 E-8	9 E-10	5.6 E+0	3.5 E+0	3.6 E+0	3.4 E+0
59F-SPB01	1	5.1 E-1	5.4 E-2	2.3 E-1	3.9 E-2	5 E-9	1 E-10	1 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB01	5	2.7 E-5	3.2 E-6	7.2 E-6	2.7 E-6	2 E-9	7 E-11	7 E-10	**NA**	**NA**	**NA**	**NA**
59F-SPB01	10	5.5 E-5	6.4 E-6	1.4 E-5	5.4 E-6	5 E-9	1 E-10	1 E-9	**NA**	**NA**	**NA**	**NA**
59F-SPB02	1	6.4 E-1	7.4 E-2	**3.4 E+0**	5.3 E-2	2 E-9	7 E-11	7 E-10	**1.7 E+1**	4.9 E+0	7.0 E+0	4.5 E+0
59F-SPB02	5	5.4 E-1	5.8 E-2	3.2 E-1	4.1 E-2	2 E-9	7 E-11	7 E-10	**1.2 E+1**	4.2 E+0	5.4 E+0	4.0 E+0
59F-SPB02	10	4.7 E-1	5.1 E-2	1.7 E-1	3.6 E-2	2 E-9	7 E-11	7 E-10	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SPB03	1	4.7 E-1	5.1 E-2	2.1 E-1	3.6 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB03	5	5.1 E-1	5.5 E-2	2.2 E-1	3.9 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB03	10	3.7 E-1	3.9 E-2	1.5 E-1	2.8 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
59F-SPB04	1	4.0 E-1	4.3 E-2	1.7 E-1	3.1 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB04A	5	3.8 E-1	4.1 E-2	1.5 E-1	2.9 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB05	1	4.8 E-1	5.1 E-2	2.0 E-1	3.6 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB05	5	4.6 E-1	4.9 E-2	1.9 E-1	3.5 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB05	10	4.9 E-1	5.3 E-2	2.0 E-1	3.8 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB06	1	2.9 E-1	3.1 E-2	1.3 E-1	2.2 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
59F-SPB06	2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
59F-SPB06	5	4.0 E-1	4.3 E-2	1.8 E-1	3.1 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB06	10	5.7 E-1	6.1 E-2	2.2 E-1	4.3 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB07	1	4.4 E-1	4.7 E-2	2.0 E-1	3.4 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB07	2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
59F-SPB07	5	4.3 E-1	4.7 E-2	1.9 E-1	3.3 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB07	10	5.0 E-1	5.4 E-2	1.9 E-1	3.9 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.5 E+0	3.4 E+0
59F-SPB08	1	4.7 E-1	5.0 E-2	2.0 E-1	3.6 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB08	5	5.9 E-1	6.3 E-2	2.3 E-1	4.5 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
59F-SPB08	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
60F-SB01	1	5.7 E-1	6.1 E-2	2.3 E-1	4.4 E-2	**NA**	**NA**	**NA**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
60F-SB01	5	4.2 E-1	4.5 E-2	1.8 E-1	3.2 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SB01	10	4.5 E-1	4.9 E-2	2.0 E-1	3.5 E-2	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SB02	1	1.9 E-2	2.1 E-3	4.9 E-2	1.5 E-3	8 E-8	2 E-9	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SB02	5	3.5 E-2	3.9 E-3	6.7 E-2	2.8 E-3	7 E-8	2 E-9	2 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SB03	1	1.1 E-2	1.3 E-3	5.0 E-2	9.3 E-4	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
60F-SB03	5	1.4 E-2	1.6 E-3	6.9 E-2	1.2 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0

Table 5.6-22 All Receptors Hazard Index and Cancer Risk Results-Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker	Resident Child	Resident Adult	Construction Worker	Commercial Worker
60F-SB04	1	1.1 E-2	1.3 E-3	6.5 E-2	9.3 E-4	8 E-9	2 E-10	2 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SB04	5	1.9 E-2	2.2 E-3	8.9 E-2	1.6 E-3	1 E-8	4 E-10	3 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SB05	1	1.5 E-2	1.7 E-3	7.2 E-2	1.2 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SB05	5	1.2 E-2	1.3 E-3	5.0 E-2	9.4 E-4	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
60F-SNS01	0.5	2.8 E-2	3.1 E-3	8.4 E-2	2.3 E-3	6 E-7	3 E-8	2 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
61F-SB02	1	5.7 E-4	6.7 E-5	1.5 E-4	5.7 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
61F-SB02	3	3.8 E-1	4.1 E-2	1.9 E-1	2.9 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
61F-SB02	5	3.6 E-1	3.9 E-2	1.6 E-1	2.8 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
61F-SB02	10	3.5 E-1	3.7 E-2	1.7 E-1	2.7 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
61F-SB03	1	2.1 E-2	2.4 E-3	8.9 E-2	1.8 E-3	6 E-10	8 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
61F-SB03	5	3.5 E-2	3.9 E-3	8.6 E-2	2.8 E-3	3 E-8	1 E-8	8 E-9	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
61F-SB04	1	6.5 E-2	7.2 E-3	1.7 E-2	5.4 E-3	7 E-7	2 E-8	2 E-7	**NA**	**NA**	**NA**	**NA**
61F-SB05	1	6.1 E-3	6.7 E-4	1.6 E-3	5.0 E-4	5 E-8	1 E-9	1 E-8	**NA**	**NA**	**NA**	**NA**
61F-SNS01	0.5	1.4 E-1	1.6 E-2	1.7 E-1	1.1 E-2	**2 E-6**	9 E-8	6 E-7	6.8 E+0	3.6 E+0	3.9 E+0	3.5 E+0
61F-SNS02	0.5	3.9 E-2	4.5 E-3	1.8 E-1	3.3 E-3	2 E-9	2 E-8	8 E-10	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
61F-SPB01	1	4.6 E-1	4.9 E-2	2.1 E-1	3.5 E-2	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
61F-SPB01	5	5.3 E-1	5.7 E-2	2.1 E-1	4.0 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
61F-SPB01	10	3.7 E-1	4.0 E-2	1.7 E-1	2.9 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB04	1	1.3 E-2	1.5 E-3	7.3 E-2	1.1 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB04	5	1.1 E-2	1.3 E-3	4.6 E-2	9.2 E-4	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
62F-SB05	1	1.3 E-2	1.4 E-3	1.0 E-2	1.0 E-3	6 E-10	2 E-11	2 E-10	4.7 E+0	3.3 E+0	3.3 E+0	3.3 E+0
62F-SB05	5	1.7 E-2	1.9 E-3	7.2 E-2	1.4 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
62F-SB06	2	4.8 E-2	5.4 E-3	5.7 E-2	4.1 E-3	8 E-7	3 E-8	2 E-7	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
62F-SB06	5.5	1.3 E-2	1.5 E-3	5.8 E-2	1.1 E-3	7 E-10	9 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB07	5	2.4 E-2	2.7 E-3	6.0 E-2	2.0 E-3	3 E-7	2 E-8	8 E-8	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB08	1	2.7 E-2	3.1 E-3	2.0 E-1	2.2 E-3	**NA**	**NA**	**NA**	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB08	5	1.7 E-2	1.9 E-3	5.9 E-2	1.3 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB09	1	1.4 E-2	1.6 E-3	8.0 E-2	1.2 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB09	5	1.5 E-2	1.7 E-3	6.7 E-2	1.2 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB10	1	1.9 E-2	2.1 E-3	7.5 E-2	1.5 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SB10	5	1.8 E-2	2.0 E-3	8.1 E-2	1.4 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SD01	0.25	6.5 E-5	7.7 E-6	1.9 E-5	6.5 E-6	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
62F-SD01	1.5	8.7 E-5	1.0 E-5	2.5 E-5	8.7 E-6	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
62F-SD01	5	1.2 E-4	1.4 E-5	3.5 E-5	1.2 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
62F-SNS01	0.5	2.0 E-2	2.4 E-3	1.0 E-1	1.8 E-3	3 E-7	2 E-8	8 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
62F-SNS01	2.5	2.6 E-2	3.0 E-3	1.4 E-1	2.2 E-3	1 E-9	1 E-8	5 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
62F-SNS02	0.5	3.7 E-2	4.2 E-3	1.1 E-1	3.0 E-3	1 E-7	2 E-8	3 E-8	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
C201-SPB01	1	4.8 E-1	5.1 E-2	2.3 E-1	3.7 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
C201-SPB01	5	4.7 E-1	5.0 E-2	2.1 E-1	3.6 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
C201-SPB01	10	4.0 E-1	4.3 E-2	1.9 E-1	3.1 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
C207-SB01	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C207-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C207-SB01	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SB02	1	**1.1 E+0**	1.3 E-1	2.8 E-1	1.1 E-1	**1 E-5**	4 E-7	**4 E-6**	**NA**	**NA**	**NA**	**NA**
C208-SB02	3	3.7 E-1	4.4 E-2	9.7 E-2	3.9 E-2	**5 E-6**	1 E-7	1 E-6	**NA**	**NA**	**NA**	**NA**
C208-SB02	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SB02	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SB03	1	5.8 E-1	6.2 E-2	2.2 E-1	4.5 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
C208-SB03	5	4.3 E-1	4.6 E-2	1.7 E-1	3.3 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
C208-SB03	10	3.7 E-1	4.0 E-2	1.7 E-1	2.9 E-2	**NA**	**NA**	**NA**	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
C208-SB04	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SB04	3	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SB04	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SB04	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SB05	1	**1.2 E+0**	1.4 E-1	3.1 E-1	1.3 E-1	**2 E-5**	4 E-7	**4 E-6**	**NA**	**NA**	**NA**	**NA**
C208-SB05	3	5.8 E-1	6.9 E-2	1.5 E-1	6.1 E-2	**7 E-6**	2 E-7	**2 E-6**	**NA**	**NA**	**NA**	**NA**
C208-SB05	5	2.3 E-1	2.7 E-2	6.0 E-2	2.4 E-2	**3 E-6**	8 E-8	9 E-7	**NA**	**NA**	**NA**	**NA**
C208-SB05	10	8.1 E-2	9.7 E-3	2.1 E-2	8.6 E-3	1 E-6	3 E-8	3 E-7	**NA**	**NA**	**NA**	**NA**
C208-SPB01	1	**1.6 E+0**	1.9 E-1	4.9 E-1	1.6 E-1	**2 E-5**	5 E-7	**5 E-6**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
C208-SPB01	3	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SPB01	6	5.9 E-1	6.6 E-2	2.4 E-1	5.0 E-2	**2 E-6**	5 E-8	5 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
C208-SPB01	10	3.1 E-1	3.3 E-2	1.4 E-1	2.4 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
C208-SPB06	1	3.4 E-1	4.0 E-2	8.8 E-2	3.6 E-2	**4 E-6**	1 E-7	1 E-6	**NA**	**NA**	**NA**	**NA**

Table 5.6-22 All Receptors Hazard Index and Cancer Risk Results-Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
Sample Name	Depth	Resident Child	Resident Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker	Resident Child	Resident Adult	Construction Worker	Commercial Worker
C208-SPB06	3	4.2 E-1	5.0 E-2	1.1 E-1	4.4 E-2	**5 E-6**	2 E-7	**2 E-6**	**NA**	**NA**	**NA**	**NA**
C208-SPB06	5	1.1 E-4	1.3 E-5	2.9 E-5	1.1 E-5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
C208-SPB06	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB02	1	1.9 E-2	2.2 E-3	8.2 E-2	1.6 E-3	6 E-10	8 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB02	5	2.3 E-2	2.6 E-3	9.0 E-2	1.9 E-3	8 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB03	1	1.8 E-2	2.1 E-3	8.1 E-2	1.5 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB03	5	2.6 E-2	2.9 E-3	7.7 E-2	2.2 E-3	9 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB04	1	2.1 E-2	2.4 E-3	8.2 E-2	1.8 E-3	5 E-9	8 E-9	1 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB04	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB05	1	1.7 E-2	2.0 E-3	8.8 E-2	1.4 E-3	7 E-10	9 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB05	5	1.0 E-2	1.2 E-3	5.5 E-2	9.0 E-4	5 E-10	6 E-9	2 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB06	1	2.2 E-2	2.4 E-3	5.9 E-2	1.8 E-3	5 E-10	7 E-9	2 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB08	1	3.0 E-2	3.3 E-3	9.8 E-2	2.4 E-3	9 E-10	1 E-8	4 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB08	5	1.9 E-2	2.2 E-3	6.5 E-2	1.6 E-3	6 E-10	8 E-9	3 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB09	1	1.3 E-2	1.4 E-3	3.6 E-2	1.1 E-3	4 E-9	5 E-9	1 E-9	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-07-SB09	5	1.9 E-2	2.2 E-3	6.1 E-2	1.6 E-3	8 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB10	1	1.4 E-2	1.7 E-3	7.3 E-2	1.2 E-3	6 E-10	8 E-9	3 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-07-SB10	5	1.1 E-2	1.3 E-3	6.7 E-2	9.4 E-4	4 E-10	5 E-9	2 E-10	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-07-SB11	1	1.4 E-2	1.6 E-3	8.0 E-2	1.2 E-3	6 E-10	7 E-9	3 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-07-SB11	5	1.5 E-2	1.7 E-3	9.5 E-2	1.3 E-3	5 E-10	7 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB12	1	1.3 E-2	1.5 E-3	5.9 E-2	1.1 E-3	5 E-10	6 E-9	2 E-10	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-07-SB12	5	1.7 E-2	1.9 E-3	7.3 E-2	1.4 E-3	6 E-10	8 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB13	1	1.2 E-2	1.4 E-3	6.4 E-2	1.0 E-3	5 E-10	6 E-9	2 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB13	5	2.8 E-2	3.2 E-3	9.1 E-2	2.3 E-3	5 E-10	7 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB14	1	1.8 E-2	2.0 E-3	6.0 E-2	1.4 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB14	5	1.6 E-2	1.8 E-3	5.8 E-2	1.3 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB15	1	1.7 E-2	1.9 E-3	5.2 E-2	1.4 E-3	5 E-10	6 E-9	2 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB15	5	2.5 E-2	2.8 E-3	1.0 E-1	2.1 E-3	8 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB16	1	1.8 E-2	2.0 E-3	8.1 E-2	1.4 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB16	5	1.2 E-2	1.4 E-3	4.6 E-2	1.0 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-07-SB17	1	1.8 E-2	2.1 E-3	1.0 E-1	1.5 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB17	5	3.3 E-2	3.7 E-3	9.9 E-2	2.6 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB18	1	1.6 E-2	1.9 E-3	9.5 E-2	1.3 E-3	**NA**	**NA**	**NA**	5.9 E+0	3.5 E+0	3.7 E+0	3.4 E+0
CP2-07-SB18	5	1.4 E-2	1.6 E-3	6.9 E-2	1.1 E-3	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB19	1	1.8 E-2	2.0 E-3	7.4 E-2	1.5 E-3	4 E-10	5 E-9	2 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB19	5	1.2 E-2	1.4 E-3	5.6 E-2	9.7 E-4	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-07-SB20	1	1.5 E-6	1.8 E-7	4.0 E-7	1.5 E-7	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB20	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB21	1	3.8 E-6	4.5 E-7	1.0 E-6	3.8 E-7	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB21	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB22	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB22	5	8.6 E-7	1.0 E-7	2.3 E-7	8.5 E-8	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB23	1	2.7 E-5	3.2 E-6	7.1 E-6	2.7 E-6	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB23	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB24	1	1.6 E-6	1.9 E-7	4.3 E-7	1.6 E-7	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-07-SB24	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
CP2-08-SB09	1	1.5 E-2	1.7 E-3	5.7 E-2	1.2 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB09	5	1.6 E-2	1.9 E-3	9.5 E-2	1.3 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB10	2	2.2 E-1	2.6 E-2	1.3 E-1	2.3 E-2	**3 E-6**	8 E-8	8 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB10	6	1.7 E-2	2.0 E-3	8.1 E-2	1.4 E-3	3 E-10	4 E-9	2 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB11	1	2.5 E-2	2.8 E-3	7.1 E-2	2.1 E-3	8 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB11	5	2.6 E-2	2.9 E-3	6.8 E-2	2.1 E-3	8 E-10	1 E-8	4 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB12	1	**1.7 E+0**	2.0 E-1	4.9 E-1	1.8 E-1	**2 E-5**	6 E-7	**7 E-6**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-08-SB12	5	3.5 E-2	3.9 E-3	1.1 E-1	2.8 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB13	1	1.0 E-1	1.2 E-2	1.1 E-1	9.5 E-3	8 E-7	2 E-8	2 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB13	5	3.1 E-2	3.4 E-3	6.9 E-2	2.4 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB14	1	6.6 E-2	7.4 E-3	2.2 E-1	5.3 E-3	**NA**	**NA**	**NA**	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB14	5	1.8 E-2	2.0 E-3	8.8 E-2	1.4 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB15	1	2.0 E-2	2.3 E-3	1.2 E-1	1.7 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SB15	5	1.3 E-2	1.5 E-3	8.0 E-2	1.1 E-3	6 E-10	8 E-9	3 E-10	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SNS01	0.5	9.4 E-2	1.1 E-2	1.8 E-1	9.2 E-3	8 E-7	3 E-8	2 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SNS01	2.5	3.0 E-2	3.4 E-3	1.1 E-1	2.5 E-3	7 E-10	8 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SNS02	0.5	1.3 E-1	1.5 E-2	1.0 E-1	1.3 E-2	**2 E-6**	6 E-8	5 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0

Table 5.6-22 All Receptors Hazard Index and Cancer Risk Results-Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil			Blood Lead			
Sample Name	Depth	Resident Child	Resident Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker	Resident Child	Resident Adult	Construction Worker	Commercial Worker
CP2-08-SNS02	2.5	2.1 E-2	2.4 E-3	7.5 E-2	1.7 E-3	7 E-10	9 E-9	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SNS03	0.5	8.5 E-2	1.0 E-2	8.0 E-2	8.6 E-3	9 E-7	3 E-8	3 E-7	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SNS03	2.5	6.7 E-2	7.8 E-3	1.0 E-1	6.4 E-3	5 E-7	2 E-8	2 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-08-SNS04	0.5	4.6 E-1	5.5 E-2	2.0 E-1	4.8 E-2	**9 E-6**	3 E-7	**3 E-6**	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
CP2-08-SNS04	2.5	1.7 E-2	2.0 E-3	8.8 E-2	1.5 E-3	7 E-10	9 E-9	3 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-RE01-SB01	1	1.5 E-2	1.7 E-3	5.7 E-2	1.2 E-3	9 E-10	3 E-11	2 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-RE01-SB01	5	1.7 E-2	2.0 E-3	8.8 E-2	1.4 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-RE05-SB01	1	2.9 E-2	3.2 E-3	9.1 E-2	2.4 E-3	5 E-8	9 E-9	1 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-RE05-SB01	5	6.6 E-2	7.2 E-3	7.2 E-2	5.1 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-RE05-SB02	1	6.8 E-2	7.5 E-3	9.5 E-2	5.4 E-3	5 E-10	7 E-9	2 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-RE05-SB02	5	6.1 E-2	6.7 E-3	1.0 E-1	4.8 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-RE05-SB03	1	9.0 E-2	9.9 E-3	1.0 E-1	7.2 E-3	1 E-7	1 E-8	3 E-8	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-RE05-SB03	5	1.6 E-2	1.8 E-3	5.8 E-2	1.3 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-RE05-SB04	1	2.0 E-2	2.3 E-3	9.6 E-2	1.6 E-3	1 E-9	4 E-11	3 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-RE05-SB04	5	2.1 E-2	2.3 E-3	5.8 E-2	1.7 E-3	1 E-9	9 E-9	5 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-RE05-SB05	1	2.0 E-2	2.2 E-3	9.6 E-2	1.6 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-RE05-SB05	5	2.7 E-2	3.0 E-3	7.0 E-2	2.2 E-3	8 E-10	1 E-8	4 E-10	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
CP2-ST07-SB01	1	1.4 E-2	1.7 E-3	7.3 E-2	1.2 E-3	6 E-8	1 E-8	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
CP2-ST07-SB01	5	1.5 E-2	1.8 E-3	8.1 E-2	1.3 E-3	7 E-10	9 E-9	3 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(C)-SB01	1	4.3 E-1	4.7 E-2	1.8 E-1	3.3 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(C)-SB01	5	4.1 E-1	4.4 E-2	1.8 E-1	3.1 E-2	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(C)-SB01	10	4.0 E-1	4.3 E-2	1.7 E-1	3.0 E-2	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(c)-SB02	1	7.7 E-2	9.2 E-3	7.0 E-2	7.9 E-3	9 E-7	3 E-8	3 E-7	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
F(c)-SB02	5	8.8 E-3	1.0 E-3	7.2 E-2	7.5 E-4	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(c)-SB03	1	1.5 E-2	1.7 E-3	1.1 E-1	1.2 E-3	**NA**	**NA**	**NA**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(c)-SB03	5	2.9 E-2	3.2 E-3	5.4 E-2	2.3 E-3	**NA**	**NA**	**NA**	4.8 E+0	3.4 E+0	3.3 E+0	3.3 E+0
F(c)-SB04	1	**1.1 E+2**	**1.3 E+1**	**2.8 E+1**	**1.1 E+1**	**1 E-3**	**4 E-5**	**4 E-4**	4.8 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(c)-SB04	5	6.9 E-2	7.6 E-3	6.3 E-2	5.7 E-3	1 E-7	9 E-9	4 E-8	4.7 E+0	3.4 E+0	3.3 E+0	3.3 E+0
F(c)-SNS01	0.5	4.3 E-2	4.7 E-3	8.1 E-2	3.5 E-3	3 E-7	2 E-8	8 E-8	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
F(c)-SNS02	0.5	2.0 E-1	2.4 E-2	1.3 E-1	2.1 E-2	**3 E-6**	9 E-8	8 E-7	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
F(c)-SNS03	0.5	2.3 E-1	2.7 E-2	1.3 E-1	2.3 E-2	**3 E-6**	1 E-7	9 E-7	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
OS1-F2-SB02	1	6.7 E-4	7.5 E-5	1.8 E-4	5.9 E-5	4 E-8	1 E-9	1 E-8	**NA**	**NA**	**NA**	**NA**
OS1-F2-SB03	1	5.4 E-2	6.5 E-3	1.4 E-2	5.7 E-3	7 E-7	2 E-8	2 E-7	**NA**	**NA**	**NA**	**NA**
OS1-F2-SB04	1	8.3 E-2	1.0 E-2	2.2 E-2	8.8 E-3	1 E-6	3 E-8	3 E-7	**NA**	**NA**	**NA**	**NA**
OS1-F2-SNS01	0.5	3.3 E-2	3.8 E-3	1.8 E-1	2.7 E-3	3 E-8	2 E-9	7 E-9	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
OS1-F2-SNS01	2.5	4.7 E-2	5.6 E-3	4.0 E-1	4.1 E-3	7 E-8	9 E-9	2 E-8	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0
OS1-F2-SNS02	0.5	1.0 E-1	1.2 E-2	5.2 E-1	8.7 E-3	8 E-7	3 E-8	2 E-7	5.5 E+0	3.4 E+0	3.5 E+0	3.4 E+0
OS1-F2-SNS02	2.5	1.8 E-2	2.1 E-3	7.3 E-2	1.5 E-3	6 E-8	3 E-9	2 E-8	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
OS1-F2-SNS03	0.5	6.6 E-2	7.4 E-3	2.4 E-1	5.4 E-3	6 E-7	3 E-8	2 E-7	5.7 E+0	3.5 E+0	3.6 E+0	3.4 E+0
OS1-F2-SNS03	2.5	2.5 E-2	2.8 E-3	9.7 E-2	2.0 E-3	3 E-9	1 E-9	7 E-10	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0
OS1-F2-SNS04	0.5	2.0 E-2	2.3 E-3	7.4 E-2	1.6 E-3	3 E-9	1 E-9	8 E-10	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
OS1-F2-SNS04	2.5	3.7 E-2	4.2 E-3	1.6 E-1	3.0 E-3	1 E-7	9 E-9	3 E-8	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0
OS1-F3-SD01	0.25	1.5 E-1	1.8 E-2	3.9 E-2	1.6 E-2	**2 E-6**	6 E-8	5 E-7	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0
Minimum		8.6 E-7	1.0 E-7	2.3 E-7	8.5 E-8	3 E-10	2 E-11	2 E-10	4.7 E+0	3.3 E+0	3.3 E+0	3.3 E+0
Median		3.3 E-2	3.7 E-3	9.5 E-2	2.6 E-3	5 E-9	1 E-8	1 E-9	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0
Maximum		**1.1 E+2**	**1.3 E+1**	**2.8 E+1**	**1.1 E+1**	**1 E-3**	**4 E-5**	**4 E-4**	**1.7 E+1**	4.9 E+0	7.0 E+0	4.5 E+0

Key:
NA = Not applicable
HI = Hazard index
ILCR = Incremental lifetime cancer risk
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.
Note: HIs and ILCRs present only the relative contribution of arsenic above background.

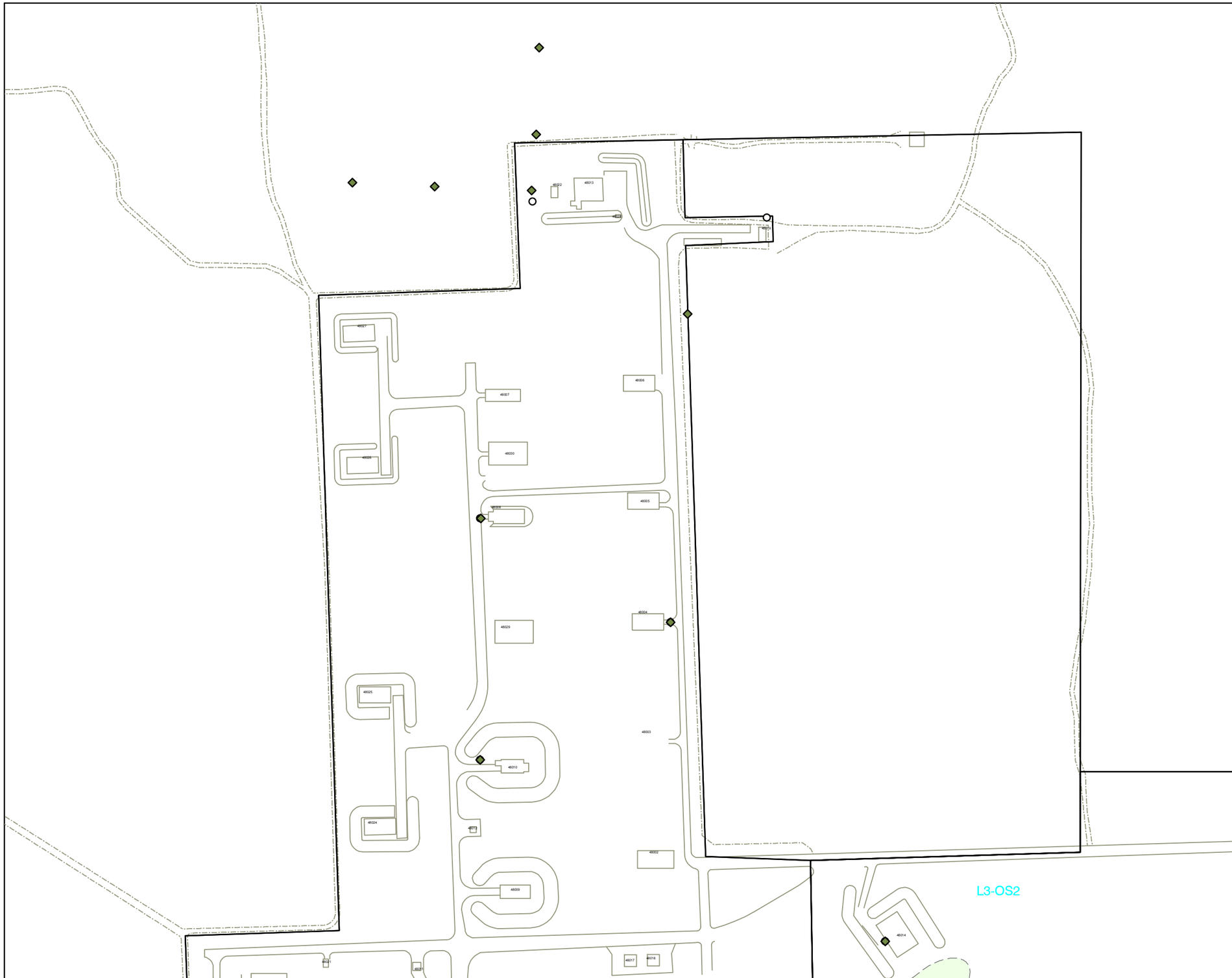
Table 5.6-23 All Receptors Hazard Index and Cancer Risk Results-Soil Vapor
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
59F-SP33	10	**1.3 E+0**	5.4 E-1	5.3 E-3	1.9 E-1	**3 E-5**	8 E-9	**8 E-6**
59F-SP33	20	**5.0 E+0**	**2.2 E+0**	1.9 E-2	7.8 E-1	**1 E-4**	4 E-8	**4 E-5**
59F-SP34	10	**1.1 E+1**	**4.8 E+0**	4.8 E-2	**1.7 E+0**	**3 E-4**	9 E-8	**8 E-5**
59F-SP34	15	**6.0 E+0**	**2.6 E+0**	2.4 E-2	9.3 E-1	**2 E-4**	4 E-8	**4 E-5**
59F-SP35	10	**2.4 E+1**	**1.0 E+1**	1.0 E-1	**3.7 E+0**	**7 E-4**	2 E-7	**2 E-4**
59F-SP35	20	**4.7 E+1**	**2.0 E+1**	1.8 E-1	**7.3 E+0**	**1 E-3**	3 E-7	**3 E-4**
59F-SP36	10	9.2 E-3	4.0 E-3	3.9 E-5	1.4 E-3	1 E-6	3 E-10	3 E-7
59F-SP36	20	8.9 E-3	3.8 E-3	3.3 E-5	1.4 E-3	3 E-7	6 E-11	6 E-8
59F-SP37	10	9.2 E-4	3.9 E-4	3.9 E-6	1.4 E-4	1 E-7	3 E-11	2 E-8
59F-SP38	10	1.5 E-2	6.3 E-3	5.8 E-5	2.3 E-3	7 E-7	2 E-10	2 E-7
59F-SP38	20	6.5 E-3	2.8 E-3	2.4 E-5	1.0 E-3	4 E-7	8 E-11	8 E-8
59F-SP38	40	6.9 E-5	3.0 E-5	2.4 E-7	1.1 E-5	3 E-9	7 E-13	8 E-10
59F-SP39	20	4.6 E-3	2.0 E-3	1.7 E-5	7.1 E-4	2 E-7	5 E-11	5 E-8
60F-SP08	10	1.2 E-4	5.2 E-5	5.3 E-7	1.9 E-5	0 E+0	0 E+0	0 E+0
60F-SP08	20	1.7 E-3	7.2 E-4	5.8 E-6	2.6 E-4	8 E-8	2 E-11	2 E-8
61F-SP03	10	2.1 E-1	9.1 E-2	9.0 E-4	3.3 E-2	**6 E-6**	2 E-9	1 E-6
61F-SP03	20	5.3 E-2	2.3 E-2	2.0 E-4	8.2 E-3	**2 E-6**	4 E-10	4 E-7
61F-SP04	10	2.0 E-3	8.5 E-4	7.9 E-6	3.1 E-4	7 E-9	2 E-12	2 E-9
61F-SP04	20	1.3 E-3	5.7 E-4	4.6 E-6	2.0 E-4	3 E-9	6 E-13	7 E-10
61F-SP05	10	3.5 E-4	1.5 E-4	1.5 E-6	5.4 E-5	5 E-8	1 E-11	1 E-8
61F-SP05	20	1.4 E-4	6.1 E-5	5.3 E-7	2.2 E-5	2 E-8	4 E-12	4 E-9
61F-SP06	10	1.2 E-4	5.3 E-5	5.2 E-7	1.9 E-5	8 E-9	2 E-12	2 E-9
61F-SP06	20	3.7 E-4	1.6 E-4	1.3 E-6	5.7 E-5	4 E-8	9 E-12	9 E-9
62F-SP01	20	9.6 E-2	4.1 E-2	3.3 E-4	1.5 E-2	1 E-7	3 E-11	3 E-8
62F-SP02	20	6.6 E-3	2.8 E-3	2.3 E-5	1.0 E-3	2 E-8	4 E-12	4 E-9
62F-SP03	20	9.0 E-3	3.8 E-3	3.1 E-5	1.4 E-3	1 E-8	3 E-12	3 E-9
62F-SP04	10	8.7 E-3	3.7 E-3	3.4 E-5	1.4 E-3	1 E-8	3 E-12	2 E-9
62F-SP05	10	2.6 E-1	1.1 E-1	1.0 E-3	4.0 E-2	5 E-7	1 E-10	1 E-7
62F-SP05	20	1.4 E-1	6.1 E-2	4.9 E-4	2.2 E-2	3 E-7	6 E-11	7 E-8
62F-SP06	10	1.9 E-3	8.3 E-4	7.5 E-6	3.0 E-4	9 E-9	2 E-12	2 E-9
62F-SP06	20	3.1 E-3	1.3 E-3	1.1 E-5	4.8 E-4	8 E-8	2 E-11	2 E-8
62F-SP07	10	4.7 E-3	2.0 E-3	1.9 E-5	7.3 E-4	3 E-7	6 E-11	6 E-8
62F-SP07	20	3.6 E-4	1.5 E-4	1.3 E-6	5.5 E-5	2 E-8	4 E-12	4 E-9
CP2-07-SP01	10	**6.4 E+1**	**2.7 E+1**	2.7 E-1	**9.9 E+0**	**3 E-3**	8 E-7	**8 E-4**
CP2-07-SP01	20	**1.3 E+3**	**5.6 E+2**	**5.0 E+0**	**2.0 E+2**	**4 E-2**	**9 E-6**	**1 E-2**
CP2-07-SP01	40	**1.8 E+2**	**7.6 E+1**	6.4 E-1	**2.7 E+1**	**5 E-3**	1 E-6	**1 E-3**
CP2-07-SP02	10	4.1 E-2	1.7 E-2	1.6 E-4	6.3 E-3	**2 E-5**	4 E-9	**4 E-6**
CP2-07-SP02	20	**NA**	**NA**	**NA**	**NA**	0 E+0	0 E+0	0 E+0
CP2-07-SP03	10	1.1 E-2	4.9 E-3	4.6 E-5	1.8 E-3	2 E-7	6 E-11	5 E-8
CP2-07-SP03	20	8.8 E-3	3.8 E-3	3.1 E-5	1.4 E-3	1 E-7	3 E-11	3 E-8
CP2-07-SP04	10	5.6 E-2	2.4 E-2	2.4 E-4	8.6 E-3	**3 E-6**	7 E-10	7 E-7
CP2-07-SP04	20	4.2 E-2	1.8 E-2	1.6 E-4	6.6 E-3	**4 E-6**	9 E-10	9 E-7
CP2-07-SP05	10	1.5 E-2	6.4 E-3	6.2 E-5	2.3 E-3	**2 E-6**	5 E-10	5 E-7
CP2-07-SP05	20	1.0 E-2	4.4 E-3	3.9 E-5	1.6 E-3	**2 E-6**	4 E-10	4 E-7
CP2-07-SP06	10	1.7 E-1	7.3 E-2	7.2 E-4	2.6 E-2	**1 E-5**	4 E-9	**3 E-6**
CP2-07-SP06	20	3.7 E-2	1.6 E-2	1.4 E-4	5.7 E-3	**3 E-6**	8 E-10	8 E-7
CP2-07-SP07	10	1.0 E-2	4.3 E-3	4.0 E-5	1.5 E-3	4 E-7	9 E-11	9 E-8
CP2-07-SP07	20	3.9 E-3	1.7 E-3	1.4 E-5	6.0 E-4	1 E-7	3 E-11	4 E-8
CP2-07-SP08	10	5.5 E-3	2.4 E-3	2.4 E-5	8.6 E-4	2 E-7	4 E-11	4 E-8
CP2-07-SP08	20	9.7 E-4	4.2 E-4	3.7 E-6	1.5 E-4	3 E-8	6 E-12	6 E-9
CP2-07-SP08	30	1.8 E-3	7.7 E-4	6.4 E-6	2.8 E-4	1 E-7	2 E-11	2 E-8
CP2-07-SP09	10	9.4 E-4	4.0 E-4	3.8 E-6	1.5 E-4	5 E-8	1 E-11	1 E-8
CP2-07-SP09	20	1.9 E-3	8.1 E-4	6.8 E-6	2.9 E-4	2 E-7	4 E-11	4 E-8
CP2-07-SP09	34	1.9 E-3	8.1 E-4	6.6 E-6	2.9 E-4	2 E-7	4 E-11	4 E-8
CP2-07-SP10	10	3.2 E-3	1.4 E-3	1.3 E-5	5.0 E-4	3 E-7	8 E-11	8 E-8
CP2-07-SP10	20	1.0 E-2	4.3 E-3	3.7 E-5	1.5 E-3	6 E-7	1 E-10	1 E-7
CP2-07-SP10	40	1.0 E-3	4.3 E-4	3.3 E-6	1.5 E-4	4 E-8	8 E-12	9 E-9
CP2-07-SP11	10	2.9 E-3	1.3 E-3	1.2 E-5	4.6 E-4	6 E-8	2 E-11	1 E-8
CP2-07-SP11	20	9.6 E-4	4.1 E-4	3.5 E-6	1.5 E-4	9 E-8	2 E-11	2 E-8

Table 5.6-23 All Receptors Hazard Index and Cancer Risk Results-Soil Vapor
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
CP2-07-SP12	10	3.4 E-3	1.5 E-3	1.4 E-5	5.3 E-4	3 E-7	7 E-11	6 E-8
CP2-07-SP12	20	4.4 E-4	1.9 E-4	1.6 E-6	6.8 E-5	4 E-8	9 E-12	1 E-8
CP2-07-SP12	40	1.0 E-2	4.3 E-3	3.5 E-5	1.5 E-3	4 E-7	9 E-11	1 E-7
CP2-07-SP13	10	4.3 E-3	1.8 E-3	1.7 E-5	6.7 E-4	2 E-7	5 E-11	5 E-8
CP2-07-SP13	20	9.2 E-4	3.9 E-4	3.3 E-6	1.4 E-4	9 E-8	2 E-11	2 E-8
CP2-07-SP14	10	1.0 E-3	4.3 E-4	4.1 E-6	1.5 E-4	7 E-8	2 E-11	2 E-8
CP2-07-SP14	18.5	2.2 E-3	9.4 E-4	8.4 E-6	3.4 E-4	7 E-8	2 E-11	2 E-8
CP2-07-SP15	10	2.5 E-4	1.1 E-4	1.1 E-6	3.9 E-5	3 E-8	8 E-12	8 E-9
CP2-07-SP15	20	**NA**	**NA**	**NA**	**NA**	0 E+0	0 E+0	0 E+0
CP2-08-SP11	10	7.0 E-2	3.0 E-2	2.8 E-4	1.1 E-2	1 E-6	3 E-10	3 E-7
CP2-08-SP11	20	5.9 E-2	2.5 E-2	2.0 E-4	9.1 E-3	3 E-7	7 E-11	7 E-8
CP2-08-SP12	10	3.1 E-2	1.3 E-2	1.2 E-4	4.9 E-3	2 E-7	6 E-11	6 E-8
CP2-08-SP12	20	3.4 E-1	1.4 E-1	1.3 E-3	5.2 E-2	**1 E-5**	2 E-9	**2 E-6**
CP2-08-SP13	10	1.2 E-4	5.1 E-5	5.3 E-7	1.9 E-5	0 E+0	0 E+0	0 E+0
CP2-08-SP14	10	1.1 E-4	4.5 E-5	4.2 E-7	1.6 E-5	0 E+0	0 E+0	0 E+0
CP2-RE05-SP01	10	**8.2 E+1**	**3.5 E+1**	3.5 E-1	**1.3 E+1**	**2 E-3**	6 E-7	**6 E-4**
CP2-RE05-SP01	20	**1.7 E+1**	**7.2 E+0**	6.4 E-2	**2.6 E+0**	**5 E-4**	1 E-7	**1 E-4**
CP2-RE05-SP01	40	7.8 E-4	3.3 E-4	2.8 E-6	1.2 E-4	2 E-8	5 E-12	5 E-9
CP2-RE05-SP02	10	**1.0 E+1**	**4.5 E+0**	4.4 E-2	**1.6 E+0**	**3 E-4**	8 E-8	**7 E-5**
CP2-RE05-SP02	20	**1.5 E+0**	6.4 E-1	5.8 E-3	2.3 E-1	**4 E-5**	1 E-8	**1 E-5**
CP2-RE05-SP02	40	3.3 E-3	1.4 E-3	1.1 E-5	5.2 E-4	2 E-7	3 E-11	4 E-8
CP2-RE05-SP03	10	1.7 E-5	7.4 E-6	7.6 E-8	2.7 E-6	0 E+0	0 E+0	0 E+0
CP2-RE05-SP03	20	9.2 E-4	3.9 E-4	3.2 E-6	1.4 E-4	0 E+0	0 E+0	0 E+0
CP2-RE05-SP04	10	6.1 E-5	2.6 E-5	2.7 E-7	9.5 E-6	0 E+0	0 E+0	0 E+0
CP2-RE05-SP04	20	3.8 E-5	1.6 E-5	1.4 E-7	5.9 E-6	0 E+0	0 E+0	0 E+0
CP2-RE05-SP05	10	9.3 E-2	4.0 E-2	4.0 E-4	1.4 E-2	**3 E-6**	7 E-10	7 E-7
CP2-RE05-SP05	20	3.2 E-3	1.4 E-3	1.2 E-5	5.0 E-4	9 E-8	2 E-11	2 E-8
CP2-RE05-SP05	40	1.4 E-3	6.0 E-4	5.0 E-6	2.2 E-4	4 E-8	9 E-12	1 E-8
CP2-RE05-SP06	10	**3.3 E+0**	**1.4 E+0**	1.4 E-2	5.1 E-1	**1 E-4**	3 E-8	**2 E-5**
CP2-RE05-SP06	20	6.5 E-1	2.8 E-1	2.5 E-3	1.0 E-1	**2 E-5**	5 E-9	**5 E-6**
CP2-RE05-SP06	40	7.3 E-2	3.1 E-2	2.6 E-4	1.1 E-2	**2 E-6**	5 E-10	5 E-7
CP2-RE05-SP07	10	5.6 E-3	2.4 E-3	2.2 E-5	8.7 E-4	5 E-9	1 E-12	1 E-9
CP2-RE05-SP07	20	2.0 E-3	8.6 E-4	7.0 E-6	3.1 E-4	9 E-9	2 E-12	2 E-9
CP2-RE05-SP08	10	6.2 E-3	2.6 E-3	2.6 E-5	9.6 E-4	2 E-7	6 E-11	5 E-8
CP2-RE05-SP08	20	2.7 E-3	1.1 E-3	1.0 E-5	4.2 E-4	1 E-7	2 E-11	2 E-8
CP2-RE05-SP08	40	9.0 E-4	3.9 E-4	3.3 E-6	1.4 E-4	3 E-8	6 E-12	6 E-9
CP2-RE05-SP09	10	2.1 E-3	9.0 E-4	8.9 E-6	3.3 E-4	6 E-8	2 E-11	1 E-8
CP2-RE05-SP09	20	1.3 E-3	5.4 E-4	4.7 E-6	2.0 E-4	3 E-8	8 E-12	8 E-9
CP2-RE05-SP10	10	5.4 E-5	2.3 E-5	2.4 E-7	8.3 E-6	0 E+0	0 E+0	0 E+0
CP2-RE05-SP10	20	3.8 E-5	1.6 E-5	1.4 E-7	5.8 E-6	0 E+0	0 E+0	0 E+0
F(C)-SP05	20	3.3 E-3	1.4 E-3	1.2 E-5	5.1 E-4	7 E-8	2 E-11	2 E-8
F(C)-SP06	10	8.3 E-2	3.5 E-2	3.2 E-4	1.3 E-2	9 E-8	2 E-11	2 E-8
F(C)-SP06	20	2.6 E-2	1.1 E-2	8.9 E-5	4.0 E-3	6 E-8	1 E-11	1 E-8
OS1-F1-SP01	10	9.6 E-3	4.1 E-3	3.8 E-5	1.5 E-3	5 E-7	1 E-10	1 E-7
OS1-F1-SP01	20	4.8 E-3	2.1 E-3	1.8 E-5	7.4 E-4	2 E-7	6 E-11	6 E-8
Minimum		1.7 E-5	7.4 E-6	7.6 E-8	2.7 E-6	0 E+0	0 E+0	0 E+0
Median		5.2 E-3	2.2 E-3	2.1 E-5	8.0 E-4	2 E-7	3 E-11	4 E-8
Maximum		**1.3 E+3**	**5.6 E+2**	**5.0 E+0**	**2.0 E+2**	**4 E-2**	**9 E-6**	**1 E-2**

Key:
NA = Not applicable



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Surface Water Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 340 '

0 340 680

AEROJET

Environmental Remediation

Figure 5.7-1

Residential
Non-Cancer Effects – All Media
Magazine Area

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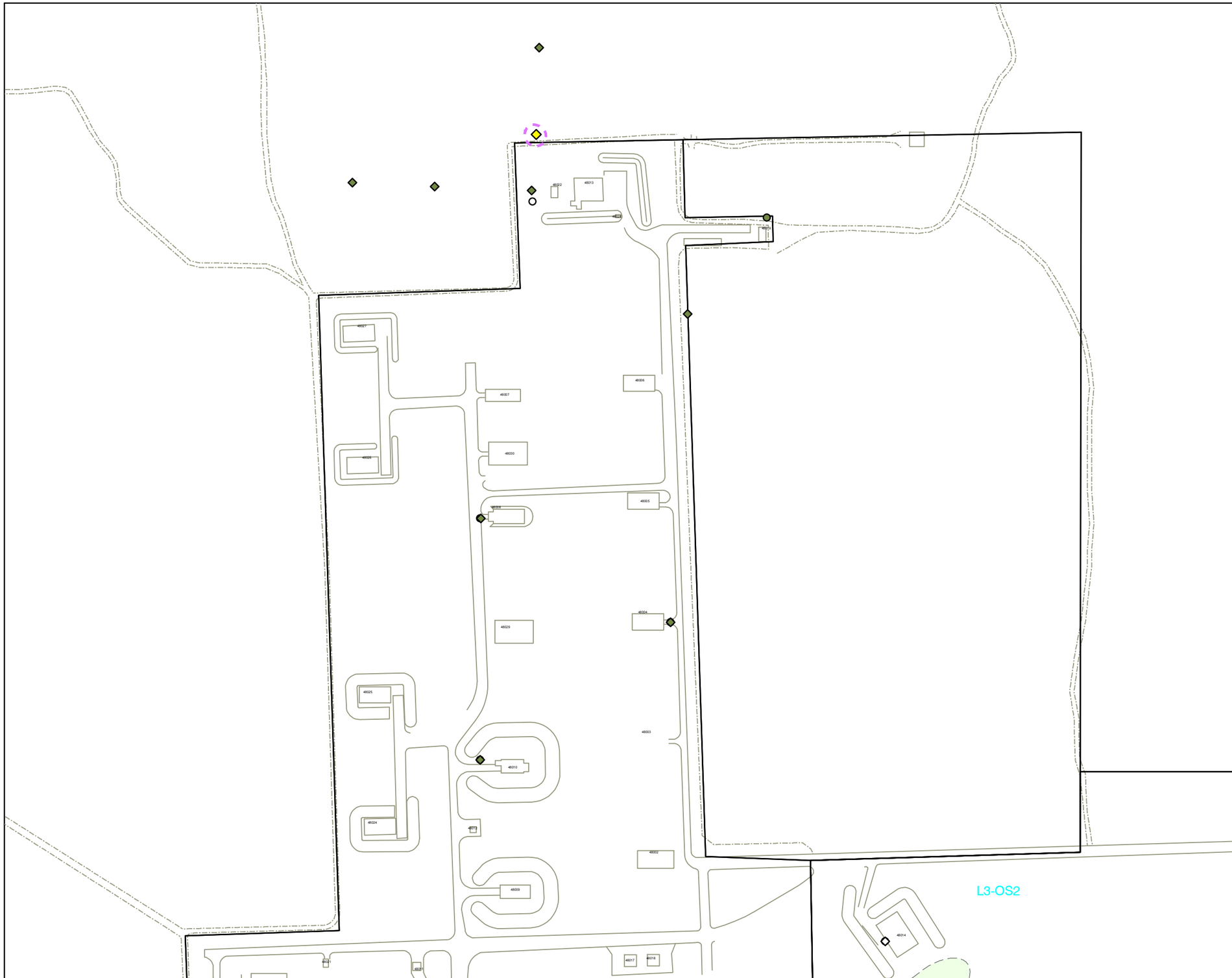

Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 340 '

0 340 680

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Environmental Remediation

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Figure 5.7-2

Residential
Cancer Risks – All Media
Magazine Area

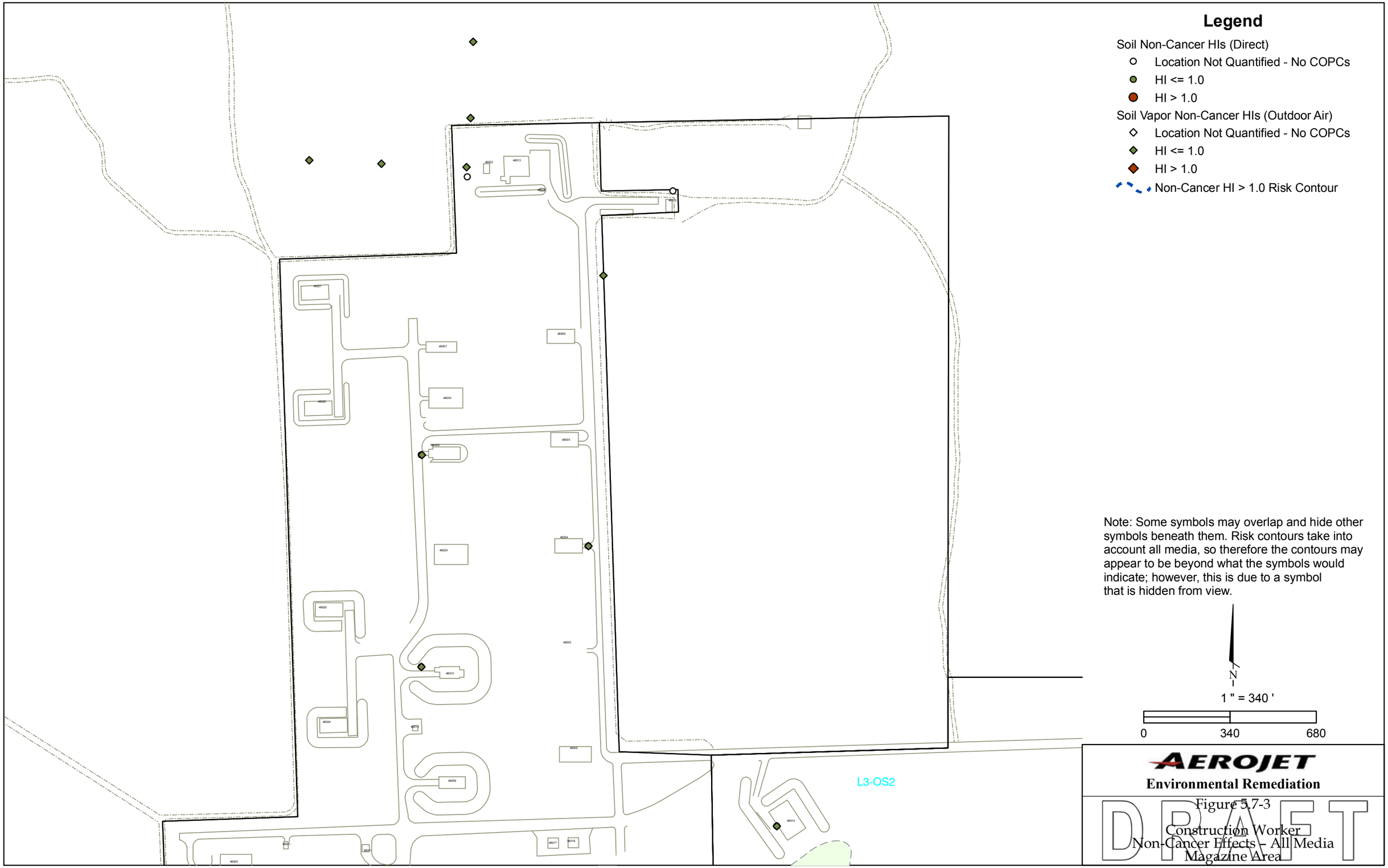
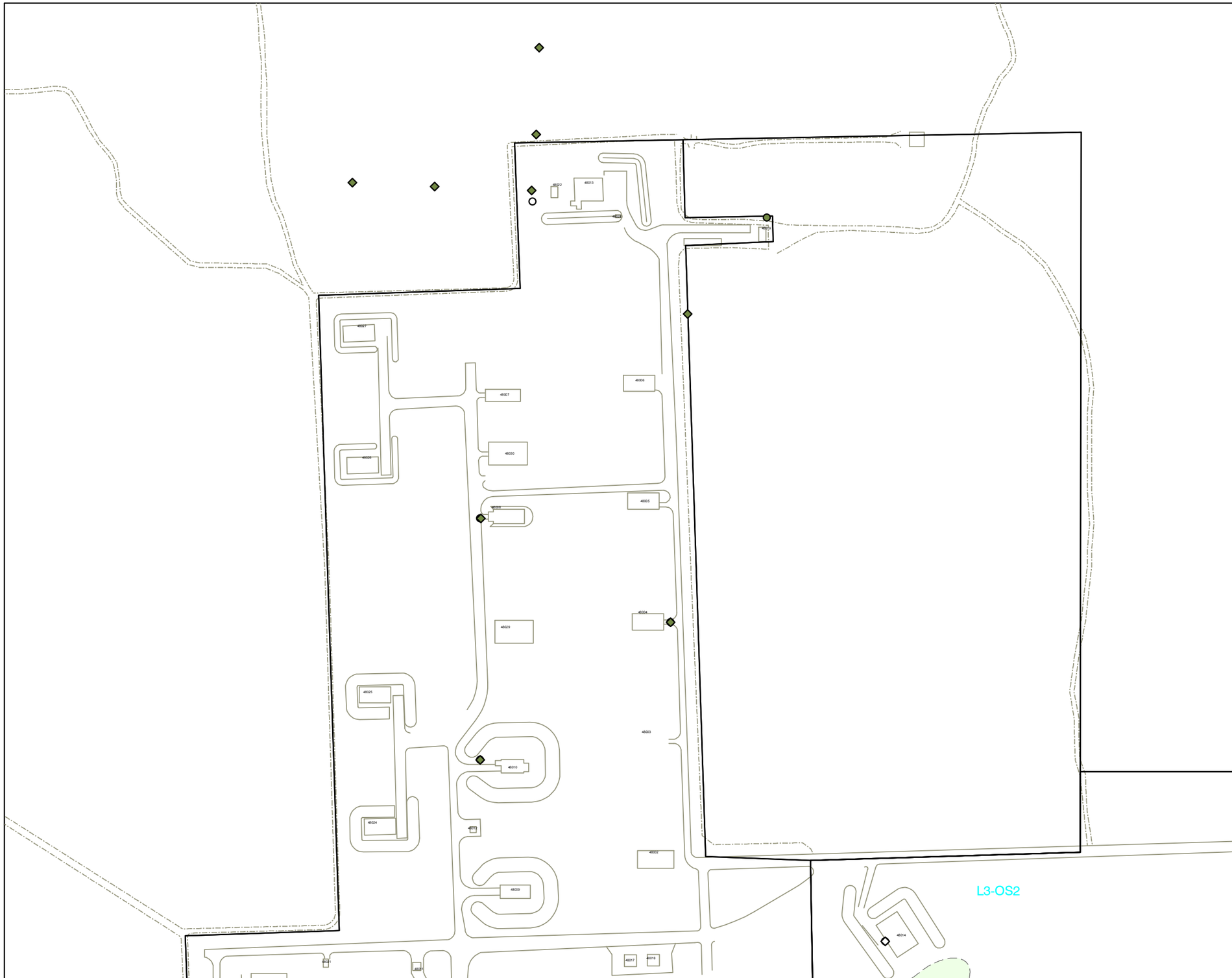


Figure 5.7-3
Construction Worker
Non-Cancer Effects – All Media
Magazine Area



Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4
- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 340 '

0 340 680

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Environmental Remediation

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Figure 5.7-4

Construction Worker
Cancer Risks – All Media
Magazine Area

Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 340 '

0 340 680

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Environmental Remediation

Figure 5.7-5

Commercial/Industrial Worker Non-Cancer Effects – All Media Magazine Area

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Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Cancer Risk > 10-6 Contour

Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 340 '

0 340 680

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Environmental Remediation

Figure 5.7-6

Commercial/Industrial Worker
Cancer Risks – All Media
Magazine Area

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Table 5.7-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Magazine Area	71-55-6	1,1,1-Trichloroethane	8.9	8.9	µg/m^3	A48-ST13-SP06-10	10	27	1	3.7%	5.4-7.7	9.9E+04	nc	N	BSL	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/m^3			27	0	0.0%	6.8-9.7	1.8E+00	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/m^3			27	0	0.0%	5.4-7.7	6.6E+00	ca	N	ND	NA
	75-34-3	1,1-Dichloroethane	ND	ND	µg/m^3			27	0	0.0%	4-5.7	6.6E+01	ca	N	ND	NA
	75-35-4	1,1-Dichloroethene	9	9	µg/m^3	A48-ST13-SP06-10	10	27	1	3.7%	3.9-5.6	3.1E+03	nc	N	BSL	NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/m^3			27	0	0.0%	18-260	6.7E+00	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/m^3			27	0	0.0%	30-42	9.9E+03	nc	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/m^3			27	0	0.0%	4.9-6.9	2.7E+02	nc	N	ND	NA
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/m^3			27	0	0.0%	7.6-11	1.7E+00	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/m^3			27	0	0.0%	6-8.5	9.1E+03	nc	N	ND	NA
	107-06-2	1,2-Dichloroethane	ND	ND	µg/m^3			27	0	0.0%	4-5.7	5.0E+00	ca*	N	ND	NA
	78-87-5	1,2-Dichloropropane	ND	ND	µg/m^3			27	0	0.0%	4.6-6.5	1.1E+01	ca*	N	ND	NA
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/m^3			27	0	0.0%	4.9-6.9	2.7E+02	nc	N	ND	NA
	106-99-0	1,3-Butadiene	3.3	62	µg/m^3	A48-ST13-SP05-30	30	27	20	74.1%	2.5-3	5.9E-01	ca*	N	NR	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/m^3			27	0	0.0%	6-8.5	4.8E+03	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/m^3			27	0	0.0%	6-8.5	9.7E+00	ca	N	ND	NA
	123-91-1	1,4-Dioxane	19	28	µg/m^3	A48-ST13-SP04-30	30	27	2	7.4%	14-20	1.4E+01	ca	Y		NA
	540-84-1	2,2,4-Trimethylpentane	9.6	9.6	µg/m^3	A48-ST13-SP06-30	30	27	1	3.7%	4.6-6.6	3.2E+04	nc	N	BSL	NA
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	22	200	µg/m^3	A48-ST13-SP05-30	30	27	10	37.0%	3.7-18	2.3E+05	nc	Y		NA
	591-78-6	2-Hexanone	ND	ND	µg/m^3			27	0	0.0%	16-23	3.6E+03	nc	N	ND	NA
	67-63-0	2-Propanol	14	25	µg/m^3	A48-ST13-SP06-30	30	27	3	11.1%	9.8-14	4.6E+02	nc	Y		NA
	107-05-1	3-Chloropropene	ND	ND	µg/m^3			27	0	0.0%	12-18	1.7E+01	nc	N	ND	NA
	622-96-8	4-Ethyltoluene	ND	ND	µg/m^3			27	0	0.0%	4.9-6.9	3.2E+04	nc	N	ND	NA
	108-10-1	4-Methyl-2-pentanone	5.2	16	µg/m^3	A48-ST13-SP03-20-T	20	27	8	29.6%	4.1-5.8	3.6E+03	nc	Y		NA
	67-64-1	Acetone	58	1800	µg/m^3	A48-ST13-SP05-30	30	27	19	70.4%	15-160	1.5E+04	nc	Y		NA
	100-44-7	alpha-Chlorotoluene	ND	ND	µg/m^3			27	0	0.0%	5.2-7.3	2.2E+00	ca	N	ND*	100%
	71-43-2	Benzene	4.3	54	µg/m^3	A48-ST13-SP05-30	30	27	16	59.3%	3.6-4.3	3.6E+00	ca	Y		NA
	75-27-4	Bromodichloromethane	ND	ND	µg/m^3			27	0	0.0%	6.7-9.4	3.1E+00	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	µg/m^3			27	0	0.0%	10-14	1.2E+02	nc	N	ND	NA
	74-83-9	Bromomethane	ND	ND	µg/m^3			27	0	0.0%	3.9-5.5	2.3E+02	nc	N	ND	NA
		Butylbenzene	ND	ND	µg/m^3			27	0	0.0%	22-310	6.5E+03	nc	N	ND	NA
	75-15-0	Carbon Disulfide	4.4	25	µg/m^3	A48-ST13-SP03-20-T	20	27	21	77.8%	3.6-4.2	3.1E+04	nc	Y		NA
	56-23-5	Carbon Tetrachloride	42	42	µg/m^3	A48-ST13-SP05-30	30	27	1	3.7%	6.3-8.9	2.5E+00	ca*	Y		NA
	108-90-7	Chlorobenzene	ND	ND	µg/m^3			27	0	0.0%	4.6-6.5	4.5E+04	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	µg/m^3			27	0	0.0%	2.6-3.7	1.2E+02	ca	N	ND	NA
	67-66-3	Chloroform	ND	ND	µg/m^3			27	0	0.0%	4.8-6.9	2.0E+01	ca	N	ND	NA
	74-87-3	Chloromethane	ND	ND	µg/m^3			27	0	0.0%	8.2-12	1.0E+02	nc	N	ND	NA

Table 5.7-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Magazine Area	156-59-2	cis-1,2-Dichloroethene	ND	ND	$\mu g/m^3$			27	0	0.0%	3.9-5.6	1.6E+03	nc	N	ND	NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	$\mu g/m^3$			27	0	0.0%	4.5-6.4	6.7E+00	ca	N	ND	NA
	98-82-8	Cumene	ND	ND	$\mu g/m^3$			27	0	0.0%	4.9-6.9	1.8E+04	nc	N	ND	NA
	110-82-7	Cyclohexane	4.5	5.9	$\mu g/m^3$	A48-ST13-SP06-30	30	27	4	14.8%	3.4-4.8	2.7E+05	nc	Y		NA
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$			27	0	0.0%	8.5-12	4.6E+00	ca	N	ND*	100%
	64-17-5	Ethanol	8.3	720	$\mu g/m^3$	A48-ST13-SP07-30	30	27	11	40.7%	8.6-46	7.9E+04	nc	Y		NA
	100-41-4	Ethyl Benzene	6.6	6.6	$\mu g/m^3$	A48-ST13-SP06-30	30	27	1	3.7%	4.3-6.1	4.2E+01	nc	N		NA
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$			27	0	0.0%	5.6-7.9	3.1E+04	nc	N	ND	NA
	76-13-1	Freon 113	15	630	$\mu g/m^3$	A48-ST13-SP06-10	10	27	5	18.5%	8-11	1.4E+06	nc	Y		NA
	76-14-2	Freon 114	ND	ND	$\mu g/m^3$			27	0	0.0%	7-9.8	1.4E+06	nc	N	ND	NA
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$			27	0	0.0%	4.9-7	9.1E+03	nc	N	ND	NA
	142-82-5	Heptane	5.2	76	$\mu g/m^3$	A48-ST13-SP06-30	30	27	11	40.7%	4.7-5.8	8.7E+03	nc	Y		NA
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$			27	0	0.0%	42-60	4.9E+00	ca*	N	ND*	100%
	110-54-3	Hexane	4.8	110	$\mu g/m^3$	A48-ST13-SP05-30	30	27	20	74.1%	4-4.5	8.7E+03	nc	Y		NA
	136777-61-2	m,p-Xylene	5.3	16	$\mu g/m^3$	A48-ST13-SP03-10	10	27	13	48.1%	5-6.1	3.2E+04	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$			27	0	0.0%	3.6-5.1	4.0E+02	ca	N	ND	NA
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$			27	0	0.0%	3.4-4.9	1.0E+02	ca	N	ND	NA
	95-47-6	o-Xylene	5.5	5.5	$\mu g/m^3$	A48-ST13-SP03-10	10	27	1	3.7%	4.3-6.1	3.2E+04	nc	N		NA
	99-87-6	p-Cymene	ND	ND	$\mu g/m^3$			27	0	0.0%	22-310	3.2E+04	nc	N	ND	NA
	103-65-1	Propylbenzene	ND	ND	$\mu g/m^3$			27	0	0.0%	4.9-6.9	6.4E+03	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	$\mu g/m^3$			27	0	0.0%	22-310	6.5E+03	nc	N	ND	NA
	100-42-5	Styrene	7.1	7.1	$\mu g/m^3$	A48-ST13-SP07-20	20	27	1	3.7%	4.2-6	4.1E+04	nc	N	BSL	NA
	98-06-6	tert-Butylbenzene	ND	ND	$\mu g/m^3$			27	0	0.0%	22-310	6.5E+03	nc	N	ND	NA
	127-18-4	Tetrachloroethene	8	1800	$\mu g/m^3$	A48-ST13-SP06-10	10	27	19	70.4%	8.2-8.8	1.8E+01	ca	Y		NA
	109-99-9	Tetrahydrofuran	7.6	64	$\mu g/m^3$	A48-ST13-SP04-30	30	27	13	48.1%	3.4-4.2	5.3E+01	ca	Y		NA
	108-88-3	Toluene	4.8	750	$\mu g/m^3$	A48-RC08-SP01-30	30	27	25	92.6%	4.8-4.9	1.4E+04	nc	Y		NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$			27	0	0.0%	3.9-5.6	3.2E+03	nc	N	ND	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	$\mu g/m^3$			27	0	0.0%	4.5-6.4	6.7E+00	ca	N	ND	NA
	79-01-6	Trichloroethene	6.7	520	$\mu g/m^3$	A48-ST13-SP06-10	10	27	16	59.3%	5.6-7.2	5.3E+01	ca	Y		NA
	75-01-4	Vinyl Chloride	ND	ND	$\mu g/m^3$			27	0	0.0%	2.5-3.6	1.3E+00	ca	N	ND*	100%

Footnotes:

(1) See Table 1

(2) FOD = Frequency of detection screening

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

NA = Not applicable

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

ca = Cancer

COPC = Chemical of potential concern

$\mu g/m^3$ = Micrograms per cubic meter

nc = Noncancer

Table 5.7-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Magazine Area	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	6.2	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	60	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.061	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	53	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.35	ca	N	ND*	13%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.61	nc**	N	ND	NA
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	18	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.51-2.9	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	6.3	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.17	nc	N	ND*	100!
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	310	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	15	0	0%	0.51-2.9	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	1.8	nc	N	ND	NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.61	nc	N	ND	NA
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	24	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	15	0	0%	0.51-2.9	2.3	ca**	N	ND	NA
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	370	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	230	nc	N	ND	NA
	7429-90-5	Aluminum	4900	53000	mg/kg	A48-RC08-SB01-11.5	11.5	15	15	100%	NA	7600	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	8.5	ca**	N	ND	NA
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	2200	nc	N	ND	NA
	7440-36-0	Antimony	0.11	0.54	mg/kg	OS3-F1-SB03-2.0	2	14	6	43%	1-23	3	nc	N	BSL	NA
	7440-38-2	Arsenic	1.8	12	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	0.0062	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.44	ca	N	ND*	7%
	7440-39-3	Barium	27	270	mg/kg	A48-RC08-SB01-11.5	11.5	15	15	100%	NA	520	nc	N	BSL	NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	15	0	0%	0.36-2	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.0035	0.0035	mg/kg	OS3-F1-SB03-0.5	0.5	15	1	7%	0.0066-0.038	0.062	ca	Y		NA
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	0.0038	ca	N	ND*	100%
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	15	0	0%	0.013-0.076	0.038	ca	N	ND	NA
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	230	nc	N	ND	NA

Table 5.7-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Magazine Area	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	15	0	0%	0.51-2.9	10000	max	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	1800	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.12	1.2	mg/kg	OS3-F1-SB01-2.0 A48-RC08-SB01-11.5	2 11.5	15	13	87%	0.23-0.25	15	nc	N	BSL	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.022	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.29	ca	N	ND*	27%
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	15	0	0%	0.51-2.9	3.5	ca*	N	ND	NA
	7440-42-8	Boron	2.2	23	mg/kg	OS3-F1-SB03-2.0	2	15	6	40%	2-12	1600	nc	N	BSL	NA
	7440-43-9	Cadmium	0.06	0.86	mg/kg	A48-RC08-SB01-11.5	11.5	15	14	93%	0.42-0.42	0.17	nc	N	BG	NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	2.4	ca	N	ND	NA
	7440-47-3	Chromium	16	100	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	10000	max	N	BSL	NA
	218-01-9	Chrysene	0.0085	0.029	mg/kg	OS3-F1-SB01-0.5	0.5	15	3	20%	0.0066-0.01	0.38	ca	Y		NA
	7440-48-4	Cobalt	3.5	31	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	66	ca**	N	BSL	NA
	7440-50-8	Copper	16	69	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	300	nc	N	BSL	NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	0.0062	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	15	nc	N	ND	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	4900	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	15	0	0%	0.41-2.3	610	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	240	nc	N	ND	NA
	206-44-0	Fluoranthene	0.0017	0.0023	mg/kg	OS3-F1-SB03-0.5	0.5	15	2	13%	0.0066-0.038	230	nc	Y		NA
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	270	nc	N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.62	ca**	N	ND	NA
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-4.1	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	3.5	ca**	N	ND	NA
	2691-41-0	HMX	ND	ND	mg/kg	ND	ND	6	0	0%	0.03-0.03	182	nc	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	0.062	ca	N	ND	NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	51	ca*	N	ND	NA
	7439-92-1	Lead	2.4	17	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	15	nc	N	BG	NA
	7439-93-2	Lithium	3.4	23	mg/kg	A48-RC08-SB01-11.5	11.5	15	15	100%	NA	160	nc	N	BSL	NA
	7439-96-5	Manganese	130	800	mg/kg	A48-RC08-SB01-11.5	11.5	15	15	100%	NA	180	nc	N	BG	NA
	7439-97-6	Mercury	0.0063	0.1	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	1.8	nc	N	BSL	NA
	7439-98-7	Molybdenum	0.27	2.6	mg/kg	OS3-F1-SB02-2.0	2	15	15	100%	NA	38	nc	N	BSL	NA
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	0.17	ca	N	ND	NA
	7440-02-0	Nickel	15	82	mg/kg	A48-RC08-SB01-11.5	11.5	15	15	100%	NA	160	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	2	nc	N	ND	NA
	556887	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	15	0	0%	0.032-0.25	365	nc	N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.00095	ca*	N	ND*	100%

Table 5.7-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Magazine Area Management Area
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Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Magazine Area	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	0.007	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	15	0	0%	0.2-1.2	150	nc	N	ND	NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	15	0	0%	0.71-4.1	0.3	ca	N	ND*	100%
	14797-73-0	Perchlorate	0.043	0.33	mg/kg	A48-ST13-SB01-6.0	6	9	3	33%	0.046-0.06	0.78	ca/nc	N	BSL	NA
	85-01-8	Phenanthrene	0.0043	0.029	mg/kg	OS3-F1-SB01-0.5	0.5	15	4	27%	0.0066-0.01	230	nc	Y		NA
	108-95-2	Phenol	0.68	1.2	mg/kg	OS3-F1-SB01-2.0	2	15	4	27%	0.2-1.2	1800	nc	Y		NA
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	15	0	0%	0.0066-0.038	230	nc	N	ND	NA
	121824	RDX	ND	ND	mg/kg	ND	ND	6	0	0%	0.04-0.04	0.61	ca	N	ND	NA
	7782-49-2	Selenium	ND	ND	mg/kg	ND	ND	15	0	0%	0.81-4.6	38	nc	N	ND	NA
	7440-22-4	Silver	0.064	0.16	mg/kg	OS3-F1-SB01-2.0	2	15	6	40%	0.4-2.3	38	nc	N	BSL	NA
	7440-24-6	Strontium	9.8	55	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	4700	nc	N	BSL	NA
	7440-28-0	Thallium	0.14	4.5	mg/kg	A48-RC08-SB01-11.5	11.5	15	10	67%	0.54-4.2	0.5	nc	N	BG	NA
	7440-32-6	Titanium	240	1200	mg/kg	OS3-F1-SB01-2.0 A48-RC08-SB01-11.5	2 11.5	15	15	100%	NA	10000	nc	N	BSL	NA
	7440-62-2	Vanadium	15	150	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	0.53	nc	N	BG	NA
	7440-66-6	Zinc	18	85	mg/kg	OS3-F1-SB01-2.0	2	15	15	100%	NA	2300	nc	N	BSL	

Footnotes:

(1) See Table 2
(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
NA = Not applicable
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.7-3 Chemical of Potential Concern Summary
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
1,1,2,2-Tetrachloroethane	N	ND*	NA	NA
1,1,1-Trichloroethane	Y		NA	NA
1,1,2-Trichloroethane	N	ND*	NA	NA
1,1-Dichloroethane	Y		NA	NA
1,1-Dichloroethene	Y		NA	NA
1,1-Dichloropropene	N	ND	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	N	ND	N	ND
1,2,4-Trimethylbenzene	Y		NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	N	ND*	NA	NA
1,2-Dichlorobenzene	N	BSL	N	ND
1,2-Dichloroethane	Y		NA	NA
cis-1,2-Dichloroethene	Y		NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA
1,2-Dichloropropane	N	ND*	NA	NA
1,2-Diphenylhydrazine	NA	NA	NA	NA
1,3,5-Trimethylbenzene	Y		NA	NA
1,3-Butadiene	N	NR	NA	NA
1,3-Dichlorobenzene	N	ND	N	ND
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	N	ND*	N	ND*
1,4-Dioxane	Y		NA	NA
2,2,4-Trimethylpentane	Y		NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	N	ND
2,4,6-Trichlorophenol	NA	NA	N	ND
2,4-Dichlorophenol	NA	NA	N	ND
2,4-Dimethylphenol	NA	NA	N	ND
2,4-Dinitrophenol	NA	NA	N	ND
2,4-Dinitrotoluene	NA	NA	N	ND
2,6-Dinitrotoluene	NA	NA	N	ND
2-Butanone (Methyl Ethyl Ketone)	Y		NA	NA
2-Chloronaphthalene	NA	NA	N	ND
2-Chlorophenol	NA	NA	N	ND
2-Chlorotoluene	NA	NA	NA	NA
2-Hexanone	Y		NA	NA
2-Methylnaphthalene	NA	NA	N	ND*
2-Methylphenol	NA	NA	N	ND
2-Nitroaniline	NA	NA	N	ND
2-Nitrophenol	NA	NA	N	ND
2-Propanol	Y		NA	NA
3,3'-Dichlorobenzidine	NA	NA	N	ND*
3-Chloropropene	N	ND	NA	NA
3-Nitroaniline	NA	NA	N	ND
4,6-Dinitro-2-methylphenol	NA	NA	N	ND*
4-Bromophenyl phenyl ether	NA	NA	N	ND
4-Chloro-3-methylphenol	NA	NA	N	ND
4-Chloroaniline	NA	NA	N	ND
4-Chlorophenyl phenyl ether	NA	NA	N	ND
4-Chlorotoluene	NA	NA	NA	NA
4-Ethyltoluene	Y		NA	NA
4-Methyl-2-pentanone	Y		NA	NA
4-Methylphenol	NA	NA	N	ND
4-Nitroaniline	NA	NA	N	ND
4-Nitrophenol	NA	NA	N	ND
Acenaphthene	NA	NA	N	ND
Acenaphthylene	NA	NA	N	ND
Acetone	Y		NA	NA
alpha-Chlorotoluene	N	ND*	NA	NA

Table 5.7-3 Chemical of Potential Concern Summary
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Aluminum	NA	NA	N	BG
Aniline	NA	NA	N	ND
Anthracene	NA	NA	N	ND
Antimony	NA	NA	N	BSL
PCB-1016	NA	NA	NA	NA
PCB-1221	NA	NA	NA	NA
PCB-1232	NA	NA	NA	NA
PCB-1242	NA	NA	NA	NA
PCB-1248	NA	NA	NA	NA
PCB-1254	NA	NA	NA	NA
PCB-1260	NA	NA	NA	NA
Arsenic	NA	NA	N	BG
Azobenzene	NA	NA	N	ND*
Barium	NA	NA	N	BSL
Benzene	Y		NA	NA
Benzidine	NA	NA	N	ND*
Benzo (a) anthracene	NA	NA	Y	
Benzo (a) pyrene	NA	NA	N	ND*
Benzo (b & k) fluoranthene (total)	NA	NA	N	ND
Benzo (ghi) perylene	NA	NA	N	ND
Benzo (b) fluoranthene	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA
Benzoic acid	NA	NA	N	ND
Benzyl alcohol	NA	NA	N	ND
Benzyl butyl phthalate	NA	NA	N	ND
Beryllium	NA	NA	N	BSL
Bis(2-Chloroethoxy)methane	NA	NA	N	ND
Bis(2-Chloroethyl)ether	NA	NA	N	ND*
Bis(2-Chloroisopropyl)ether	NA	NA	N	ND*
Bis(2-Ethylhexyl)phthalate	NA	NA	N	ND
Boron	NA	NA	N	BSL
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	NA
Bromodichloromethane	Y		NA	NA
Bromoform	N	ND*	NA	NA
Bromomethane	N	ND*	NA	NA
Butylbenzene	N	ND*	NA	NA
Cadmium	NA	NA	N	BG
Calcium	NA	NA	NA	NA
Carbazole	NA	NA	N	ND
Carbon Disulfide	Y		NA	NA
Carbon Tetrachloride	Y		NA	NA
Chlorobenzene	N	ND	NA	NA
Chloroethane	N	BSL	NA	NA
Chloroform	Y		NA	NA
Chloromethane	N	BSL	NA	NA
Chromium	NA	NA	N	BSL
Chrysene	NA	NA	Y	
cis-1,2-Dichloroethene	Y		NA	NA
cis-1,3-Dichloropropene	N	ND	NA	NA
Cobalt	NA	NA	N	BSL
Copper	NA	NA	N	BSL
Cyclohexane	Y		NA	NA
Dibenz (a,h) anthracene	NA	NA	N	ND*
Dibenzofuran	NA	NA	N	ND
Dibromochloromethane	N	ND*	NA	NA
Dibromomethane	NA	NA	NA	NA
Freon 12	Y		NA	NA
Diesel Range Organics (C10-C28)	NA	NA	NA	NA
Diethyl phthalate	NA	NA	N	ND
Dimethyl phthalate	NA	NA	N	ND

Table 5.7-3 Chemical of Potential Concern Summary
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Di-n-butyl phthalate	NA	NA	N	ND
Di-n-octyl phthalate	NA	NA	N	ND
Ethanol	Y		NA	NA
Ethyl benzene	Y		NA	NA
Fluoranthene	NA	NA	Y	
Fluorene	NA	NA	N	ND
Freon 113	Y		NA	NA
Freon 114	N	ND	NA	NA
Heptane	Y		NA	NA
Hexachlorobenzene	NA	NA	N	ND*
Hexachlorobutadiene	N	ND*	N	ND
Hexachlorocyclopentadiene	NA	NA	N	ND
Hexachloroethane	NA	NA	N	ND
Hexane	Y		NA	NA
Chromium VI	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	N	ND
Iron	NA	NA	NA	NA
Isophorone	NA	NA	N	ND
Cumene	N	ND	NA	NA
Lead	NA	NA	N	BG
Lithium	NA	NA	N	BSL
m,p-Xylene	Y		NA	NA
Magnesium	NA	NA	NA	NA
Manganese	NA	NA	N	BG
Mercury	NA	NA	N	BSL
Methyl tert-butyl ether	N	ND*	NA	NA
Methylene Chloride	N	ND*	NA	NA
Molybdenum	NA	NA	N	BSL
Motor Oil Range Organics (C16-C36)	NA	NA	NA	NA
Naphthalene	NA	NA	N	ND
Butylbenzene	N	ND*	NA	NA
Nickel	NA	NA	N	BSL
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	NA	NA	N	ND
N-Nitrosodimethylamine	NA	NA	N	ND*
N-Nitrosodi-n-propylamine	NA	NA	N	ND*
N-Nitrosodiphenylamine	NA	NA	N	ND
Propylbenzene	N	BSL	NA	NA
o-Xylene	Y		NA	NA
Pentachlorophenol	NA	NA	N	ND*
Perchlorate	NA	NA	N	BSL
Phenanthrene	NA	NA	Y	
Phenol	NA	NA	Y	
p-Cymene	N	ND	NA	NA
Polychlorinated biphenyl	NA	NA	NA	NA
Potassium	NA	NA	NA	NA
Pyrene	NA	NA	N	ND
sec-Butylbenzene	N	ND	NA	NA
Selenium	NA	NA	N	ND
Silver	NA	NA	N	BSL
Sodium	NA	NA	NA	NA
Strontium	NA	NA	N	BSL
Styrene	N	BSL	NA	NA
tert-Butylbenzene	N	ND*	NA	NA
Tetrachloroethene	Y		NA	NA
Tetrahydrofuran	Y		NA	NA
Thallium	NA	NA	N	BG
Tin	NA	NA	NA	NA
Titanium	NA	NA	N	BSL
Toluene	Y		NA	NA

Table 5.7-3 Chemical of Potential Concern Summary
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Total Cyanide	NA	NA	NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA
trans-1,3-Dichloropropene	N	ND	NA	NA
Trichloroethene	Y		NA	NA
Freon 11	Y		NA	NA
Vanadium	NA	NA	N	BG
Vinyl Chloride	Y		NA	NA
Xylenes (total)	NA	NA	NA	NA
Zinc	NA	NA	N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Table 5.7-4 *Outdoor Air Exposure Point Concentration Results*
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Chrysene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Phenanthrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg, Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.7-5 ***Residential Soil Vapor to Indoor Air Attenuation Factors***
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors Feet bgs		
Chemical/Feet bgs	**10**	**20**	**30**
1,4-Dioxane	5.9 E-4	3.4 E-4	2.3 E-4
2-Propanol	5.2 E-4	3.0 E-4	2.0 E-4
Benzene	5.2 E-4	2.8 E-4	1.9 E-4
Carbon Tetrachloride	4.7 E-4	2.5 E-4	1.7 E-4
Freon 113	4.7 E-4	2.7 E-4	1.7 E-4
Heptane	9.3 E-4	5.8 E-4	4.0 E-4
Hexane	9.3 E-4	5.6 E-4	4.0 E-4
Tetrachloroethylene	4.4 E-4	2.4 E-4	1.6 E-4
Tetrahydrofuran	6.0 E-4	3.5 E-4	2.3 E-4
Trichloroethylene	4.8 E-4	2.7 E-4	1.8 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	2.8 E-4	1.8 E-4
4-Methyl-2-pentanone	4.6 E-4	2.6 E-4	1.7 E-4
Acetone	6.8 E-4	4.0 E-4	2.7 E-4
Carbon Disulfide	5.9 E-4	3.4 E-4	2.3 E-4
Cyclohexane	4.8 E-4	2.7 E-4	1.8 E-4
Ethanol	8.4 E-4	5.2 E-4	3.5 E-4
m,p-Xylene	4.6 E-4	2.6 E-4	1.7 E-4
Toluene	5.1 E-4	2.9 E-4	1.9 E-4

Key:
bgs = Below ground surface

Table 5.7-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors*
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors		
	Feet bgs		
Chemical/Feet bgs	**10**	**20**	**30**
1,4-Dioxane	3.0 E-4	1.7 E-4	1.1 E-4
2-Propanol	2.6 E-4	1.5 E-4	9.9 E-5
Benzene	2.6 E-4	1.4 E-4	9.7 E-5
Carbon Tetrachloride	2.4 E-4	1.3 E-4	8.7 E-5
Freon 113	2.4 E-4	1.3 E-4	8.7 E-5
Heptane	4.6 E-4	2.9 E-4	2.0 E-4
Hexane	4.6 E-4	2.8 E-4	2.0 E-4
Tetrachloroethylene	2.2 E-4	1.2 E-4	8.1 E-5
Tetrahydrofuran	3.0 E-4	1.7 E-4	1.2 E-4
Trichloroethylene	2.4 E-4	1.3 E-4	8.8 E-5
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.4 E-4	9.1 E-5
4-Methyl-2-pentanone	2.3 E-4	1.3 E-4	8.4 E-5
Acetone	3.4 E-4	2.0 E-4	1.3 E-4
Carbon Disulfide	2.9 E-4	1.7 E-4	1.1 E-4
Cyclohexane	2.4 E-4	1.4 E-4	8.9 E-5
Ethanol	4.2 E-4	2.6 E-4	1.8 E-4
m,p-Xylene	2.3 E-4	1.3 E-4	8.6 E-5
Toluene	2.6 E-4	1.5 E-4	9.6 E-5

Key:
bgs = Below ground surface

Table 5.7-7 *Source Partitioning Coefficients and Attenuation Factors For Soil Vapor to Outdoor Air*
Magazine Area Management Area
Boundary Operable Unit Risk Assessment Example
Aerojet Superfund Site
Sacramento County, California

Chemical of Potential Concern	Diffusivity in Air (cm^2/s)	Attenuation Factor for Sample Depth (Feet bgs)						
		10	15	18.5	20	30	34	40
1,4-Dioxane	9.9 E-2	7.9 E-6	5.3 E-6	4.3 E-6	4.0 E-6	2.6 E-6	2.3 E-6	2.0 E-6
2-Propanol	8.6 E-2	6.9 E-6	4.6 E-6	3.7 E-6	3.4 E-6	2.3 E-6	2.0 E-6	1.7 E-6
Benzene	8.8 E-2	7.0 E-6	4.7 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.1 E-6	1.8 E-6
Carbon Tetrachloride	7.8 E-2	6.2 E-6	4.2 E-6	3.4 E-6	3.1 E-6	2.1 E-6	1.8 E-6	1.6 E-6
Freon 113	7.8 E-2	6.2 E-6	4.2 E-6	3.4 E-6	3.1 E-6	2.1 E-6	1.8 E-6	1.6 E-6
Heptane	6.8 E-2	5.5 E-6	3.6 E-6	3.0 E-6	2.7 E-6	1.8 E-6	1.6 E-6	1.4 E-6
Hexane	2.0 E-1	1.6 E-5	1.1 E-5	8.6 E-6	8.0 E-6	5.3 E-6	4.7 E-6	4.0 E-6
Tetrachloroethylene	7.2 E-2	5.8 E-6	3.8 E-6	3.1 E-6	2.9 E-6	1.9 E-6	1.7 E-6	1.4 E-6
Tetrahydrofuran	1.1 E-1	8.4 E-6	5.6 E-6	4.5 E-6	4.2 E-6	2.8 E-6	2.5 E-6	2.1 E-6
Trichloroethylene	7.9 E-2	6.3 E-6	4.2 E-6	3.4 E-6	3.2 E-6	2.1 E-6	1.9 E-6	1.6 E-6
2-Butanone (Methyl Ethyl Ketone)	8.1 E-2	6.5 E-6	4.3 E-6	3.5 E-6	3.2 E-6	2.2 E-6	1.9 E-6	1.6 E-6
4-Methyl-2-pentanone	7.5 E-2	6.0 E-6	4.0 E-6	3.2 E-6	3.0 E-6	2.0 E-6	1.8 E-6	1.5 E-6
Acetone	1.2 E-1	9.9 E-6	6.6 E-6	5.4 E-6	5.0 E-6	3.3 E-6	2.9 E-6	2.5 E-6
Carbon Disulfide	1.0 E-1	8.3 E-6	5.5 E-6	4.5 E-6	4.2 E-6	2.8 E-6	2.4 E-6	2.1 E-6
Cyclohexane	8.0 E-2	6.4 E-6	4.3 E-6	3.5 E-6	3.2 E-6	2.1 E-6	1.9 E-6	1.6 E-6
Ethanol	1.6 E-1	1.3 E-5	8.4 E-6	6.8 E-6	6.3 E-6	4.2 E-6	3.7 E-6	3.1 E-6
m,p-Xylene	7.7 E-2	6.1 E-6	4.1 E-6	3.3 E-6	3.1 E-6	2.0 E-6	1.8 E-6	1.5 E-6
Toluene	8.7 E-2	6.9 E-6	4.6 E-6	3.8 E-6	3.5 E-6	2.3 E-6	2.0 E-6	1.7 E-6

a = USEPA, 1988, Superfund Exposure Assessment Manual

$$\text{Ambient Air Attenuation Factor} = \frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm3/m3}}$$

Dia =	chemical specif	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	2.0 E+7	cm^2	Area (assume 4500 cm x 4500 cm)
d =	305	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2.0	m	Breathing zone height
u =	3.0	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
m = Meter
µg/L = Micrograms per liter
cm^2/s = Square Centimeter per second
m/s = Meter per second
cm^3 = Cubic centimeter
cm = Centimeter
$\mu g/m^3$ = Micrograms per cubic r
m^3 = Cubic meter

Table 5.7-8 ***Soil Unit Hazard and Unit Cancer Risk Results - Resident***
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil	Child				Adult							
	Concentration	Oral	Dermal	Inhal	Unit	Oral	Dermal	Inhal	Unit	Oral	Dermal	Inhal	Unit
Chemical	**(mg/kg)**	**HQ**	**HQ**	**HQ**	**HI**	**HQ**	**HQ**	**HQ**	**HI**	**ILCR**	**ILCR**	**ILCR**	**ILCR**
Semivolatile Organic Compounds													
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	4.7 E-7	8.0 E-11	1.6 E-6
Chrysene	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	7.7 E-8	4.3 E-12	2.6 E-7
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
Phenanthrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.7-9 *Inhalation Unit Hazard and Unit Cancer Risk Results - Resident*
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Carbon Tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.5 E-1	1.9 E-1	NA
4-Methyl-2-pentanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Cyclohexane	1.0 E+0	3.7 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Toluene	1.0 E+0	7.5 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.7-10
Location-Specific Soil Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)					Child Non-Cancer Hazard Index						Adult Non-Cancer Hazard Index						Incremental Lifetime Cancer Risk					
Sample Name	**Depth**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**HI**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**HI**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**ILCR**
Unit Hazard Child		NA	NA	4.4 E-4	5.8 E-4	5.5 E-5																		
Unit Hazard Adult		NA	NA	5.2 E-5	6.9 E-5	6.4 E-6																		
Unit Risk		1.6 E-6	2.6 E-7	NA	NA	NA																		
A48-RC08-SB01	2				0.0048		NA	NA	NA	2.8 E-6	NA	2.8 E-6	NA	NA	NA	3.3 E-7	NA	3.3 E-7	NA	NA	NA	NA	NA	NA
A48-RC08-SB01	5.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SB01	11.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	2						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	6						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	11.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	4						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	6						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	11.5		0.0085	0.0017	0.012		NA	NA	7.4 E-7	7.0 E-6	NA	7.7 E-6	NA	NA	8.8 E-8	8.3 E-7	NA	9.2 E-7	NA	2.3 E-9	NA	NA	NA	2 E-9
OS3-F1-SB01	0.5		0.029		0.029	0.93	NA	NA	NA	1.7 E-5	5.1 E-5	6.8 E-5	NA	NA	NA	2.0 E-6	5.9 E-6	8.0 E-6	NA	7.7 E-9	NA	NA	NA	8 E-9
OS3-F1-SB01	2					1.2	NA	NA	NA	NA	6.5 E-5	6.5 E-5	NA	NA	NA	NA	7.7 E-6	7.7 E-6	NA	NA	NA	NA	NA	NA
OS3-F1-SB02	0.5					0.82	NA	NA	NA	NA	4.5 E-5	4.5 E-5	NA	NA	NA	NA	5.2 E-6	5.2 E-6	NA	NA	NA	NA	NA	NA
OS3-F1-SB02	2					0.68	NA	NA	NA	NA	3.7 E-5	3.7 E-5	NA	NA	NA	NA	4.3 E-6	4.3 E-6	NA	NA	NA	NA	NA	NA
OS3-F1-SB03	0.5	0.0035	0.013	0.0023	0.0043		NA	NA	1.0 E-6	2.5 E-6	NA	3.5 E-6	NA	NA	1.2 E-7	3.0 E-7	NA	4.2 E-7	5.6 E-9	3.4 E-9	NA	NA	NA	9 E-9
OS3-F1-SB03	2						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.7-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard Child		7.5 E-1	4.5 E-1	2.5 E+2	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+0	5.6 E+1	3.7 E-1	1.3 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0
Unit Hazard Adult		3.2 E-1	1.9 E-1	1.1 E+2	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+0	2.4 E+1	1.6 E-1	5.5 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0
Unit Risk		4.0 E-3	NA	NA	NA	NA	1.5 E-2	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3
A48-RC08-SP01	10																		
A48-RC08-SP01	20					76	5.4	24						7.3		13		6.6	71
A48-RC08-SP01	30			16		280		15			13			6.0		12	10	750	78
A48-ST13-SP03	10		57			320	6.8	21			23			7.1	16	28		14	160
A48-ST13-SP03	20				16	92	8.8	25						6.9		13		12	62
A48-ST13-SP04	10						5.6	9.5					8.7	18		140	19	11	22
A48-ST13-SP04	20		34			150	8.7	11			8.3	15	14	29	7.4	160	30	17	26
A48-ST13-SP04	30	28	72		6.3	430	16	7.4		4.8	16	85	35	80	7.7	180	64	43	39
A48-ST13-SP05	10					58								6.4		13	8.1	7.8	
A48-ST13-SP05	20					67								13		12	18	15	
A48-ST13-SP05	30		200		15	1800	54	13	42	4.5	48		29	110		12	54	64	20
A48-ST13-SP06	10					84	7.0	8.7				630	5.2	21		1800	30	14	520
A48-ST13-SP06	20		70	14	5.8	310	10	8.6			19	18	16	28	8.3	210	30	28	30
A48-ST13-SP06	30	19	160	25	9.4	650	47	14		5.9	59		76	93	12	400	46	59	13
A48-ST13-SP07	10					85	16	10			11		12	18	7.6	110	7.6	18	
A48-ST13-SP07	20					300	15	9.1					12	24	6.6	56		14	
A48-ST13-SP07	30		33			250	24	6.4		5.0	720		35	74	9.6	140	25	38	6.7
A48-ST13-SP08	10					75		6.2						6.0		11		5.9	
A48-ST13-SP08	20													8.1	5.3	10	10	11	
A48-ST19-SP03	10					60		4.4							8.4	8.0		5.1	41
A48-ST19-SP03	20							5.0										4.8	25
OS3-F1-SP01	10		23				15	14					11	16	6.3			13	
OS3-F1-SP01	20						4.3	7.0										7.0	
OS3-F1-SP02	10				5.2		5.4	9.2				19		4.8				5.4	32
OS3-F1-SP02	20																		13
OS3-F1-SP03	10		22		9.7	180		5.1			81				5.7			8.7	
OS3-F1-SP03	20		42		5.6	300					53				16			14	

Table 5.7-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SP01	20	NA	NA	NA	NA	2.2 E-5	1.1 E-4	2.6 E-5	NA	NA	NA	NA	NA	1.3 E-5	NA	2.0 E-4	NA	1.4 E-5	7.2 E-5	4.6 E-4
A48-RC08-SP01	30	NA	NA	7.8 E-4	NA	5.3 E-5	NA	1.1 E-5	NA	NA	5.9 E-6	NA	NA	7.7 E-6	NA	1.2 E-4	1.7 E-5	1.1 E-3	5.2 E-5	2.1 E-3
A48-ST13-SP03	10	NA	1.2 E-5	NA	NA	1.5 E-4	2.6 E-4	4.0 E-5	NA	NA	2.5 E-5	NA	NA	2.1 E-5	1.7 E-4	7.9 E-4	NA	5.4 E-5	2.9 E-4	1.8 E-3
A48-ST13-SP03	20	NA	NA	NA	3.1 E-6	2.6 E-5	1.9 E-4	2.7 E-5	NA	NA	NA	NA	NA	1.2 E-5	NA	2.0 E-4	NA	2.6 E-5	6.3 E-5	5.4 E-4
A48-ST13-SP04	10	NA	NA	NA	NA	NA	2.2 E-4	1.8 E-5	NA	NA	NA	NA	2.6 E-5	5.3 E-5	NA	3.9 E-3	8.4 E-5	4.2 E-5	3.9 E-5	4.4 E-3
A48-ST13-SP04	20	NA	4.2 E-6	NA	NA	4.3 E-5	1.8 E-4	1.2 E-5	NA	NA	5.5 E-6	3.0 E-7	2.6 E-5	5.2 E-5	4.4 E-5	2.4 E-3	7.7 E-5	3.7 E-5	2.6 E-5	2.9 E-3
A48-ST13-SP04	30	4.8 E-6	5.8 E-6	NA	7.9 E-7	8.2 E-5	2.3 E-4	5.4 E-6	NA	3.2 E-7	7.2 E-6	1.1 E-6	4.5 E-5	1.0 E-4	3.0 E-5	1.9 E-3	1.1 E-4	6.2 E-5	2.6 E-5	2.6 E-3
A48-ST13-SP05	10	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	3.7 E-4	3.6 E-5	3.0 E-5	NA	4.8 E-4
A48-ST13-SP05	20	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	NA	1.8 E-4	4.6 E-5	3.3 E-5	NA	3.0 E-4
A48-ST13-SP05	30	NA	1.6 E-5	NA	1.9 E-6	3.4 E-4	7.8 E-4	9.4 E-6	4.1 E-4	3.0 E-7	2.2 E-5	NA	3.7 E-5	1.4 E-4	NA	1.2 E-4	9.2 E-5	9.2 E-5	1.3 E-5	2.1 E-3
A48-ST13-SP06	10	NA	NA	NA	NA	4.0 E-5	2.7 E-4	1.6 E-5	NA	NA	NA	2.2 E-5	1.5 E-5	6.2 E-5	NA	5.1 E-2	1.3 E-4	5.4 E-5	9.3 E-4	5.2 E-2
A48-ST13-SP06	20	NA	8.7 E-6	1.0 E-3	1.1 E-6	8.8 E-5	2.1 E-4	9.4 E-6	NA	NA	1.3 E-5	3.6 E-7	3.0 E-5	5.0 E-5	4.9 E-5	3.2 E-3	7.7 E-5	6.1 E-5	3.0 E-5	4.8 E-3
A48-ST13-SP06	30	3.2 E-6	1.3 E-5	1.2 E-3	1.2 E-6	1.2 E-4	6.8 E-4	1.0 E-5	NA	3.9 E-7	2.7 E-5	NA	9.8 E-5	1.2 E-4	4.6 E-5	4.1 E-3	7.9 E-5	8.5 E-5	8.6 E-6	6.6 E-3
A48-ST13-SP07	10	NA	NA	NA	NA	4.1 E-5	6.2 E-4	1.9 E-5	NA	NA	1.2 E-5	NA	3.6 E-5	5.3 E-5	7.9 E-5	3.1 E-3	3.4 E-5	6.9 E-5	NA	4.1 E-3
A48-ST13-SP07	20	NA	NA	NA	NA	8.6 E-5	3.2 E-4	1.0 E-5	NA	NA	NA	NA	2.2 E-5	4.3 E-5	3.9 E-5	8.5 E-4	NA	3.1 E-5	NA	1.4 E-3
A48-ST13-SP07	30	NA	2.7 E-6	NA	NA	4.8 E-5	3.5 E-4	4.6 E-6	NA	3.3 E-7	3.2 E-4	NA	4.5 E-5	9.5 E-5	3.7 E-5	1.4 E-3	4.3 E-5	5.5 E-5	4.4 E-6	2.5 E-3
A48-ST13-SP08	10	NA	NA	NA	NA	3.6 E-5	NA	1.2 E-5	NA	NA	NA	NA	NA	1.8 E-5	NA	3.1 E-4	NA	2.3 E-5	NA	4.0 E-4
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	3.1 E-5	1.5 E-4	2.6 E-5	2.4 E-5	NA	2.5 E-4
A48-ST19-SP03	10	NA	NA	NA	NA	2.9 E-5	NA	8.3 E-6	NA	NA	NA	NA	NA	NA	8.7 E-5	2.3 E-4	NA	2.0 E-5	7.3 E-5	4.4 E-4
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	5.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	2.5 E-5	4.1 E-5
OS3-F1-SP01	10	NA	5.0 E-6	NA	NA	NA	5.8 E-4	2.6 E-5	NA	NA	NA	NA	3.3 E-5	4.7 E-5	6.6 E-5	NA	NA	5.0 E-5	NA	8.0 E-4
OS3-F1-SP01	20	NA	NA	NA	NA	NA	9.0 E-5	7.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	1.1 E-4
OS3-F1-SP02	10	NA	NA	NA	1.8 E-6	NA	2.1 E-4	1.7 E-5	NA	NA	NA	6.6 E-7	NA	1.4 E-5	NA	NA	NA	2.1 E-5	5.7 E-5	3.2 E-4
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	1.3 E-5
OS3-F1-SP03	10	NA	4.8 E-6	NA	3.3 E-6	8.7 E-5	NA	9.6 E-6	NA	NA	8.7 E-5	NA	NA	NA	5.9 E-5	NA	NA	3.3 E-5	NA	2.8 E-4
OS3-F1-SP03	20	NA	5.2 E-6	NA	1.1 E-6	8.6 E-5	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	9.4 E-5	NA	NA	3.1 E-5	NA	2.5 E-4

Table 5.7-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SP01	20	NA	NA	NA	NA	9.3 E-6	4.9 E-5	1.1 E-5	NA	NA	NA	NA	NA	5.6 E-6	NA	8.4 E-5	NA	6.2 E-6	3.1 E-5	2.0 E-4
A48-RC08-SP01	30	NA	NA	3.3 E-4	NA	2.3 E-5	NA	4.7 E-6	NA	NA	2.5 E-6	NA	NA	3.3 E-6	NA	5.3 E-5	7.3 E-6	4.6 E-4	2.2 E-5	9.1 E-4
A48-ST13-SP03	10	NA	5.3 E-6	NA	NA	6.6 E-5	1.1 E-4	1.7 E-5	NA	NA	1.1 E-5	NA	NA	9.0 E-6	7.1 E-5	3.4 E-4	NA	2.3 E-5	1.2 E-4	7.7 E-4
A48-ST13-SP03	20	NA	NA	NA	1.3 E-6	1.1 E-5	7.9 E-5	1.2 E-5	NA	NA	NA	NA	NA	5.3 E-6	NA	8.4 E-5	NA	1.1 E-5	2.7 E-5	2.3 E-4
A48-ST13-SP04	10	NA	NA	NA	NA	NA	9.2 E-5	7.7 E-6	NA	NA	NA	NA	1.1 E-5	2.3 E-5	NA	1.7 E-3	3.6 E-5	1.8 E-5	1.7 E-5	1.9 E-3
A48-ST13-SP04	20	NA	1.8 E-6	NA	NA	1.8 E-5	7.8 E-5	5.2 E-6	NA	NA	2.4 E-6	1.3 E-7	1.1 E-5	2.2 E-5	1.9 E-5	1.0 E-3	3.3 E-5	1.6 E-5	1.1 E-5	1.3 E-3
A48-ST13-SP04	30	2.0 E-6	2.5 E-6	NA	3.4 E-7	3.5 E-5	9.9 E-5	2.3 E-6	NA	1.4 E-7	3.1 E-6	4.7 E-7	1.9 E-5	4.4 E-5	1.3 E-5	8.0 E-4	4.7 E-5	2.6 E-5	1.1 E-5	1.1 E-3
A48-ST13-SP05	10	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	8.1 E-6	NA	1.6 E-4	1.5 E-5	1.3 E-5	NA	2.1 E-4
A48-ST13-SP05	20	NA	NA	NA	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	7.8 E-5	2.0 E-5	1.4 E-5	NA	1.3 E-4
A48-ST13-SP05	30	NA	7.0 E-6	NA	8.1 E-7	1.5 E-4	3.3 E-4	4.0 E-6	1.8 E-4	1.3 E-7	9.3 E-6	NA	1.6 E-5	6.1 E-5	NA	5.3 E-5	4.0 E-5	3.9 E-5	5.7 E-6	8.9 E-4
A48-ST13-SP06	10	NA	NA	NA	NA	1.7 E-5	1.2 E-4	7.0 E-6	NA	NA	NA	9.4 E-6	6.6 E-6	2.7 E-5	NA	2.2 E-2	5.7 E-5	2.3 E-5	4.0 E-4	2.2 E-2
A48-ST13-SP06	20	NA	3.7 E-6	4.4 E-4	4.8 E-7	3.8 E-5	9.0 E-5	4.0 E-6	NA	NA	5.4 E-6	1.5 E-7	1.3 E-5	2.2 E-5	2.1 E-5	1.4 E-3	3.3 E-5	2.6 E-5	1.3 E-5	2.1 E-3
A48-ST13-SP06	30	1.4 E-6	5.6 E-6	5.2 E-4	5.1 E-7	5.3 E-5	2.9 E-4	4.3 E-6	NA	1.7 E-7	1.1 E-5	NA	4.2 E-5	5.1 E-5	2.0 E-5	1.8 E-3	3.4 E-5	3.6 E-5	3.7 E-6	2.8 E-3
A48-ST13-SP07	10	NA	NA	NA	NA	1.8 E-5	2.6 E-4	8.1 E-6	NA	NA	5.1 E-6	NA	1.5 E-5	2.3 E-5	3.4 E-5	1.3 E-3	1.4 E-5	3.0 E-5	NA	1.7 E-3
A48-ST13-SP07	20	NA	NA	NA	NA	3.7 E-5	1.4 E-4	4.3 E-6	NA	NA	NA	NA	9.6 E-6	1.8 E-5	1.7 E-5	3.6 E-4	NA	1.3 E-5	NA	6.0 E-4
A48-ST13-SP07	30	NA	1.1 E-6	NA	NA	2.0 E-5	1.5 E-4	2.0 E-6	NA	1.4 E-7	1.4 E-4	NA	1.9 E-5	4.1 E-5	1.6 E-5	6.2 E-4	1.8 E-5	2.3 E-5	1.9 E-6	1.1 E-3
A48-ST13-SP08	10	NA	NA	NA	NA	1.5 E-5	NA	5.0 E-6	NA	NA	NA	NA	NA	7.6 E-6	NA	1.3 E-4	NA	9.7 E-6	NA	1.7 E-4
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-6	1.3 E-5	6.5 E-5	1.1 E-5	1.0 E-5	NA	1.1 E-4
A48-ST19-SP03	10	NA	NA	NA	NA	1.2 E-5	NA	3.6 E-6	NA	NA	NA	NA	NA	NA	3.7 E-5	9.7 E-5	NA	8.4 E-6	3.1 E-5	1.9 E-4
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	1.1 E-5	1.8 E-5
OS3-F1-SP01	10	NA	2.1 E-6	NA	NA	NA	2.5 E-4	1.1 E-5	NA	NA	NA	NA	1.4 E-5	2.0 E-5	2.8 E-5	NA	NA	2.1 E-5	NA	3.4 E-4
OS3-F1-SP01	20	NA	NA	NA	NA	NA	3.9 E-5	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	NA	4.9 E-5
OS3-F1-SP02	10	NA	NA	NA	7.6 E-7	NA	8.9 E-5	7.4 E-6	NA	NA	NA	2.8 E-7	NA	6.1 E-6	NA	NA	NA	8.9 E-6	2.5 E-5	1.4 E-4
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-6	5.6 E-6
OS3-F1-SP03	10	NA	2.1 E-6	NA	1.4 E-6	3.7 E-5	NA	4.1 E-6	NA	NA	3.7 E-5	NA	NA	NA	2.5 E-5	NA	NA	1.4 E-5	NA	1.2 E-4
OS3-F1-SP03	20	NA	2.2 E-6	NA	4.6 E-7	3.7 E-5	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	4.0 E-5	NA	NA	1.3 E-5	NA	1.1 E-4

Table 5.7-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																	
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A48-RC08-SP01	20	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	2.0 E-8	5 E-8
A48-RC08-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-9	2.3 E-9	NA	1.4 E-8	2 E-8
A48-ST13-SP03	10	NA	NA	NA	NA	5.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	7.9 E-8	2 E-7
A48-ST13-SP03	20	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-9	NA	NA	1.7 E-8	6 E-8
A48-ST13-SP04	10	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	1.1 E-8	NA	1.1 E-8	3 E-7
A48-ST13-SP04	20	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	1.1 E-8	NA	7.3 E-9	2 E-7
A48-ST13-SP04	30	2.6 E-8	NA	NA	NA	4.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-8	1.5 E-8	NA	7.2 E-9	2 E-7
A48-ST13-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	4.9 E-9	NA	NA	2 E-8
A48-ST13-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	6.3 E-9	NA	NA	2 E-8
A48-ST13-SP05	30	NA	NA	NA	NA	1.6 E-7	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	6.1 E-9	1.3 E-8	NA	3.7 E-9	3 E-7
A48-ST13-SP06	10	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	1.8 E-8	NA	2.6 E-7	3 E-6
A48-ST13-SP06	20	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	1.1 E-8	NA	8.4 E-9	2 E-7
A48-ST13-SP06	30	1.7 E-8	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	1.1 E-8	NA	2.4 E-9	4 E-7
A48-ST13-SP07	10	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	4.6 E-9	NA	NA	3 E-7
A48-ST13-SP07	20	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	NA	1 E-7
A48-ST13-SP07	30	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	5.8 E-9	NA	1.2 E-9	1 E-7
A48-ST13-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	2 E-8
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	3.5 E-9	NA	NA	1 E-8
A48-ST19-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	2.0 E-8	3 E-8
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-9	7 E-9
OS3-F1-SP01	10	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
OS3-F1-SP01	20	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
OS3-F1-SP02	10	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	6 E-8
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	4 E-9
OS3-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
OS3-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.7-5) x the unit hazard or unit risk for the chemical).

Table 5.7-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard Child		7.5 E-1	4.5 E-1	2.5 E+2	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+0	5.6 E+1	3.7 E-1	1.3 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0
Unit Hazard Adult		3.2 E-1	1.9 E-1	1.1 E+2	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+0	2.4 E+1	1.6 E-1	5.5 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0
Unit Risk		4.0 E-3	NA	NA	NA	NA	1.5 E-2	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3
A48-RC08-SP01	10																		
A48-RC08-SP01	20					76	5.4	24						7.3		13		6.6	71
A48-RC08-SP01	30			16		280		15			13			6.0		12	10	750	78
A48-ST13-SP03	10		57			320	6.8	21			23			7.1	16	28		14	160
A48-ST13-SP03	20				16	92	8.8	25						6.9		13		12	62
A48-ST13-SP04	10						5.6	9.5					8.7	18		140	19	11	22
A48-ST13-SP04	20		34			150	8.7	11			8.3	15	14	29	7.4	160	30	17	26
A48-ST13-SP04	30	28	72		6.3	430	16	7.4		4.8	16	85	35	80	7.7	180	64	43	39
A48-ST13-SP05	10					58								6.4		13	8.1	7.8	
A48-ST13-SP05	20					67								13		12	18	15	
A48-ST13-SP05	30		200		15	1800	54	13	42	4.5	48		29	110		12	54	64	20
A48-ST13-SP06	10					84	7.0	8.7				630	5.2	21		1800	30	14	520
A48-ST13-SP06	20		70	14	5.8	310	10	8.6			19	18	16	28	8.3	210	30	28	30
A48-ST13-SP06	30	19	160	25	9.4	650	47	14		5.9	59		76	93	12	400	46	59	13
A48-ST13-SP07	10					85	16	10			11		12	18	7.6	110	7.6	18	
A48-ST13-SP07	20					300	15	9.1					12	24	6.6	56		14	
A48-ST13-SP07	30		33			250	24	6.4		5.0	720		35	74	9.6	140	25	38	6.7
A48-ST13-SP08	10					75		6.2						6.0		11		5.9	
A48-ST13-SP08	20													8.1	5.3	10	10	11	
A48-ST19-SP03	10					60		4.4							8.4	8.0		5.1	41
A48-ST19-SP03	20							5.0										4.8	25
OS3-F1-SP01	10		23				15	14					11	16	6.3			13	
OS3-F1-SP01	20						4.3	7.0										7.0	
OS3-F1-SP02	10				5.2		5.4	9.2				19		4.8				5.4	32
OS3-F1-SP02	20																		13
OS3-F1-SP03	10		22		9.7	180		5.1			81				5.7			8.7	
OS3-F1-SP03	20		42		5.6	300					53				16			14	

Table 5.7-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																	
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SP01	20	NA	NA	NA	3.6 E-7	1.9 E-6	4.2 E-7	NA	NA	NA	NA	NA	2.5 E-7	NA	3.2 E-6	NA	2.3 E-7	1.1 E-6	7.4 E-6
A48-RC08-SP01	30	NA	NA	1.5 E-5	1.1 E-6	NA	2.2 E-7	NA	NA	1.1 E-7	NA	NA	1.7 E-7	NA	2.4 E-6	3.4 E-7	2.1 E-5	1.0 E-6	4.1 E-5
A48-ST13-SP03	10	NA	1.6 E-7	NA	2.3 E-6	3.6 E-6	5.6 E-7	NA	NA	3.7 E-7	NA	NA	3.6 E-7	2.2 E-6	1.0 E-5	NA	7.3 E-7	3.8 E-6	2.4 E-5
A48-ST13-SP03	20	NA	NA	NA	4.3 E-7	3.1 E-6	4.4 E-7	NA	NA	NA	NA	NA	2.3 E-7	NA	3.2 E-6	NA	4.1 E-7	9.8 E-7	8.8 E-6
A48-ST13-SP04	10	NA	NA	NA	NA	2.9 E-6	2.5 E-7	NA	NA	NA	NA	1.5 E-7	9.2 E-7	NA	5.1 E-5	1.2 E-6	5.7 E-7	5.2 E-7	5.8 E-5
A48-ST13-SP04	20	NA	6.5 E-8	NA	7.0 E-7	3.0 E-6	1.9 E-7	NA	NA	8.9 E-8	4.6 E-9	1.6 E-7	9.9 E-7	6.8 E-7	3.9 E-5	1.2 E-6	5.9 E-7	4.1 E-7	4.7 E-5
A48-ST13-SP04	30	8.9 E-8	1.1 E-7	NA	1.6 E-6	4.5 E-6	1.1 E-7	NA	6.2 E-9	1.4 E-7	2.1 E-8	3.3 E-7	2.2 E-6	5.7 E-7	3.6 E-5	2.2 E-6	1.2 E-6	5.0 E-7	4.9 E-5
A48-ST13-SP05	10	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	NA	4.8 E-6	5.0 E-7	4.0 E-7	NA	6.4 E-6
A48-ST13-SP05	20	NA	NA	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	2.9 E-6	7.5 E-7	5.2 E-7	NA	5.0 E-6
A48-ST13-SP05	30	NA	3.1 E-7	NA	6.8 E-6	1.5 E-5	1.9 E-7	7.9 E-6	5.8 E-9	4.2 E-7	NA	2.7 E-7	3.0 E-6	NA	2.4 E-6	1.8 E-6	1.8 E-6	2.6 E-7	4.1 E-5
A48-ST13-SP06	10	NA	NA	NA	5.9 E-7	3.7 E-6	2.3 E-7	NA	NA	NA	2.9 E-7	9.1 E-8	1.1 E-6	NA	6.6 E-4	1.9 E-6	7.3 E-7	1.2 E-5	6.8 E-4
A48-ST13-SP06	20	NA	1.3 E-7	1.6 E-5	1.5 E-6	3.5 E-6	1.5 E-7	NA	NA	2.0 E-7	5.6 E-9	1.9 E-7	9.5 E-7	7.6 E-7	5.1 E-5	1.2 E-6	9.7 E-7	4.7 E-7	7.7 E-5
A48-ST13-SP06	30	6.1 E-8	2.5 E-7	2.3 E-5	2.5 E-6	1.3 E-5	2.0 E-7	NA	7.6 E-9	5.1 E-7	NA	7.2 E-7	2.6 E-6	8.9 E-7	7.9 E-5	1.5 E-6	1.7 E-6	1.7 E-7	1.3 E-4
A48-ST13-SP07	10	NA	NA	NA	6.0 E-7	8.4 E-6	2.7 E-7	NA	NA	1.8 E-7	NA	2.1 E-7	9.2 E-7	1.0 E-6	4.0 E-5	4.7 E-7	9.3 E-7	NA	5.3 E-5
A48-ST13-SP07	20	NA	NA	NA	1.4 E-6	5.2 E-6	1.6 E-7	NA	NA	NA	NA	1.4 E-7	8.2 E-7	6.0 E-7	1.4 E-5	NA	4.8 E-7	NA	2.3 E-5
A48-ST13-SP07	30	NA	5.2 E-8	NA	9.5 E-7	6.8 E-6	9.2 E-8	NA	6.4 E-9	6.2 E-6	NA	3.3 E-7	2.0 E-6	7.1 E-7	2.8 E-5	8.4 E-7	1.1 E-6	8.6 E-8	4.7 E-5
A48-ST13-SP08	10	NA	NA	NA	5.3 E-7	NA	1.6 E-7	NA	NA	NA	NA	NA	3.1 E-7	NA	4.0 E-6	NA	3.1 E-7	NA	5.3 E-6
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	4.9 E-7	2.5 E-6	4.2 E-7	3.8 E-7	NA	4.0 E-6
A48-ST19-SP03	10	NA	NA	NA	4.2 E-7	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	1.2 E-6	2.9 E-6	NA	2.6 E-7	9.7 E-7	5.9 E-6
A48-ST19-SP03	20	NA	NA	NA	NA	NA	8.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	4.0 E-7	6.5 E-7
OS3-F1-SP01	10	NA	6.6 E-8	NA	NA	7.8 E-6	3.7 E-7	NA	NA	NA	NA	1.9 E-7	8.2 E-7	8.7 E-7	NA	NA	6.7 E-7	NA	1.1 E-5
OS3-F1-SP01	20	NA	NA	NA	NA	1.5 E-6	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	1.9 E-6
OS3-F1-SP02	10	NA	NA	NA	NA	2.8 E-6	2.4 E-7	NA	NA	NA	8.8 E-9	NA	2.5 E-7	NA	NA	NA	2.8 E-7	7.6 E-7	4.4 E-6
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	2.1 E-7
OS3-F1-SP03	10	NA	6.4 E-8	NA	1.3 E-6	NA	1.4 E-7	NA	NA	1.3 E-6	NA	NA	NA	7.8 E-7	NA	NA	4.5 E-7	NA	4.0 E-6
OS3-F1-SP03	20	NA	8.1 E-8	NA	1.4 E-6	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	1.5 E-6	NA	NA	4.8 E-7	NA	4.0 E-6

Table 5.7-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SP01	20	NA	NA	NA	NA	1.5 E-7	8.1 E-7	1.8 E-7	NA	NA	NA	NA	NA	1.1 E-7	NA	1.4 E-6	NA	9.8 E-8	4.8 E-7	3.2 E-6
A48-RC08-SP01	30	NA	NA	6.3 E-6	NA	4.6 E-7	NA	9.2 E-8	NA	NA	4.8 E-8	NA	NA	7.1 E-8	NA	1.0 E-6	1.4 E-7	9.0 E-6	4.3 E-7	1.8 E-5
A48-ST13-SP03	10	NA	7.1 E-8	NA	NA	9.6 E-7	1.5 E-6	2.4 E-7	NA	NA	1.6 E-7	NA	NA	1.6 E-7	9.4 E-7	4.4 E-6	NA	3.1 E-7	1.6 E-6	1.0 E-5
A48-ST13-SP03	20	NA	NA	NA	2.0 E-8	1.8 E-7	1.3 E-6	1.9 E-7	NA	NA	NA	NA	NA	1.0 E-7	NA	1.4 E-6	NA	1.8 E-7	4.2 E-7	3.8 E-6
A48-ST13-SP04	10	NA	NA	NA	NA	NA	1.3 E-6	1.1 E-7	NA	NA	NA	NA	6.5 E-8	3.9 E-7	NA	2.2 E-5	5.1 E-7	2.4 E-7	2.2 E-7	2.5 E-5
A48-ST13-SP04	20	NA	2.8 E-8	NA	NA	3.0 E-7	1.3 E-6	8.3 E-8	NA	NA	3.8 E-8	2.0 E-9	7.0 E-8	4.2 E-7	2.9 E-7	1.7 E-5	5.3 E-7	2.5 E-7	1.8 E-7	2.0 E-5
A48-ST13-SP04	30	3.8 E-8	4.8 E-8	NA	6.5 E-9	7.0 E-7	1.9 E-6	4.6 E-8	NA	2.6 E-9	5.9 E-8	9.1 E-9	1.4 E-7	9.5 E-7	2.5 E-7	1.5 E-5	9.2 E-7	5.2 E-7	2.1 E-7	2.1 E-5
A48-ST13-SP05	10	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	2.0 E-6	2.2 E-7	1.7 E-7	NA	2.8 E-6
A48-ST13-SP05	20	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	1.3 E-6	3.2 E-7	2.2 E-7	NA	2.1 E-6
A48-ST13-SP05	30	NA	1.3 E-7	NA	1.6 E-8	2.9 E-6	6.5 E-6	8.0 E-8	3.4 E-6	2.5 E-9	1.8 E-7	NA	1.2 E-7	1.3 E-6	NA	1.0 E-6	7.8 E-7	7.7 E-7	1.1 E-7	1.7 E-5
A48-ST13-SP06	10	NA	NA	NA	NA	2.5 E-7	1.6 E-6	9.9 E-8	NA	NA	NA	1.3 E-7	3.9 E-8	4.6 E-7	NA	2.8 E-4	8.0 E-7	3.1 E-7	5.3 E-6	2.9 E-4
A48-ST13-SP06	20	NA	5.8 E-8	6.8 E-6	7.4 E-9	6.2 E-7	1.5 E-6	6.5 E-8	NA	NA	8.7 E-8	2.4 E-9	8.0 E-8	4.1 E-7	3.3 E-7	2.2 E-5	5.3 E-7	4.1 E-7	2.0 E-7	3.3 E-5
A48-ST13-SP06	30	2.6 E-8	1.1 E-7	9.8 E-6	9.7 E-9	1.1 E-6	5.7 E-6	8.6 E-8	NA	3.3 E-9	2.2 E-7	NA	3.1 E-7	1.1 E-6	3.8 E-7	3.4 E-5	6.6 E-7	7.1 E-7	7.1 E-8	5.4 E-5
A48-ST13-SP07	10	NA	NA	NA	NA	2.6 E-7	3.6 E-6	1.1 E-7	NA	NA	7.6 E-8	NA	9.0 E-8	3.9 E-7	4.5 E-7	1.7 E-5	2.0 E-7	4.0 E-7	NA	2.3 E-5
A48-ST13-SP07	20	NA	NA	NA	NA	6.0 E-7	2.2 E-6	6.9 E-8	NA	NA	NA	NA	6.0 E-8	3.5 E-7	2.6 E-7	5.9 E-6	NA	2.1 E-7	NA	9.7 E-6
A48-ST13-SP07	30	NA	2.2 E-8	NA	NA	4.1 E-7	2.9 E-6	3.9 E-8	NA	2.8 E-9	2.7 E-6	NA	1.4 E-7	8.8 E-7	3.1 E-7	1.2 E-5	3.6 E-7	4.6 E-7	3.7 E-8	2.0 E-5
A48-ST13-SP08	10	NA	NA	NA	NA	2.3 E-7	NA	7.1 E-8	NA	NA	NA	NA	NA	1.3 E-7	NA	1.7 E-6	NA	1.3 E-7	NA	2.3 E-6
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	2.1 E-7	1.1 E-6	1.8 E-7	1.6 E-7	NA	1.7 E-6
A48-ST19-SP03	10	NA	NA	NA	NA	1.8 E-7	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	4.9 E-7	1.3 E-6	NA	1.1 E-7	4.2 E-7	2.5 E-6
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	1.7 E-7	2.8 E-7
OS3-F1-SP01	10	NA	2.8 E-8	NA	NA	NA	3.4 E-6	1.6 E-7	NA	NA	NA	NA	8.2 E-8	3.5 E-7	3.7 E-7	NA	NA	2.9 E-7	NA	4.6 E-6
OS3-F1-SP01	20	NA	NA	NA	NA	NA	6.4 E-7	5.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	8.0 E-7
OS3-F1-SP02	10	NA	NA	NA	1.0 E-8	NA	1.2 E-6	1.0 E-7	NA	NA	NA	3.8 E-9	NA	1.1 E-7	NA	NA	NA	1.2 E-7	3.3 E-7	1.9 E-6
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-8	8.8 E-8
OS3-F1-SP03	10	NA	2.7 E-8	NA	1.9 E-8	5.4 E-7	NA	5.8 E-8	NA	NA	5.6 E-7	NA	NA	NA	3.4 E-7	NA	NA	1.9 E-7	NA	1.7 E-6
OS3-F1-SP03	20	NA	3.5 E-8	NA	7.1 E-9	6.0 E-7	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	6.3 E-7	NA	NA	2.1 E-7	NA	1.7 E-6

Table 5.7-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A48-RC08-SP01	20	NA	NA	NA	NA	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	3.1 E-10	8 E-10
A48-RC08-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	4.6 E-11	NA	2.8 E-10	4 E-10
A48-ST13-SP03	10	NA	NA	NA	NA	NA	7.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-10	NA	NA	1.1 E-9	2 E-9
A48-ST13-SP03	20	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	2.7 E-10	1 E-9
A48-ST13-SP04	10	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	1.6 E-10	NA	1.4 E-10	3 E-9
A48-ST13-SP04	20	NA	NA	NA	NA	NA	6.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	1.7 E-10	NA	1.1 E-10	3 E-9
A48-ST13-SP04	30	4.8 E-10	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	2.9 E-10	NA	1.4 E-10	4 E-9
A48-ST13-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	6.9 E-11	NA	NA	3 E-10
A48-ST13-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	1.0 E-10	NA	NA	2 E-10
A48-ST13-SP05	30	NA	NA	NA	NA	NA	3.1 E-9	NA	3.2 E-9	NA	NA	NA	NA	NA	NA	1.2 E-10	2.5 E-10	NA	7.1 E-11	7 E-9
A48-ST13-SP06	10	NA	NA	NA	NA	NA	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	2.5 E-10	NA	3.4 E-9	4 E-8
A48-ST13-SP06	20	NA	NA	NA	NA	NA	7.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	1.7 E-10	NA	1.3 E-10	4 E-9
A48-ST13-SP06	30	3.3 E-10	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	2.1 E-10	NA	4.6 E-11	7 E-9
A48-ST13-SP07	10	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	6.4 E-11	NA	NA	4 E-9
A48-ST13-SP07	20	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	NA	NA	2 E-9
A48-ST13-SP07	30	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	1.1 E-10	NA	2.4 E-11	3 E-9
A48-ST13-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	2 E-10
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	5.7 E-11	NA	NA	2 E-10
A48-ST19-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	2.7 E-10	4 E-10
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	1 E-10
OS3-F1-SP01	10	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
OS3-F1-SP01	20	NA	NA	NA	NA	NA	3.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
OS3-F1-SP02	10	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	8 E-10
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-11	6 E-11
OS3-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
OS3-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.7-7) x the unit hazard or unit risk for the chemical).

Table 5.7-13 ***Unit Soil Hazard and Unit Cancer Risk Results - Construction Worker***
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	3.4 E-8	1.3 E-8	1.0 E-9	4.8 E-8
Chrysene	1.0 E+0	NA	NA	NA	NA	5.5 E-9	2.2 E-9	5.5 E-11	7.7 E-9
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
Phenanthrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram

Table 5.7-14 *Inhalation Unit Hazard and Unit Cancer Risk Results-*
Construction Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,4-Dioxane	1.0 E+0	2.3 E-1	7.5 E-5
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
Carbon Tetrachloride	1.0 E+0	1.7 E+1	4.2 E-4
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
Trichloroethylene	1.0 E+0	1.2 E+0	2.0 E-5
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter

Table 5.7-15
Location-Specific Soil Risk Assessment Results - Construction Workers
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)					Non-Cancer Hazard Index						Incremental Lifetime Cancer Risk					
Sample Name	**Depth**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**HI**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**ILCR**
Unit Hazard		NA	NA	1.1 E-4	1.5 E-4	1.6 E-5												
Unit Risk		4.8 E-8	7.7 E-9	NA	NA	NA												
A48-RC08-SB01	2				0.0048		NA	NA	NA	7.3 E-7	NA	7.3 E-7	NA	NA	NA	NA	NA	NA
A48-RC08-SB01	5.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SB01	11.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	2						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	6						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	11.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	4						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	6						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	11.5		0.0085	0.0017	0.012		NA	NA	1.9 E-7	1.8 E-6	NA	2.0 E-6	NA	6.6 E-11	NA	NA	NA	7 E-11
OS3-F1-SB01	0.5		0.029		0.029	0.93	NA	NA	NA	4.4 E-6	1.5 E-5	1.9 E-5	NA	2.2 E-10	NA	NA	NA	2 E-10
OS3-F1-SB01	2					1.2	NA	NA	NA	NA	1.9 E-5	1.9 E-5	NA	NA	NA	NA	NA	NA
OS3-F1-SB02	0.5					0.82	NA	NA	NA	NA	1.3 E-5	1.3 E-5	NA	NA	NA	NA	NA	NA
OS3-F1-SB02	2					0.68	NA	NA	NA	NA	1.1 E-5	1.1 E-5	NA	NA	NA	NA	NA	NA
OS3-F1-SB03	0.5	0.0035	0.013	0.0023	0.0043		NA	NA	2.6 E-7	6.6 E-7	NA	9.2 E-7	1.7 E-10	1.0 E-10	NA	NA	NA	3 E-10
OS3-F1-SB03	2						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.7-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard		2.3 E-1	1.4 E-1	7.5 E+1	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	1.7 E+1	1.1 E-1	3.9 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		7.5 E-5	NA	NA	NA	NA	2.8 E-4	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5
A48-RC08-SP01	10																		
A48-RC08-SP01	20					76	5.4	24						7.3		13		6.6	71
A48-RC08-SP01	30			16		280		15			13			6		12	10	750	78
A48-ST13-SP03	10		57			320	6.8	21			23			7.1	16	28		14	160
A48-ST13-SP03	20				16	92	8.8	25						6.9		13		12	62
A48-ST13-SP04	10						5.6	9.5					8.7	18		140	19	11	22
A48-ST13-SP04	20		34			150	8.7	11			8.3	15	14	29	7.4	160	30	17	26
A48-ST13-SP04	30	28	72		6.3	430	16	7.4		4.8	16	85	35	80	7.7	180	64	43	39
A48-ST13-SP05	10					58								6.4		13	8.1	7.8	
A48-ST13-SP05	20					67								13		12	18	15	
A48-ST13-SP05	30		200		15	1800	54	13	42	4.5	48		29	110		12	54	64	20
A48-ST13-SP06	10					84	7.0	8.7				630	5.2	21		1800	30	14	520
A48-ST13-SP06	20		70	14	5.8	310	10	8.6			19	18	16	28	8.3	210	30	28	30
A48-ST13-SP06	30	19	160	25	9.4	650	47	14		5.9	59		76	93	12	400	46	59	13
A48-ST13-SP07	10					85	16	10			11		12	18	7.6	110	7.6	18	
A48-ST13-SP07	20					300	15	9.1					12	24	6.6	56		14	
A48-ST13-SP07	30		33			250	24	6.4		5.0	720		35	74	9.6	140	25	38	6.7
A48-ST13-SP08	10					75		6.2						6.0		11		5.9	
A48-ST13-SP08	20													8.1	5.3	10	10	11	
A48-ST19-SP03	10					60		4.4							8.4	8.0		5.1	41
A48-ST19-SP03	20							5.0										4.8	25
OS3-F1-SP01	10		23				15	14					11	16	6.3			13.0	
OS3-F1-SP01	20						4.3	7.0										7	
OS3-F1-SP02	10				5.2		5.4	9.2				19		4.8				5.4	32
OS3-F1-SP02	20																		13
OS3-F1-SP03	10		22		9.7	180		5.1			81				5.7			8.7	
OS3-F1-SP03	20		42		5.6	300					53				16			14	

Table 5.7-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SP01	20	NA	NA	NA	NA	1.1 E-7	5.8 E-7	1.3 E-7	NA	NA	NA	NA	NA	7.6 E-8	NA	9.8 E-7	NA	7.0 E-8	3.4 E-7	2.3 E-6
A48-RC08-SP01	30	NA	NA	4.5 E-6	NA	3.3 E-7	NA	6.6 E-8	NA	NA	3.4 E-8	NA	NA	5.1 E-8	NA	7.3 E-7	1.0 E-7	6.4 E-6	3.1 E-7	1.3 E-5
A48-ST13-SP03	10	NA	5.0 E-8	NA	NA	6.9 E-7	1.1 E-6	1.7 E-7	NA	NA	1.1 E-7	NA	NA	1.1 E-7	6.7 E-7	3.2 E-6	NA	2.2 E-7	1.2 E-6	7.4 E-6
A48-ST13-SP03	20	NA	NA	NA	1.5 E-8	1.3 E-7	9.4 E-7	1.4 E-7	NA	NA	NA	NA	NA	7.2 E-8	NA	9.8 E-7	NA	1.3 E-7	3.0 E-7	2.7 E-6
A48-ST13-SP04	10	NA	NA	NA	NA	NA	9.0 E-7	7.7 E-8	NA	NA	NA	NA	4.7 E-8	2.8 E-7	NA	1.6 E-5	3.6 E-7	1.7 E-7	1.6 E-7	1.8 E-5
A48-ST13-SP04	20	NA	2.0 E-8	NA	NA	2.2 E-7	9.3 E-7	6.0 E-8	NA	NA	2.7 E-8	1.4 E-9	5.0 E-8	3.0 E-7	2.1 E-7	1.2 E-5	3.8 E-7	1.8 E-7	1.3 E-7	1.5 E-5
A48-ST13-SP04	30	2.7 E-8	3.4 E-8	NA	4.7 E-9	5.0 E-7	1.4 E-6	3.3 E-8	NA	1.9 E-9	4.2 E-8	6.5 E-9	1.0 E-7	6.8 E-7	1.8 E-7	1.1 E-5	6.6 E-7	3.7 E-7	1.5 E-7	1.5 E-5
A48-ST13-SP05	10	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	1.5 E-6	1.5 E-7	1.2 E-7	NA	2.0 E-6
A48-ST13-SP05	20	NA	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	9.0 E-7	2.3 E-7	1.6 E-7	NA	1.5 E-6
A48-ST13-SP05	30	NA	9.6 E-8	NA	1.1 E-8	2.1 E-6	4.7 E-6	5.7 E-8	2.4 E-6	1.8 E-9	1.3 E-7	NA	8.4 E-8	9.3 E-7	NA	7.3 E-7	5.6 E-7	5.5 E-7	7.9 E-8	1.2 E-5
A48-ST13-SP06	10	NA	NA	NA	NA	1.8 E-7	1.1 E-6	7.1 E-8	NA	NA	NA	8.9 E-8	2.8 E-8	3.3 E-7	NA	2.0 E-4	5.7 E-7	2.2 E-7	3.8 E-6	2.1 E-4
A48-ST13-SP06	20	NA	4.1 E-8	4.8 E-6	5.3 E-9	4.5 E-7	1.1 E-6	4.7 E-8	NA	NA	6.2 E-8	1.7 E-9	5.7 E-8	2.9 E-7	2.3 E-7	1.6 E-5	3.8 E-7	3.0 E-7	1.5 E-7	2.4 E-5
A48-ST13-SP06	30	1.9 E-8	7.6 E-8	7.0 E-6	6.9 E-9	7.6 E-7	4.1 E-6	6.2 E-8	NA	2.3 E-9	1.6 E-7	NA	2.2 E-7	7.9 E-7	2.7 E-7	2.4 E-5	4.7 E-7	5.1 E-7	5.1 E-8	3.9 E-5
A48-ST13-SP07	10	NA	NA	NA	NA	1.8 E-7	2.6 E-6	8.1 E-8	NA	NA	5.4 E-8	NA	6.4 E-8	2.8 E-7	3.2 E-7	1.2 E-5	1.5 E-7	2.9 E-7	NA	1.6 E-5
A48-ST13-SP07	20	NA	NA	NA	NA	4.3 E-7	1.6 E-6	4.9 E-8	NA	NA	NA	NA	4.3 E-8	2.5 E-7	1.9 E-7	4.2 E-6	NA	1.5 E-7	NA	6.9 E-6
A48-ST13-SP07	30	NA	1.6 E-8	NA	NA	2.9 E-7	2.1 E-6	2.8 E-8	NA	2.0 E-9	1.9 E-6	NA	1.0 E-7	6.3 E-7	2.2 E-7	8.5 E-6	2.6 E-7	3.3 E-7	2.6 E-8	1.4 E-5
A48-ST13-SP08	10	NA	NA	NA	NA	1.6 E-7	NA	5.0 E-8	NA	NA	NA	NA	NA	9.4 E-8	NA	1.2 E-6	NA	9.4 E-8	NA	1.6 E-6
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	1.5 E-7	7.5 E-7	1.3 E-7	1.2 E-7	NA	1.2 E-6
A48-ST19-SP03	10	NA	NA	NA	NA	1.3 E-7	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	3.5 E-7	9.0 E-7	NA	8.1 E-8	3.0 E-7	1.8 E-6
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	1.2 E-7	2.0 E-7
OS3-F1-SP01	10	NA	2.0 E-8	NA	NA	NA	2.4 E-6	1.1 E-7	NA	NA	NA	NA	5.9 E-8	2.5 E-7	2.7 E-7	NA	NA	2.1 E-7	NA	3.3 E-6
OS3-F1-SP01	20	NA	NA	NA	NA	NA	4.6 E-7	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	5.7 E-7
OS3-F1-SP02	10	NA	NA	NA	7.1 E-9	NA	8.6 E-7	7.5 E-8	NA	NA	NA	2.7 E-9	NA	7.5 E-8	NA	NA	NA	8.6 E-8	2.3 E-7	1.3 E-6
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	6.3 E-8
OS3-F1-SP03	10	NA	1.9 E-8	NA	1.3 E-8	3.9 E-7	NA	4.1 E-8	NA	NA	4.0 E-7	NA	NA	NA	2.4 E-7	NA	NA	1.4 E-7	NA	1.2 E-6
OS3-F1-SP03	20	NA	2.5 E-8	NA	5.1 E-9	4.3 E-7	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	4.5 E-7	NA	NA	1.5 E-7	NA	1.2 E-6

Table 5.7-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A48-RC08-SP01	20	NA	NA	NA	NA	NA	7.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-12	NA	NA	5.8 E-12	2 E-11
A48-RC08-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	8.6 E-13	NA	5.2 E-12	8 E-12
A48-ST13-SP03	10	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-12	NA	NA	2.0 E-11	4 E-11
A48-ST13-SP03	20	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-12	NA	NA	5.1 E-12	2 E-11
A48-ST13-SP04	10	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	3.0 E-12	NA	2.7 E-12	6 E-11
A48-ST13-SP04	20	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	3.2 E-12	NA	2.1 E-12	5 E-11
A48-ST13-SP04	30	9.0 E-12	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	5.5 E-12	NA	2.6 E-12	7 E-11
A48-ST13-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-12	1.3 E-12	NA	NA	6 E-12
A48-ST13-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-12	1.9 E-12	NA	NA	5 E-12
A48-ST13-SP05	30	NA	NA	NA	NA	NA	5.7 E-11	NA	5.9 E-11	NA	NA	NA	NA	NA	NA	2.2 E-12	4.7 E-12	NA	1.3 E-12	1 E-10
A48-ST13-SP06	10	NA	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-10	4.8 E-12	NA	6.4 E-11	7 E-10
A48-ST13-SP06	20	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	3.2 E-12	NA	2.5 E-12	7 E-11
A48-ST13-SP06	30	6.1 E-12	NA	NA	NA	NA	5.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-11	4.0 E-12	NA	8.7 E-13	1 E-10
A48-ST13-SP07	10	NA	NA	NA	NA	NA	3.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-11	1.2 E-12	NA	NA	7 E-11
A48-ST13-SP07	20	NA	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	3 E-11
A48-ST13-SP07	30	NA	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	2.2 E-12	NA	4.5 E-13	5 E-11
A48-ST13-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-12	NA	NA	NA	4 E-12
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-12	1.1 E-12	NA	NA	3 E-12
A48-ST19-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-12	NA	NA	5.1 E-12	8 E-12
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-12	2 E-12
OS3-F1-SP01	10	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
OS3-F1-SP01	20	NA	NA	NA	NA	NA	5.6 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-12
OS3-F1-SP02	10	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-12	1 E-11
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-12	1 E-12
OS3-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
OS3-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.7-7) x the unit hazard or unit risk for the chemical).

Table 5.7-17 ***Unit Hazard and Unit Cancer Risk Results-Outdoor Commercial Worker***
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Semivolatile Organic Compounds									
Benzo(a)anthracene	1.0 E+0	NA	NA	NA	NA	2.6 E-7	2.2 E-7	3.8 E-11	4.7 E-7
Chrysene	1.0 E+0	NA	NA	NA	NA	4.2 E-8	3.6 E-8	2.0 E-12	7.8 E-8
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	4 E-9	4.5 E-5	NA	NA	NA	NA
Phenanthrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	3 E-9	5.4 E-6	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram

Table 5.7-18 Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Carbon Tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	1.5 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	4.8 E-4
Trichloroethylene	1.0 E+0	1.2 E+0	4.9 E-4
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.7-19
Location-Specific Soil Risk Assessment Results - Commercial Workers
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)					Non-Cancer Hazard Index						Incremental Lifetime Cancer Risk					
Sample Name	**Depth**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**HI**	**Benzo(a)anthracene**	**Chrysene**	**Fluoranthene**	**Phenanthrene**	**Phenol**	**ILCR**
Unit Hazard		NA	NA	4.5 E-5	6.1 E-5	5.4 E-6												
Unit Risk		4.7 E-7	7.8 E-8	NA	NA	NA												
A48-RC08-SB01	2				0.0048		NA	NA	NA	2.9 E-7	NA	2.9 E-7	NA	NA	NA	NA	NA	NA
A48-RC08-SB01	5.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SB01	11.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	2						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	6						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST13-SB01	11.5						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	4						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	6						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-ST19-SB01	11.5		0.0085	0.0017	0.012		NA	NA	7.7 E-8	7.3 E-7	NA	8.0 E-7	NA	7 E-10	NA	NA	NA	7 E-10
OS3-F1-SB01	0.5		0.029		0.029	0.93	NA	NA	NA	1.8 E-6	5.0 E-6	6.8 E-6	NA	2 E-9	NA	NA	NA	2 E-9
OS3-F1-SB01	2					1.2	NA	NA	NA	NA	6.5 E-6	6.5 E-6	NA	NA	NA	NA	NA	NA
OS3-F1-SB02	0.5					0.82	NA	NA	NA	NA	4.4 E-6	4.4 E-6	NA	NA	NA	NA	NA	NA
OS3-F1-SB02	2					0.68	NA	NA	NA	NA	3.7 E-6	3.7 E-6	NA	NA	NA	NA	NA	NA
OS3-F1-SB03	0.5	0.0035	0.013	0.0023	0.0043		NA	NA	1.0 E-7	2.6 E-7	NA	3.7 E-7	2 E-9	1 E-9	NA	NA	NA	3 E-9
OS3-F1-SB03	2						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.7-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard		2.3 E-1	1.4 E-1	7.5 E+1	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	1.7 E+1	1.1 E-1	3.9 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		1.9 E-3	NA	NA	NA	NA	7.0 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4
A48-RC08-SP01	10																		
A48-RC08-SP01	20					76	5.4	24						7.3		13		6.6	71
A48-RC08-SP01	30			16		280		15			13			6		12	10	750	78
A48-ST13-SP03	10		57			320	6.8	21			23			7.1	16	28		14	160
A48-ST13-SP03	20				16	92	8.8	25						6.9		13		12	62
A48-ST13-SP04	10						5.6	9.5					8.7	18		140	19	11	22
A48-ST13-SP04	20		34			150	8.7	11			8.3	15	14	29	7.4	160	30	17	26
A48-ST13-SP04	30	28	72		6.3	430	16	7.4		4.8	16	85	35	80	7.7	180	64	43	39
A48-ST13-SP05	10					58								6.4		13	8.1	7.8	
A48-ST13-SP05	20					67								13		12	18	15	
A48-ST13-SP05	30		200		15	1800	54	13	42	4.5	48		29	110		12	54	64	20
A48-ST13-SP06	10					84	7	8.7				630	5.2	21		1800	30	14	520
A48-ST13-SP06	20		70	14	5.8	310	10	8.6			19	18	16	28	8.3	210	30	28	30
A48-ST13-SP06	30	19	160	25	9.4	650	47	14		5.9	59		76	93	12	400	46	59	13
A48-ST13-SP07	10					85	16	10			11		12	18	7.6	110	7.6	18	
A48-ST13-SP07	20					300	15	9.1					12	24	6.6	56		14	
A48-ST13-SP07	30		33			250	24	6.4		5.0	720		35	74	9.6	140	25	38	6.7
A48-ST13-SP08	10					75		6.2						6.0		11		5.9	
A48-ST13-SP08	20													8.1	5.3	10	10	11	
A48-ST19-SP03	10					60		4.4							8.4	8.0		5.1	41
A48-ST19-SP03	20							5.0										4.8	25
OS3-F1-SP01	10		23				15	14					11	16	6.3			13	
OS3-F1-SP01	20						4.3	7.0										7.0	
OS3-F1-SP02	10				5.2		5.4	9.2				19		4.8				5.4	32
OS3-F1-SP02	20																		13
OS3-F1-SP03	10		22		9.7	180		5.1			81				5.7			8.7	
OS3-F1-SP03	20		42		5.6	300					53				16			14	

Table 5.7-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SP01	20	NA	NA	NA	NA	3.3 E-6	1.7 E-5	4.0 E-6	NA	NA	NA	NA	NA	2.0 E-6	NA	3.0 E-5	NA	2.2 E-6	1.1 E-5	7.0 E-5
A48-RC08-SP01	30	NA	NA	1.2 E-4	NA	8.2 E-6	NA	1.7 E-6	NA	NA	9.0 E-7	NA	NA	1.2 E-6	NA	1.9 E-5	2.6 E-6	1.6 E-4	7.9 E-6	3.3 E-4
A48-ST13-SP03	10	NA	1.9 E-6	NA	NA	2.4 E-5	4.0 E-5	6.1 E-6	NA	NA	3.8 E-6	NA	NA	3.2 E-6	2.5 E-5	1.2 E-4	NA	8.2 E-6	4.4 E-5	2.8 E-4
A48-ST13-SP03	20	NA	NA	NA	4.7 E-7	4.0 E-6	2.8 E-5	4.2 E-6	NA	NA	NA	NA	NA	1.9 E-6	NA	3.0 E-5	NA	4.0 E-6	9.6 E-6	8.3 E-5
A48-ST13-SP04	10	NA	NA	NA	NA	NA	3.3 E-5	2.7 E-6	NA	NA	NA	NA	4.0 E-6	8.2 E-6	NA	6.0 E-4	1.3 E-5	6.4 E-6	6.0 E-6	6.8 E-4
A48-ST13-SP04	20	NA	6.5 E-7	NA	NA	6.5 E-6	2.8 E-5	1.8 E-6	NA	NA	8.4 E-7	4.5 E-8	4.0 E-6	8.0 E-6	6.7 E-6	3.7 E-4	1.2 E-5	5.7 E-6	4.0 E-6	4.5 E-4
A48-ST13-SP04	30	7.3 E-7	8.9 E-7	NA	1.2 E-7	1.3 E-5	3.5 E-5	8.2 E-7	NA	4.9 E-8	1.1 E-6	1.7 E-7	6.9 E-6	1.6 E-5	4.5 E-6	2.8 E-4	1.7 E-5	9.5 E-6	4.0 E-6	3.9 E-4
A48-ST13-SP05	10	NA	NA	NA	NA	4.3 E-6	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	5.6 E-5	5.5 E-6	4.6 E-6	NA	7.3 E-5
A48-ST13-SP05	20	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	2.8 E-5	7.1 E-6	5.0 E-6	NA	4.6 E-5
A48-ST13-SP05	30	NA	2.5 E-6	NA	2.9 E-7	5.2 E-5	1.2 E-4	1.4 E-6	6.3 E-5	4.6 E-8	3.3 E-6	NA	5.7 E-6	2.2 E-5	NA	1.9 E-5	1.4 E-5	1.4 E-5	2.0 E-6	3.2 E-4
A48-ST13-SP06	10	NA	NA	NA	NA	6.2 E-6	4.1 E-5	2.5 E-6	NA	NA	NA	3.4 E-6	2.4 E-6	9.5 E-6	NA	7.8 E-3	2.0 E-5	8.2 E-6	1.4 E-4	8.0 E-3
A48-ST13-SP06	20	NA	1.3 E-6	1.6 E-4	1.7 E-7	1.4 E-5	3.2 E-5	1.4 E-6	NA	NA	1.9 E-6	5.5 E-8	4.6 E-6	7.7 E-6	7.5 E-6	4.9 E-4	1.2 E-5	9.4 E-6	4.7 E-6	7.4 E-4
A48-ST13-SP06	30	4.9 E-7	2.0 E-6	1.9 E-4	1.8 E-7	1.9 E-5	1.0 E-4	1.6 E-6	NA	6.0 E-8	4.1 E-6	NA	1.5 E-5	1.8 E-5	7.1 E-6	6.3 E-4	1.2 E-5	1.3 E-5	1.3 E-6	1.0 E-3
A48-ST13-SP07	10	NA	NA	NA	NA	6.3 E-6	9.4 E-5	2.9 E-6	NA	NA	1.8 E-6	NA	5.4 E-6	8.2 E-6	1.2 E-5	4.7 E-4	5.2 E-6	1.1 E-5	NA	6.2 E-4
A48-ST13-SP07	20	NA	NA	NA	NA	1.3 E-5	4.8 E-5	1.5 E-6	NA	NA	NA	NA	3.4 E-6	6.6 E-6	5.9 E-6	1.3 E-4	NA	4.7 E-6	NA	2.1 E-4
A48-ST13-SP07	30	NA	4.1 E-7	NA	NA	7.3 E-6	5.3 E-5	7.1 E-7	NA	5.1 E-8	5.0 E-5	NA	6.9 E-6	1.5 E-5	5.6 E-6	2.2 E-4	6.5 E-6	8.4 E-6	6.8 E-7	3.8 E-4
A48-ST13-SP08	10	NA	NA	NA	NA	5.5 E-6	NA	1.8 E-6	NA	NA	NA	NA	NA	2.7 E-6	NA	4.7 E-5	NA	3.5 E-6	NA	6.1 E-5
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	4.8 E-6	2.3 E-5	4.0 E-6	3.7 E-6	NA	3.8 E-5
A48-ST19-SP03	10	NA	NA	NA	NA	4.4 E-6	NA	1.3 E-6	NA	NA	NA	NA	NA	NA	1.3 E-5	3.4 E-5	NA	3.0 E-6	1.1 E-5	6.8 E-5
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	8.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	3.9 E-6	6.3 E-6
OS3-F1-SP01	10	NA	7.7 E-7	NA	NA	NA	8.8 E-5	4.0 E-6	NA	NA	NA	NA	5.0 E-6	7.3 E-6	1.0 E-5	NA	NA	7.6 E-6	NA	1.2 E-4
OS3-F1-SP01	20	NA	NA	NA	NA	NA	1.4 E-5	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	1.7 E-5
OS3-F1-SP02	10	NA	NA	NA	2.7 E-7	NA	3.2 E-5	2.7 E-6	NA	NA	NA	1.0 E-7	NA	2.2 E-6	NA	NA	NA	3.2 E-6	8.8 E-6	4.9 E-5
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-6	2.0 E-6
OS3-F1-SP03	10	NA	7.3 E-7	NA	5.1 E-7	1.3 E-5	NA	1.5 E-6	NA	NA	1.3 E-5	NA	NA	NA	9.1 E-6	NA	NA	5.1 E-6	NA	4.3 E-5
OS3-F1-SP03	20	NA	8.0 E-7	NA	1.6 E-7	1.3 E-5	NA	NA	NA	NA	5.4 E-6	NA	NA	NA	1.4 E-5	NA	NA	4.7 E-6	NA	3.9 E-5

Table 5.7-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A48-RC08-SP01	20	NA	NA	NA	NA	NA	5.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	4.7 E-9	1 E-8
A48-RC08-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	5.5 E-10	NA	3.4 E-9	5 E-9
A48-ST13-SP03	10	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	NA	1.9 E-8	4 E-8
A48-ST13-SP03	20	NA	NA	NA	NA	NA	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	4.1 E-9	2 E-8
A48-ST13-SP04	10	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	2.7 E-9	NA	2.6 E-9	6 E-8
A48-ST13-SP04	20	NA	NA	NA	NA	NA	8.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	2.5 E-9	NA	1.7 E-9	4 E-8
A48-ST13-SP04	30	6.0 E-9	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	3.5 E-9	NA	1.7 E-9	4 E-8
A48-ST13-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	1.1 E-9	NA	NA	5 E-9
A48-ST13-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	1.5 E-9	NA	NA	4 E-9
A48-ST13-SP05	30	NA	NA	NA	NA	NA	3.7 E-8	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	1.4 E-9	3.0 E-9	NA	8.6 E-10	8 E-8
A48-ST13-SP06	10	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-7	4.3 E-9	NA	6.0 E-8	7 E-7
A48-ST13-SP06	20	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	2.5 E-9	NA	2.0 E-9	5 E-8
A48-ST13-SP06	30	4.1 E-9	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	2.5 E-9	NA	5.6 E-10	9 E-8
A48-ST13-SP07	10	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	1.1 E-9	NA	NA	7 E-8
A48-ST13-SP07	20	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	NA	2 E-8
A48-ST13-SP07	30	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	1.4 E-9	NA	2.9 E-10	3 E-8
A48-ST13-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-9	NA	NA	NA	4 E-9
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	8.3 E-10	NA	NA	3 E-9
A48-ST19-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	4.8 E-9	7 E-9
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	2 E-9
OS3-F1-SP01	10	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
OS3-F1-SP01	20	NA	NA	NA	NA	NA	4.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
OS3-F1-SP02	10	NA	NA	NA	NA	NA	9.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	1 E-8
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	9 E-10
OS3-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
OS3-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.7-6) x the unit hazard or unit risk for the chemical).

Table 5.7-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																	
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**
Unit Hazard		2.3 E-1	1.4 E-1	7.5 E+1	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	1.7 E+1	1.1 E-1	3.9 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		1.9 E-3	NA	NA	NA	NA	7.0 E-3	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4
A48-RC08-SP01	10																		
A48-RC08-SP01	20					76	5.4	24						7.3		13		6.6	71
A48-RC08-SP01	30			16		280		15			13			6.0		12	10	750	78
A48-ST13-SP03	10		57			320	6.8	21			23			7.1	16	28		14	160
A48-ST13-SP03	20				16	92	8.8	25						6.9		13		12	62
A48-ST13-SP04	10						5.6	9.5					8.7	18		140	19	11	22
A48-ST13-SP04	20		34			150	8.7	11			8.3	15	14	29	7.4	160	30	17	26
A48-ST13-SP04	30	28	72		6.3	430	16	7.4		4.8	16	85	35	80	7.7	180	64	43	39
A48-ST13-SP05	10					58								6.4		13	8.1	7.8	
A48-ST13-SP05	20					67								13		12	18	15	
A48-ST13-SP05	30		200		15	1800	54	13	42	4.5	48		29	110		12	54	64	20
A48-ST13-SP06	10					84	7.0	8.7				630	5.2	21		1800	30	14	520
A48-ST13-SP06	20		70	14	5.8	310	10	8.6			19	18	16	28	8.3	210	30	28	30
A48-ST13-SP06	30	19	160	25	9.4	650	47	14		5.9	59		76	93	12	400	46	59	13
A48-ST13-SP07	10					85	16	10			11		12	18	7.6	110	7.6	18	
A48-ST13-SP07	20					300	15	9.1					12	24	6.6	56		14	
A48-ST13-SP07	30		33			250	24	6.4		5.0	720		35	74	9.6	140	25	38	6.7
A48-ST13-SP08	10					75		6.2						6.0		11		5.9	
A48-ST13-SP08	20													8.1	5.3	10	10	11	
A48-ST19-SP03	10					60		4.4							8.4	8.0		5.1	41
A48-ST19-SP03	20							5.0										4.8	25
OS3-F1-SP01	10		23				15	14					11	16	6.3			13	
OS3-F1-SP01	20						4.3	7.0										7.0	
OS3-F1-SP02	10				5.2		5.4	9.2				19		4.8				5.4	32
OS3-F1-SP02	20																		13
OS3-F1-SP03	10		22		9.7	180		5.1			81				5.7			8.7	
OS3-F1-SP03	20		42		5.6	300					53				16			14	

Table 5.7-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A48-RC08-SP01	20	NA	NA	NA	NA	1.1 E-7	5.8 E-7	1.3 E-7	NA	NA	NA	NA	NA	7.6 E-8	NA	9.8 E-7	NA	7.0 E-8	3.4 E-7	2.3 E-6
A48-RC08-SP01	30	NA	NA	4.5 E-6	NA	3.3 E-7	NA	6.6 E-8	NA	NA	3.4 E-8	NA	NA	5.1 E-8	NA	7.3 E-7	1.0 E-7	6.4 E-6	3.1 E-7	1.3 E-5
A48-ST13-SP03	10	NA	5.0 E-8	NA	NA	6.9 E-7	1.1 E-6	1.7 E-7	NA	NA	1.1 E-7	NA	NA	1.1 E-7	6.7 E-7	3.2 E-6	NA	2.2 E-7	1.2 E-6	7.4 E-6
A48-ST13-SP03	20	NA	NA	NA	1.5 E-8	1.3 E-7	9.4 E-7	1.4 E-7	NA	NA	NA	NA	NA	7.2 E-8	NA	9.8 E-7	NA	1.3 E-7	3.0 E-7	2.7 E-6
A48-ST13-SP04	10	NA	NA	NA	NA	NA	9.0 E-7	7.7 E-8	NA	NA	NA	NA	4.7 E-8	2.8 E-7	NA	1.6 E-5	3.6 E-7	1.7 E-7	1.6 E-7	1.8 E-5
A48-ST13-SP04	20	NA	2.0 E-8	NA	NA	2.2 E-7	9.3 E-7	6.0 E-8	NA	NA	2.7 E-8	1.4 E-9	5.0 E-8	3.0 E-7	2.1 E-7	1.2 E-5	3.8 E-7	1.8 E-7	1.3 E-7	1.5 E-5
A48-ST13-SP04	30	2.7 E-8	3.4 E-8	NA	4.7 E-9	5.0 E-7	1.4 E-6	3.3 E-8	NA	1.9 E-9	4.2 E-8	6.5 E-9	1.0 E-7	6.8 E-7	1.8 E-7	1.1 E-5	6.6 E-7	3.7 E-7	1.5 E-7	1.5 E-5
A48-ST13-SP05	10	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	1.5 E-6	1.5 E-7	1.2 E-7	NA	2.0 E-6
A48-ST13-SP05	20	NA	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	9.0 E-7	2.3 E-7	1.6 E-7	NA	1.5 E-6
A48-ST13-SP05	30	NA	9.6 E-8	NA	1.1 E-8	2.1 E-6	4.7 E-6	5.7 E-8	2.4 E-6	1.8 E-9	1.3 E-7	NA	8.4 E-8	9.3 E-7	NA	7.3 E-7	5.6 E-7	5.5 E-7	7.9 E-8	1.2 E-5
A48-ST13-SP06	10	NA	NA	NA	NA	1.8 E-7	1.1 E-6	7.1 E-8	NA	NA	NA	8.9 E-8	2.8 E-8	3.3 E-7	NA	2.0 E-4	5.7 E-7	2.2 E-7	3.8 E-6	2.1 E-4
A48-ST13-SP06	20	NA	4.1 E-8	4.8 E-6	5.3 E-9	4.5 E-7	1.1 E-6	4.7 E-8	NA	NA	6.2 E-8	1.7 E-9	5.7 E-8	2.9 E-7	2.3 E-7	1.6 E-5	3.8 E-7	3.0 E-7	1.5 E-7	2.4 E-5
A48-ST13-SP06	30	1.9 E-8	7.6 E-8	7.0 E-6	6.9 E-9	7.6 E-7	4.1 E-6	6.2 E-8	NA	2.3 E-9	1.6 E-7	NA	2.2 E-7	7.9 E-7	2.7 E-7	2.4 E-5	4.7 E-7	5.1 E-7	5.1 E-8	3.9 E-5
A48-ST13-SP07	10	NA	NA	NA	NA	1.8 E-7	2.6 E-6	8.1 E-8	NA	NA	5.4 E-8	NA	6.4 E-8	2.8 E-7	3.2 E-7	1.2 E-5	1.5 E-7	2.9 E-7	NA	1.6 E-5
A48-ST13-SP07	20	NA	NA	NA	NA	4.3 E-7	1.6 E-6	4.9 E-8	NA	NA	NA	NA	4.3 E-8	2.5 E-7	1.9 E-7	4.2 E-6	NA	1.5 E-7	NA	6.9 E-6
A48-ST13-SP07	30	NA	1.6 E-8	NA	NA	2.9 E-7	2.1 E-6	2.8 E-8	NA	2.0 E-9	1.9 E-6	NA	1.0 E-7	6.3 E-7	2.2 E-7	8.5 E-6	2.6 E-7	3.3 E-7	2.6 E-8	1.4 E-5
A48-ST13-SP08	10	NA	NA	NA	NA	1.6 E-7	NA	5.0 E-8	NA	NA	NA	NA	NA	9.4 E-8	NA	1.2 E-6	NA	9.4 E-8	NA	1.6 E-6
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-8	1.5 E-7	7.5 E-7	1.3 E-7	1.2 E-7	NA	1.2 E-6
A48-ST19-SP03	10	NA	NA	NA	NA	1.3 E-7	NA	3.6 E-8	NA	NA	NA	NA	NA	NA	3.5 E-7	9.0 E-7	NA	8.1 E-8	3.0 E-7	1.8 E-6
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	1.2 E-7	2.0 E-7
OS3-F1-SP01	10	NA	2.0 E-8	NA	NA	NA	2.4 E-6	1.1 E-7	NA	NA	NA	NA	5.9 E-8	2.5 E-7	2.7 E-7	NA	NA	2.1 E-7	NA	3.3 E-6
OS3-F1-SP01	20	NA	NA	NA	NA	NA	4.6 E-7	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	5.7 E-7
OS3-F1-SP02	10	NA	NA	NA	7.1 E-9	NA	8.6 E-7	7.5 E-8	NA	NA	NA	2.7 E-9	NA	7.5 E-8	NA	NA	NA	8.6 E-8	2.3 E-7	1.3 E-6
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	6.3 E-8
OS3-F1-SP03	10	NA	1.9 E-8	NA	1.3 E-8	3.9 E-7	NA	4.1 E-8	NA	NA	4.0 E-7	NA	NA	NA	2.4 E-7	NA	NA	1.4 E-7	NA	1.2 E-6
OS3-F1-SP03	20	NA	2.5 E-8	NA	5.1 E-9	4.3 E-7	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	4.5 E-7	NA	NA	1.5 E-7	NA	1.2 E-6

Table 5.7-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**1,4-Dioxane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Propanol**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Carbon Tetrachloride**	**Cyclohexane**	**Ethanol**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard																				
Unit Risk																				
A48-RC08-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
A48-RC08-SP01	20	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-11	NA	NA	1.5 E-10	4 E-10
A48-RC08-SP01	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	2.2 E-11	NA	1.3 E-10	2 E-10
A48-ST13-SP03	10	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	4.9 E-10	1 E-9
A48-ST13-SP03	20	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-11	NA	NA	1.3 E-10	5 E-10
A48-ST13-SP04	10	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	7.6 E-11	NA	6.8 E-11	2 E-9
A48-ST13-SP04	20	NA	NA	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-10	8.0 E-11	NA	5.4 E-11	1 E-9
A48-ST13-SP04	30	2.3 E-10	NA	NA	NA	NA	4.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	1.4 E-10	NA	6.5 E-11	2 E-9
A48-ST13-SP05	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	3.2 E-11	NA	NA	1 E-10
A48-ST13-SP05	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	4.8 E-11	NA	NA	1 E-10
A48-ST13-SP05	30	NA	NA	NA	NA	NA	1.4 E-9	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	5.5 E-11	1.2 E-10	NA	3.3 E-11	3 E-9
A48-ST13-SP06	10	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	1.2 E-10	NA	1.6 E-9	2 E-8
A48-ST13-SP06	20	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	8.0 E-11	NA	6.2 E-11	2 E-9
A48-ST13-SP06	30	1.5 E-10	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	9.9 E-11	NA	2.2 E-11	3 E-9
A48-ST13-SP07	10	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-10	3.0 E-11	NA	NA	2 E-9
A48-ST13-SP07	20	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	8 E-10
A48-ST13-SP07	30	NA	NA	NA	NA	NA	6.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-10	5.4 E-11	NA	1.1 E-11	1 E-9
A48-ST13-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	9 E-11
A48-ST13-SP08	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	2.7 E-11	NA	NA	8 E-11
A48-ST19-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	NA	1.3 E-10	2 E-10
A48-ST19-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	5 E-11
OS3-F1-SP01	10	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
OS3-F1-SP01	20	NA	NA	NA	NA	NA	1.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
OS3-F1-SP02	10	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	4 E-10
OS3-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	3 E-11
OS3-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
OS3-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.7-7) x the unit hazard or unit risk for the chemical).

Table 5.7-22 All Receptors Hazard Index and Cancer Risk Results-Soil
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

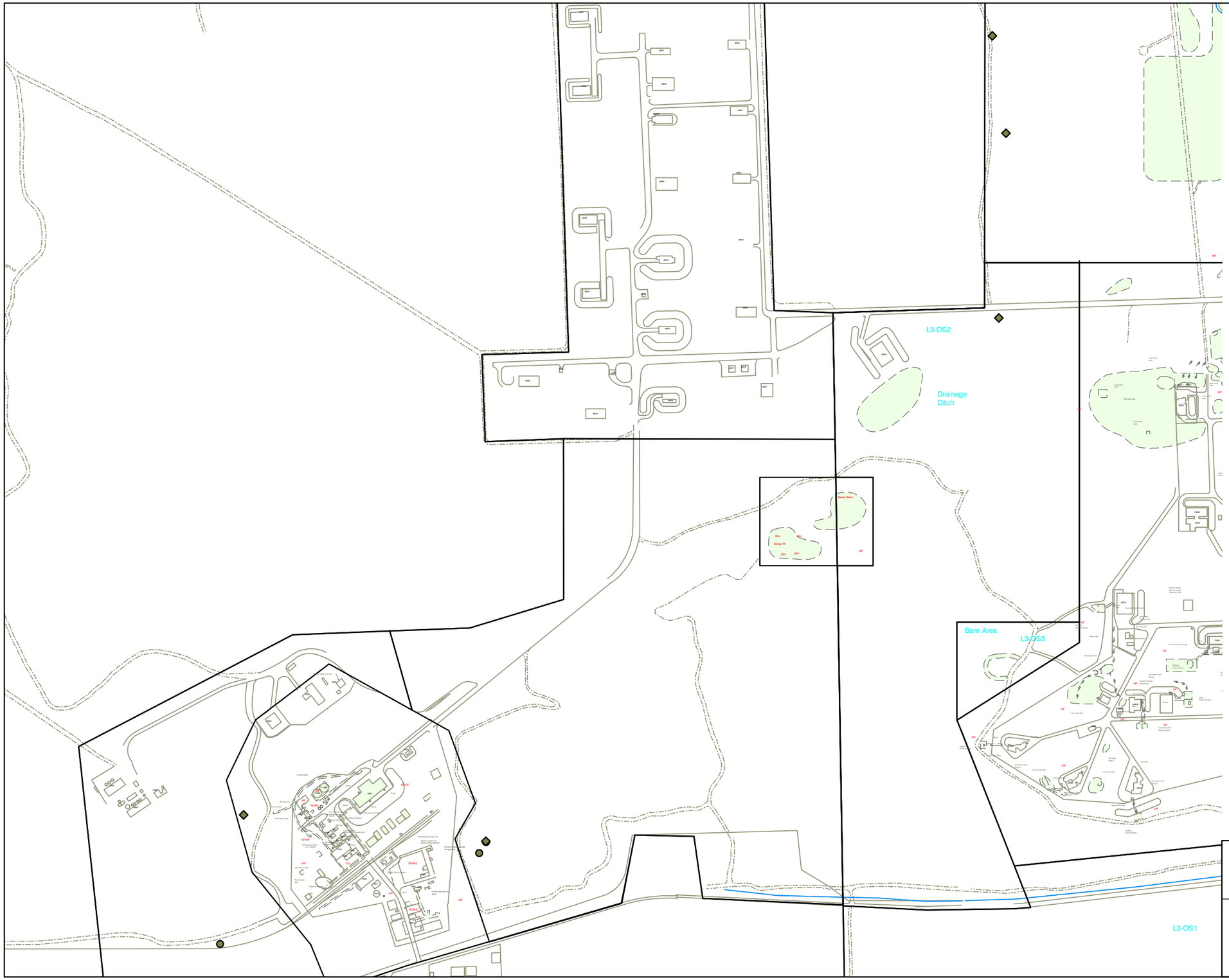
		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
A48-RC08-SB01	2	2.8 E-6	3.3 E-7	7.3 E-7	2.9 E-7	**NA**	**NA**	**NA**
A48-RC08-SB01	5.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
A48-RC08-SB01	11.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
A48-ST13-SB01	2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
A48-ST13-SB01	6	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
A48-ST13-SB01	11.5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
A48-ST19-SB01	4	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
A48-ST19-SB01	6	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
A48-ST19-SB01	11.5	7.7 E-6	9.2 E-7	2.0 E-6	8.0 E-7	2 E-9	7 E-11	7 E-10
OS3-F1-SB01	0.5	6.8 E-5	8.0 E-6	1.9 E-5	6.8 E-6	8 E-9	2 E-10	2 E-9
OS3-F1-SB01	2	6.5 E-5	7.7 E-6	1.9 E-5	6.5 E-6	**NA**	**NA**	**NA**
OS3-F1-SB02	0.5	4.5 E-5	5.2 E-6	1.3 E-5	4.4 E-6	**NA**	**NA**	**NA**
OS3-F1-SB02	2	3.7 E-5	4.3 E-6	1.1 E-5	3.7 E-6	**NA**	**NA**	**NA**
OS3-F1-SB03	0.5	3.5 E-6	4.2 E-7	9.2 E-7	3.7 E-7	9 E-9	3 E-10	3 E-9
OS3-F1-SB03	2	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Minimum		2.8 E-6	3.3 E-7	7.3 E-7	2.9 E-7	2 E-9	7 E-11	7 E-10
Median		3.7 E-5	4.3 E-6	1.1 E-5	3.7 E-6	8 E-9	2 E-10	2 E-9
Maximum		6.8 E-5	8.0 E-6	1.9 E-5	6.8 E-6	9 E-9	3 E-10	3 E-9

Key:
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.7-23 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
A48-RC08-SP01	10	**NA**	**NA**	**NA**	**NA**	0 E+0	0 E+0	0 E+0
A48-RC08-SP01	20	4.7 E-4	2.0 E-4	2.3 E-6	7.2 E-5	5 E-8	2 E-11	1 E-8
A48-RC08-SP01	30	2.2 E-3	9.3 E-4	1.3 E-5	3.4 E-4	2 E-8	8 E-12	6 E-9
A48-ST13-SP03	10	1.8 E-3	7.9 E-4	7.4 E-6	2.8 E-4	2 E-7	4 E-11	4 E-8
A48-ST13-SP03	20	5.5 E-4	2.4 E-4	2.7 E-6	8.5 E-5	7 E-8	2 E-11	2 E-8
A48-ST13-SP04	10	4.5 E-3	1.9 E-3	1.8 E-5	6.9 E-4	3 E-7	6 E-11	6 E-8
A48-ST13-SP04	20	3.0 E-3	1.3 E-3	1.5 E-5	4.6 E-4	2 E-7	5 E-11	4 E-8
A48-ST13-SP04	30	2.6 E-3	1.1 E-3	1.5 E-5	4.1 E-4	2 E-7	7 E-11	5 E-8
A48-ST13-SP05	10	4.9 E-4	2.1 E-4	2.0 E-6	7.5 E-5	2 E-8	6 E-12	5 E-9
A48-ST13-SP05	20	3.1 E-4	1.3 E-4	1.5 E-6	4.8 E-5	2 E-8	5 E-12	4 E-9
A48-ST13-SP05	30	2.1 E-3	9.1 E-4	1.2 E-5	3.3 E-4	3 E-7	1 E-10	8 E-8
A48-ST13-SP06	10	5.3 E-2	2.3 E-2	2.1 E-4	8.2 E-3	**3 E-6**	7 E-10	7 E-7
A48-ST13-SP06	20	4.9 E-3	2.1 E-3	2.4 E-5	7.6 E-4	2 E-7	7 E-11	5 E-8
A48-ST13-SP06	30	6.8 E-3	2.9 E-3	3.9 E-5	1.1 E-3	4 E-7	1 E-10	9 E-8
A48-ST13-SP07	10	4.1 E-3	1.8 E-3	1.6 E-5	6.4 E-4	3 E-7	7 E-11	7 E-8
A48-ST13-SP07	20	1.4 E-3	6.1 E-4	6.9 E-6	2.2 E-4	1 E-7	3 E-11	3 E-8
A48-ST13-SP07	30	2.5 E-3	1.1 E-3	1.4 E-5	3.9 E-4	2 E-7	5 E-11	4 E-8
A48-ST13-SP08	10	4.0 E-4	1.7 E-4	1.6 E-6	6.3 E-5	2 E-8	4 E-12	4 E-9
A48-ST13-SP08	20	2.5 E-4	1.1 E-4	1.2 E-6	3.9 E-5	1 E-8	3 E-12	3 E-9
A48-ST19-SP03	10	4.5 E-4	1.9 E-4	1.8 E-6	7.0 E-5	3 E-8	8 E-12	8 E-9
A48-ST19-SP03	20	4.2 E-5	1.8 E-5	2.0 E-7	6.5 E-6	7 E-9	2 E-12	2 E-9
OS3-F1-SP01	10	8.2 E-4	3.5 E-4	3.3 E-6	1.3 E-4	1 E-7	3 E-11	3 E-8
OS3-F1-SP01	20	1.2 E-4	4.9 E-5	5.7 E-7	1.8 E-5	2 E-8	6 E-12	4 E-9
OS3-F1-SP02	10	3.2 E-4	1.4 E-4	1.3 E-6	5.0 E-5	6 E-8	1 E-11	1 E-8
OS3-F1-SP02	20	1.3 E-5	5.7 E-6	6.3 E-8	2.1 E-6	4 E-9	1 E-12	9 E-10
OS3-F1-SP03	10	2.9 E-4	1.2 E-4	1.2 E-6	4.5 E-5	0 E+0	0 E+0	0 E+0
OS3-F1-SP03	20	2.6 E-4	1.1 E-4	1.2 E-6	4.0 E-5	0 E+0	0 E+0	0 E+0
Minimum		1.3 E-5	5.7 E-6	6.3 E-8	2.1 E-6	0 E+0	0 E+0	0 E+0
Median		6.8 E-4	2.9 E-4	3.0 E-6	1.1 E-4	6 E-8	2 E-11	1 E-8
Maximum		5.3 E-2	2.3 E-2	2.1 E-4	8.2 E-3	**3 E-6**	7 E-10	7 E-7

Key:
NA = Not applicable



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Surface Water Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 600 '

0 600 1,200

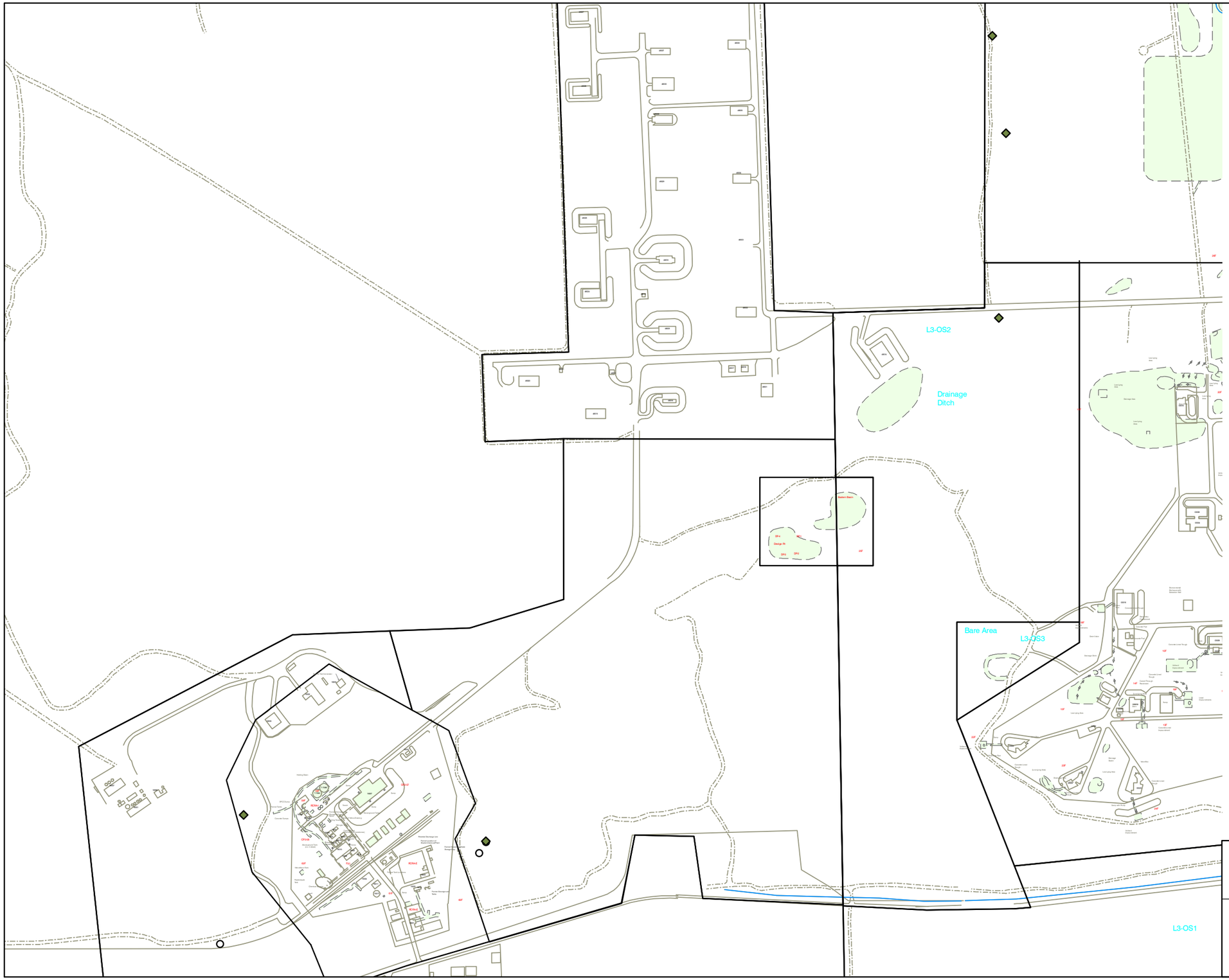
AEROJET

Environmental Remediation

Figure 5.8-1

Residential
Non-Cancer Effects – All Media
Open Space 1, 2, 3 and 4

DRAFT



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Cancer Risk > 10-6 Contour

Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 600 '

0 600 1,200

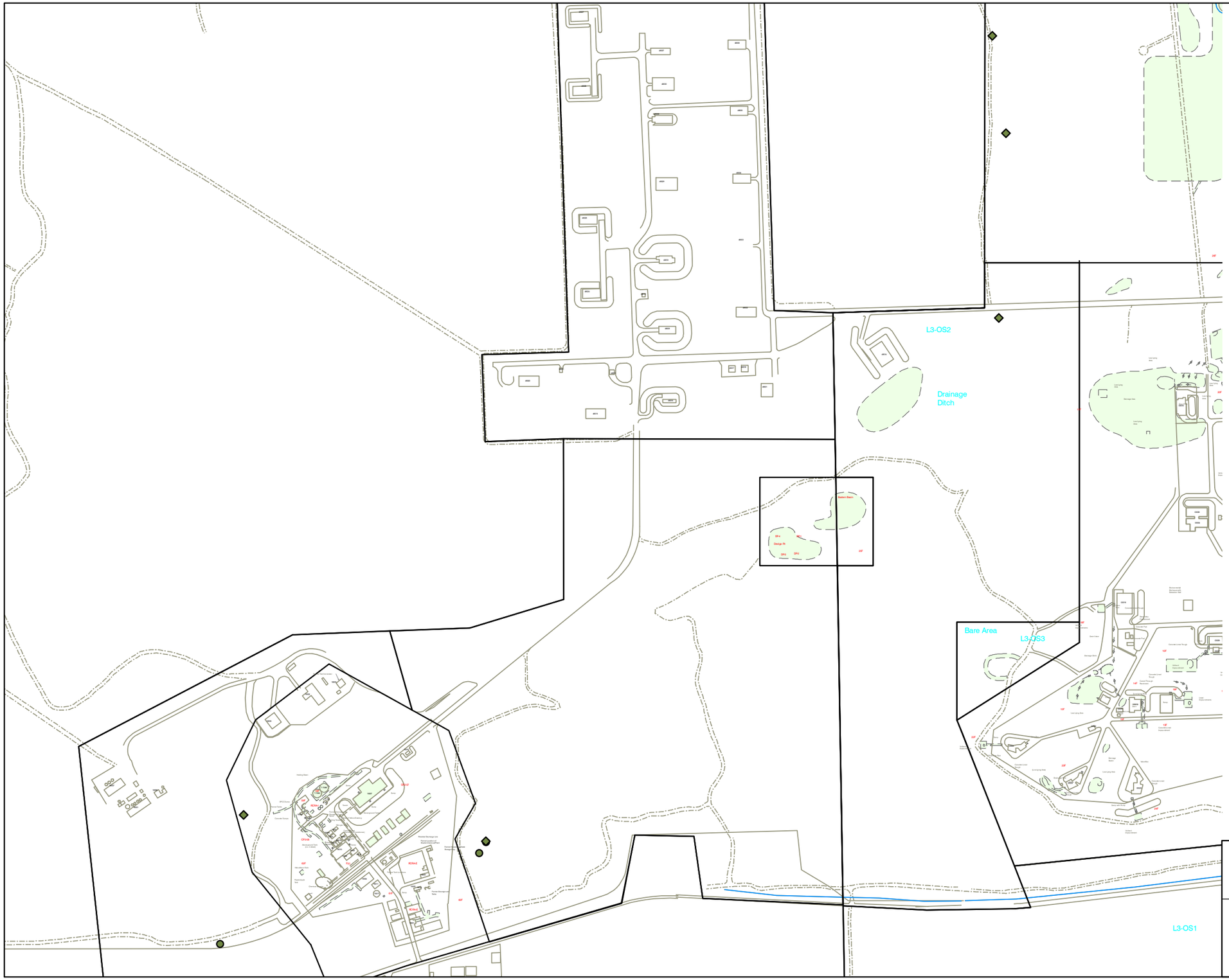
AEROJET

Environmental Remediation

Figure 5.8-2

Residential
Cancer Risks – All Media
Open Space 1, 2, 3 and 4

DRAFT



Legend

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0
- Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 600 '

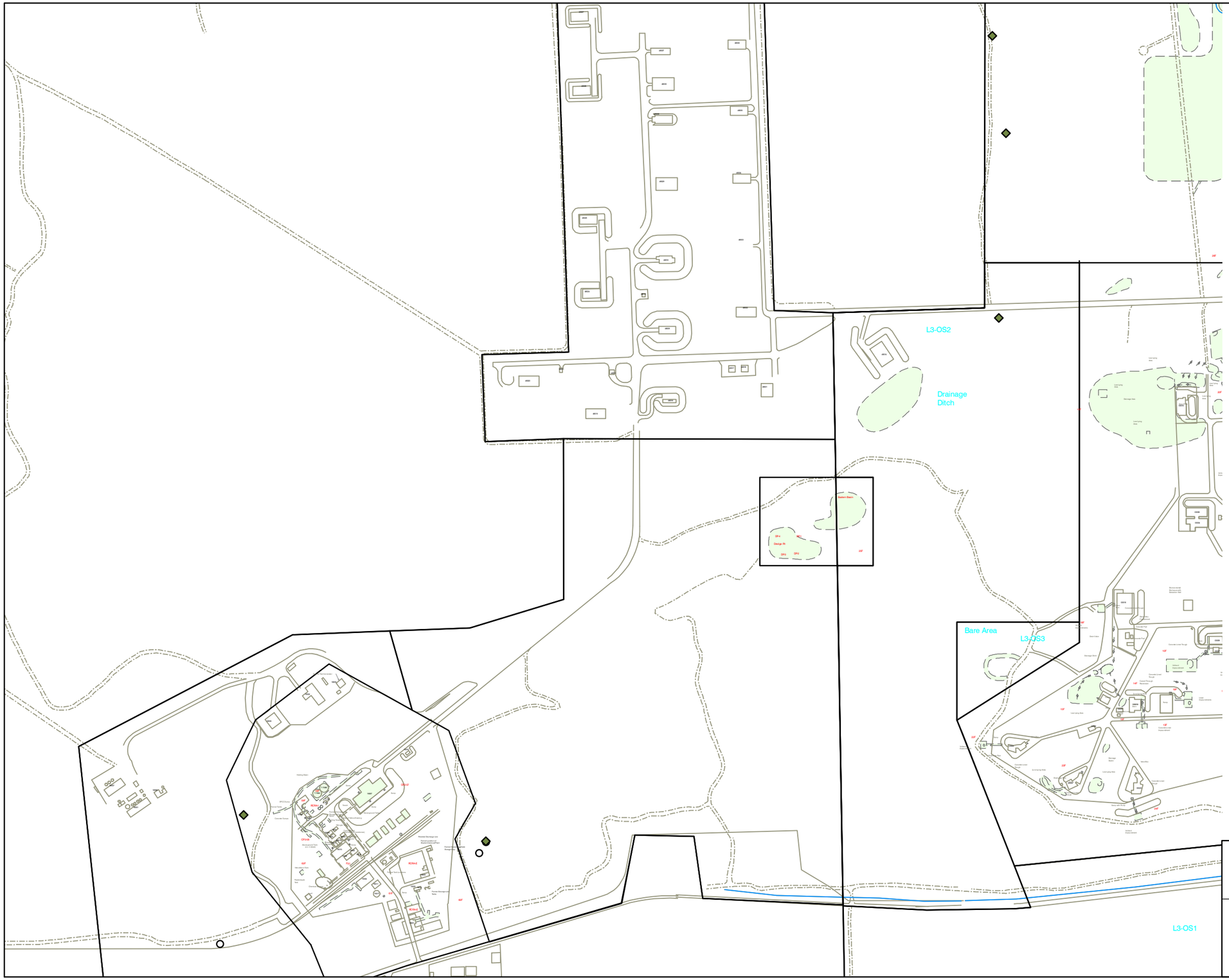
0 600 1,200

AEROJET

Environmental Remediation

DRAFT

Figure 5.8-3
Construction Worker
Non-Cancer Effects – All Media
Open Space 1, 2, 3 and 4



Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4
- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 600 '

0 600 1,200

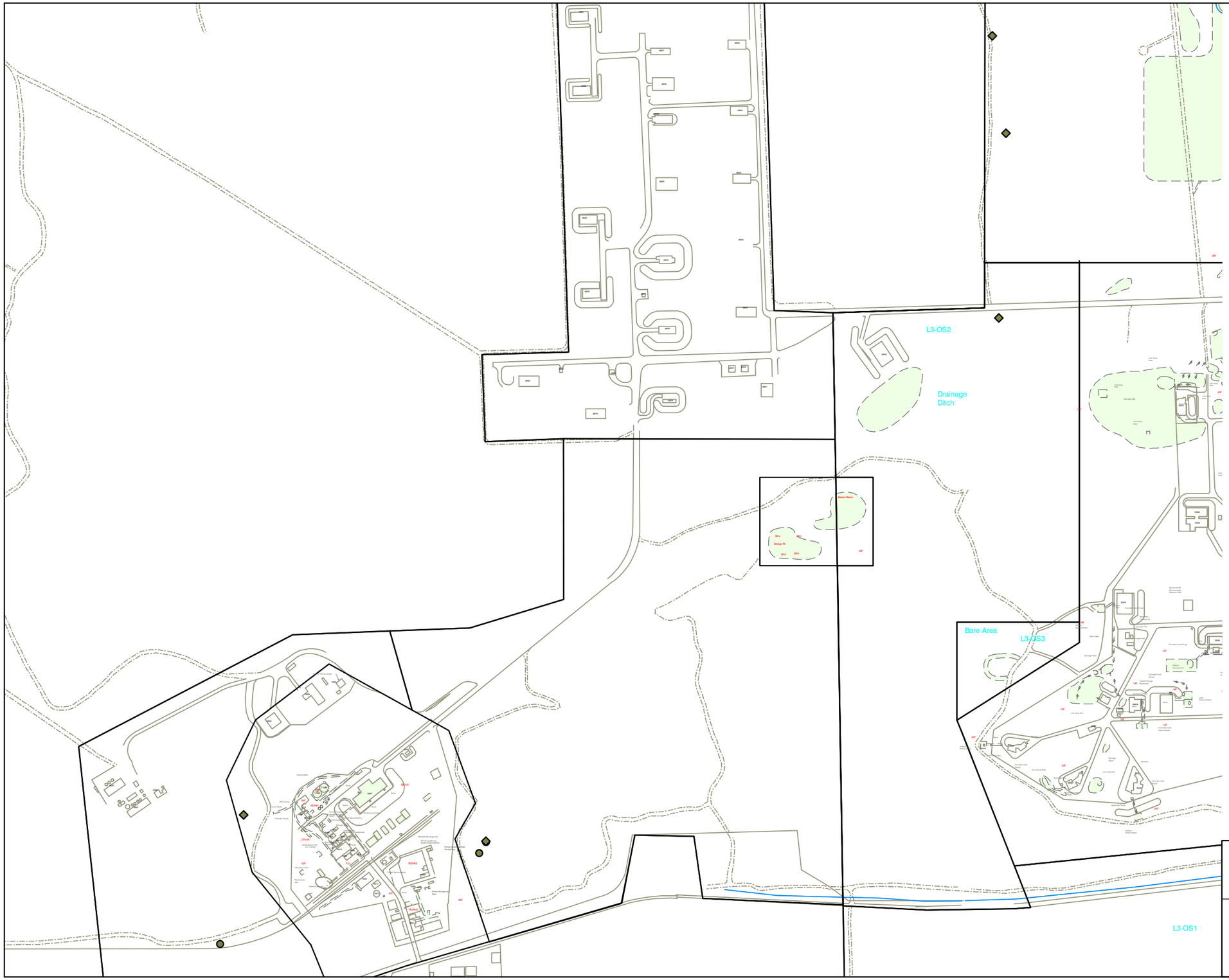
AEROJET

Environmental Remediation

Figure 5.8-4

Construction Worker
Cancer Risks – All Media
Open Space 1, 2, 3 and 4

DRAFT



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 600 '

0 600 1,200

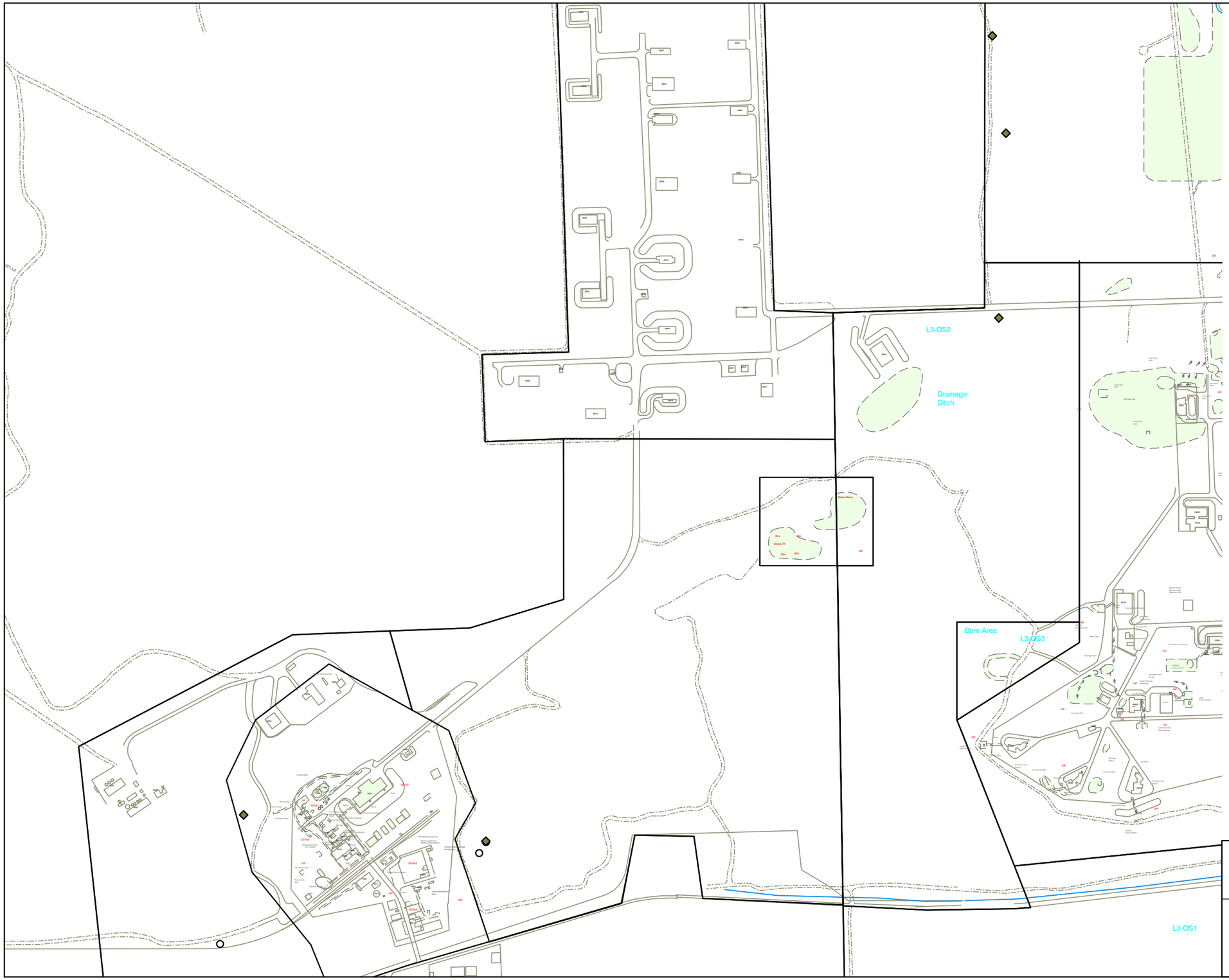
AEROJET

Environmental Remediation

Figure 5.8-5

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Open Space 1, 2, 3 and 4

DRAFT



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 600 '

0 600 1,200

AEROJET

Environmental Remediation

Figure 5.8-6

Commercial/Industrial Worker
Cancer Risks – All Media
Open Space 1, 2, 3 and 4

DRAFT

Table 5.8-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Open Space 1, 2, 3, 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)
Open Space 1,2,3,4	71-55-6	1,1,1-Trichloroethane	ND	ND	$\mu g/m^3$	ND	10	16	0	0.0%	6.4-7.5	99100	nc	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	8-9.5	2	ca	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	6.4-7.5	7	ca	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	$\mu g/m^3$	ND	40	16	0	0.0%	4.7-5.6	66	ca	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	$\mu g/m^3$	ND	10	16	0	0.0%	4.6-5.5	3139	nc	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	21-25	NA	ca	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	34-41	9914	nc	N	ND
	95-63-6	1,2,4-Trimethylbenzene	7.7	21	$\mu g/m^3$	OS4-F1-SP02	10	16	4	25.0%	5.7-6.8	274	nc	Y	
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	9-11	2	ca	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	10	16	0	0.0%	7-8.3	9116	nc	N	ND
	107-06-2	1,2-Dichloroethane	ND	ND	$\mu g/m^3$	ND	30	16	0	0.0%	4.7-5.6	5	ca	N	ND
	78-87-5	1,2-Dichloropropane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	5.4-6.4	11	ca	N	ND
	108-67-8	1,3,5-Trimethylbenzene	6.6	6.6	$\mu g/m^3$	OS4-F1-SP02	10	16	1	6.3%	5.7-6.8	274	nc	Y	
	106-99-0	1,3-Butadiene	4	30	$\mu g/m^3$	OS1-F2-SP01, OS1-F2-SP01	10 20	16	13	81.3%	2.6-3	1	ca	N	NR
	541-73-1	1,3-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	7-8.3	4785	nc	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	7-8.3	10	ca	N	ND
	123-91-1	1,4-Dioxane	ND	ND	$\mu g/m^3$	ND	20	16	0	0.0%	17-20	14	ca	N	ND
	540-84-1	2,2,4-Trimethylpentane	8.4	22	$\mu g/m^3$	OS4-F1-SP03	20	16	4	25.0%	5.4-6.4	31500	nc	Y	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	22	370	$\mu g/m^3$	OS4-F1-SP03	10	16	8	50.0%	3.4-17	225572	nc	Y	
	591-78-6	2-Hexanone	28	48	$\mu g/m^3$	OS4-F1-SP03	10	16	2	12.5%	19-23	3626	nc	Y	
	67-63-0	2-Propanol	15	25	$\mu g/m^3$	OS4-F1-SP01	10	16	2	12.5%	11-14	456	nc	Y	
	107-05-1	3-Chloropropene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	14-17	NA	nc	N	ND
	622-96-8	4-Ethyltoluene	8.5	28	$\mu g/m^3$	OS4-F1-SP02	20	16	4	25.0%	5.7-6.8	31500	nc	Y	
	108-10-1	4-Methyl-2-pentanone	5.2	27	$\mu g/m^3$	OS1-F2-SP01	10	16	4	25.0%	4.8-5.6	3626	nc	Y	
	67-64-1	Acetone	59	300	$\mu g/m^3$	OS3-F1-SP03	20	16	7	43.8%	11-160	15460	nc	Y	
	100-44-7	alpha-Chlorotoluene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	6-7.1	2	ca	N	ND
	71-43-2	Benzene	3.8	98	$\mu g/m^3$	OS4-F1-SP03	20	16	11	68.8%	3.7-4.4	4	ca	Y	
	75-27-4	Bromodichloromethane	ND	ND	$\mu g/m^3$	ND	20	16	0	0.0%	7.8-9.2	3	ca	N	ND
	75-25-2	Bromoform	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	12-14	121	nc	N	ND
	74-83-9	Bromomethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	4.5-5.4	227	nc	N	ND
	104-51-8	Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	26-30	6474	nc	N	ND
	75-15-0	Carbon Disulfide	5.1	14	$\mu g/m^3$	OS3-F1-SP01	10	16	7	43.8%	3.6-4.3	31158	nc	Y	
	56-23-5	Carbon Tetrachloride	ND	ND	$\mu g/m^3$	ND	20	16	0	0.0%	7.3-8.7	3	ca	N	ND
	108-90-7	Chlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	5.4-6.4	45404	nc	N	ND
	75-00-3	Chloroethane	3.6	3.6	$\mu g/m^3$	OS4-F1-SP02	10	16	1	6.3%	3.1-3.6	122	ca	Y	
	67-66-3	Chloroform	ND	ND	$\mu g/m^3$	ND	20	16	0	0.0%	5.7-6.7	20	ca	N	ND
	74-87-3	Chloromethane	ND	ND	$\mu g/m^3$	ND	18	16	0	0.0%	9.6-11	103	nc	N	ND
	156-59-2	cis-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	10	16	0	0.0%	4.6-5.5	1590	nc	N	ND
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	5.3-6.3	NA	ca	N	ND

Table 5.8-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Open Space 1, 2, 3, 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)
Open Space 1,2,3,4	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	5.7-6.8	18309	nc	N	ND
	110-82-7	Cyclohexane	15	39	$\mu g/m^3$	OS4-F1-SP03	20	16	4	25.0%	4-4.8	270853	nc	Y	
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	9.9-12	5	ca	N	ND
	64-17-5	Ethanol	13	320	$\mu g/m^3$	OS4-F1-SP02	20	16	10	62.5%	8.8-46	78800	nc	Y	
	100-41-4	Ethyl Benzene	69	120	$\mu g/m^3$	OS4-F1-SP02	20	16	4	25.0%	5-6	42	nc	Y	
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$	ND	20	16	0	0.0%	6.5-7.8	31446	nc	N	ND
	76-13-1	Freon 113	19	54	$\mu g/m^3$	OS4-F1-SP01	20	16	3	18.8%	8.9-10	1360890	nc	Y	
	76-14-2	Freon 114	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	8.1-9.6	NA	nc	N	ND
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$	ND	30	16	0	0.0%	5.8-6.8	9139	nc	N	ND
	142-82-5	Heptane	8.4	120	$\mu g/m^3$	OS4-F1-SP03	20	16	8	50.0%	4.8-5.6	8701	nc	Y	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	50-59	5	ca	N	ND
	110-54-3	Hexane	4.8	120	$\mu g/m^3$	OS4-F1-SP03	20	16	10	62.5%	4.1-4.9	8701	nc	Y	
	mp-Xyl	m,p-Xylene	5.7	370	$\mu g/m^3$	OS4-F1-SP02	20	16	9	56.3%	5-6	31500	nc	Y	
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	4.2-5	400	ca	N	ND
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	4-4.8	104	ca	N	ND
	95-47-6	o-Xylene	42	91	$\mu g/m^3$	OS4-F1-SP02	20	16	4	25.0%	5-6	31500	nc	Y	
	99-87-6	p-Cymene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	26-30	NA	nc	N	ND
	103-65-1	Propylbenzene	7.4	7.4	$\mu g/m^3$	OS4-F1-SP02, OS4-F1-SP02	10 20	16	2	12.5%	5.7-6.8	6447	nc	Y	
	135-98-8	sec-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	26-30	NA	nc	N	ND
	100-42-5	Styrene	12	19	$\mu g/m^3$	OS4-F1-SP03	20	16	3	18.8%	5-5.9	40940	nc	Y	
	98-06-6	tert-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	26-30	6479	nc	N	ND
	127-18-4	Tetrachloroethene	31	160	$\mu g/m^3$	OS4-F1-SP01	10	16	4	25.0%	7.9-9.4	18	ca	Y	
	109-99-9	Tetrahydrofuran	3.6	25	$\mu g/m^3$	OS4-F1-SP03	20	16	7	43.8%	3.4-4.1	53	ca	Y	
	108-88-3	Toluene	5.4	1000	$\mu g/m^3$	OS4-F1-SP02, OS4-F1-SP03	20 10	16	15	93.8%	4.4-5.2	13500	nc	Y	
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	4.6-5.5	3190	nc	N	ND
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0.0%	5.3-6.3	NA	ca	N	ND
	79-01-6	Trichloroethene	13	32	$\mu g/m^3$	OS3-F1-SP02	10	16	4	25.0%	6.3-7.4	53	ca	Y	
	75-01-4	Vinyl Chloride	ND	ND	$\mu g/m^3$	ND	20	16	0	0.0%	3-3.5	1	ca	N	ND

Footnotes:
(1) See Table 1
(2) FOD = Frequency of detection screening
BSL = Below screening level
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible

Key:
bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
$\mu g/m^3$ = Micrograms per cubic meter
nc = Noncancer

Table 5.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Open Space 1, 2, 3, 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 1, 2, 3, 4	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	6.2	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	60	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.061	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	53	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.35	ca	N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.61	nc	N	ND	NA
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	18	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.55-0.71	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	6.3	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.17	nc	N	ND	NA
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	310	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	7	0	0%	0.55-0.71	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	1.8	nc	N	ND	NA
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	4	0	0%	0.0082-0.0086	2.3	ca	N	ND	NA
	72-55-9	4,4'-DDE	ND	ND	mg/kg	ND	ND	4	0	0%	0.0027-0.0029	1.6	ca	N	ND	NA
	50-29-3	4,4'-DDT	ND	ND	mg/kg	ND	ND	4	0	0%	0.0082-0.0086	1.6	ca	N	ND	NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.61	nc	N	ND	NA
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	24	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	7	0	0%	0.55-0.71	2.3	ca	N	ND	NA
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	370	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	231.60	nc	N	ND	NA
	309-00-2	Aldrin	ND	ND	mg/kg	ND	ND	4	0	0%	0.0014-0.0014	6.11	ca	N	ND	NA
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	4	0	0%	0.0014-0.0014	0.09022	ca	N	ND	NA
	7429-90-5	Aluminum	11000	52000	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	7600	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	8.5	ca	N	ND	NA
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	2200	nc	N	ND	NA
	7440-36-0	Antimony	0.12	0.52	mg/kg	OS2-F1-SB01-1.0-T	1	9	7	78%	1.4-1.4	3	nc	N	BSL	NA
	7440-38-2	Arsenic	2.8	9.4	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	0.0062	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.44	ca	N	ND	NA
	7440-39-3	Barium	81	240	mg/kg	OS2-F1-SB01-1.0-T	1	9	9	100%	NA	520	nc	N	BSL	NA

Table 5.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Open Space 1, 2, 3, 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 1, 2, 3, 4	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	7	0	0%	0.39-0.5	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	0.062	ca	N	ND	NA
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	0.0038	ca	N	ND*	100%
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	7	0	0%	0.015-0.019	0.038	ca	N	ND	NA
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	231.60	nc	N	ND	NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	7	0	0%	0.55-0.71	10000	max	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	1800	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.3	1.2	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	15	nc	N	BSL	NA
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	4	0	0%	0.0014-0.0014	0.3158	ca	N	ND	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.022	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.29	ca	N	ND	NA
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	7	0	0%	0.55-0.71	3.5	ca	N	ND	NA
	7440-42-8	Boron	3.5	10	mg/kg	OS2-F1-SB01-1.0-T OS1-F1-SB01-1.0	1 1	9	9	100%	NA	1600	nc	N	BSL	NA
	7440-43-9	Cadmium	0.072	0.19	mg/kg	OS1-F1-SB01-1.0	1	9	9	100%	NA	0.17	nc	N	BG	NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	2.4	ca	N	ND	NA
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	4	0	0%	0.027-0.029	0.43	ca	N	ND	NA
	7440-47-3	Chromium	29	85	mg/kg	OS2-F1-SB01-11	11	9	9	100%	NA	10000	max	N	BSL	NA
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	0.38	ca	N	ND	NA
	7440-48-4	Cobalt	8.1	23	mg/kg	OS2-F1-SB01-1.0 OS2-F1-SB02-11	1 11	9	9	100%	NA	66	ca	N	BSL	NA
	7440-50-8	Copper	31	64	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	300	nc	N	BSL	NA
	319-86-8	delta-BHC	ND	ND	mg/kg	ND	ND	4	0	0%	0.0014-0.0014	NA		N	ND	NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	0.0062	ca	N	ND	NA
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	15	nc	N	ND	NA
	60-57-1	Dieldrin	ND	ND	mg/kg	ND	ND	4	0	0%	0.0027-0.0029	0.0304	ca	N	ND	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	4900	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	7	0	0%	0.44-0.57	610	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	240	nc	N	ND	NA
	959-98-8	Endosulfan I	ND	ND	mg/kg	ND	ND	4	0	0%	0.0027-0.0029	37	nc	N	ND	NA
	33213-65-9	Endosulfan II	ND	ND	mg/kg	ND	ND	4	0	0%	0.0027-0.0029	37	nc	N	ND	NA
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	4	0	0%	0.0082-0.0086	37.00	nc	N	ND	NA
	72-20-8	Endrin	ND	ND	mg/kg	ND	ND	4	0	0%	0.0027-0.0029	1.8	nc	N	ND	NA
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	4	0	0%	0.0082-0.0086	1.80	nc	N	ND	NA
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	4	0	0%	0.0082-0.0086	1.80	nc	N	ND	NA
	206-44-0	Fluoranthene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	230	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	270	nc	N	ND	NA
	58-89-9	gamma-BHC (Lindane)	ND	ND	mg/kg	ND	ND	4	0	0%	0.0014-0.0014	0.4372	ca	N	ND	NA
	76-44-8	Heptachlor	ND	ND	mg/kg	ND	ND	4	0	0%	0.0014-0.0014	0.1081	ca	N	ND	NA

Table 5.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Open Space 1, 2, 3, 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 1, 2, 3, 4	1024-57-3	Heptachlor epoxide	ND	ND	mg/kg	ND	ND	4	0	0%	0.0014-0.0014	0.05345	ca	N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.62	ca	N	ND	NA
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	7	0	0%	0.77-1	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	3.5	ca	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	0.062	ca	N	ND	NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	51	ca	N	ND	NA
	7439-92-1	Lead	3.9	12	mg/kg	OS2-F1-SB01-1.0-T	1	9	9	100%	NA	15	nc	N	BSL	NA
	7439-93-2	Lithium	4.7	23	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	160	nc	N	BSL	NA
	7439-96-5	Manganese	270	830	mg/kg	OS2-F1-SB02-11	11	9	9	100%	NA	180	nc	N	BG	NA
	7439-97-6	Mercury	0.028	0.12	mg/kg	OS2-F1-SB01-11	11	9	9	100%	NA	1.8	nc	N	BSL	NA
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	4	0	0%	0.0055-0.029	30.55	nc	N	ND	NA
	7439-98-7	Molybdenum	0.4	0.77	mg/kg	OS1-F1-SB01-5.0	5	9	8	89%	1.4-1.4	38	nc	N	BSL	NA
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	0.17	ca	N	ND	NA
	7440-02-0	Nickel	22	77	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	160	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	2	nc	N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.00095	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	0.007	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	7	0	0%	0.22-0.29	150	nc	N	ND	NA
	40487-42-1	Pendimethalin (Prowl)	ND	ND	mg/kg	ND	ND	4	0	0%	0.0068-0.0071	244.4	nc	N	ND	NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	7	0	0%	0.77-1	0.3	ca	N	ND*	100%
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	231.60	nc	N	ND	NA
	108-95-2	Phenol	1.3	2.7	mg/kg	OS2-F1-SB01-1.0	1	7	3	43%	0.28-0.29	1800	nc	Y		NA
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	7	0	0%	0.0073-0.0094	230	nc	N	ND	NA
	7782-49-2	Selenium	0.3	0.3	mg/kg	OS2-F1-SB01-1.0	1	9	1	11%	1.1-2.8	38	nc	N	BSL	NA
	7440-22-4	Silver	0.032	0.12	mg/kg	OS1-F1-SB01-1.0 OS2-F1-SB01-11	1 11	9	9	100%	NA	38	nc	N	BSL	NA
	7440-24-6	Strontium	23	51	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	4700	nc	N	BSL	NA
	7440-28-0	Thallium	0.2	0.25	mg/kg	OS2-F1-SB02-1 OS1-F1-SB01-5.0-T	1 5	9	8	89%	1.4-1.4	0.5	nc	N	BSL	NA
	7440-32-6	Titanium	550	1400	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	10000	nc	N	BSL	NA
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	4	0	0%	0.11-0.11	0.4422	ca	N	ND	NA
	7440-62-2	Vanadium	43	130	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	0.53	nc	N	BG	NA
	7440-66-6	Zinc	29	79	mg/kg	OS2-F1-SB01-1.0	1	9	9	100%	NA	2300	nc	N	BSL	NA

Footnotes:
(1) See Table 2
(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:
bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.8-3 Chemical of Potential Concern Summary
Open Space 1, 2, 3 and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
1,1,2,2-Tetrachloroethane	N	ND	NA	NA
1,1,1-Trichloroethane	N	ND	NA	NA
1,1,2-Trichloroethane	N	ND	NA	NA
1,1-Dichloroethane	N	ND	NA	NA
1,1-Dichloroethene	N	ND	NA	NA
1,1-Dichloropropene	N	ND	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	N	ND	N	ND
1,2,4-Trimethylbenzene	Y		NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	N	ND	NA	NA
1,2-Dichlorobenzene	N	ND	N	ND
1,2-Dichloroethane	N	ND	NA	NA
cis-1,2-Dichloroethene	N	ND	NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA
1,2-Dichloropropane	N	ND	NA	NA
1,2-Diphenylhydrazine	NA	NA	NA	NA
1,3,5-Trimethylbenzene	Y		NA	NA
1,3-Butadiene	N	NR	NA	NA
1,3-Dichlorobenzene	N	ND	N	ND
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	N	ND	N	ND
1,4-Dioxane	N	ND	NA	NA
2,2,4-Trimethylpentane	Y		NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	N	ND
2,4,6-Trichlorophenol	NA	NA	N	ND
2,4-Dichlorophenol	NA	NA	N	ND
2,4-Dimethylphenol	NA	NA	N	ND
2,4-Dinitrophenol	NA	NA	N	ND
2,4-Dinitrotoluene	NA	NA	N	ND
2,6-Dinitrotoluene	NA	NA	N	ND
2-Butanone (Methyl Ethyl Ketone)	Y		NA	NA
2-Chloronaphthalene	NA	NA	N	ND
2-Chlorophenol	NA	NA	N	ND
2-Chlorotoluene	NA	NA	NA	NA
2-Hexanone	Y		NA	NA
2-Methylnaphthalene	NA	NA	N	ND
2-Methylphenol	NA	NA	N	ND
2-Nitroaniline	NA	NA	N	ND
2-Nitrophenol	NA	NA	N	ND
2-Propanol	Y		NA	NA
3,3'-Dichlorobenzidine	NA	NA	N	ND*
3-Chloropropene	N	ND	NA	NA
3-Nitroaniline	NA	NA	N	ND
4,6-Dinitro-2-methylphenol	NA	NA	N	ND
4-Bromophenyl phenyl ether	NA	NA	N	ND
4-Chloro-3-methylphenol	NA	NA	N	ND
4-Chloroaniline	NA	NA	N	ND
4-Chlorophenyl phenyl ether	NA	NA	N	ND
4-Chlorotoluene	NA	NA	NA	NA
4-Ethyltoluene	Y		NA	NA
4-Methyl-2-pentanone	Y		NA	NA
4-Methylphenol	NA	NA	N	ND
4-Nitroaniline	NA	NA	N	ND
4-Nitrophenol	NA	NA	N	ND
Acenaphthene	NA	NA	N	ND
Acenaphthylene	NA	NA	N	ND
Acetone	Y		NA	NA
alpha-Chlorotoluene	N	ND	NA	NA
Aluminum	NA	NA	N	BG

Table 5.8-3 Chemical of Potential Concern Summary
Open Space 1, 2, 3 and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Aniline	NA	NA	N	ND
Anthracene	NA	NA	N	ND
Antimony	NA	NA	N	BSL
PCB-1016	NA	NA	NA	NA
PCB-1221	NA	NA	NA	NA
PCB-1232	NA	NA	NA	NA
PCB-1242	NA	NA	NA	NA
PCB-1248	NA	NA	NA	NA
PCB-1254	NA	NA	NA	NA
PCB-1260	NA	NA	NA	NA
Arsenic	NA	NA	N	BG
Azobenzene	NA	NA	N	ND
Barium	NA	NA	N	BSL
Benzene	Y		NA	NA
Benzidine	NA	NA	N	ND*
Benzo (a) anthracene	NA	NA	N	ND
Benzo (a) pyrene	NA	NA	N	ND*
Benzo (b & k) fluoranthene (total)	NA	NA	N	ND
Benzo (ghi) perylene	NA	NA	N	ND
Benzo(b)fluoranthene	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA
Benzoic acid	NA	NA	N	ND
Benzyl alcohol	NA	NA	N	ND
Benzyl butyl phthalate	NA	NA	N	ND
Beryllium	NA	NA	N	BSL
Bis(2-Chloroethoxy)methane	NA	NA	N	ND
Bis(2-Chloroethyl)ether	NA	NA	N	ND*
Bis(2-Chloroisopropyl)ether	NA	NA	N	ND
Bis(2-Ethylhexyl)phthalate	NA	NA	N	ND
Boron	NA	NA	N	BSL
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	NA
Bromodichloromethane	N	ND	NA	NA
Bromoform	N	ND	NA	NA
Bromomethane	N	ND	NA	NA
Butylbenzene	N	ND	NA	NA
Cadmium	NA	NA	N	BG
Calcium	NA	NA	NA	NA
Carbazole	NA	NA	N	ND
Carbon Disulfide	Y		NA	NA
Carbon Tetrachloride	N	ND	NA	NA
Chlorobenzene	N	ND	NA	NA
Chloroethane	Y		NA	NA
Chloroform	N	ND	NA	NA
Chloromethane	N	ND	NA	NA
Chromium	NA	NA	N	BSL
Chrysene	NA	NA	N	ND
cis-1,2-Dichloroethene	N	ND	NA	NA
cis-1,3-Dichloropropene	N	ND	NA	NA
Cobalt	NA	NA	N	BSL
Copper	NA	NA	N	BSL
Cyclohexane	Y		NA	NA
Dibenz (a,h) anthracene	NA	NA	N	ND
Dibenzofuran	NA	NA	N	ND
Dibromochloromethane	N	ND	NA	NA
Dibromomethane	NA	NA	NA	NA
Freon 12	N	ND	NA	NA
Diesel Range Organics (C10-C28)	NA	NA	NA	NA
Diethyl phthalate	NA	NA	N	ND
Dimethyl phthalate	NA	NA	N	ND
Di-n-butyl phthalate	NA	NA	N	ND
Di-n-octyl phthalate	NA	NA	N	ND

Table 5.8-3 Chemical of Potential Concern Summary
Open Space 1, 2, 3 and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Ethanol	Y		NA	NA
Ethyl benzene	Y		NA	NA
Fluoranthene	NA	NA	N	ND
Fluorene	NA	NA	N	ND
Freon 113	Y		NA	NA
Freon 114	N	ND	NA	NA
Heptane	Y		NA	NA
Hexachlorobenzene	NA	NA	N	ND*
Hexachlorobutadiene	N	ND	N	ND
Hexachlorocyclopentadiene	NA	NA	N	ND
Hexachloroethane	NA	NA	N	ND
Hexane	Y		NA	NA
Chromium VI	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	N	ND
Iron	NA	NA	NA	NA
Isophorone	NA	NA	N	ND
Cumene	N	ND	NA	NA
Lead	NA	NA	N	BSL
Lithium	NA	NA	N	BSL
m,p-Xylene	Y		NA	NA
Magnesium	NA	NA	NA	NA
Manganese	NA	NA	N	BG
Mercury	NA	NA	N	BSL
Methyl tert-butyl ether	N	ND	NA	NA
Methylene Chloride	N	ND	NA	NA
Molybdenum	NA	NA	N	BSL
Motor Oil Range Organics (C16-C36)	NA	NA	NA	NA
Naphthalene	NA	NA	N	ND
Butylbenzene	N	ND	NA	NA
Nickel	NA	NA	N	BSL
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	NA	NA	N	ND
N-Nitrosodimethylamine	NA	NA	N	ND*
N-Nitrosodi-n-propylamine	NA	NA	N	ND*
N-Nitrosodiphenylamine	NA	NA	N	ND
Propylbenzene	Y		NA	NA
o-Xylene	Y		NA	NA
Pentachlorophenol	NA	NA	N	ND*
Perchlorate	NA	NA	NA	NA
Phenanthrene	NA	NA	N	ND
Phenol	NA	NA	Y	
p-Cymene	N	ND	NA	NA
Polychlorinated biphenyl	NA	NA	NA	NA
Potassium	NA	NA	NA	NA
Pyrene	NA	NA	N	ND
sec-Butylbenzene	N	ND	NA	NA
Selenium	NA	NA	N	BSL
Silver	NA	NA	N	BSL
Sodium	NA	NA	NA	NA
Strontium	NA	NA	N	BSL
Styrene	Y		NA	NA
tert-Butylbenzene	N	ND	NA	NA
Tetrachloroethene	Y		NA	NA
Tetrahydrofuran	Y		NA	NA
Thallium	NA	NA	N	BSL
Tin	NA	NA	NA	NA
Titanium	NA	NA	N	BSL
Toluene	Y		NA	NA
Total Cyanide	NA	NA	NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA

Table 5.8-3 Chemical of Potential Concern Summary
Open Space 1, 2, 3 and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
trans-1,3-Dichloropropene	N	ND	NA	NA
Trichloroethene	Y		NA	NA
Freon 11	N	ND	NA	NA
Vanadium	NA	NA	N	BG
Vinyl Chloride	N	ND	NA	NA
Xylenes (total)	NA	NA	NA	NA
Zinc	NA	NA	N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern
NA = Not applicable

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Table 5.8-4 *Outdoor Air Exposure Point Concentration Results*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg, Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.8-5 ***Residential Soil Vapor to Indoor Air Attenuation Factors***
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors	
	Feet bgs	
Chemical/Feet bgs	**10**	**20**
2-Propanol	5.2 E-4	3.0 E-4
Benzene	5.2 E-4	2.8 E-4
Chloroethane	1.1 E-3	7.3 E-4
Ethylbenzene	4.6 E-4	2.5 E-4
Freon 113	4.7 E-4	2.7 E-4
Heptane	9.3 E-4	5.8 E-4
Hexane	9.3 E-4	5.6 E-4
2-Hexanone	4.6 E-4	2.6 E-4
Tetrachloroethylene	4.4 E-4	2.4 E-4
Tetrahydrofuran	6.0 E-4	3.5 E-4
Trichloroethylene	4.8 E-4	2.7 E-4
1,2,4-Trimethylbenzene	3.8 E-4	2.1 E-4
1,3,5-Trimethylbenzene	3.8 E-4	2.1 E-4
2,2,4-Trimethylpentane	5.1 E-4	2.9 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	2.8 E-4
4-Ethyltoluene	5.1 E-4	2.9 E-4
4-Methyl-2-pentanone	4.6 E-4	2.6 E-4
Acetone	6.8 E-4	4.0 E-4
Carbon Disulfide	5.9 E-4	3.4 E-4
Cyclohexane	4.8 E-4	2.7 E-4
Ethanol	8.4 E-4	5.2 E-4
o-Xylene	5.1 E-4	2.9 E-4
m,p-Xylene	4.6 E-4	2.6 E-4
Propylbenzene	3.8 E-4	2.1 E-4
Styrene	4.4 E-4	2.4 E-4
Toluene	5.1 E-4	2.9 E-4

Key:
bgs = Below ground surface

Table 5.8-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors Feet bgs	
Chemical/Feet bgs	**10**	**20**
2-Propanol	2.6 E-4	1.5 E-4
Benzene	2.6 E-4	1.4 E-4
Chloroethane	5.5 E-4	3.6 E-4
Ethylbenzene	2.3 E-4	1.2 E-4
Freon 113	2.4 E-4	1.3 E-4
Heptane	4.6 E-4	2.9 E-4
Hexane	4.6 E-4	2.8 E-4
2-Hexanone	2.3 E-4	1.3 E-4
Tetrachloroethylene	2.2 E-4	1.2 E-4
Tetrahydrofuran	3.0 E-4	1.7 E-4
Trichloroethylene	2.4 E-4	1.3 E-4
1,2,4-Trimethylbenzene	1.9 E-4	1.1 E-4
1,3,5-Trimethylbenzene	1.9 E-4	1.1 E-4
2,2,4-Trimethylpentane	2.6 E-4	1.5 E-4
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.4 E-4
4-Ethyltoluene	2.6 E-4	1.5 E-4
4-Methyl-2-pentanone	2.3 E-4	1.3 E-4
Acetone	3.4 E-4	2.0 E-4
Carbon Disulfide	2.9 E-4	1.7 E-4
Cyclohexane	2.4 E-4	1.4 E-4
Ethanol	4.2 E-4	2.6 E-4
o-Xylene	2.6 E-4	1.5 E-4
m,p-Xylene	2.3 E-4	1.3 E-4
Propylbenzene	1.9 E-4	1.1 E-4
Styrene	2.2 E-4	1.2 E-4
Toluene	2.6 E-4	1.5 E-4

Key:
bgs = Below ground surface

Table 5.8-7 ***Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air***
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical of Potential Concern	Diffusivity in Air (cm2/s)	10	20
2-Propanol	8.6 E-2	6.9 E-6	3.4 E-6
Benzene	8.8 E-2	7.0 E-6	3.5 E-6
Chloroethane	2.7 E-1	2.2 E-5	1.1 E-5
Ethylbenzene	7.5 E-2	6.0 E-6	3.0 E-6
Freon 113	7.8 E-2	6.2 E-6	3.1 E-6
Heptane	6.8 E-2	5.5 E-6	2.7 E-6
Hexane	2.0 E-1	1.6 E-5	8.0 E-6
2-Hexanone	7.5 E-2	6.0 E-6	3.0 E-6
Tetrachloroethylene	7.2 E-2	5.8 E-6	2.9 E-6
Tetrahydrofuran	1.1 E-1	8.4 E-6	4.2 E-6
Trichloroethylene	7.9 E-2	6.3 E-6	3.2 E-6
1,2,4-Trimethylbenzene	6.1 E-2	4.8 E-6	2.4 E-6
1,3,5-Trimethylbenzene	6.0 E-2	4.8 E-6	2.4 E-6
2,2,4-Trimethylpentane	8.7 E-2	6.9 E-6	3.5 E-6
2-Butanone (Methyl Ethyl Ketone)	8.1 E-2	6.5 E-6	3.2 E-6
4-Ethyltoluene	8.7 E-2	6.9 E-6	3.5 E-6
4-Methyl-2-pentanone	7.5 E-2	6.0 E-6	3.0 E-6
Acetone	1.2 E-1	9.9 E-6	5.0 E-6
Carbon Disulfide	1.0 E-1	8.3 E-6	4.2 E-6
Cyclohexane	8.0 E-2	6.4 E-6	3.2 E-6
Ethanol	1.6 E-1	1.3 E-5	6.3 E-6
m,p-Xylene	7.7 E-2	6.1 E-6	3.1 E-6
Propylbenzene	6.0 E-2	4.8 E-6	2.4 E-6
o-Xylene	8.7 E-2	6.9 E-6	3.5 E-6
Styrene	7.1 E-2	5.7 E-6	2.8 E-6
Toluene	8.7 E-2	6.9 E-6	3.5 E-6

a = USEPA, 1988, Superfund Exposure Assessment Manual

Ambient Air Attenuation Factor = $\frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm3/m3}}$

Dia =	chemical specific	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	2.0 E+7	cm^2	Area (assume 4500 cm x 4500 cm)
d =	305	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2.0	m	Breathing zone height
u =	3	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
cm^2/s = Square Centimeter per second
cm = Centimeter
m = Meter
m/s = Meter per second
$\mu g/m^3$ = Micrograms per cubic meter

Table 5.8-8 Soil Unit Hazard and Unit Cancer Risk Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child			Unit HI	Adult			Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
		Oral HQ	Dermal HQ	Inhal HQ		Oral HQ	Dermal HQ	Inhal HQ					
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.8-9 *Inhalation Unit Hazard and Unit Cancer Risk Results - Resident*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Chloroethane	1.0 E+0	2.2 E-1	9.4 E-2	NA
Ethylbenzene	1.0 E+0	2.2 E+0	9.6 E-1	1.3 E-3
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
2-Hexanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
1,3,5-Trimethylbenzene	1.0 E+0	3.8 E+2	1.6 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	2.2 E+1	9.6 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.5 E-1	1.9 E-1	NA
4-Ethyltoluene	1.0 E+0	2.2 E+1	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Cyclohexane	1.0 E+0	3.7 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
o-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Propylbenzene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Styrene	1.0 E+0	2.5 E+0	1.1 E+0	NA
Toluene	1.0 E+0	7.5 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.8-10 *Location-Specific Soil Risk Assessment Results - Resident*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (mg/kg)	Child Non-Cancer Hazard Index		Adult Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	
Sample Name	**Depth**	**Phenol**	**Phenol**	**HI**	**Phenol**	**HI**	**Phenol**	**ILCR**
Unit Hazard Child		5.5 E-5						
Unit Hazard Adult		6.4 E-6						
Unit Risk		NA						
OS1-F1-SB01	1	1.3	7.1 E-5	7.1 E-5	8.3 E-6	8.3 E-6	NA	NA
OS2-F1-SB01	1	2.7	1.5 E-4	1.5 E-4	1.7 E-5	1.7 E-5	NA	NA
OS2-F1-SB01	5		NA	NA	NA	NA	NA	NA
OS2-F1-SB01	11	1.7	9.3 E-5	9.3 E-5	1.1 E-5	1.1 E-5	NA	NA
OS2-F1-SB02	1		NA	NA	NA	NA	NA	NA
OS2-F1-SB02	5		NA	NA	NA	NA	NA	NA
OS2-F1-SB02	11		NA	NA	NA	NA	NA	NA

Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.8-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**
Unit Hazard Child		3.2 E+2	3.8 E+2	2.2 E+1	4.5 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+0	2.2 E-1	3.7 E-1	1.3 E+0	2.2 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0
Unit Hazard Adult		1.4 E+2	1.6 E+2	9.6 E+0	1.9 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+0	9.4 E-2	1.6 E-1	5.5 E-1	9.6 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0
Unit Risk		NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3
OS1-F2-SP01	10	7.70			79				27	280	14	9.7						10	37	8.3						14	
OS1-F2-SP01	20										12	12						12	22							7.8	
OS2-F1-SP01	10						15								15									48	5.9	7.6	
OS2-F1-SP01	20										6.0				13			8.4	15	5.7				31	14	21	
OS4-F1-SP01	10						25								200		51							160		6.6	17
OS4-F1-SP01	20									100	3.8	9.2			47		54		7.4					110	3.6	12	20
OS4-F1-SP02	10	21	6.6	8.4	170			24		59	53		3.6	15	200	94		63	51	260	57	7.4			7.3	810	
OS4-F1-SP02	20	14		20	180			28			88			32	320	120		100	95	370	91	7.4	15		18	1000	
OS4-F1-SP03	10	8.2		17	370	48		13		73	83			29	57	89		110	94	220	55		12		14	1000	
OS4-F1-SP03	20			22	340	28		8.5		68	98			39	66	69		120	120	170	42		19		25	780	

Table 5.8-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**HI**
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
OS1-F2-SP01	10	9.4 E-4	NA	NA	1.7 E-5	NA	NA	NA	9.2 E-6	1.3 E-4	5.4 E-4	1.8 E-5	NA	NA	NA	NA	NA	3.0 E-5	1.1 E-4	8.6 E-5	NA	NA	NA	NA	NA	5.4 E-5	NA	1.9 E-3
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	1.3 E-5	NA	NA	NA	NA	NA	2.2 E-5	3.9 E-5	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	3.4 E-4
OS2-F1-SP01	10	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-3	2.6 E-5	2.9 E-5	NA	3.4 E-3
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	8.6 E-6	NA	NA	1.6 E-5	2.7 E-5	3.4 E-5	NA	NA	NA	4.7 E-4	3.6 E-5	4.6 E-5	NA	7.6 E-4
OS4-F1-SP01	10	NA	NA	NA	NA	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	4.5 E-3	NA	2.5 E-5	3.0 E-5	8.0 E-3
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	8.0 E-5	1.0 E-5	NA	NA	3.1 E-5	NA	1.1 E-6	NA	1.3 E-5	NA	NA	NA	NA	1.7 E-3	9.3 E-6	2.6 E-5	2.0 E-5	1.9 E-3
OS4-F1-SP02	10	2.6 E-3	9.4 E-4	9.6 E-5	3.7 E-5	NA	NA	2.8 E-4	NA	2.8 E-5	2.0 E-3	NA	8.8 E-7	2.7 E-6	2.2 E-4	9.6 E-5	NA	1.9 E-4	1.5 E-4	2.7 E-3	6.5 E-4	1.8 E-4	NA	NA	3.2 E-5	3.1 E-3	NA	1.3 E-2
OS4-F1-SP02	20	9.5 E-4	NA	1.3 E-4	2.2 E-5	NA	NA	1.8 E-4	NA	NA	1.9 E-3	NA	NA	3.3 E-6	2.1 E-4	6.6 E-5	NA	1.9 E-4	1.7 E-4	2.2 E-3	6.0 E-4	1.0 E-4	9.1 E-6	NA	4.6 E-5	2.2 E-3	NA	8.9 E-3
OS4-F1-SP03	10	1.0 E-3	NA	2.0 E-4	8.1 E-5	1.6 E-5	NA	1.5 E-4	NA	3.5 E-5	3.2 E-3	NA	NA	5.2 E-6	6.1 E-5	9.1 E-5	NA	3.3 E-4	2.8 E-4	2.3 E-3	6.3 E-4	NA	1.3 E-5	NA	6.2 E-5	3.8 E-3	NA	1.2 E-2
OS4-F1-SP03	20	NA	NA	1.4 E-4	4.2 E-5	5.4 E-6	NA	5.6 E-5	NA	1.9 E-5	2.1 E-3	NA	NA	4.0 E-6	4.4 E-5	3.8 E-5	NA	2.2 E-4	2.2 E-4	1.0 E-3	2.8 E-4	NA	1.2 E-5	NA	6.5 E-5	1.7 E-3	NA	5.9 E-3

Table 5.8-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**HI**
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
OS1-F2-SP01	10	4.0 E-4	NA	NA	7.4 E-6	NA	NA	NA	3.9 E-6	5.8 E-5	2.3 E-4	7.8 E-6	NA	NA	NA	NA	NA	1.3 E-5	4.7 E-5	3.7 E-5	NA	NA	NA	NA	NA	2.3 E-5	NA	8.3 E-4
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	5.6 E-6	NA	NA	NA	NA	NA	9.6 E-6	1.7 E-5	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	1.5 E-4
OS2-F1-SP01	10	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-4	1.1 E-5	1.2 E-5	NA	1.4 E-3
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-5	NA	NA	NA	3.7 E-6	NA	NA	6.7 E-6	1.2 E-5	1.4 E-5	NA	NA	NA	2.0 E-4	1.5 E-5	2.0 E-5	NA	3.3 E-4
OS4-F1-SP01	10	NA	NA	NA	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	7.6 E-7	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	1.1 E-5	1.3 E-5	3.4 E-3
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	3.4 E-5	4.3 E-6	NA	NA	1.3 E-5	NA	4.6 E-7	NA	5.7 E-6	NA	NA	NA	NA	7.1 E-4	4.0 E-6	1.1 E-5	8.7 E-6	8.1 E-4
OS4-F1-SP02	10	1.1 E-3	4.0 E-4	4.1 E-5	1.6 E-5	NA	NA	1.2 E-4	NA	1.2 E-5	8.7 E-4	NA	3.8 E-7	1.2 E-6	9.2 E-5	4.1 E-5	NA	8.0 E-5	6.5 E-5	1.2 E-3	2.8 E-4	7.7 E-5	NA	NA	1.4 E-5	1.3 E-3	NA	5.7 E-3
OS4-F1-SP02	20	4.1 E-4	NA	5.6 E-5	9.6 E-6	NA	NA	7.9 E-5	NA	NA	7.9 E-4	NA	NA	1.4 E-6	9.1 E-5	2.8 E-5	NA	8.0 E-5	7.3 E-5	9.3 E-4	2.6 E-4	4.3 E-5	3.9 E-6	NA	2.0 E-5	9.4 E-4	NA	3.8 E-3
OS4-F1-SP03	10	4.3 E-4	NA	8.4 E-5	3.5 E-5	7.0 E-6	NA	6.4 E-5	NA	1.5 E-5	1.4 E-3	NA	NA	2.2 E-6	2.6 E-5	3.9 E-5	NA	1.4 E-4	1.2 E-4	9.8 E-4	2.7 E-4	NA	5.6 E-6	NA	2.7 E-5	1.6 E-3	NA	5.3 E-3
OS4-F1-SP03	20	NA	NA	6.2 E-5	1.8 E-5	2.3 E-6	NA	2.4 E-5	NA	8.3 E-6	8.8 E-4	NA	NA	1.7 E-6	1.9 E-5	1.6 E-5	NA	9.6 E-5	9.2 E-5	4.3 E-4	1.2 E-4	NA	5.0 E-6	NA	2.8 E-5	7.3 E-4	NA	2.5 E-3

Table 5.8-11
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																										
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**ILCR**
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
OS1-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
OS2-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	3.6 E-9	NA	NA	7 E-8
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	4.9 E-9	NA	NA	5 E-8
OS4-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	8.4 E-9	2 E-7
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-8	1.3 E-9	NA	5.6 E-9	1 E-7
OS4-F1-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	5.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	5 E-7
OS4-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	4 E-7
OS4-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-7	NA	NA	NA	NA	5.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-9	NA	NA	7 E-7
OS4-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-7	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-9	NA	NA	4 E-7

Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.8-5) x the unit hazard or unit risk for the chemical).

Table 5.8-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**
Unit Hazard Child		3.2 E+2	3.8 E+2	2.2 E+1	4.5 E-1	7.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+0	2.2 E-1	3.7 E-1	1.3 E+0	2.2 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0
Unit Hazard Adult		1.4 E+2	1.6 E+2	9.6 E+0	1.9 E-1	3.2 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+0	9.4 E-2	1.6 E-1	5.5 E-1	9.6 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0
Unit Risk		NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3
OS1-F2-SP01	10	7.70			79				27	280	14	9.7						10	37	8.3						14	
OS1-F2-SP01	20										12	12						12	22							7.8	
OS2-F1-SP01	10						15								15									48	5.9	7.6	
OS2-F1-SP01	20										6.0				13			8.4	15	5.7				31	14	21	
OS4-F1-SP01	10						25								200		51							160		6.6	17
OS4-F1-SP01	20									100	3.8	9.2			47		54		7.4					110	3.6	12	20
OS4-F1-SP02	10	21	6.6	8.4	170			24		59	53		3.6	15	200	94		63	51	260	57	7.4			7.3	810	
OS4-F1-SP02	20	14		20	180			28			88			32	320	120		100	95	370	91	7.4	15		18	1000	
OS4-F1-SP03	10	8.2		17	370	48		13		73	83			29	57	89		110	94	220	55		12		14	1000	
OS4-F1-SP03	20			22	340	28		8.5		68	98			39	66	69		120	120	170	42		19		25	780	

Table 5.8-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**HI**
Unit Hazard Child																											
Unit Hazard Adult																											
Unit Risk																											
OS1-F2-SP01	10	1.2 E-5	NA	NA	2.3 E-7	NA	NA	NA	1.2 E-7	2.0 E-6	7.3 E-6	2.6 E-7	NA	NA	NA	NA	NA	1.7 E-7	1.9 E-6	1.1 E-6	NA	NA	NA	NA	NA	7.3 E-7	NA	2.6 E-5
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	1.6 E-7	NA	NA	NA	NA	NA	1.0 E-7	5.6 E-7	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	4.2 E-6
OS2-F1-SP01	10	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	3.7 E-7	3.9 E-7	NA	4.4 E-5
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	1.0 E-7	NA	NA	7.3 E-8	3.8 E-7	3.9 E-7	NA	NA	NA	5.7 E-6	4.4 E-7	5.4 E-7	NA	9.2 E-6
OS4-F1-SP01	10	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	5.9 E-5	NA	3.4 E-7	4.0 E-7	1.1 E-4
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	9.9 E-7	1.2 E-7	NA	NA	3.8 E-7	NA	1.3 E-8	NA	1.9 E-7	NA	NA	NA	NA	2.0 E-5	1.1 E-7	3.1 E-7	2.4 E-7	2.3 E-5
OS4-F1-SP02	10	3.2 E-5	1.2 E-5	1.3 E-6	4.9 E-7	NA	NA	3.7 E-6	NA	4.2 E-7	2.8 E-5	NA	1.7 E-8	3.6 E-8	3.2 E-6	1.3 E-6	NA	1.1 E-6	2.6 E-6	3.6 E-5	8.9 E-6	2.3 E-6	NA	NA	4.6 E-7	4.2 E-5	NA	1.8 E-4
OS4-F1-SP02	20	1.1 E-5	NA	1.6 E-6	2.6 E-7	NA	NA	2.2 E-6	NA	NA	2.3 E-5	NA	NA	3.8 E-8	2.6 E-6	8.0 E-7	NA	8.7 E-7	2.4 E-6	2.5 E-5	7.1 E-6	1.1 E-6	1.1 E-7	NA	5.6 E-7	2.6 E-5	NA	1.0 E-4
OS4-F1-SP03	10	1.3 E-5	NA	2.6 E-6	1.1 E-6	2.1 E-7	NA	2.0 E-6	NA	5.1 E-7	4.3 E-5	NA	NA	6.9 E-8	9.1 E-7	1.2 E-6	NA	1.9 E-6	4.8 E-6	3.0 E-5	8.6 E-6	NA	1.7 E-7	NA	8.7 E-7	5.2 E-5	NA	1.6 E-4
OS4-F1-SP03	20	NA	NA	1.7 E-6	4.9 E-7	6.3 E-8	NA	6.6 E-7	NA	2.4 E-7	2.6 E-5	NA	NA	4.6 E-8	5.3 E-7	4.6 E-7	NA	1.0 E-6	3.1 E-6	1.2 E-5	3.3 E-6	NA	1.3 E-7	NA	7.8 E-7	2.0 E-5	NA	7.0 E-5

Table 5.8-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																										
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloroe thylene**	**HI**
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
OS1-F2-SP01	10	5.1 E-6	NA	NA	9.8 E-8	NA	NA	NA	5.2 E-8	8.4 E-7	3.1 E-6	1.1 E-7	NA	NA	NA	NA	NA	7.5 E-8	8.1 E-7	4.9 E-7	NA	NA	NA	NA	NA	3.1 E-7	NA	1.1 E-5
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	6.8 E-8	NA	NA	NA	NA	NA	4.5 E-8	2.4 E-7	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	1.8 E-6
OS2-F1-SP01	10	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-6	1.6 E-7	1.7 E-7	NA	1.9 E-5
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	NA	4.5 E-8	NA	NA	3.1 E-8	1.6 E-7	1.7 E-7	NA	NA	NA	2.4 E-6	1.9 E-7	2.3 E-7	NA	3.9 E-6
OS4-F1-SP01	10	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	1.5 E-7	1.7 E-7	4.5 E-5
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	4.3 E-7	5.2 E-8	NA	NA	1.6 E-7	NA	5.4 E-9	NA	8.1 E-8	NA	NA	NA	NA	8.7 E-6	4.8 E-8	1.3 E-7	1.0 E-7	9.8 E-6
OS4-F1-SP02	10	1.4 E-5	5.1 E-6	5.6 E-7	2.1 E-7	NA	NA	1.6 E-6	NA	1.8 E-7	1.2 E-5	NA	7.4 E-9	1.5 E-8	1.4 E-6	5.4 E-7	NA	4.7 E-7	1.1 E-6	1.5 E-5	3.8 E-6	9.7 E-7	NA	NA	2.0 E-7	1.8 E-5	NA	7.5 E-5
OS4-F1-SP02	20	4.6 E-6	NA	6.7 E-7	1.1 E-7	NA	NA	9.3 E-7	NA	NA	9.9 E-6	NA	NA	1.6 E-8	1.1 E-6	3.4 E-7	NA	3.7 E-7	1.0 E-6	1.1 E-5	3.0 E-6	4.9 E-7	4.5 E-8	NA	2.4 E-7	1.1 E-5	NA	4.5 E-5
OS4-F1-SP03	10	5.4 E-6	NA	1.1 E-6	4.6 E-7	9.2 E-8	NA	8.7 E-7	NA	2.2 E-7	1.9 E-5	NA	NA	3.0 E-8	3.9 E-7	5.1 E-7	NA	8.2 E-7	2.1 E-6	1.3 E-5	3.7 E-6	NA	7.2 E-8	NA	3.7 E-7	2.2 E-5	NA	7.0 E-5
OS4-F1-SP03	20	NA	NA	7.3 E-7	2.1 E-7	2.7 E-8	NA	2.8 E-7	NA	1.0 E-7	1.1 E-5	NA	NA	2.0 E-8	2.3 E-7	2.0 E-7	NA	4.5 E-7	1.3 E-6	5.0 E-6	1.4 E-6	NA	5.7 E-8	NA	3.3 E-7	8.7 E-6	NA	3.0 E-5

Table 5.8-12
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**ILCR**
Unit Hazard Child																											
Unit Hazard Adult																											
Unit Risk																											
OS1-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
OS2-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	5.0 E-11	NA	9 E-10
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-10	5.9 E-11	NA	7 E-10
OS4-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	1.1 E-10	3 E-9
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	1.5 E-11	NA	6.6 E-11	1 E-9
OS4-F1-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-9	NA	NA	NA	NA	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-11	NA	NA	6 E-9
OS4-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-11	NA	NA	5 E-9
OS4-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-9	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	9 E-9
OS4-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	NA	5 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.8-7) x the unit hazard or unit risk for the chemical).

Table 5.8-13 ***Unit Soil Hazard and Unit Cancer Risk Results-Construction Worker***
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.8-14 *Inhalation Unit Hazard and Unit Cancer Risk Results - Construction Worker*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
Chloroethane	1.0 E+0	6.7 E-2	NA
Ethylbenzene	1.0 E+0	6.8 E-1	2.4 E-5
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
2-Hexanone	1.0 E+0	2.2 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
Trichloroethylene	1.0 E+0	1.2 E+0	2.0 E-5
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Styrene	1.0 E+0	7.6 E-1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.8-15 Location-Specific Soil Risk Assessment Results - Construction Workers
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)	Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	
Sample Name	**Depth**	**Phenol**	**Phenol**	**HI**	**Phenol**	**ILCR**
Unit Hazard		1.6 E-5				
Unit Risk		NA				
OS1-F1-SB01	1	1.3	2.0 E-5	2.0 E-5	NA	NA
OS2-F1-SB01	1	2.7	4.2 E-5	4.2 E-5	NA	NA
OS2-F1-SB01	5		NA	NA	NA	NA
OS2-F1-SB01	11	1.7	2.7 E-5	2.7 E-5	NA	NA
OS2-F1-SB02	1		NA	NA	NA	NA
OS2-F1-SB02	5		NA	NA	NA	NA
OS2-F1-SB02	11		NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = incremental lifetime cancer risk
NA = Not applicable

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.8-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																								
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**
Unit Hazard		9.8 E+1	1.2 E+2	6.8 E+0	1.4 E-1	2.2 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	6.7 E-2	1.1 E-1	3.9 E-1	6.8 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5
OS1-F2-SP01	10	7.7			79				27	280	14	9.7						10	37	8.3						14	
OS1-F2-SP01	20										12	12						12	22							7.8	
OS2-F1-SP01	10						15								15									48	5.9	7.6	
OS2-F1-SP01	20										6.0				13			8.4	15	5.7				31	14	21	
OS4-F1-SP01	10						25								200		51							160		6.6	17
OS4-F1-SP01	20									100	3.8	9.2			47		54		7.4					110	3.6	12	20
OS4-F1-SP02	10	21	6.6	8.4	170			24		59	53		3.6	15	200	94		63	51	260	57	7.4			7.3	810	
OS4-F1-SP02	20	14		20	180			28			88			32	320	120		100	95	370	91	7.4	15		18	1000	
OS4-F1-SP03	10	8.2		17	370	48		13		73	83			29	57	89		110	94	220	55		12		14	1000	
OS4-F1-SP03	20			22	340	28		8.5		68	98			39	66	69		120	120	170	42		19		25	780	

Table 5.8-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**HI**
Unit Hazard																											
Unit Risk																											
OS1-F2-SP01	10	3.6 E-6	NA	NA	7.0 E-8	NA	NA	NA	3.7 E-8	6.0 E-7	2.2 E-6	7.9 E-8	NA	NA	NA	NA	NA	5.3 E-8	5.8 E-7	3.5 E-7	NA	NA	NA	NA	NA	2.2 E-7	NA	7.9 E-6
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	4.9 E-8	NA	NA	NA	NA	NA	3.2 E-8	1.7 E-7	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	1.3 E-6
OS2-F1-SP01	10	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	1.1 E-7	1.2 E-7	NA	1.3 E-5
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	3.2 E-8	NA	NA	2.2 E-8	1.2 E-7	1.2 E-7	NA	NA	NA	1.7 E-6	1.3 E-7	1.7 E-7	NA	2.8 E-6
OS4-F1-SP01	10	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	9.8 E-7	NA	7.2 E-9	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	1.0 E-7	1.2 E-7	3.2 E-5
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	3.0 E-7	3.7 E-8	NA	NA	1.2 E-7	NA	3.8 E-9	NA	5.8 E-8	NA	NA	NA	NA	6.2 E-6	3.4 E-8	9.5 E-8	7.3 E-8	7.0 E-6
OS4-F1-SP02	10	9.9 E-6	3.7 E-6	4.0 E-7	1.5 E-7	NA	NA	1.1 E-6	NA	1.3 E-7	8.5 E-6	NA	5.3 E-9	1.1 E-8	9.8 E-7	3.9 E-7	NA	3.4 E-7	8.0 E-7	1.1 E-5	2.7 E-6	7.0 E-7	NA	NA	1.4 E-7	1.3 E-5	NA	5.4 E-5
OS4-F1-SP02	20	3.3 E-6	NA	4.8 E-7	8.0 E-8	NA	NA	6.7 E-7	NA	NA	7.0 E-6	NA	NA	1.2 E-8	7.8 E-7	2.5 E-7	NA	2.7 E-7	7.4 E-7	7.8 E-6	2.2 E-6	3.5 E-7	3.2 E-8	NA	1.7 E-7	7.9 E-6	NA	3.2 E-5
OS4-F1-SP03	10	3.9 E-6	NA	8.1 E-7	3.3 E-7	6.3 E-8	NA	6.2 E-7	NA	1.6 E-7	1.3 E-5	NA	NA	2.1 E-8	2.8 E-7	3.7 E-7	NA	5.9 E-7	1.5 E-6	9.3 E-6	2.6 E-6	NA	5.2 E-8	NA	2.7 E-7	1.6 E-5	NA	5.0 E-5
OS4-F1-SP03	20	NA	NA	5.2 E-7	1.5 E-7	1.8 E-8	NA	2.0 E-7	NA	7.3 E-8	7.8 E-6	NA	NA	1.4 E-8	1.6 E-7	1.4 E-7	NA	3.2 E-7	9.4 E-7	3.6 E-6	1.0 E-6	NA	4.1 E-8	NA	2.4 E-7	6.2 E-6	NA	2.1 E-5

Table 5.8-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**ILCR**
Unit Hazard																											
Unit Risk																											
OS1-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.75E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-11
OS2-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	9.4 E-13	NA	NA	2 E-11
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-12	1.1 E-12	NA	NA	1 E-11
OS4-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-11	NA	NA	2.1 E-12	6 E-11
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	2.9 E-13	NA	1.2 E-12	2 E-11
OS4-F1-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-12	NA	NA	1 E-10
OS4-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-11	NA	NA	NA	NA	8.7 E-12	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-12	NA	NA	1 E-10
OS4-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	NA	2 E-10
OS4-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-11	NA	NA	NA	NA	5.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-12	NA	NA	1 E-10

Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.8-7) x the unit hazard or unit risk for the chemical).

Table 5.8-17 Unit Hazard and Unit Cancer Risk Results-Outdoor Commercial Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	3 E-9	5.4 E-6	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.8-18 *Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Chloroethane	1.0 E+0	6.7 E-2	NA
Ethylbenzene	1.0 E+0	6.8 E-1	6.1 E-4
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
2-Hexanone	1.0 E+0	2.3 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	1.5 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	4.8 E-4
Trichloroethylene	1.0 E+0	1.2 E+0	4.9 E-4
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Styrene	1.0 E+0	7.6 E-1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter

Table 5.8-19 *Location-Specific Soil Risk Assessment Results - Commercial Workers*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)	Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	
Sample Name	**Depth**	**Phenol**	**Phenol**	**HI**	**Phenol**	**ILCR**
Unit Hazard		5.4 E-6				
Unit Risk		NA				
OS1-F1-SB01	1	1.3	7.0 E-6	7.0 E-6	NA	NA
OS2-F1-SB01	1	2.7	1.5 E-5	1.5 E-5	NA	NA
OS2-F1-SB01	5		NA	NA	NA	NA
OS2-F1-SB01	11	1.7	9.2 E-6	9.2 E-6	NA	NA
OS2-F1-SB02	1		NA	NA	NA	NA
OS2-F1-SB02	5		NA	NA	NA	NA
OS2-F1-SB02	11		NA	NA	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.8-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																								
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**EthylBenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloroe thylene**
Unit Hazard		9.8 E+1	1.2 E+2	6.8 E+0	1.4 E-1	2.3 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	6.7 E-2	1.1 E-1	3.9 E-1	6.8 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	NA	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4
OS1-F2-SP01	10	8			79				27	280	14	9.7						10	37	8.3						14	
OS1-F2-SP01	20										12	12						12	22							7.8	
OS2-F1-SP01	10						15								15									48	5.9	7.6	
OS2-F1-SP01	20										6				13			8.4	15	5.7				31	14	21	
OS4-F1-SP01	10						25								200		51							160		6.6	17
OS4-F1-SP01	20									100	3.8	9.2			47		54		7.4					110	3.6	12	20
OS4-F1-SP02	10	21	6.6	8.4	170			24		59	53		3.6	15	200	94		63	51	260	57	7.4			7.3	810	
OS4-F1-SP02	20	14		20	180			28			88			32	320	120		100	95	370	91	7.4	15		18	1000	
OS4-F1-SP03	10	8.2		17	370	48		13		73	83			29	57	89		110	94	220	55		12		14	1000	
OS4-F1-SP03	20			22	340	28		8.5		68	98			39	66	69		120	120	170	42		19		25	780	

Table 5.8-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																										
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**EthylBenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Toluene**	**Trichloroethylene**	**HI**
Unit Hazard																												
Unit Risk																												
OS1-F2-SP01	10	1.4 E-4	NA	NA	2.6 E-6	NA	NA	NA	1.4 E-6	2.1 E-5	8.3 E-5	2.8 E-6	NA	NA	NA	NA	NA	4.5 E-6	1.7 E-5	1.3 E-5	NA	NA	NA	NA	NA	8.2 E-6	NA	3.0 E-4
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	2.0 E-6	NA	NA	NA	NA	NA	3.4 E-6	6.0 E-6	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	5.3 E-5
OS2-F1-SP01	10	NA	NA	NA	NA	NA	3.0 E-4	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-4	4.0 E-6	4.5 E-6	NA	5.1 E-4
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	1.3 E-6	NA	NA	2.4 E-6	4.1 E-6	5.1 E-6	NA	NA	NA	7.2 E-5	5.5 E-6	7.0 E-6	NA	1.2 E-4
OS4-F1-SP01	10	NA	NA	NA	NA	NA	4.9 E-4	NA	NA	NA	NA	NA	NA	NA	3.3 E-5	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	3.9 E-6	4.6 E-6	1.2 E-3
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	1.2 E-5	1.5 E-6	NA	NA	4.8 E-6	NA	1.6 E-7	NA	2.0 E-6	NA	NA	NA	NA	2.5 E-4	1.4 E-6	4.0 E-6	3.1 E-6	2.9 E-4
OS4-F1-SP02	10	3.9 E-4	1.4 E-4	1.5 E-5	5.7 E-6	NA	NA	4.2 E-5	NA	4.3 E-6	3.1 E-4	NA	1.3 E-7	4.1 E-7	3.3 E-5	1.5 E-5	NA	2.9 E-5	2.3 E-5	4.1 E-4	1.0 E-4	2.7 E-5	NA	NA	5.0 E-6	4.7 E-4	NA	2.0 E-3
OS4-F1-SP02	20	1.5 E-4	NA	2.0 E-5	3.4 E-6	NA	NA	2.8 E-5	NA	NA	2.8 E-4	NA	NA	5.0 E-7	3.2 E-5	1.0 E-5	NA	2.9 E-5	2.6 E-5	3.3 E-4	9.1 E-5	1.5 E-5	1.4 E-6	NA	7.1 E-6	3.4 E-4	NA	1.4 E-3
OS4-F1-SP03	10	1.5 E-4	NA	3.0 E-5	1.2 E-5	2.5 E-6	NA	2.3 E-5	NA	5.4 E-6	4.9 E-4	NA	NA	7.9 E-7	9.4 E-6	1.4 E-5	NA	5.0 E-5	4.3 E-5	3.5 E-4	9.7 E-5	NA	2.0 E-6	NA	9.5 E-6	5.9 E-4	NA	1.9 E-3
OS4-F1-SP03	20	NA	NA	2.2 E-5	6.5 E-6	8.2 E-7	NA	8.5 E-6	NA	3.0 E-6	3.2 E-4	NA	NA	6.1 E-7	6.7 E-6	5.8 E-6	NA	3.4 E-5	3.3 E-5	1.5 E-4	4.2 E-5	NA	1.8 E-6	NA	9.9 E-6	2.6 E-4	NA	9.1 E-4

Table 5.8-20
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**EthylBenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**ILCR**
Unit Hazard																											
Unit Risk																											
OS1-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
OS2-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	8.4 E-10	NA	NA	2 E-8
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-9	1.2 E-9	NA	NA	1 E-8
OS4-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-8	NA	NA	2.0 E-9	5 E-8
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	3.0 E-10	NA	1.3 E-9	2 E-8
OS4-F1-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	1 E-7
OS4-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA	NA	NA	9.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	1 E-7
OS4-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	2 E-7
OS4-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	1 E-7

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.8-6) x the unit hazard or unit risk for the chemical).

Table 5.8-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																								
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**
Unit Hazard		9.8 E+1	1.2 E+2	6.8 E+0	1.4 E-1	2.3 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E-1	6.7 E-2	1.1 E-1	3.9 E-1	6.8 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0
Unit Risk		NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	NA	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4
OS1-F2-SP01	10	7.7			79				27	280	14	9.7						10	37	8.3						14	
OS1-F2-SP01	20										12	12						12	22							7.8	
OS2-F1-SP01	10						15								15									48	5.9	7.6	
OS2-F1-SP01	20										6.0				13			8.4	15	5.7				31	14	21	
OS4-F1-SP01	10						25								200		51							160		6.6	17
OS4-F1-SP01	20									100	3.8	9.2			47		54		7.4					110	3.6	12	20
OS4-F1-SP02	10	21	6.6	8.4	170			24		59	53		3.6	15	200	94		63	51	260	57	7.4			7.3	810	
OS4-F1-SP02	20	14		20	180			28			88			32	320	120		100	95	370	91	7.4	15		18	1000	
OS4-F1-SP03	10	8.2		17	370	48		13		73	83			29	57	89		110	94	220	55		12		14	1000	
OS4-F1-SP03	20			22	340	28		8.5		68	98			39	66	69		120	120	170	42		19		25	780	

Table 5.8-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																										
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**HI**
Unit Hazard																												
Unit Risk																												
OS1-F2-SP01	10	3.6 E-6	NA	NA	7.0 E-8	NA	NA	NA	3.7 E-8	6.0 E-7	2.2 E-6	7.9 E-8	NA	NA	NA	NA	NA	5.3 E-8	5.8 E-7	3.5 E-7	NA	NA	NA	NA	NA	2.2 E-7	NA	7.9 E-6
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	4.9 E-8	NA	NA	NA	NA	NA	3.2 E-8	1.7 E-7	NA	NA	NA	NA	NA	NA	6.2 E-8	NA	1.3 E-6
OS2-F1-SP01	10	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	1.1 E-7	1.2 E-7	NA	1.3 E-5
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	3.2 E-8	NA	NA	2.2 E-8	1.2 E-7	1.2 E-7	NA	NA	NA	1.7 E-6	1.3 E-7	1.7 E-7	NA	2.8 E-6
OS4-F1-SP01	10	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	9.8 E-7	NA	7.2 E-9	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	1.0 E-7	1.2 E-7	3.2 E-5
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	3.0 E-7	3.7 E-8	NA	NA	1.2 E-7	NA	3.8 E-9	NA	5.8 E-8	NA	NA	NA	NA	6.2 E-6	3.4 E-8	9.5 E-8	7.3 E-8	7.0 E-6
OS4-F1-SP02	10	9.9 E-6	3.7 E-6	4.0 E-7	1.5 E-7	NA	NA	1.1 E-6	NA	1.3 E-7	8.5 E-6	NA	5.3 E-9	1.1 E-8	9.8 E-7	3.9 E-7	NA	3.4 E-7	8.0 E-7	1.1 E-5	2.7 E-6	7.0 E-7	NA	NA	1.4 E-7	1.3 E-5	NA	5.4 E-5
OS4-F1-SP02	20	3.3 E-6	NA	4.8 E-7	8.0 E-8	NA	NA	6.7 E-7	NA	NA	7.0 E-6	NA	NA	1.2 E-8	7.8 E-7	2.5 E-7	NA	2.7 E-7	7.4 E-7	7.8 E-6	2.2 E-6	3.5 E-7	3.2 E-8	NA	1.7 E-7	7.9 E-6	NA	3.2 E-5
OS4-F1-SP03	10	3.9 E-6	NA	8.1 E-7	3.3 E-7	6.6 E-8	NA	6.2 E-7	NA	1.6 E-7	1.3 E-5	NA	NA	2.1 E-8	2.8 E-7	3.7 E-7	NA	5.9 E-7	1.5 E-6	9.3 E-6	2.6 E-6	NA	5.2 E-8	NA	2.7 E-7	1.6 E-5	NA	5.0 E-5
OS4-F1-SP03	20	NA	NA	5.2 E-7	1.5 E-7	1.9 E-8	NA	2.0 E-7	NA	7.3 E-8	7.8 E-6	NA	NA	1.4 E-8	1.6 E-7	1.4 E-7	NA	3.2 E-7	9.4 E-7	3.6 E-6	1.0 E-6	NA	4.1 E-8	NA	2.4 E-7	6.2 E-6	NA	2.1 E-5

Table 5.8-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	**Depth**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**	**2,2,4-Trimethylpentane**	**2-Butanone (Methyl Ethyl Ketone)**	**2-Hexanone**	**2-Propanol**	**4-Ethyltoluene**	**4-Methyl-2-pentanone**	**Acetone**	**Benzene**	**Carbon Disulfide**	**Chloroethane**	**Cyclohexane**	**Ethanol**	**Ethylbenzene**	**Freon 113**	**Heptane**	**Hexane**	**m,p-Xylene**	**o-Xylene**	**Propylbenzene**	**Styrene**	**Tetrachloro ethylene**	**Tetrahydro furan**	**Toluene**	**Trichloro ethylene**	**ILCR**
Unit Hazard																											
Unit Risk																											
OS1-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
OS1-F2-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
OS2-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	2.4 E-11	NA	NA	4 E-10
OS2-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	2.8 E-11	NA	NA	3 E-10
OS4-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	5.2 E-11	1 E-9
OS4-F1-SP01	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	7.2 E-12	NA	3.1 E-11	6 E-10
OS4-F1-SP02	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	3 E-9
OS4-F1-SP02	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	NA	2 E-9
OS4-F1-SP03	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-9	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	NA	4 E-9
OS4-F1-SP03	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-11	NA	NA	3 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI - Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.8-7) x the unit hazard or unit risk for the chemical).

Table 5.8-22 ***All Receptors Hazard Index and Cancer Risk Results-Soil***
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

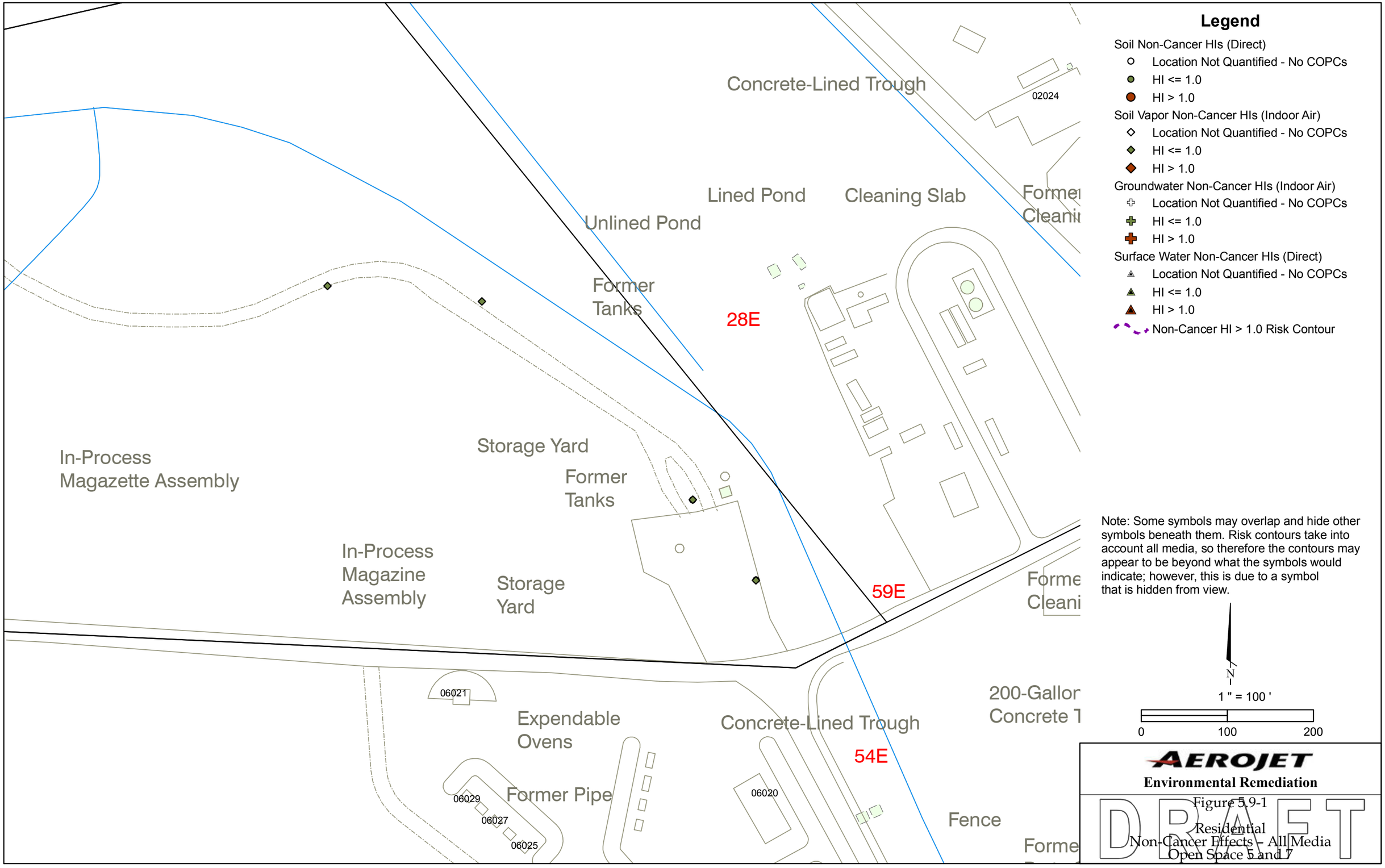
		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	**Depth**	**Resident Child**	**Adult**	**Construction Worker**	**Commercial Worker**	**Resident**	**Construction Worker**	**Commercial Worker**
OS1-F1-SB01	1	7.1 E-5	8.3 E-6	2.0 E-5	7.0 E-6	**NA**	**NA**	**NA**
OS2-F1-SB01	1	1.5 E-4	1.7 E-5	4.2 E-5	1.5 E-5	**NA**	**NA**	**NA**
OS2-F1-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
OS2-F1-SB01	11	9.3 E-5	1.1 E-5	2.7 E-5	9.2 E-6	**NA**	**NA**	**NA**
OS2-F1-SB02	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
OS2-F1-SB02	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
OS2-F1-SB02	11	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Minimum		7.1 E-5	8.3 E-6	2.0 E-5	7.0 E-6	0 E+0	0 E+0	0 E+0
Median		9.3 E-5	1.1 E-5	2.7 E-5	9.2 E-6	**NA**	**NA**	**NA**
Maximum		1.5 E-4	1.7 E-5	4.2 E-5	1.5 E-5	0 E+0	0 E+0	0 E+0

Key:
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.8-23 *All Receptors Hazard Index and Cancer Risk Results-Soil Vapor*
Open Space 1,2,3,4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
OS1-F2-SP01	10	2.0 E-3	8.4 E-4	7.9 E-6	3.0 E-4	1 E-7	3 E-11	3 E-8
OS1-F2-SP01	20	3.5 E-4	1.5 E-4	1.3 E-6	5.4 E-5	5 E-8	1 E-11	1 E-8
OS2-F1-SP01	10	3.4 E-3	1.5 E-3	1.3 E-5	5.3 E-4	7 E-8	2 E-11	2 E-8
OS2-F1-SP01	20	7.7 E-4	3.3 E-4	2.8 E-6	1.2 E-4	5 E-8	1 E-11	1 E-8
OS4-F1-SP01	10	8.1 E-3	3.5 E-3	3.2 E-5	1.3 E-3	2 E-7	6 E-11	6 E-8
OS4-F1-SP01	20	1.9 E-3	8.2 E-4	7.0 E-6	3.0 E-4	1 E-7	2 E-11	3 E-8
OS4-F1-SP02	10	1.3 E-2	5.8 E-3	5.4 E-5	2.1 E-3	5 E-7	1 E-10	1 E-7
OS4-F1-SP02	20	9.0 E-3	3.9 E-3	3.2 E-5	1.4 E-3	4 E-7	1 E-10	1 E-7
OS4-F1-SP03	10	1.2 E-2	5.3 E-3	5.0 E-5	1.9 E-3	7 E-7	2 E-10	2 E-7
OS4-F1-SP03	20	6.0 E-3	2.6 E-3	2.1 E-5	9.3 E-4	4 E-7	1 E-10	1 E-7
Minimum		3.5 E-4	1.5 E-4	1.3 E-6	5.4 E-5	5 E-8	1 E-11	1 E-8
Median		4.7 E-3	2.0 E-3	1.7 E-5	7.3 E-4	2 E-7	4 E-11	4 E-8
Maximum		1.3 E-2	5.8 E-3	5.4 E-5	2.1 E-3	7 E-7	2 E-10	2 E-7

Key:
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.


Legend
Soil Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Soil Vapor Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Groundwater Non-Cancer HIs (Indoor Air)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Surface Water Non-Cancer HIs (Direct)
Location Not Quantified - No COPCs
HI <= 1.0
HI > 1.0
Non-Cancer HI > 1.0 Risk Contour
Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.
N
1 " = 100 '
0
100
200
Concrete-Lined Trough
02024
Lined Pond
Cleaning Slab
Unlined Pond
Former Tanks
28E
Storage Yard
Former Tanks
In-Process Magazette Assembly
In-Process Magazine Assembly
Storage Yard
59E
06021
Expendable Ovens
Concrete-Lined Trough
54E
06029
Former Pipe
06027
06025
06020
Fence
200-Gallon Concrete T
AEROJET
Environmental Remediation
DRAFT
Figure 5.9-1
Residential
Non-Cancer Effects – All Media
Open Space 5 and 7

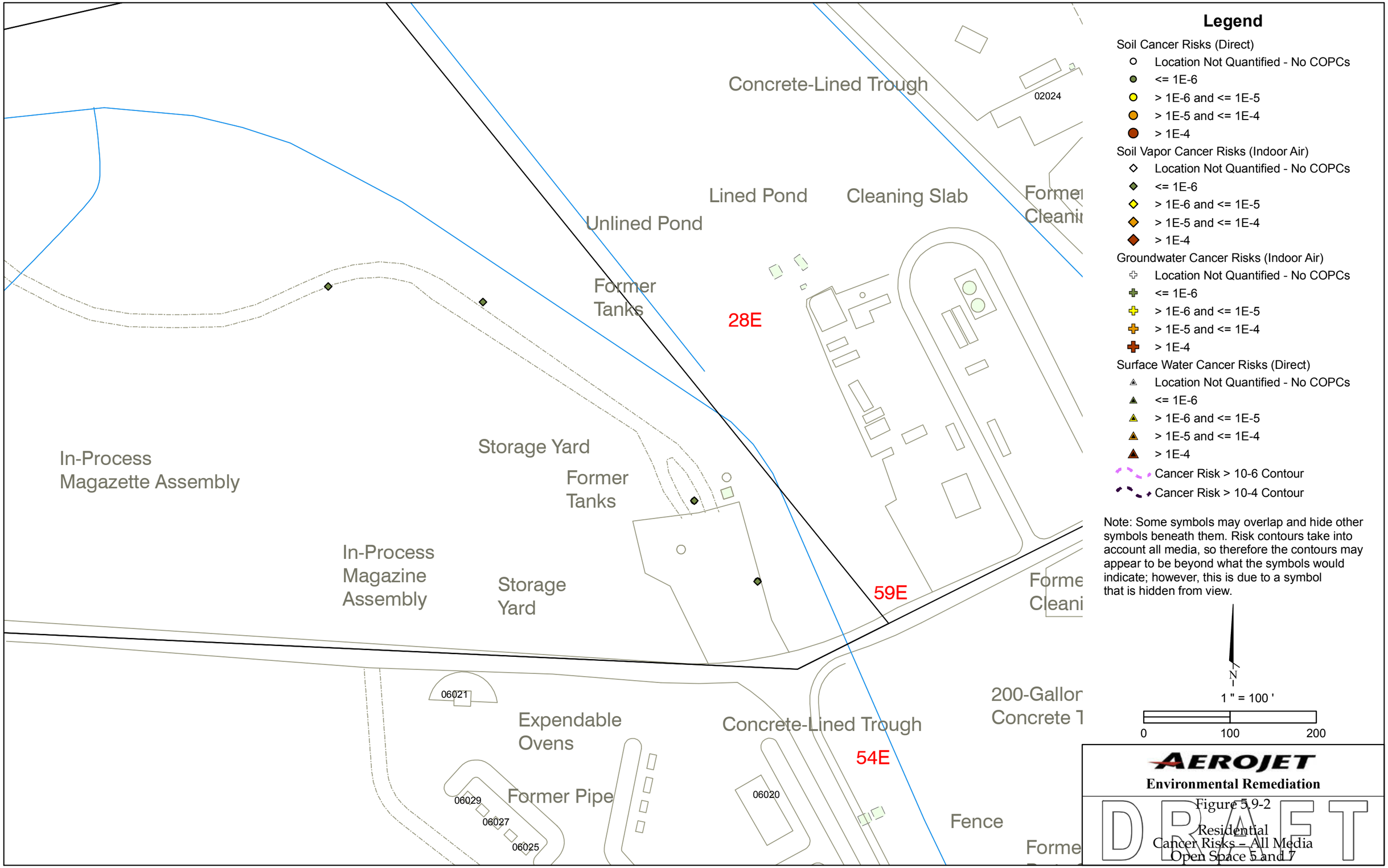


Figure 5.9-2
Residential
Cancer Risks – All Media
Open Space 5 and 7

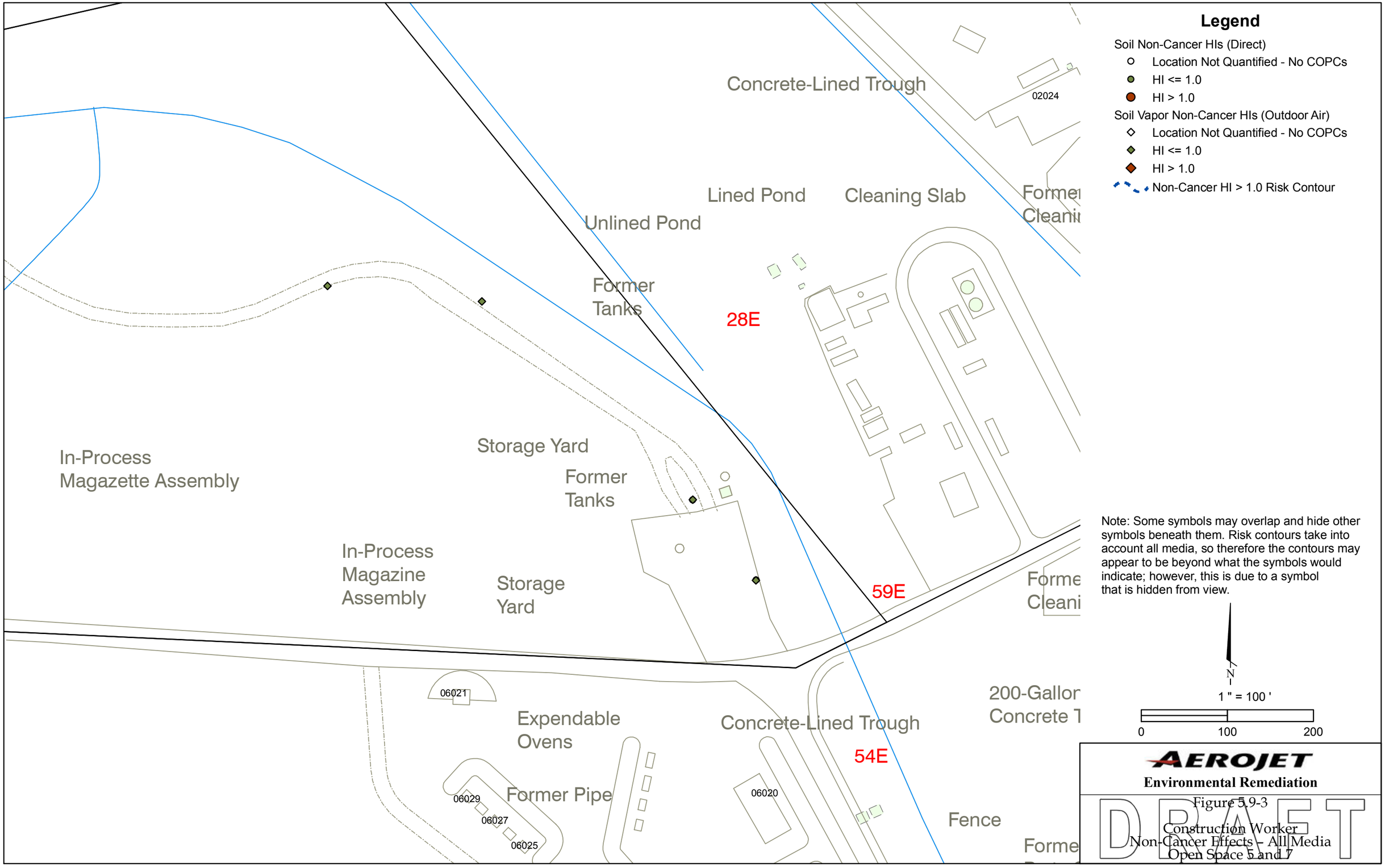


Figure 5.9-3
Construction Worker
Non-Cancer Effects – All Media
Open Space 5 and 7

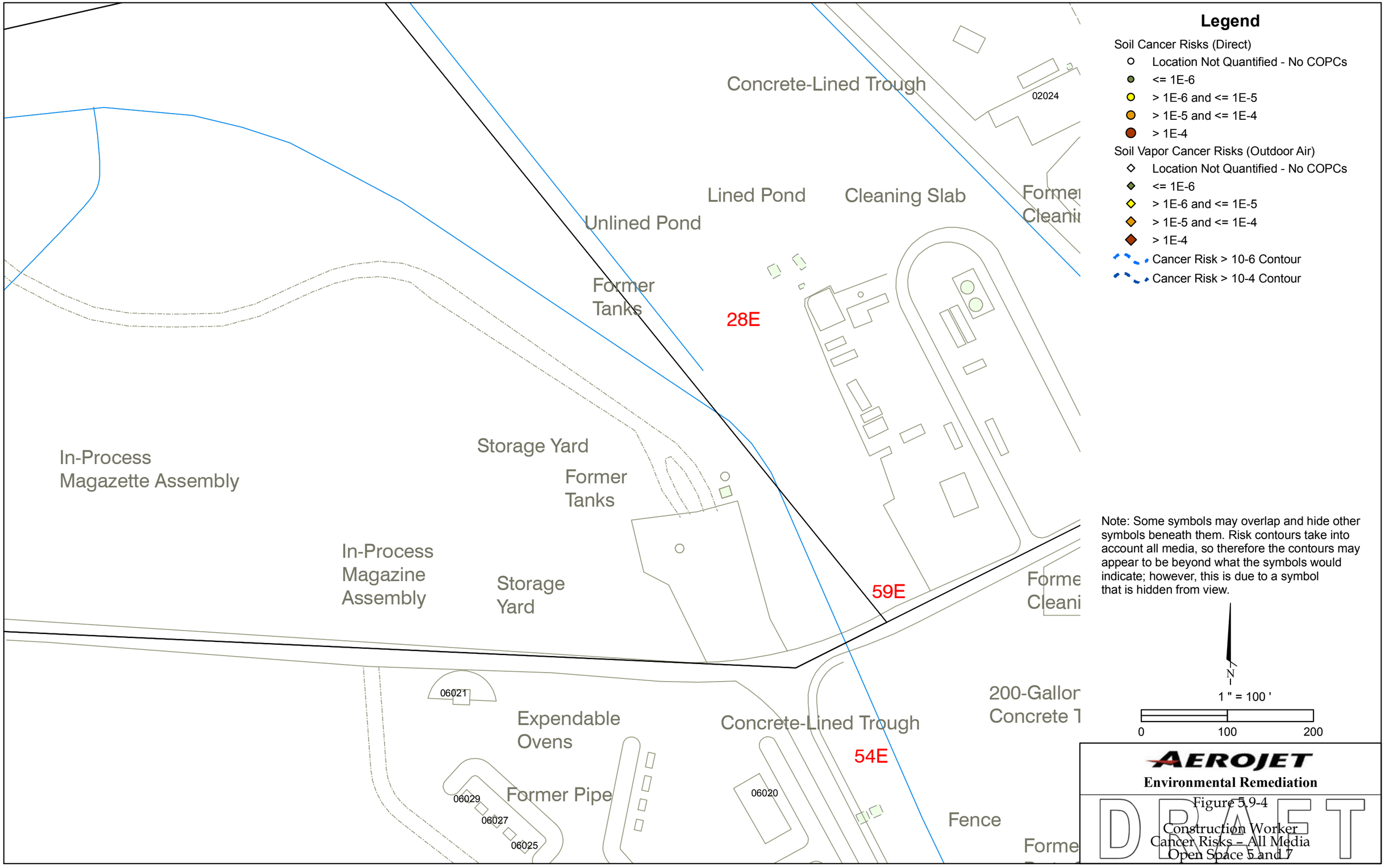


Figure 5.9-4
Construction Worker
Cancer Risks – All Media
Open Space 5 and 17

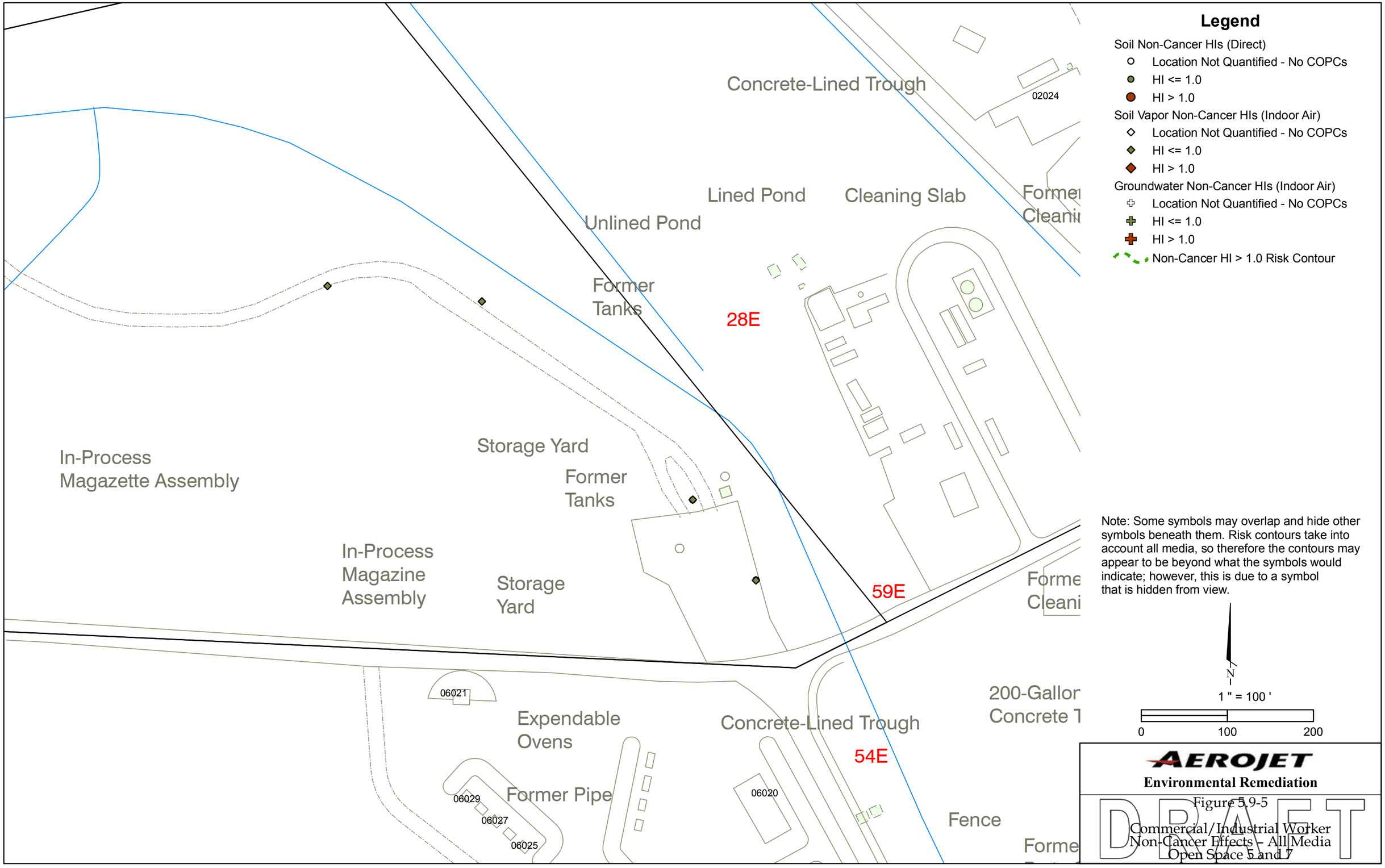


Figure 5.9-5
Commercial/Industrial Worker
Non-Cancer Effects – All Media
Open Space 5 and 7

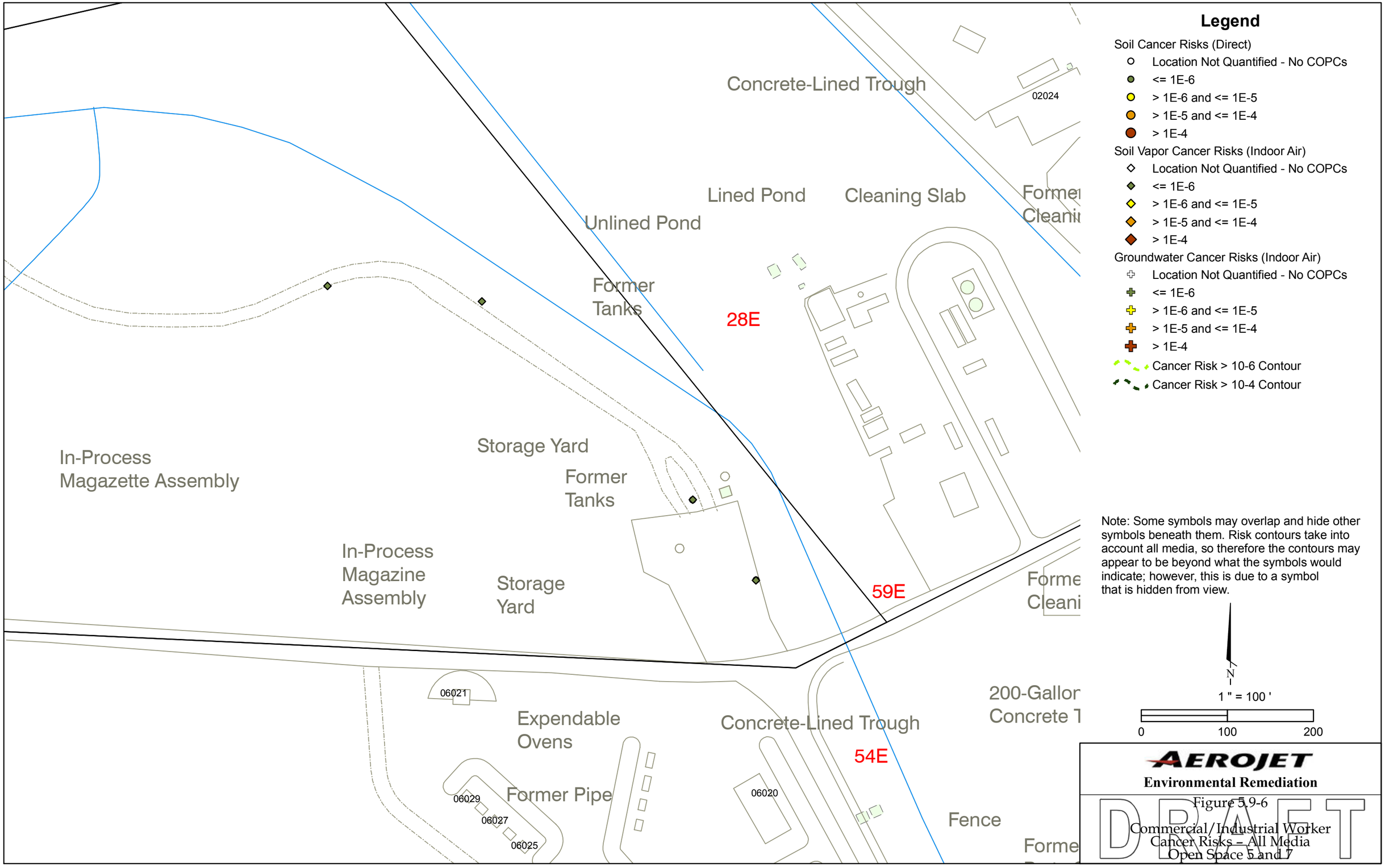


Figure 5.9-6
Commercial/Industrial Worker Cancer Risks – All Media
Open Space 5 and 17

Table 5.9-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 5 & 7	71-55-6	1,1,1-Trichloroethane	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	6.2-7	99100	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	7.9-8.8	2	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	6.2-7	7	ca	N	ND	NA
	75-34-3	1,1-Dichloroethane	ND	ND	$\mu g/m^3$	ND	40	6	0	0.0%	4.6-5.2	66	ca	N	ND	NA
	75-35-4	1,1-Dichloroethene	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	4.5-5.1	3139	nc	N	ND	NA
	563-58-6	1,1-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	21-23	NA	ca	N	ND	NA
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	34-38	9914	nc	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	5.6-6.3	274	nc	N	ND	NA
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	8.8-9.9	2	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	6.9-7.8	9116	nc	N	ND	NA
	107-06-2	1,2-Dichloroethane	7.5	35	$\mu g/m^3$	28E-SP17	10	6	2	33.3%	4.6-5.2	5	ca	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	5.3-6	11	ca	N	ND	NA
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	5.6-6.3	274	nc	N	ND	NA
	106-99-0	1,3-Butadiene	14	200	$\mu g/m^3$	28E-SP19	20	6	4	66.7%	2.5-2.8	1	ca	N	NR	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	6.9-7.8	4785	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	6.9-7.8	10	ca	N	ND	NA
	123-91-1	1,4-Dioxane	18	20	$\mu g/m^3$	28E-SP19	20	6	2	33.3%	16-18	14	ca	Y		NA
	540-84-1	2,2,4-Trimethylpentane	ND	ND	$\mu g/m^3$	ND	30	6	0	0.0%	5.3-6	31500	nc	N	ND	NA
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	24	30	$\mu g/m^3$	28E-SP19	20	6	2	33.3%	3.6-14	225572	nc	Y		NA
	591-78-6	2-Hexanone	ND	ND	$\mu g/m^3$	ND	20	6	0	0.0%	19-21	3626	nc	N	ND	NA
	67-63-0	2-Propanol	13	17	$\mu g/m^3$	28E-SP19	20	6	2	33.3%	11-13	456	nc	Y		NA
	107-05-1	3-Chloropropene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	14-16	17	nc	N	ND	NA
	622-96-8	4-Ethyltoluene	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	5.6-6.3	31500	nc	N	ND	NA
	108-10-1	4-Methyl-2-pentanone	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	4.7-5.3	3626	nc	N	ND	NA
	67-64-1	Acetone	72	280	$\mu g/m^3$	28E-SP19	20	6	3	50.0%	11-24	15460	nc	Y		NA
	100-44-7	alpha-Chlorotoluene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	5.9-6.7	2	ca	N	ND*	100%
	71-43-2	Benzene	6.4	40	$\mu g/m^3$	28E-SP17	10	6	4	66.7%	3.6-4.1	4	ca	Y		NA
	75-27-4	Bromodichloromethane	ND	ND	$\mu g/m^3$	ND	20	6	0	0.0%	7.7-8.6	3	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	12-13	121	nc	N	ND	NA
	74-83-9	Bromomethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	4.4-5	227	nc	N	ND	NA
	104-51-8	Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	25-28	6474	nc	N	ND	NA
	75-15-0	Carbon Disulfide	20	330	$\mu g/m^3$	28E-SP19	20	6	6	100.0%	3.6-4	31158	nc	Y		NA
	56-23-5	Carbon Tetrachloride	ND	ND	$\mu g/m^3$	ND	20	6	0	0.0%	7.2-8.1	3	ca	N	ND*	100%
	108-90-7	Chlorobenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0.0%	5.3-5.9	45404	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	$\mu g/m^3$	ND	10	6	0	0.0%	3-3.4	122	ca	N	ND	NA
	67-66-3	Chloroform	24	24	$\mu g/m^3$	OS5-F2-SP01	10	6	1	16.7%	5.6-6.3	20	ca	Y		NA
	74-87-3	Chloromethane	ND	ND	$\mu g/m^3$	ND	18	6	0	0.0%	9.4-11	103	nc	N	ND	NA

Table 5.9-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 5 & 7	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/m^3	ND	10	6	0	0.0%	4.5-5.1	1590	nc	N	ND	NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	5.2-5.8	NA	ca	N	ND	NA
	98-82-8	Cumene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	5.6-6.3	18309	nc	N	ND	NA
	110-82-7	Cyclohexane	8.7	17	µg/m^3	28E-SP17	10	6	4	66.7%	3.9-4.4	270853	nc	Y		NA
	124-48-1	Dibromochloromethane	ND	ND	µg/m^3	ND	ND	6	0	0.0%	9.8-11	5	ca	N	ND*	100%
	64-17-5	Ethanol	15	28	µg/m^3	28E-SP19	20	6	2	33.3%	8.6-9.7	78800	nc	Y		NA
	100-41-4	Ethyl Benzene	ND	ND	µg/m^3	ND	20	6	0	0.0%	5-5.6	96	nc	N	ND	NA
	75-69-4	Freon 11	ND	ND	µg/m^3	ND	20	6	0	0.0%	6.4-7.2	31446	nc	N	ND	NA
	76-13-1	Freon 113	19	19	µg/m^3	28E-SP19	20	6	1	16.7%	8.8-9.9	1360890	nc	Y		NA
	76-14-2	Freon 114	ND	ND	µg/m^3	ND	ND	6	0	0.0%	8-9	1360890	nc	N	ND	NA
	75-71-8	Freon 12	ND	ND	µg/m^3	ND	30	6	0	0.0%	5.7-6.4	9139	nc	N	ND	NA
	142-82-5	Heptane	15	130	µg/m^3	28E-SP17	10	6	4	66.7%	4.7-5.3	8701	nc	Y		NA
	87-68-3	Hexachlorobutadiene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	49-55	5	ca	N	ND*	100%
	110-54-3	Hexane	13	620	µg/m^3	28E-SP17	10	6	5	83.3%	4-4.5	8701	nc	Y		NA
	mp-Xyl	m,p-Xylene	6.7	6.7	µg/m^3	28E-SP19	20	6	1	16.7%	5-5.6	31500	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/m^3	ND	ND	6	0	0.0%	4.1-4.6	400	ca	N	ND	NA
	75-09-2	Methylene Chloride	29	29	µg/m^3	OS5-F2-SP01	10	6	1	16.7%	4-4.5	104	ca	Y		NA
	95-47-6	o-Xylene	ND	ND	µg/m^3	ND	10	6	0	0.0%	5-5.6	31500	nc	N	ND	NA
	99-87-6	p-Cymene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	25-28	31500	nc	N	ND	NA
	103-65-1	Propylbenzene	ND	ND	µg/m^3	ND	10	6	0	0.0%	5.6-6.3	6447	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	25-28	6469	nc	N	ND	NA
	100-42-5	Styrene	ND	ND	µg/m^3	ND	10	6	0	0.0%	4.9-5.5	40940	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	25-28	6479	nc	N	ND	NA
	127-18-4	Tetrachloroethene	15	15	µg/m^3	28E-SP17	10	6	1	16.7%	7.8-8.8	18	ca	Y		NA
	109-99-9	Tetrahydrofuran	4.1	62	µg/m^3	28E-SP19	20	6	3	50.0%	3.4-3.8	53	ca	Y		NA
	108-88-3	Toluene	12	66	µg/m^3	28E-SP19	20	6	4	66.7%	4.3-4.9	13500	nc	Y		NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	4.5-5.1	3190	nc	N	ND	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/m^3	ND	ND	6	0	0.0%	5.2-5.8	7	ca	N	ND	NA
	79-01-6	Trichloroethene	9.8	22	µg/m^3	28E-SP19	20	6	3	50.0%	6.2-6.9	53	ca	Y		NA
	75-01-4	Vinyl Chloride	ND	ND	µg/m^3	ND	20	6	0	0.0%	2.9-3.3	1	ca	N	ND*	100%

Footnotes:
(1) See Table 1
(2) FOD = Frequency of detection screening
BSL = Below screening level
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
NA = Not applicable
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible

Key:
bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/L = Micrograms per liter
nc = Noncancer

Table 5.9-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 5 and 7	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	6.2		N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	60		N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.061		N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	53		N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.35		N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	610		N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.61		N	ND	NA
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	18		N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	120		N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.56-0.59	12		N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	12		N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	6.1		N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	490		N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	6.3		N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.17		N	ND	NA
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	310		N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	18		N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	4	0	0%	0.56-0.59	0.11		N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	1.8		N	ND	NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.61		N	ND	NA
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	24		N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	31		N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.56-0.59	2.3		N	ND	NA
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	370		N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	230		N	ND	NA
	7429-90-5	Aluminum	19000	32000	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	7600		N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	8.5		N	ND	NA
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	2200		N	ND	NA
	7440-36-0	Antimony	0.20	0.20	mg/kg	OS5-F1-SB01	1	1	1	100%	NA	3		N	BSL	NA
	7440-38-2	Arsenic	2.6	3.5	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	0.0062		N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.44		N	ND	NA
	7440-39-3	Barium	140	150	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	520		N	BSL	NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	4	0	0%	0.39-0.42	0.00021		N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	0.062		N	ND	NA
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	0.0038		N	ND*	100%
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	2	0	0%	0.015-0.015	0.038		N	ND	NA

Table 5.9-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 5 and 7	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	230		N	ND	NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	4	0	0%	0.56-0.59	10000		N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	1800		N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	1200		N	ND	NA
	7440-41-7	Beryllium	0.55	0.71	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	15		N	BSL	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.022		N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	8	0	0%	0.22-0.24	0.29		N	ND	NA
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.56-0.59	3.5		N	ND	NA
	7440-42-8	Boron	5.9	9.9	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	1600		N	BSL	NA
	7440-43-9	Cadmium	0.085	0.15	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	0.17		N	BSL	NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	2.4		N	ND	NA
	7440-47-3	Chromium	51	52	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	10000		N	BSL	NA
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	0.38		N	ND	NA
	7440-48-4	Cobalt	14	18	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	66		N	BSL	NA
	7440-50-8	Copper	26	28	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	300		N	BSL	NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	0.0062		N	ND	NA
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	15		N	ND	NA
	68334-30-5	Diesel Range Organics (C10-C28)	2.9	3.1	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	4900		N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	10000		N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.45-0.48	610		N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	240		N	ND	NA
	206-44-0	Fluoranthene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	230		N	ND	NA
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	270		N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.03		N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.62		N	ND	NA
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	4	0	0%	0.78-0.83	37		N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	3.5		N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	0.062		N	ND	NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	51		N	ND	NA
	7439-92-1	Lead	10	13	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	15		N	BSL	NA
	7439-93-2	Lithium	7.6	10	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	160		N	BSL	NA
	7439-96-5	Manganese	820	910	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	180		N	BG	NA
	7439-97-6	Mercury	0.040	0.040	mg/kg	OS5-F2-SB01	1	2	1	50%	0.022-0.024	1.8		N	BSL	NA
	7439-98-7	Molybdenum	0.18	0.76	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	38		N	BSL	NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	4.9	9.9	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	NA		N	ITC	NA
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	0.17		N	ND	NA
	7440-02-0	Nickel	34	39	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	160		N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	2		N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.00095		N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	0.007		N	ND*	100%

Table 5.9-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Open Space 5 and 7	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	4	0	0%	0.22-0.24	150		N	ND	NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.78-0.83	0.3		N	ND*	100%
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	2	0	0%	0.045-0.047	0.78		N	ND	NA
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	230		N	ND	NA
	108-95-2	Phenol	1.4	1.9	mg/kg	OS5-F2-SB01	5	4	3	75%	0.22-0.24	1800		Y		NA
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	230		N	ND	NA
	7782-49-2	Selenium	ND	ND	mg/kg	ND	ND	2	0	0%	1.1-1.2	38		N	ND	NA
	7440-22-4	Silver	0.10	0.12	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	38		N	BSL	NA
	7440-24-6	Strontium	19	20	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	4700		N	BSL	NA
	7440-28-0	Thallium	0.24	0.37	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	0.5		N	BSL	NA
	7440-32-6	Titanium	680	710	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	10000		N	BSL	NA
	7440-62-2	Vanadium	70	84	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	0.53		N	BG	NA
	7440-66-6	Zinc	46	59	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	2300		N	BSL	NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.9-3 Chemical of Potential Concern Summary
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
1,1,2,2-Tetrachloroethane	N	ND*	NA	NA
1,1,1-Trichloroethane	N	ND	NA	NA
1,1,2-Trichloroethane	N	ND	NA	NA
1,1-Dichloroethane	N	ND	NA	NA
1,1-Dichloroethene	N	ND	NA	NA
1,1-Dichloropropene	N	ND	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	N	ND	N	ND
1,2,4-Trimethylbenzene	N	ND	NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	N	ND*	NA	NA
1,2-Dichlorobenzene	N	ND	N	ND
1,2-Dichloroethane	Y		NA	NA
cis-1,2-Dichloroethene	N	ND	NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA
1,2-Dichloropropane	N	ND	NA	NA
1,2-Diphenylhydrazine	NA	NA	NA	NA
1,3,5-Trimethylbenzene	N	ND	NA	NA
1,3-Butadiene	N	NR	NA	NA
1,3-Dichlorobenzene	N	ND	N	ND
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	N	ND	N	ND
1,4-Dioxane	Y		NA	NA
2,2,4-Trimethylpentane	N	ND	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	N	ND
2,4,6-Trichlorophenol	NA	NA	N	ND
2,4-Dichlorophenol	NA	NA	N	ND
2,4-Dimethylphenol	NA	NA	N	ND
2,4-Dinitrophenol	NA	NA	N	ND
2,4-Dinitrotoluene	NA	NA	N	ND
2,6-Dinitrotoluene	NA	NA	N	ND
2-Butanone (Methyl Ethyl Ketone)	Y	0	NA	NA
2-Chloronaphthalene	NA	NA	N	ND
2-Chlorophenol	NA	NA	N	ND
2-Chlorotoluene	NA	NA	NA	NA
2-Hexanone	N	ND	NA	NA
2-Methylnaphthalene	NA	NA	N	ND
2-Methylphenol	NA	NA	N	ND
2-Nitroaniline	NA	NA	N	ND
2-Nitrophenol	NA	NA	N	ND
2-Propanol	Y		NA	NA
3,3'-Dichlorobenzidine	NA	NA	N	ND*
3-Chloropropene	N	ND	NA	NA
3-Nitroaniline	NA	NA	N	ND
4,6-Dinitro-2-methylphenol	NA	NA	N	ND
4-Bromophenyl phenyl ether	NA	NA	N	ND
4-Chloro-3-methylphenol	NA	NA	N	ND
4-Chloroaniline	NA	NA	N	ND
4-Chlorophenyl phenyl ether	NA	NA	N	ND
4-Chlorotoluene	NA	NA	NA	NA
4-Ethyltoluene	N	ND	NA	NA
4-Methyl-2-pentanone	N	ND	NA	NA
4-Methylphenol	NA	NA	N	ND
4-Nitroaniline	NA	NA	N	ND
4-Nitrophenol	NA	NA	N	ND
Acenaphthene	NA	NA	N	ND
Acenaphthylene	NA	NA	N	ND
Acetone	Y	0	NA	NA
alpha-Chlorotoluene	N	ND*	NA	NA
Aluminum	NA	NA	N	BG

Table 5.9-3 Chemical of Potential Concern Summary
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Aniline	NA	NA	N	ND
Anthracene	NA	NA	N	ND
Antimony	NA	NA	N	BSL
PCB-1016	NA	NA	NA	NA
PCB-1221	NA	NA	NA	NA
PCB-1232	NA	NA	NA	NA
PCB-1242	NA	NA	NA	NA
PCB-1248	NA	NA	NA	NA
PCB-1254	NA	NA	NA	NA
PCB-1260	NA	NA	NA	NA
Arsenic	NA	NA	N	BG
Azobenzene	NA	NA	N	ND
Barium	NA	NA	N	BSL
Benzene	Y		NA	NA
Benzidine	NA	NA	N	ND*
Benzo (a) anthracene	NA	NA	N	ND
Benzo (a) pyrene	NA	NA	N	ND*
Benzo (b & k) fluoranthene (total)	NA	NA	N	ND
Benzo (ghi) perylene	NA	NA	N	ND
Benzo(b)fluoranthene	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA
Benzoic acid	NA	NA	N	ND
Benzyl alcohol	NA	NA	N	ND
Benzyl butyl phthalate	NA	NA	N	ND
Beryllium	NA	NA	N	BSL
Bis(2-Chloroethoxy)methane	NA	NA	N	ND
Bis(2-Chloroethyl)ether	NA	NA	N	ND*
Bis(2-Chloroisopropyl)ether	NA	NA	N	ND
Bis(2-Ethylhexyl)phthalate	NA	NA	N	ND
Boron	NA	NA	N	BSL
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	NA
Bromodichloromethane	N	ND*	NA	NA
Bromoform	N	ND	NA	NA
Bromomethane	N	ND	NA	NA
Butylbenzene	N	ND	NA	NA
Cadmium	NA	NA	N	BSL
Calcium	NA	NA	NA	NA
Carbazole	NA	NA	N	ND
Carbon Disulfide	Y	0	NA	NA
Carbon Tetrachloride	N	ND*	NA	NA
Chlorobenzene	N	ND	NA	NA
Chloroethane	N	ND	NA	NA
Chloroform	Y		NA	NA
Chloromethane	N	ND	NA	NA
Chromium	NA	NA	N	BSL
Chrysene	NA	NA	N	ND
cis-1,2-Dichloroethene	N	ND	NA	NA
cis-1,3-Dichloropropene	N	ND	NA	NA
Cobalt	NA	NA	N	BSL
Copper	NA	NA	N	BSL
Cyclohexane	Y		NA	NA
Dibenz (a,h) anthracene	NA	NA	N	ND
Dibenzofuran	NA	NA	N	ND
Dibromochloromethane	N	ND*	NA	NA
Dibromomethane	NA	NA	NA	NA
Freon 12	N	ND	NA	NA
Diesel Range Organics (C10-C28)	NA	NA	NA	NA
Diethyl phthalate	NA	NA	N	ND
Dimethyl phthalate	NA	NA	N	ND
Di-n-butyl phthalate	NA	NA	N	ND
Di-n-octyl phthalate	NA	NA	N	ND

Table 5.9-3 Chemical of Potential Concern Summary
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil Vapor		Soil	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Ethanol	Y		NA	NA
Ethyl benzene	N	ND	NA	NA
Fluoranthene	NA	NA	N	ND
Fluorene	NA	NA	N	ND
Freon 113	Y		NA	NA
Freon 114	N	ND	NA	NA
Heptane	Y		NA	NA
Hexachlorobenzene	NA	NA	N	ND*
Hexachlorobutadiene	N	ND*	N	ND
Hexachlorocyclopentadiene	NA	NA	N	ND
Hexachloroethane	NA	NA	N	ND
Hexane	Y	0	NA	NA
Chromium VI	NA	NA	NA	NA
Indeno (1,2,3-cd) pyrene	NA	NA	N	ND
Iron	NA	NA	NA	NA
Isophorone	NA	NA	N	ND
Cumene	N	ND	NA	NA
Lead	NA	NA	N	BSL
Lithium	NA	NA	N	BSL
m,p-Xylene	Y	0	NA	NA
Magnesium	NA	NA	NA	NA
Manganese	NA	NA	N	BG
Mercury	NA	NA	N	BSL
Methyl tert-butyl ether	N	ND	NA	NA
Methylene Chloride	Y		NA	NA
Molybdenum	NA	NA	N	BSL
Motor Oil Range Organics (C16-C36)	NA	NA	NA	NA
Naphthalene	NA	NA	N	ND
Butylbenzene	N	ND	NA	NA
Nickel	NA	NA	N	BSL
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	NA	NA	N	ND
N-Nitrosodimethylamine	NA	NA	N	ND*
N-Nitrosodi-n-propylamine	NA	NA	N	ND*
N-Nitrosodiphenylamine	NA	NA	N	ND
Propylbenzene	N	ND	NA	NA
o-Xylene	N	ND	NA	NA
Pentachlorophenol	NA	NA	N	ND*
Perchlorate	NA	NA	NA	NA
Phenanthrene	NA	NA	N	ND
Phenol	NA	NA	Y	
p-Cymene	N	ND	NA	NA
Polychlorinated biphenyl	NA	NA	NA	NA
Potassium	NA	NA	NA	NA
Pyrene	NA	NA	N	ND
sec-Butylbenzene	N	ND	NA	NA
Selenium	NA	NA	N	ND
Silver	NA	NA	N	BSL
Sodium	NA	NA	NA	NA
Strontium	NA	NA	N	BSL
Styrene	N	ND	NA	NA
tert-Butylbenzene	N	ND	NA	NA
Tetrachloroethene	Y		NA	NA
Tetrahydrofuran	Y		NA	NA
Thallium	NA	NA	N	BSL
Tin	NA	NA	NA	NA
Titanium	NA	NA	N	BSL
Toluene	Y	0	NA	NA
Total Cyanide	NA	NA	NA	NA
trans-1,2-Dichloroethene	N	ND	NA	NA

Table 5.9-3 Chemical of Potential Concern Summary
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
trans-1,3-Dichloropropene	N	ND	NA	NA
Trichloroethene	Y		NA	NA
Freon 11	N	ND	NA	NA
Vanadium	NA	NA	N	BG
Vinyl Chloride	N	ND*	NA	NA
Xylenes (total)	NA	NA	NA	NA
Zinc	NA	NA	N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern
NA = Not applicable

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Table 5.9-4 Outdoor Air Exposure Point Concentration Results
Open Space 5 and 7 Management Areas
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**	**Soil Conc. (mg/kg)**	**PEF/VF[1] (kg/m^3)**	**Air Conc.[2] (mg/m^3)**
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg, Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.9-5 ***Residential Soil Vapor to Indoor Air Attenuation Factors***
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors	
	Feet bgs	
Chemical/Feet bgs	**10**	**20**
2-Propanol	5.2 E-4	3.0 E-4
Benzene	5.2 E-4	2.8 E-4
1,2-Dichloroethane	5.9 E-4	3.3 E-4
1,4-Dioxane	5.9 E-4	3.4 E-4
Freon 113	4.7 E-4	2.7 E-4
Heptane	9.3 E-4	5.8 E-4
Hexane	9.3 E-4	5.6 E-4
Tetrachloroethylene	4.4 E-4	2.4 E-4
Tetrahydrofuran	6.0 E-4	3.5 E-4
Trichloroethylene	4.8 E-4	2.7 E-4
2-Butanone (Methyl Ethyl Ketone)	4.9 E-4	2.8 E-4
Acetone	6.8 E-4	4.0 E-4
Carbon Disulfide	5.9 E-4	3.4 E-4
Cyclohexane	4.8 E-4	2.7 E-4
Ethanol	8.4 E-4	5.2 E-4
m,p-Xylene	4.6 E-4	2.6 E-4
Chloroform	5.9 E-4	3.3 E-4
Methylene chloride	5.8 E-4	3.2 E-4
Toluene	5.1 E-4	2.9 E-4

Key:
bgs = Below ground surface

Table 5.9-6 *Commercial Soil Vapor to Indoor Air Attenuation Factors*
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors	
	Feet bgs	
Chemical/Feet bgs	**10**	**20**
2-Propanol	2.6 E-4	1.5 E-4
Benzene	2.6 E-4	1.4 E-4
1,2-Dichloroethane	2.9 E-4	1.6 E-4
1,4-Dioxane	3.0 E-4	1.7 E-4
Freon 113	2.4 E-4	1.3 E-4
Heptane	4.6 E-4	2.9 E-4
Hexane	4.6 E-4	2.8 E-4
Tetrachloroethylene	2.2 E-4	1.2 E-4
Tetrahydrofuran	3.0 E-4	1.7 E-4
Trichloroethylene	2.4 E-4	1.3 E-4
2-Butanone (Methyl Ethyl Ketone)	2.4 E-4	1.4 E-4
Acetone	3.4 E-4	2.0 E-4
Carbon Disulfide	2.9 E-4	1.7 E-4
Cyclohexane	2.4 E-4	1.4 E-4
Ethanol	4.2 E-4	2.6 E-4
m,p-Xylene	2.3 E-4	1.3 E-4
Chloroform	2.9 E-4	1.6 E-4
Methylene chloride	2.9 E-4	1.6 E-4
Toluene	2.6 E-4	1.5 E-4

Key:
bgs = Below ground surface

Table 5.9-7 ***Source Partitioning Coefficients and Attenuation Factors for Soil Vapor to Outdoor Air***
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical of Potential Concern	Diffusivity in Air (cm^2/s)	Feet bgs 10	Feet bgs 20
2-Propanol	8.6 E-2	6.9 E-6	3.4 E-6
Benzene	8.8 E-2	7.0 E-6	3.5 E-6
1,2-Dichloroethane	1.0 E-1	8.3 E-6	4.2 E-6
1,4-Dioxane	9.9 E-2	7.9 E-6	4.0 E-6
Freon 113	7.8 E-2	6.2 E-6	3.1 E-6
Heptane	6.8 E-2	5.5 E-6	2.7 E-6
Hexane	2.0 E-1	1.6 E-5	8.0 E-6
Tetrachloroethylene	7.2 E-2	5.8 E-6	2.9 E-6
Tetrahydrofuran	1.1 E-1	8.4 E-6	4.2 E-6
Trichloroethylene	7.9 E-2	6.3 E-6	3.2 E-6
2-Butanone (Methyl Ethyl Ketone)	8.1 E-2	6.5 E-6	3.2 E-6
Acetone	1.2 E-1	9.9 E-6	5.0 E-6
Carbon Disulfide	1.0 E-1	8.3 E-6	4.2 E-6
Cyclohexane	8.0 E-2	6.4 E-6	3.2 E-6
Ethanol	1.6 E-1	1.3 E-5	6.3 E-6
m,p-Xylene	7.7 E-2	6.1 E-6	3.1 E-6
Chloroform	1.0 E-1	8.3 E-6	4.2 E-6
Methylene chloride	1.0 E-1	8.1 E-6	4.0 E-6
Toluene	8.7 E-2	6.9 E-6	3.5 E-6

a = USEPA, 1988, Superfund Exposure Assessment Manual

Ambient Air Attenuation Factor = $\frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm3/m3}}$

Dia =	chemical specific	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	20250000	cm^2	Area (assume 4500 cm x 4500 cm)
d =	304.8	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2	m	Breathing zone height
u =	3	m/s	Wind speed

Notes and Key:

bgs = Below ground surface
b = See Appendix A for calculations.
cm^2/s = Square Centimeter per second
m = Meter
m/s = Meter per second

Table 5.9-8 ***Soil Unit Hazard and Unit Cancer Risk Results-Resident***
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child			Unit HI	Adult			Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
		Oral HQ	Dermal HQ	Inhal HQ		Oral HQ	Dermal HQ	Inhal HQ					
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.9-9 *Inhalation Unit Hazard and Unit Cancer Risk Results - Resident*
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	4.5 E-1	1.9 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Cyclohexane	1.0 E+0	3.7 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
Methylene chloride	1.0 E+0	7.5 E-1	3.2 E-1	5.2 E-4
Toluene	1.0 E+0	7.5 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.9-10 *Location-Specific Soil Risk Assessment Results - Resident*
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)	Child Non-Cancer Hazard Index		Adult Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	
Sample Name	**Depth**	**Phenol**	**Phenol**	**HI**	**Phenol**	**HI**	**Phenol**	**ILCR**
Unit Hazard Child		5.5 E-5						
Unit Hazard Adult		6.4 E-6						
Unit Risk		NA						
OS5-F1-SB01	1	1.4	7.6 E-5	7.6 E-5	8.9 E-6	8.9 E-6	NA	NA
OS5-F2-SB01	1		NA	NA	NA	NA	NA	NA
OS5-F2-SB01	5	1.9	1.0 E-4	1.0 E-4	1.2 E-5	1.2 E-5	NA	NA
OS5-F2-SB01	11	1.7	9.3 E-5	9.3 E-5	1.1 E-5	1.1 E-5	NA	NA

Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.9-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**
Unit Hazard Child		2.5 E+2	7.4 E+1	4.6 E+2	7.5 E-1	7.4 E-2	3.2 E+0	3.2 E+0	6.4 E+1	7.4 E+0	3.8 E+0	4.5 E-1	7.1 E-1	3.2 E+0	3.7 E-1	1.3 E+0	2.2 E+1	4.9 E+1	7.5 E-1	7.5 E+0
Unit Hazard Adult		1.1 E+2	3.2 E+1	2.0 E+2	3.2 E-1	3.2 E-2	1.4 E+0	1.4 E+0	2.7 E+1	3.2 E+0	1.6 E+0	1.9 E-1	3.0 E-1	1.4 E+0	1.6 E-1	5.5 E-1	9.6 E+0	2.1 E+1	3.2 E-1	3.2 E+0
Unit Risk		NA	1.5 E-2	1.4 E-2	4.0 E-3	NA	NA	NA	3.1 E-3	1.0 E-3	1.0 E-3	NA	NA	NA	NA	NA	NA	1.2 E-2	5.2 E-4	NA
28E-SP17	10	13	40	35			130	620	15		17	24	110	20	17					25
28E-SP17	20		26	7.5	18		66	170			9.8		72	73		15				25
28E-SP19	20	17	37		20	19	100	390		62	22	30	280	330	9.6	28	6.7			66
OS5-F1-SP01	10									4.1				45						
OS5-F1-SP01	20		6.4					13		5.7				210	13					
OS5-F2-SP01	10						15	150						110	8.7			24	29	12

Table 5.9-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
28E-SP17	10	1.7 E-3	1.5 E-3	9.4 E-3	NA	NA	3.9 E-4	1.8 E-3	4.2 E-4	NA	3.0 E-5	5.2 E-6	5.3 E-5	3.8 E-5	3.0 E-6	NA	NA	NA	NA	9.6 E-5	1.6 E-2
28E-SP17	20	NA	5.5 E-4	1.1 E-3	4.6 E-6	NA	1.2 E-4	3.0 E-4	NA	NA	9.9 E-6	NA	2.1 E-5	8.0 E-5	NA	9.9 E-6	NA	NA	NA	5.5 E-5	2.3 E-3
28E-SP19	20	1.3 E-3	7.8 E-4	NA	5.1 E-6	3.8 E-7	1.9 E-4	7.0 E-4	NA	1.6 E-4	2.2 E-5	3.7 E-6	8.0 E-5	3.6 E-4	9.8 E-7	1.9 E-5	3.9 E-5	NA	NA	1.4 E-4	3.8 E-3
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	8.5 E-5	NA	NA	NA	NA	NA	NA	1.0 E-4
OS5-F1-SP01	20	NA	1.3 E-4	NA	NA	NA	NA	2.3 E-5	NA	1.5 E-5	NA	NA	NA	2.3 E-4	1.3 E-6	NA	NA	NA	NA	NA	4.0 E-4
OS5-F2-SP01	10	NA	NA	NA	NA	NA	4.5 E-5	4.5 E-4	NA	NA	NA	NA	NA	2.1 E-4	1.6 E-6	NA	NA	7.0 E-4	1.2 E-5	4.6 E-5	1.5 E-3

Table 5.9-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
28E-SP17	10	7.2 E-4	6.6 E-4	4.0 E-3	NA	NA	1.7 E-4	7.9 E-4	1.8 E-4	NA	1.3 E-5	2.2 E-6	2.3 E-5	1.6 E-5	1.3 E-6	NA	NA	NA	NA	4.1 E-5	6.6 E-3
28E-SP17	20	NA	2.3 E-4	4.8 E-4	2.0 E-6	NA	5.3 E-5	1.3 E-4	NA	NA	4.3 E-6	NA	8.8 E-6	3.4 E-5	NA	4.3 E-6	NA	NA	NA	2.3 E-5	9.8 E-4
28E-SP19	20	5.4 E-4	3.3 E-4	NA	2.2 E-6	1.6 E-7	8.0 E-5	3.0 E-4	NA	6.9 E-5	9.6 E-6	1.6 E-6	3.4 E-5	1.5 E-4	4.2 E-7	8.0 E-6	1.7 E-5	NA	NA	6.2 E-5	1.6 E-3
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-6	NA	NA	NA	3.6 E-5	NA	NA	NA	NA	NA	NA	4.4 E-5
OS5-F1-SP01	20	NA	5.8 E-5	NA	NA	NA	NA	1.0 E-5	NA	6.3 E-6	NA	NA	NA	9.9 E-5	5.7 E-7	NA	NA	NA	NA	NA	1.7 E-4
OS5-F2-SP01	10	NA	NA	NA	NA	NA	1.9 E-5	1.9 E-4	NA	NA	NA	NA	NA	8.9 E-5	6.7 E-7	NA	NA	3.0 E-4	5.3 E-6	2.0 E-5	6.2 E-4

Table 5.9-11
Location-Specific Soil Vapor Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
28E-SP17	10	NA	3.1 E-7	2.8 E-7	NA	NA	NA	NA	2.1 E-8	NA	8.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6E-07
28E-SP17	20	NA	1.1 E-7	3.3 E-8	2.5 E-8	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-07
28E-SP19	20	NA	1.6 E-7	NA	2.8 E-8	NA	NA	NA	NA	2.2 E-8	6.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-07
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-09
OS5-F1-SP01	20	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-08
OS5-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	8.7 E-9	NA	1.781E-07

Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.9-5) x the unit hazard or unit risk for the chemical).

Table 5.9-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**
Unit Hazard Child		2.5 E+2	7.4 E+1	4.6 E+2	7.5 E-1	7.4 E-2	3.2 E+0	3.2 E+0	6.4 E+1	7.4 E+0	3.8 E+0	4.5 E-1	7.1 E-1	3.2 E+0	3.7 E-1	1.3 E+0	2.2 E+1	4.9 E+1	7.5 E-1	7.5 E+0
Unit Hazard Adult		1.1 E+2	3.2 E+1	2.0 E+2	3.2 E-1	3.2 E-2	1.4 E+0	1.4 E+0	2.7 E+1	3.2 E+0	1.6 E+0	1.9 E-1	3.0 E-1	1.4 E+0	1.6 E-1	5.5 E-1	9.6 E+0	2.1 E+1	3.2 E-1	3.2 E+0
Unit Risk		NA	1.5 E-2	1.4 E-2	4.0 E-3	NA	NA	NA	3.1 E-3	1.0 E-3	1.0 E-3	NA	NA	NA	NA	NA	NA	1.2 E-2	5.2 E-4	NA
28E-SP17	10	13	40	35			130	620	15		17	24	110	20	17					25
28E-SP17	20		26	7.5	18		66	170			9.8		72	73		15				25
28E-SP19	20	17	37		20	19	100	390		62	22	30	280	330	9.6	28	6.7			66
OS5-F1-SP01	10									4.1				45						
OS5-F1-SP01	20		6.4					13		5.7				210	13					
OS5-F2-SP01	10						15	150						110	8.7			24	29	12

Table 5.9-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
28E-SP17	10	2.2 E-5	2.1 E-5	1.3 E-4	NA	NA	2.3 E-6	3.2 E-5	5.5 E-6	NA	4.0 E-7	6.9 E-8	7.7 E-7	5.3 E-7	4.1 E-8	NA	NA	NA	NA	1.3 E-6	2.2 E-4
28E-SP17	20	NA	6.8 E-6	1.4 E-5	5.3 E-8	NA	5.8 E-7	4.3 E-6	NA	NA	1.2 E-7	NA	2.5 E-7	9.7 E-7	NA	1.2 E-7	NA	NA	NA	6.5 E-7	2.8 E-5
28E-SP19	20	1.4 E-5	9.7 E-6	NA	5.9 E-8	4.4 E-9	8.7 E-7	1.0 E-5	NA	1.9 E-6	2.6 E-7	4.3 E-8	9.8 E-7	4.4 E-6	1.1 E-8	2.2 E-7	4.6 E-7	NA	NA	1.7 E-6	4.5 E-5
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	1.5 E-6
OS5-F1-SP01	20	NA	1.7 E-6	NA	NA	NA	NA	3.3 E-7	NA	1.8 E-7	NA	NA	NA	2.8 E-6	1.5 E-8	NA	NA	NA	NA	NA	5.0 E-6
OS5-F2-SP01	10	NA	NA	NA	NA	NA	2.6 E-7	7.7 E-6	NA	NA	NA	NA	NA	2.9 E-6	2.1 E-8	NA	NA	9.8 E-6	1.7 E-7	6.2 E-7	2.1 E-5

Table 5.9-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**HI**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
28E-SP17	10	9.4 E-6	9.0 E-6	5.7 E-5	NA	NA	9.7 E-7	1.4 E-5	2.4 E-6	NA	1.7 E-7	3.0 E-8	3.3 E-7	2.3 E-7	1.7 E-8	NA	NA	NA	NA	5.6 E-7	9.3 E-5
28E-SP17	20	NA	2.9 E-6	6.1 E-6	2.3 E-8	NA	2.5 E-7	1.9 E-6	NA	NA	5.0 E-8	NA	1.1 E-7	4.2 E-7	NA	5.1 E-8	NA	NA	NA	2.8 E-7	1.2 E-5
28E-SP19	20	6.2 E-6	4.1 E-6	NA	2.5 E-8	1.9 E-9	3.7 E-7	4.3 E-6	NA	8.3 E-7	1.1 E-7	1.9 E-8	4.2 E-7	1.9 E-6	4.9 E-9	9.6 E-8	2.0 E-7	NA	NA	7.3 E-7	1.9 E-5
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	6.2 E-7
OS5-F1-SP01	20	NA	7.2 E-7	NA	NA	NA	NA	1.4 E-7	NA	7.6 E-8	NA	NA	NA	1.2 E-6	6.6 E-9	NA	NA	NA	NA	NA	2.1 E-6
OS5-F2-SP01	10	NA	NA	NA	NA	NA	1.1 E-7	3.3 E-6	NA	NA	NA	NA	NA	1.3 E-6	8.9 E-9	NA	NA	4.2 E-6	7.5 E-8	2.7 E-7	9.2 E-6

Table 5.9-12
Location-Specific Outdoor Air Risk Assessment Results - Resident
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**ILCR**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
28E-SP17	10	NA	4.2 E-9	3.9 E-9	NA	NA	NA	NA	2.7 E-10	NA	1.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
28E-SP17	20	NA	1.4 E-9	4.2 E-10	2.9 E-10	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
28E-SP19	20	NA	1.9 E-9	NA	3.2 E-10	NA	NA	NA	NA	2.6 E-10	7.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
OS5-F1-SP01	20	NA	3.3 E-10	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10
OS5-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	1.2 E-10	NA	3 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.9-7) x the unit hazard or unit risk for the chemical).

Table 5.9-13 *Unit Soil Hazard and Unit Cancer Risk Results - Construction Worker*
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI - Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.9-15 Location-Specific Soil Risk Assessment Results - Construction Workers
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)	Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	
Sample Name	**Depth**	**Phenol**	**Phenol**	**HI**	**Phenol**	**ILCR**
Unit Hazard		1.6 E-5				
Unit Risk		NA				
OS5-F1-SB01	1	1.4	2.2 E-5	2.2 E-5	NA	NA
OS5-F2-SB01	1		NA	NA	NA	NA
OS5-F2-SB01	5	1.9	3.0 E-5	3.0 E-5	NA	NA
OS5-F2-SB01	11	1.7	2.7 E-5	2.7 E-5	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.9-14 *Inhalation Unit Hazard and Unit Cancer Risk Results - Construction Worker*
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
1,2-Dichloroethane	1.0 E+0	1.4 E+2	2.5 E-4
1,4-Dioxane	1.0 E+0	2.3 E-1	7.5 E-5
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
Trichloroethylene	1.0 E+0	1.2 E+0	2.0 E-5
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Chloroform	1.0 E+0	1.5 E+1	2.3 E-4
Methylene chloride	1.0 E+0	2.3 E-1	9.8 E-6
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.9-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**
Unit Hazard		7.5 E+1	2.3 E+1	1.4 E+2	2.3 E-1	2.3 E-2	9.8 E-1	9.8 E-1	2.0 E+1	2.3 E+0	1.2 E+0	1.4 E-1	2.2 E-1	9.8 E-1	1.1 E-1	3.9 E-1	6.8 E+0	1.5 E+1	2.3 E-1	2.3 E+0
Unit Risk		NA	2.8 E-4	2.5 E-4	7.5 E-5	NA	NA	NA	5.9 E-5	1.9 E-5	2.0 E-5	NA	NA	NA	NA	NA	NA	2.3 E-4	9.8 E-6	NA
28E-SP17	10	13	40	35			130	620	15		17	24	110	20	17					25
28E-SP17	20		26	7.5	18		66	170			9.8		72	73		15				25
28E-SP19	20	17	37		20	19	100	390		62	22	30	280	330	9.6	28	6.7			66
OS5-F1-SP01	10									4.1				45						
OS5-F1-SP01	20		6.4					13		5.7				210	13					
OS5-F2-SP01	10						15	150						110	8.7			24	29	12

Table 5.9-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
28E-SP17	10	6.7 E-6	6.4 E-6	4.1 E-5	NA	NA	6.9 E-7	9.7 E-6	1.7 E-6	NA	1.2 E-7	2.1 E-8	2.4 E-7	1.6 E-7	1.2 E-8	NA	NA	NA	NA	4.0 E-7	6.7 E-5
28E-SP17	20	NA	2.1 E-6	4.4 E-6	1.6 E-8	NA	1.8 E-7	1.3 E-6	NA	NA	3.6 E-8	NA	7.8 E-8	3.0 E-7	NA	3.7 E-8	NA	NA	NA	2.0 E-7	8.6 E-6
28E-SP19	20	4.4 E-6	3.0 E-6	NA	1.8 E-8	1.3 E-9	2.7 E-7	3.0 E-6	NA	5.9 E-7	8.0 E-8	1.3 E-8	3.0 E-7	1.3 E-6	3.5 E-9	6.9 E-8	1.4 E-7	NA	NA	5.2 E-7	1.4 E-5
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	4.4 E-7
OS5-F1-SP01	20	NA	5.1 E-7	NA	NA	NA	NA	1.0 E-7	NA	5.4 E-8	NA	NA	NA	8.5 E-7	4.7 E-9	NA	NA	NA	NA	NA	1.5 E-6
OS5-F2-SP01	10	NA	NA	NA	NA	NA	8.0 E-8	2.3 E-6	NA	NA	NA	NA	NA	8.9 E-7	6.3 E-9	NA	NA	3.0 E-6	5.3 E-8	1.9 E-7	6.6 E-6

Table 5.9-16
Location-Specific Soil Risk Assessment Results - Construction Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene chloride**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
28E-SP17	10	NA	7.9 E-11	7.4 E-11	NA	NA	NA	NA	5.1 E-12	NA	2.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-10
28E-SP17	20	NA	2.6 E-11	7.9 E-12	5.4 E-12	NA	NA	NA	NA	NA	6.0 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	4E-11
28E-SP19	20	NA	3.6 E-11	NA	6.0 E-12	NA	NA	NA	NA	4.9 E-12	1.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	5E-11
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7E-13
OS5-F1-SP01	20	NA	6.3 E-12	NA	NA	NA	NA	NA	NA	4.5 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7E-12
OS5-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-11	2.3 E-12	NA	5E-11

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA - Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.9-7) x the unit hazard or unit risk for the chemical).

Table 5.9-17 *Unit Hazard and Unit Cancer Risk Results-Outdoor Commercial Worker*
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	3 E-9	5.4 E-6	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.9-18 *Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker*
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	1.5 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	4.8 E-4
Trichloroethylene	1.0 E+0	1.2 E+0	4.9 E-4
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
Methylene chloride	1.0 E+0	2.3 E-1	2.4 E-4
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.9-19 Location-Specific Soil Risk Assessment Results - Commercial Workers
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)	Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	
Sample Name	**Depth**	**Phenol**	**Phenol**	**HI**	**Phenol**	**ILCR**
Unit Hazard		5.4 E-6				
Unit Risk		NA				
OS5-F1-SB01	1	1.4	7.6 E-6	7.6 E-6	NA	NA
OS5-F2-SB01	1		NA	NA	NA	NA
OS5-F2-SB01	5	1.9	1.0 E-5	1.0 E-5	NA	NA
OS5-F2-SB01	11	1.7	9.2 E-6	9.2 E-6	NA	NA

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.9-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene Chloride**	**Toluene**
Unit Hazard		7.5 E+1	2.3 E+1	1.4 E+2	2.3 E-1	2.3 E-2	9.8 E-1	9.8 E-1	2.0 E+1	2.3 E+0	1.2 E+0	1.4 E-1	2.2 E-1	9.8 E-1	1.1 E-1	3.9 E-1	6.8 E+0	1.5 E+1	2.3 E-1	2.3 E+0
Unit Risk		NA	7.0 E-3	6.4 E-3	1.9 E-3	NA	NA	NA	1.5 E-3	4.8 E-4	4.9 E-4	NA	NA	NA	NA	NA	NA	5.6 E-3	2.4 E-4	NA
28E-SP17	10	13	40	35			130	620	15		17	24	110	20	17					25
28E-SP17	20		26	7.5	18		66	170			9.8		72	73		15				25
28E-SP19	20	17	37		20	19	100	390		62	22	30	280	330	9.6	28	6.7			66
OS5-F1-SP01	10									4.1				45						
OS5-F1-SP01	20		6.4					13		5.7				210	13					
OS5-F2-SP01	10						15	150						110	8.7			24	29	12

Table 5.9-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene Chloride**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
28E-SP17	10	2.6 E-4	2.4 E-4	1.4 E-3	NA	NA	5.9 E-5	2.8 E-4	6.5 E-5	NA	4.6 E-6	8.0 E-7	8.1 E-6	5.8 E-6	4.7 E-7	NA	NA	NA	NA	1.5 E-5	2.4 E-3
28E-SP17	20	NA	8.4 E-5	1.7 E-4	7.1 E-7	NA	1.9 E-5	4.7 E-5	NA	NA	1.5 E-6	NA	3.1 E-6	1.2 E-5	NA	1.5 E-6	NA	NA	NA	8.4 E-6	3.5 E-4
28E-SP19	20	1.9 E-4	1.2 E-4	NA	7.9 E-7	5.8 E-8	2.9 E-5	1.1 E-4	NA	2.5 E-5	3.4 E-6	5.7 E-7	1.2 E-5	5.5 E-5	1.5 E-7	2.8 E-6	6.0 E-6	NA	NA	2.2 E-5	5.8 E-4
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	1.6 E-5
OS5-F1-SP01	20	NA	2.1 E-5	NA	NA	NA	NA	3.6 E-6	NA	2.3 E-6	NA	NA	NA	3.5 E-5	2.0 E-7	NA	NA	NA	NA	NA	6.2 E-5
OS5-F2-SP01	10	NA	NA	NA	NA	NA	6.8 E-6	6.8 E-5	NA	NA	NA	NA	NA	3.2 E-5	2.4 E-7	NA	NA	1.1 E-4	1.9 E-6	7.0 E-6	2.2 E-4

Table 5.9-20
Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene Chloride**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
28E-SP17	10	NA	7.2 E-8	6.6 E-8	NA	NA	NA	NA	4.9 E-9	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
28E-SP17	20	NA	2.6 E-8	7.8 E-9	5.8 E-9	NA	NA	NA	NA	NA	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
28E-SP19	20	NA	3.7 E-8	NA	6.5 E-9	NA	NA	NA	NA	5.1 E-9	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-8
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-10
OS5-F1-SP01	20	NA	6.3 E-9	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-9
OS5-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	2.0 E-9	NA	4 E-8

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.9-6) x the unit hazard or unit risk for the chemical).

Table 5.9-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																		
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene Chloride**	**Toluene**
Unit Hazard		7.5 E+1	2.3 E+1	1.4 E+2	2.3 E-1	2.3 E-2	9.8 E-1	9.8 E-1	2.0 E+1	2.3 E+0	1.2 E+0	1.4 E-1	2.2 E-1	9.8 E-1	1.1 E-1	3.9 E-1	6.8 E+0	1.5 E+1	2.3 E-1	2.3 E+0
Unit Risk		NA	7.0 E-3	6.4 E-3	1.9 E-3	NA	NA	NA	1.5 E-3	4.8 E-4	4.9 E-4	NA	NA	NA	NA	NA	NA	5.6 E-3	2.4 E-4	NA
28E-SP17	10	13	40	35			130	620	15		17	24	110	20	17					25
28E-SP17	20		26	7.5	18		66	170			9.8		72	73		15				25
28E-SP19	20	17	37		20	19	100	390		62	22	30	280	330	9.6	28	6.7			66
OS5-F1-SP01	10									4.1				45						
OS5-F1-SP01	20		6.4					13		5.7				210	13					
OS5-F2-SP01	10						15	150						110	8.7			24	29	12

Table 5.9-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene Chloride**	**Toluene**	**HI**
Unit Hazard																					
Unit Risk																					
28E-SP17	10	6.7 E-6	6.4 E-6	4.1 E-5	NA	NA	6.9 E-7	9.7 E-6	1.7 E-6	NA	1.2 E-7	2.1 E-8	2.4 E-7	1.6 E-7	1.2 E-8	NA	NA	NA	NA	4.0 E-7	6.7 E-5
28E-SP17	20	NA	2.1 E-6	4.4 E-6	1.6 E-8	NA	1.8 E-7	1.3 E-6	NA	NA	3.6 E-8	NA	7.8 E-8	3.0 E-7	NA	3.7 E-8	NA	NA	NA	2.0 E-7	8.6 E-6
28E-SP19	20	4.4 E-6	3.0 E-6	NA	1.8 E-8	1.3 E-9	2.7 E-7	3.0 E-6	NA	5.9 E-7	8.0 E-8	1.3 E-8	3.0 E-7	1.3 E-6	3.5 E-9	6.9 E-8	1.4 E-7	NA	NA	5.2 E-7	1.4 E-5
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-8	NA	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	4.4 E-7
OS5-F1-SP01	20	NA	5.1 E-7	NA	NA	NA	NA	1.0 E-7	NA	5.4 E-8	NA	NA	NA	8.5 E-7	4.7 E-9	NA	NA	NA	NA	NA	1.5 E-6
OS5-F2-SP01	10	NA	NA	NA	NA	NA	8.0 E-8	2.3 E-6	NA	NA	NA	NA	NA	8.9 E-7	6.3 E-9	NA	NA	3.0 E-6	5.3 E-8	1.9 E-7	6.6 E-6

Table 5.9-21
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Depth**	**2-Propanol**	**Benzene**	**1,2-Dichloroethane**	**1,4-Dioxane**	**Freon 113**	**Heptane**	**Hexane**	**Tetrachloroethylene**	**Tetrahydrofuran**	**Trichloroethylene**	**2-Butanone (Methyl Ethyl Ketone)**	**Acetone**	**Carbon Disulfide**	**Cyclohexane**	**Ethanol**	**m,p-Xylene**	**Chloroform**	**Methylene Chloride**	**Toluene**	**ILCR**
Unit Hazard																					
Unit Risk																					
28E-SP17	10	NA	2.0 E-9	1.8 E-9	NA	NA	NA	NA	1.3 E-10	NA	5.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
28E-SP17	20	NA	6.4 E-10	2.0 E-10	1.3 E-10	NA	NA	NA	NA	NA	1.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
28E-SP19	20	NA	9.1 E-10	NA	1.5 E-10	NA	NA	NA	NA	1.2 E-10	3.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
OS5-F1-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
OS5-F1-SP01	20	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
OS5-F2-SP01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	5.7 E-11	NA	1 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.9-7) x the unit hazard or unit risk for the chemical).

Table 5.9-22 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil				Incremental Lifetime Cancer Risk - Soil		
Sample Name	**Depth**	**Resident Child**	**Adult**	**Construction Worker**	**Commercial Worker**	**Resident**	**Construction Worker**	**Commercial Worker**
OS5-F1-SB01	1	7.6 E-5	8.9 E-6	2.2 E-5	7.6 E-6	**NA**	**NA**	**NA**
OS5-F2-SB01	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
OS5-F2-SB01	5	1.0 E-4	1.2 E-5	3.0 E-5	1.0 E-5	**NA**	**NA**	**NA**
OS5-F2-SB01	11	9.3 E-5	1.1 E-5	2.7 E-5	9.2 E-6	**NA**	**NA**	**NA**
Minimum		7.6 E-5	8.9 E-6	2.2 E-5	7.6 E-6	0 E+0	0 E+0	0 E+0
Median		9.3 E-5	1.1 E-5	2.7 E-5	9.2 E-6	**NA**	**NA**	**NA**
Maximum		1.0 E-4	1.2 E-5	3.0 E-5	1.0 E-5	0 E+0	0 E+0	0 E+0

Key:
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.9-23 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Open Space 5 & 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil Vapor				Incremental Lifetime Cancer Risk - Soil		
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Resident	Construction Worker	Commercial Worker
28E-SP17	10	1.6 E-2	6.7 E-3	6.7 E-5	2.4 E-3	6 E-7	2 E-10	1 E-7
28E-SP17	20	2.3 E-3	9.9 E-4	8.6 E-6	3.6 E-4	2 E-7	4 E-11	4 E-8
28E-SP19	20	3.8 E-3	1.6 E-3	1.4 E-5	5.9 E-4	2 E-7	5 E-11	5 E-8
OS5-F1-SP01	10	1.0 E-4	4.5 E-5	4.4 E-7	1.6 E-5	3 E-9	7 E-13	6 E-10
OS5-F1-SP01	20	4.1 E-4	1.8 E-4	1.5 E-6	6.3 E-5	3 E-8	7 E-12	7 E-9
OS5-F2-SP01	10	1.5 E-3	6.3 E-4	6.6 E-6	2.3 E-4	2 E-7	5 E-11	4 E-8
Minimum		1.0 E-4	4.5 E-5	4.4 E-7	1.6 E-5	3 E-9	7 E-13	6 E-10
Median		1.9 E-3	8.1 E-4	7.6 E-6	2.9 E-4	2 E-7	4 E-11	4 E-8
Maximum		1.6 E-2	6.7 E-3	6.7 E-5	2.4 E-3	6 E-7	2 E-10	1 E-7

Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

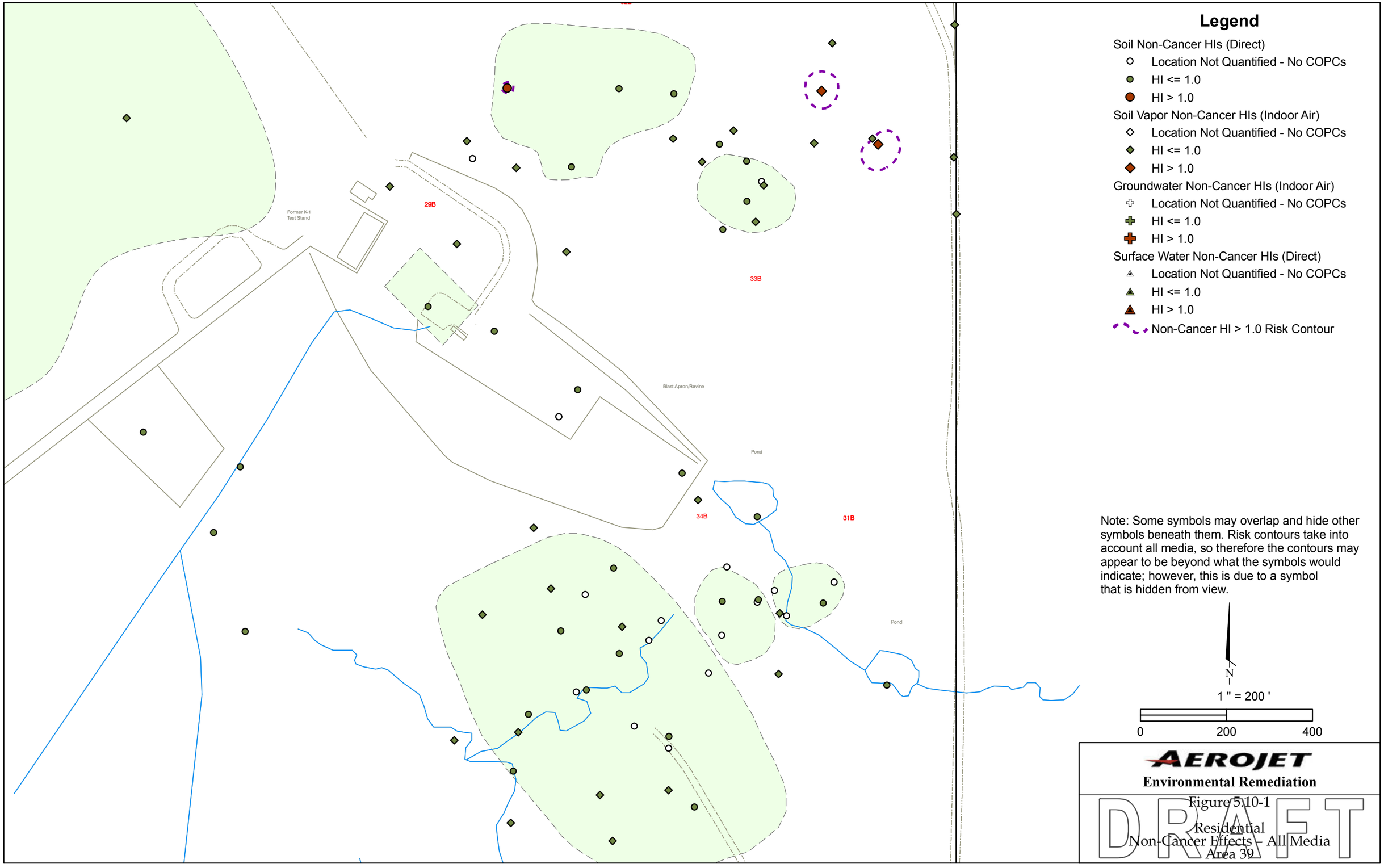
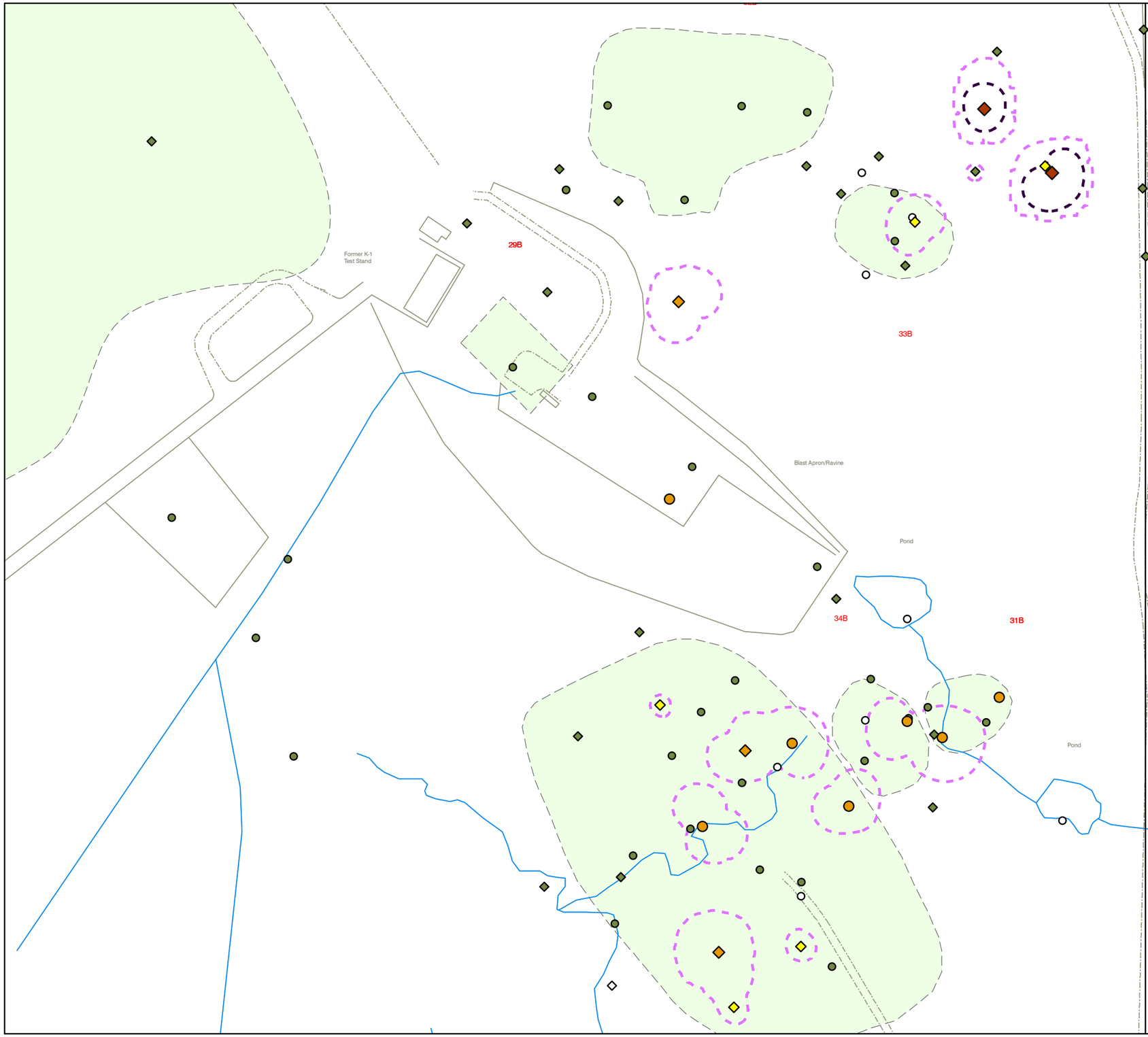


Figure 5.10-1

Residential
Non-Cancer Effects – All Media
Area 39



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 200 '

0 200 400

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Figure 5.10-2

Residential
Cancer Risks – All Media
Area 39

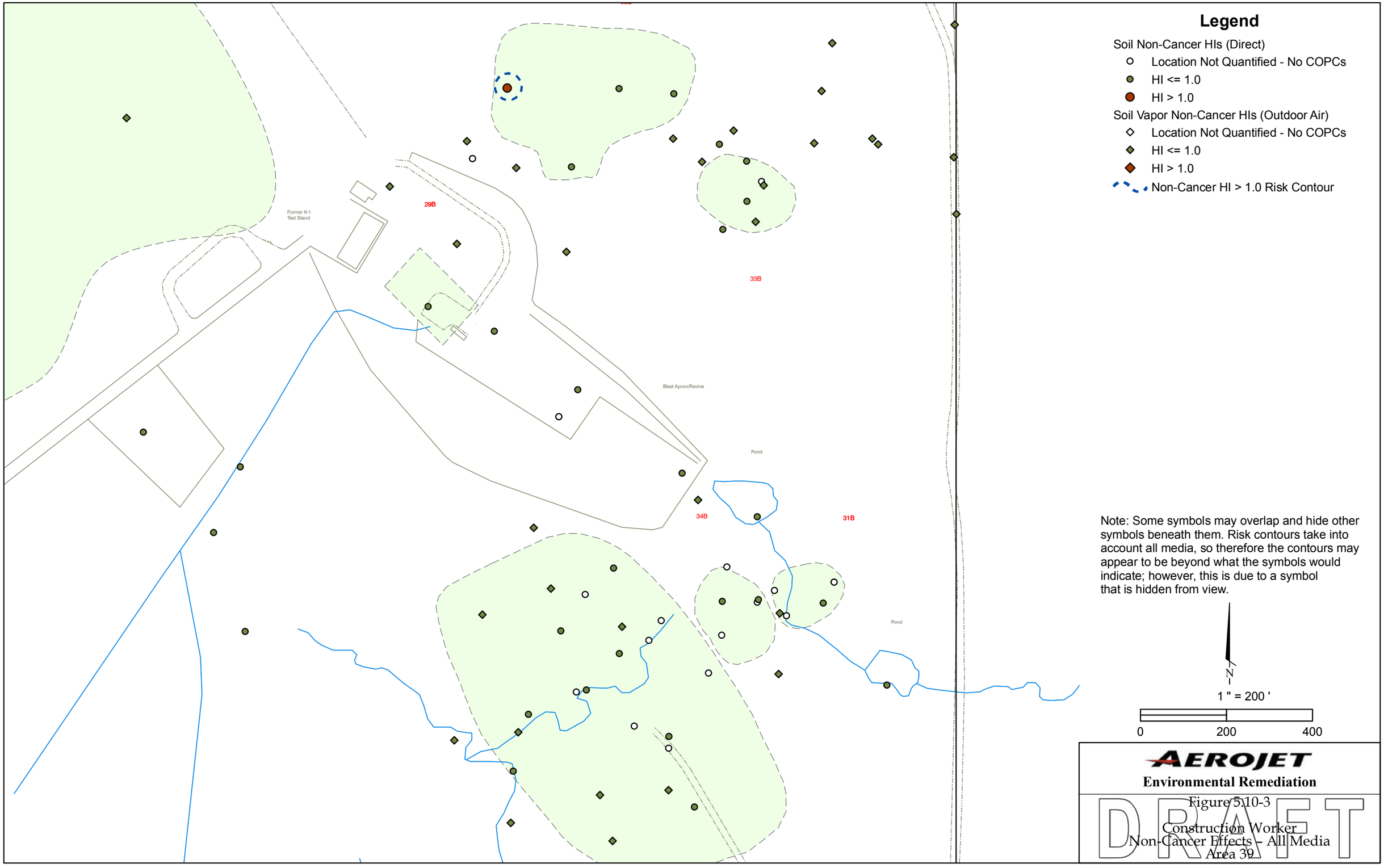
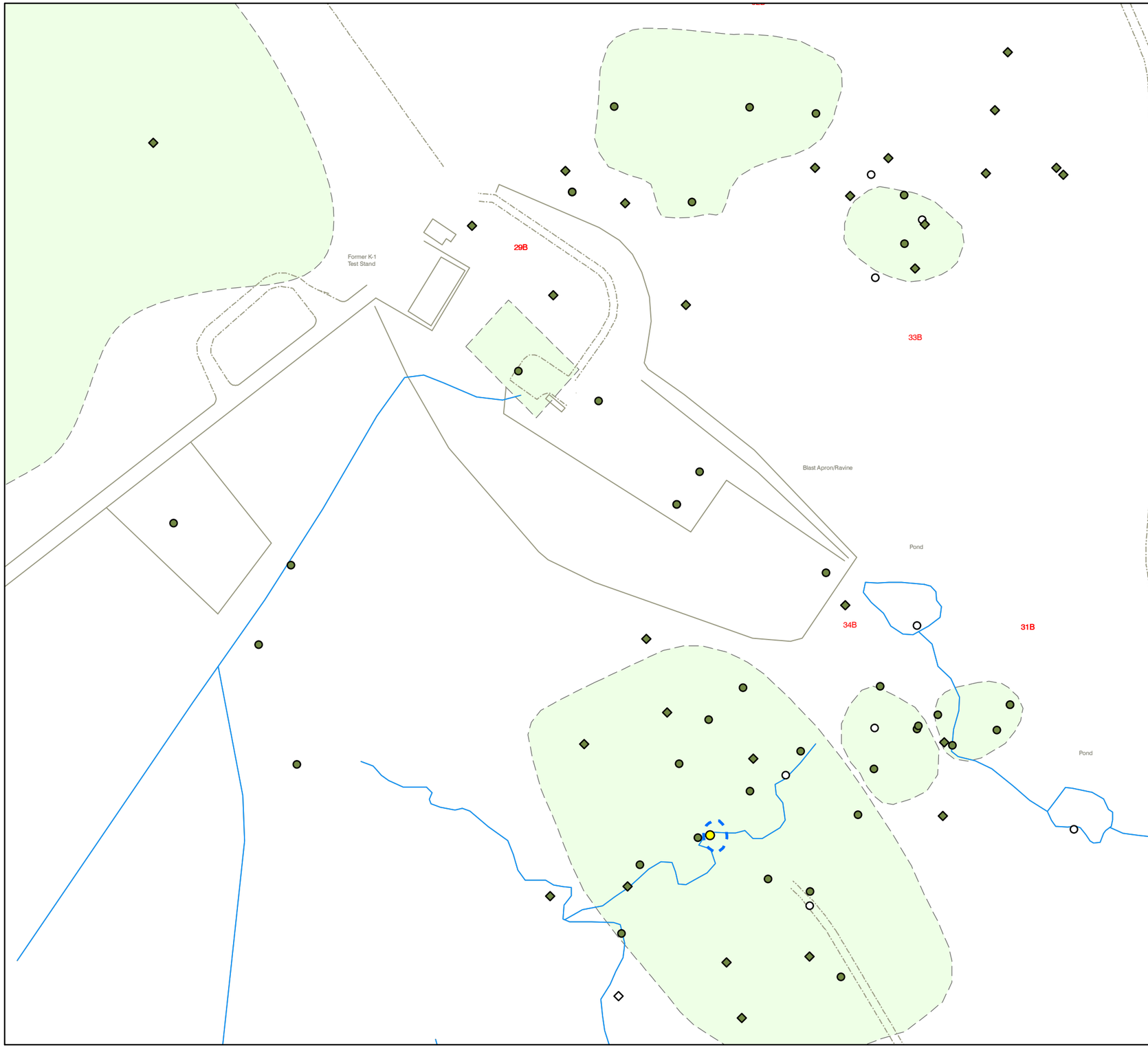


Figure 5.10-3
Construction Worker
Non-Cancer Effects – All Media
Area 39



Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4
- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 200 '

0 200 400

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Environmental Remediation

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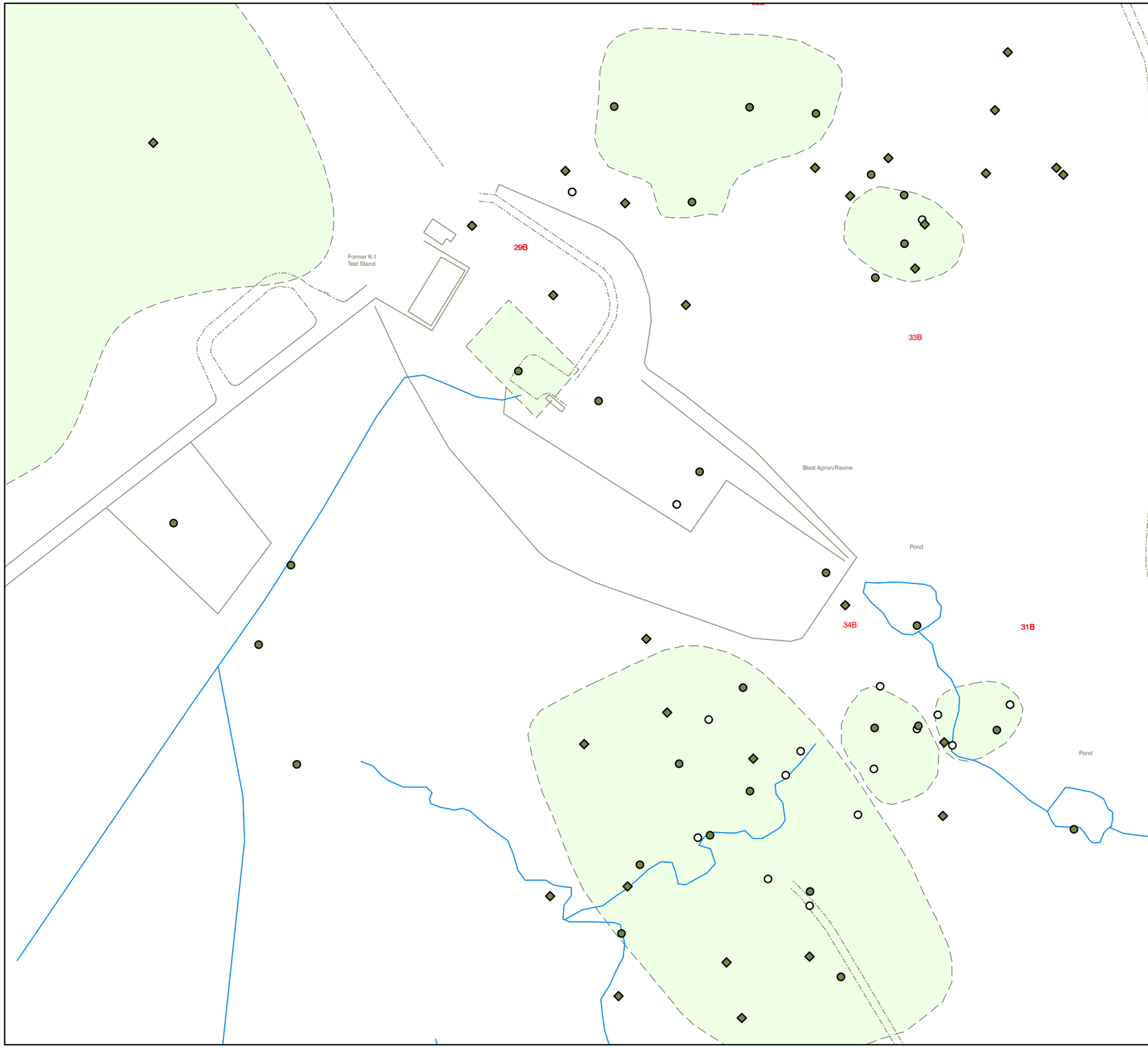
Figure 5.10-4

Construction Worker
Cancer Risks – All Media
Area 39



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 200 '

0 200 400

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Figure 5.10-5

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Area 39

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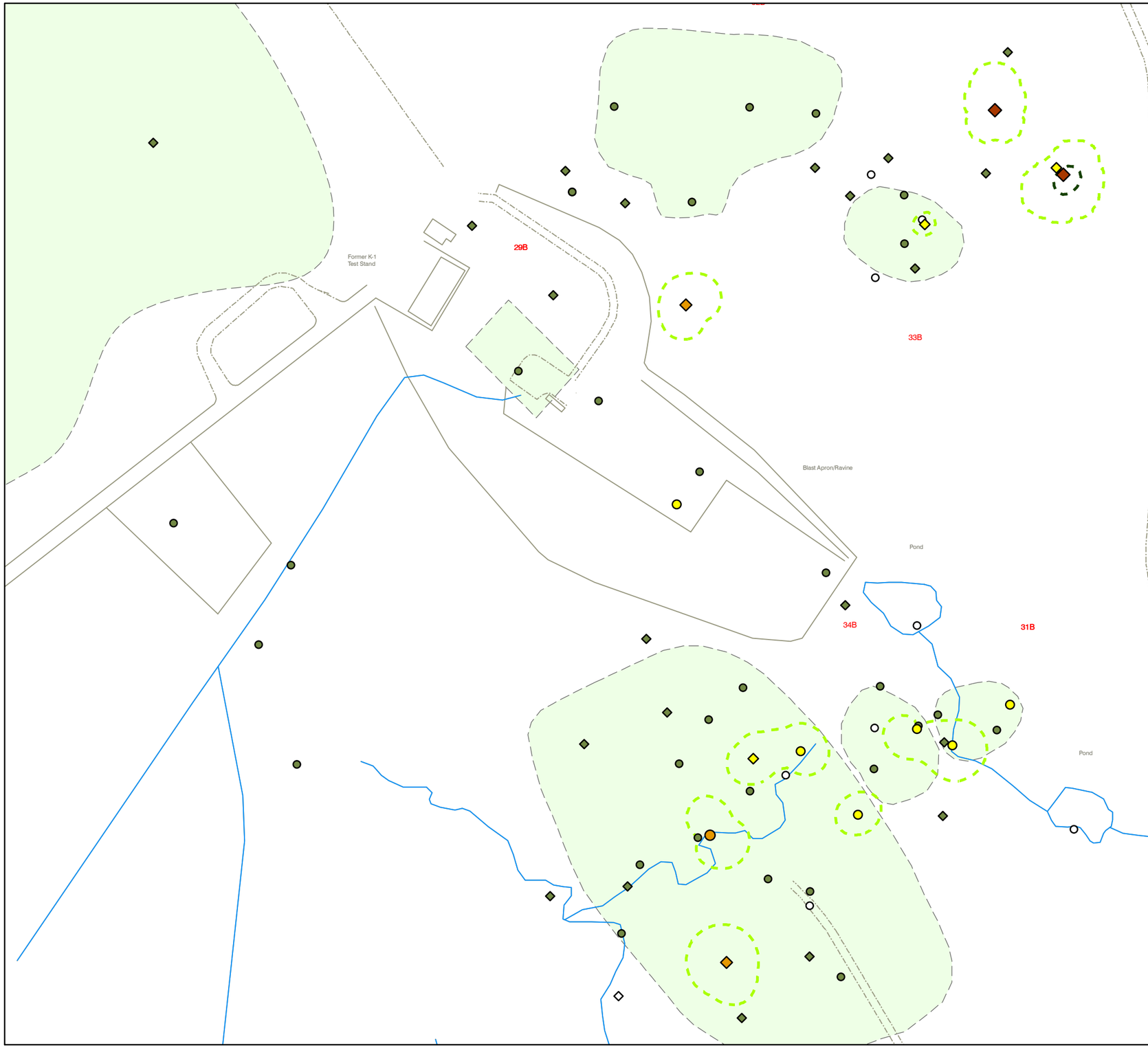

Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 200 '

0 200 400

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Figure 5.10-6

Commercial/Industrial Worker
Cancer Risks – All Media
Area 39

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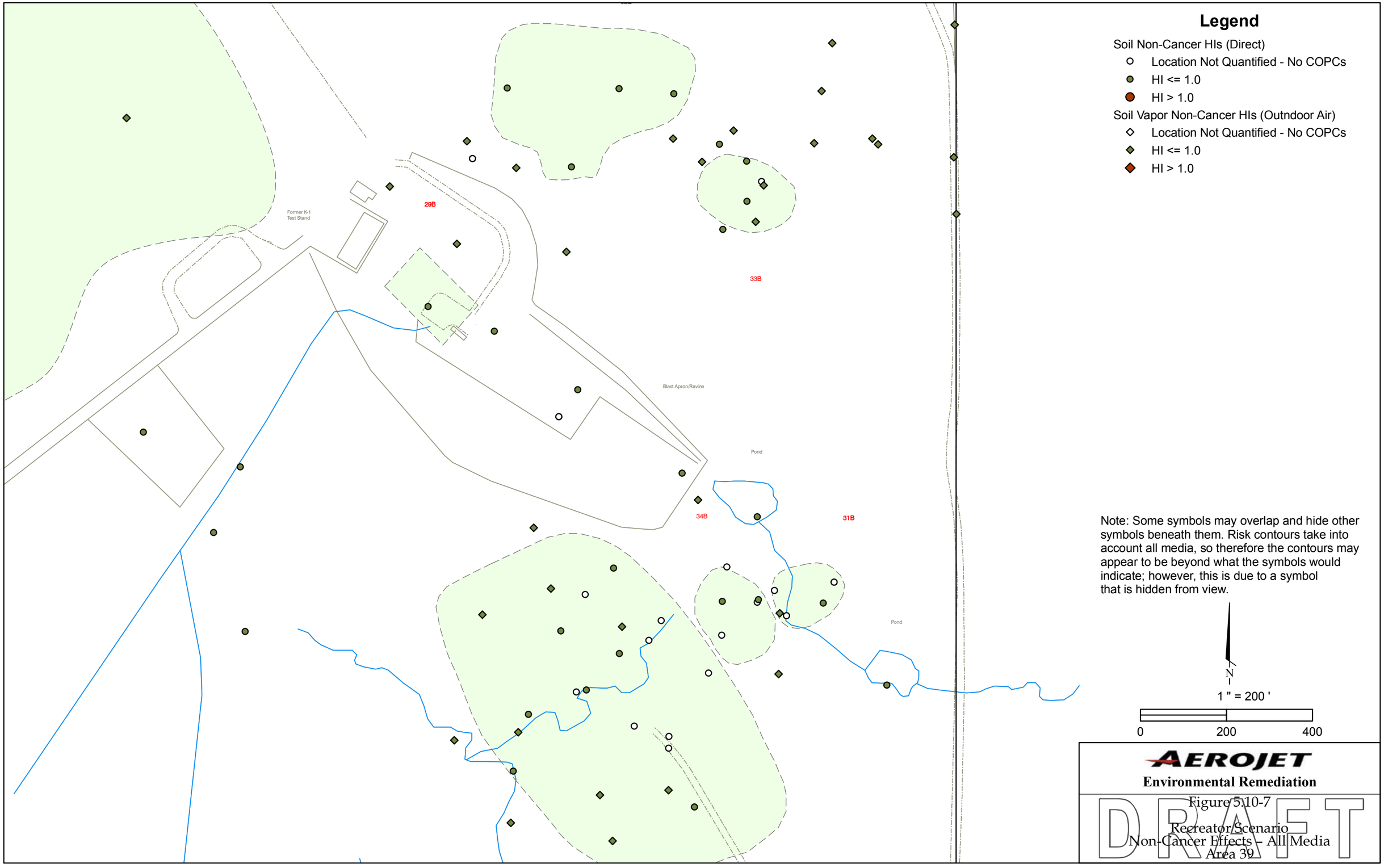
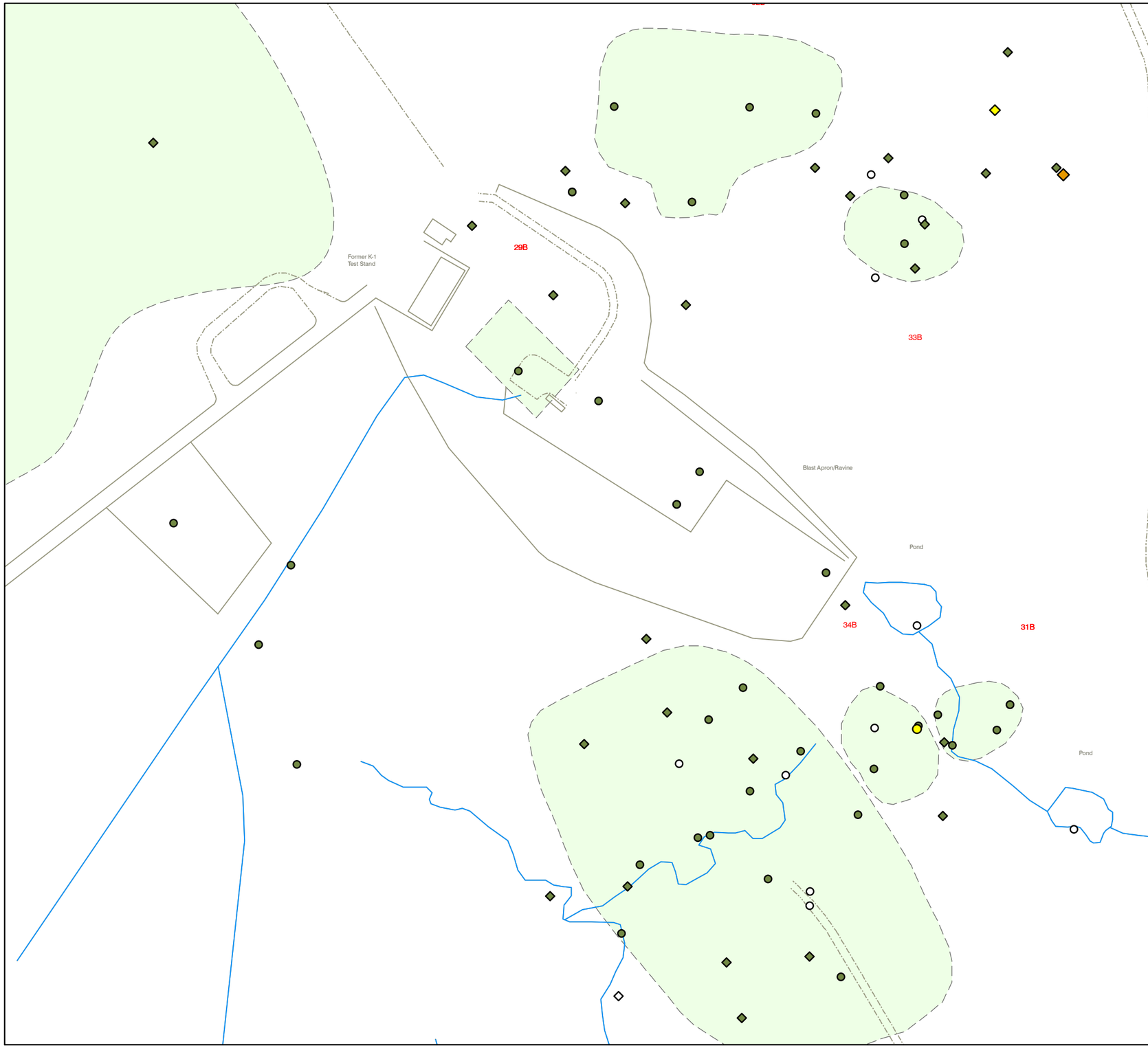


Figure 5.10-7
Recreator Scenario
Non-Cancer Effects – All Media
Area 39



Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 200 '

0 200 400

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Environmental Remediation

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Figure 5.10-8
Recreator/Scenario
Cancer Risks – All Media
Area 39

Table 5.10-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil Vapor
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	156-59-2	cis-1,2-Dichloroethene	5.2	1000	$\mu g/m^3$	33B-SP11	20	63	6	9.5%	4.4 - 1100	1590	nc	Y		NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	5.1 - 1200	6.7	ca	N	ND*	16%
	98-82-8	Cumene	6	6	$\mu g/m^3$	30B-SP15	16	63	1	1.6%	5.5 - 1300	18309	nc	N	BSL	NA
	110-82-7	Cyclohexane	4.6	810	$\mu g/m^3$	33B-SP14	10	63	19	30.2%	3.8 - 930	270853	nc	Y		NA
	124-48-1	Dibromochloromethane	12	13	$\mu g/m^3$	33B-SP12	10	63	2	3.2%	9.5 - 2300	5	ca	Y		NA
	64-17-5	Ethanol	11	410	$\mu g/m^3$	30B-SP15	16	63	35	55.6%	8.4 - 2000	78800	nc	Y		NA
	100-41-4	Ethyl Benzene	5.7	220	$\mu g/m^3$	30B-SP15	16	63	18	28.6%	4.9 - 1200	42	nc	Y		NA
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	6.3 - 1500	31446	nc	N	ND	NA
	76-13-1	Freon 113	12	1800	$\mu g/m^3$	30B-SP14	20	63	21	33.3%	8.6 - 2100	1360890	nc	Y		NA
	76-14-2	Freon 114	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	7.8 - 1900	1360890	nc	N	ND	NA
	75-71-8	Freon 12	12	12	$\mu g/m^3$	32B-SP09	20	63	1	1.6%	5.5 - 1300	9139	nc	N	BSL	NA
	142-82-5	Heptane	6	460	$\mu g/m^3$	32B-SP08	20	63	48	76.2%	4.6 - 1100	8701	nc	Y		NA
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	48 - 12000	4.9	ca*	N	ND*	100%
	110-54-3	Hexane	4.8	1200	$\mu g/m^3$	30B-SP15	16	63	54	85.7%	3.9 - 950	8701	nc	Y		NA
		m,p-Xylene	5.2	650	$\mu g/m^3$	30B-SP15	16	63	32	50.8%	4.9 - 1200	31500	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	4 - 970	400.0	ca	N	ND*	3%
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	3.9 - 1600	104.0	ca	N	ND*	6%
	95-47-6	o-Xylene	6	160	$\mu g/m^3$	30B-SP15	16	63	16	25.4%	4.9 - 1200	31500	nc	Y		NA
	99-87-6	p-Cymene	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	24 - 5900	31500	nc	N	ND	NA
	103-65-1	Propylbenzene	8	22	$\mu g/m^3$	33B-SP20, 33B-SP13	20, 7.5	63	8	12.7%	5.5 - 1300	6447	nc	Y		NA
	135-98-8	sec-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	24 - 5900	6469	nc	N	ND	NA
	100-42-5	Styrene	10	15	$\mu g/m^3$	30B-SP12	10	63	5	7.9%	4.8 - 1200	40940	nc	Y		NA
	98-06-6	tert-Butylbenzene	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	24 - 5900	6479	nc	N	ND	NA
	127-18-4	Tetrachloroethene	8.8	530	$\mu g/m^3$	30B-SP14	20	63	7	11.1%	7.6 - 1800	18	ca	Y		NA
	109-99-9	Tetrahydrofuran	3.8	98	$\mu g/m^3$	33B-SP15	20	63	26	41.3%	3.3 - 800	53	ca	Y		NA
	108-88-3	Toluene	5.2	13000	$\mu g/m^3$	33B-SP21	20	63	53	84.1%	4.2 - 1000	13500	nc	Y		NA
	156-60-5	trans-1,2-Dichloroethene	7.2	7.2	$\mu g/m^3$	33B-SP11	20	63	1	1.6%	4.4 - 1100	3190	nc	N	BSL	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	5.1 - 1200	6.7	ca	N	ND*	16%
	79-01-6	Trichloroethene	7.4	1700000	$\mu g/m^3$	33B-SP21	10, 20	63	39	61.9%	6 - 5800	53	ca	Y		NA
	75-01-4	Vinyl Chloride	4.9	4.9	$\mu g/m^3$	30B-SP18	10	63	1	1.6%	2.9 - 690	1	ca	Y		NA

Footnotes:
(1) See Table 1
(2) FOD = Frequency of detection screening
BSL = Below screening level
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
NA = Not applicable
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible

Key:
bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
$\mu g/m^3$ = Micrograms per cubic meter
nc = Noncancer

Table 5.10-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	6.2	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	60	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -20	0.061	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	53	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.35	ca	N	ND*	81%
		2,3,7,8-TCDD TEQ	1.74E-09	0.00030	mg/kg	30B-SB02	0	41	27	66%	-	0.00000039	ca	Y		NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.61	nc	N	ND*	81%
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	18	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.6 -17	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	6.3	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.17	nc	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	310	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -17	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	NA	nc	N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	26	0	0%	0.6 -6.7	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -17	1.8	nc	N	ND*	38%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -17	0.61	nc	N	ND*	81%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.33	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -4	24	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.33	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	26	0	0%	0.6 -17	2.3	ca	N	ND*	38%
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -17	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	370	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	230	nc	N	ND	NA
	7429-90-5	Aluminum	6100	69000	mg/kg	32B-SB04	5	62	62	100%	8.3 -36	7600	nc	Y		NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	8.5	ca	N	ND	NA
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	2200	nc	N	ND	NA
	7440-36-0	Antimony	0.038	0.75	mg/kg	33B-SB03	1.5	61	40	66%	1 -17	3	nc	N	BSL	NA
	7440-38-2	Arsenic	0.53	7.8	mg/kg	29B-SB06	5	62	55	89%	1.7 -7.2	0.0062	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.24 -0.28	0.44	ca	N	ND	NA
	7440-39-3	Barium	78	520	mg/kg	30B-SB06	11	62	62	100%	1 -4.5	520	nc	N		NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	5	0	0%	0.42 -0.49	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	0.062	ca	N	ND*	81%
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	0.0038	ca	N	ND*	100%
	nzo(b&k)fluoranthene(to	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	5	0	0%	0.016 -0.019	0.038	ca	N	ND	NA

Table 5.10-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	205-99-2	Benzo (b) fluoranthene	ND	ND	mg/kg	ND	ND	21	0	0%	0.33 -3.3	0.062	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	230	nc	N	ND	NA
	207-08-9	Benzo (k) fluoranthene	ND	ND	mg/kg	ND	ND	21	0	0%	0.33 -3.3	0.038	ca	N	ND*	100%
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	26	0	0%	0.6 -17	10000	max	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	1800	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.19	1.4	mg/kg	32B-SB04, 30B-SB06	11.5, 5	62	62	100%	0.21 -0.9	15	nc	N	BSL	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	29	0	0%	0.24 -3.33	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.022	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	58	0	0%	0.24 -3.33	0.29	ca	N	ND*	83%
	117-81-7	Bis(2-ethylhexyl)phthalate	2.39	2.39	mg/kg	30B-SB02	0.01, 0	29	2	7%	0.6 -3.33	3.5	ca	Y		NA
	7440-42-8	Boron	1.3	12	mg/kg	31B-SD01	1.5	62	14	23%	4.2 -18	1600	nc	N	BSL	NA
	7440-43-9	Cadmium	0.18	3.9	mg/kg	33B-SB03	1.5	62	52	84%	0.42 -1.8	0.17	nc	Y		NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	5	0	0%	0.24 -0.28	2.4	ca	N	ND	NA
	7440-47-3	Chromium	3.6	130	mg/kg	29B-SB06	5	62	62	100%	0.83 -3.6	21	max	N	BG	NA
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	0.38	ca	N	ND*	38%
	7440-48-4	Cobalt	4	29	mg/kg	30B-SB06	5	62	62	100%	0.83 -3.6	66	ca	N	BSL	NA
	7440-50-8	Copper	8	89	mg/kg	32B-SB02	2	62	62	100%	0.83 -3.6	300	nc	N	BSL	NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	0.0062	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	15	nc	N	ND	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	4900	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	0.691	8.7	mg/kg	34B-SB01	1	28	17	61%	0.48 -3.3	610	nc	Y		NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	240	nc	N	ND	NA
	206-44-0	Fluoranthene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	230	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	270	nc	N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.62	ca	N	ND*	81%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	26	0	0%	0.667 -3.3	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	3.5	ca	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	0.062	ca	N	ND*	81%
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	51	ca	N	ND	NA
	7439-92-1	Lead	1.8	14	mg/kg	32B-SB04, 29B-SB06	5, 5	62	62	100%	1.7 -7.2	15	nc	N	BSL	NA
	7439-93-2	Lithium	1	18	mg/kg	32B-SB03	5	62	62	100%	5.2 -22	160	nc	N	BSL	NA
	7439-96-5	Manganese	110	1900	mg/kg	30B-SB06	11	62	62	100%	0.64 -4.5	180	nc	N	BG	NA
	7439-97-6	Mercury	0.0037	0.15	mg/kg	29B-SB09	5	60	51	85%	0.021 -0.034	1.8	nc	N	BSL	NA
	7439-98-7	Molybdenum	0.13	16	mg/kg	29B-SB08	1.5	62	36	58%	1 -4.9	38	nc	N	BSL	NA
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	0.17	ca	N	ND*	81%
	7440-02-0	Nickel	3.6	67	mg/kg	29B-SB06	5	62	62	100%	1.7 -7.2	160	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	2	nc	N	ND	NA

Table 5.10-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39		Nitroguanidine	0.1	0.1	mg/kg	30B-SB01	3	21	1	4.8%	0.08 -0.09	610	nc	N	BSL	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.00095	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	0.007	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	21	0	0%	0.667 -3.3	9.9	ca	N	ND	NA
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	5	0	0%	0.24 -0.28	150	ca	N	ND	NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.67 -17	0.3	ca	N	ND*	100%
	7601-90-3	Perchlorate	0.023	7	mg/kg	30B-SB02	0	91	12	13%	0.0052 -4	0.78	ca/nc	Y		NA
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	230	nc	N	ND	NA
	108-95-2	Phenol	ND	ND	mg/kg	ND	ND	26	0	0%	0.24 -3.3	1800	nc	N	ND	NA
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	26	0	0%	0.008 -3.3	230	nc	N	ND	NA
	7782-49-2	Selenium	0.23	1.6	mg/kg	31B-SD02, 29B-SB04	0.25, 11	62	8	13%	1 -3.4	38	nc	N	BSL	NA
	7440-22-4	Silver	0.077	0.82	mg/kg	30B-SB06	11	62	5	8.1%	0.56 -2.1	38	nc	N	BSL	NA
	7440-24-6	Strontium	16	400	mg/kg	29B-SB06	5	62	62	100%	4.2 -18	4700	nc	N	BSL	NA
	7440-28-0	Thallium	0.13	6.6	mg/kg	32B-SB04	5	62	54	87%	0.53 -18	0.5	nc	Y		NA
	7440-32-6	Titanium	250	2100	mg/kg	32B-SB04	5	62	62	100%	1.7 -7.2	10000	nc	N	BSL	NA
	7440-62-2	Vanadium	30	280	mg/kg	29B-SB09	5	62	62	100%	0.83 -3.6	0.53	nc	Y		NA
	7440-66-6	Zinc	21	130	mg/kg	29B-SB06	5	62	62	100%	4.2 -18	2300	nc	N	BSL	NA

Footnotes:

(1) See Table 2
(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations

TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
mg/kg = Milligrams per kilogram

mg/kg = Milligrams per kilogram
nc = Noncancer
NA = Not applicable
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.10-3 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	4.3E-02	ca	N	ND*	100%
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	39	0	0.0%	0.5 - 5	1.0E+02	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	39	0	0.0%	0.5 - 5	5.5E-03	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	0.68	0.68	µg/L	39	1	2.6%	0.5 - 5	2.0E-02	ca	Y		NA
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	39	0	0.0%	0.5 - 5	2.0E-01	nc	N	ND*	100%
	75-35-4	1,1-Dichloroethylene	1.1	2.3	µg/L	39	2	5.1%	0.5 - 5	2.0E-01	nc	Y		NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	NA		N	ND	NA
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	25	0	0.0%	0.5 - 1	NA		N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	25	0	0.0%	0.5 - 1	5.6E-04	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	39	0	0.0%	0.5 - 10	5.0E-01	nc	N	ND*	36%
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	25	0	NA	0.5 - 0.5	1.2E+00	nc	N	ND*	0%
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	25	0	0.0%	1 - 1	1.6E-04	ca	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	5.6E-04	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	42	0	0.0%	0.5 - 10	3.7E+01	nc	N	ND	NA
	107-06-2	1,2-Dichloroethane	1.1	1.1	µg/L	39	1	2.6%	0.5 - 5	1.2E-02	ca	Y		NA
	540-59-0	1,2-Dichloroethene (cis/trans)	4.0	7.3	µg/L	19	3	15.8%	0.5 - 5	6.0E+00	nc	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	39	0	0.0%	0.5 - 5	1.6E-02	ca*	N	ND*	100%
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	19	0	0.0%	10 - 200	8.4E-03	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	25	0	NA	0.5 - 0.5	1.2E+00	nc	N	ND*	0%
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	42	0	0.0%	0.5 - 10	1.8E+01	nc	N	ND	NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	42	0	0.0%	0.5 - 10	5.0E-02	ca	N	ND*	100%
	123-91-1	1,4-Dioxane	ND	ND	µg/L	6	0	0.0%	10 - 10	6.1E-01	ca	N	ND*	100%
	872-50-4	1-Methyl-2-Pyrrolidinone	ND	ND	µg/L	6	0	0.0%	10 - 20	NA		N	ND	NA
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	25	0	0.0%	0.5 - 2	NA		N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	21	0	0.0%	10 - 12	3.6E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	22	0	0.0%	10 - 12	9.6E-02	nc**	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	22	0	0.0%	10 - 12	1.1E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	22	0	0.0%	5 - 10	7.3E+01	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	22	0	0.0%	20 - 50	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	22	0	0.0%	10 - 12	7.3E+00	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	22	0	0.0%	10 - 12	3.6E+00	nc	N	ND*	100%
	110-75-8	2-CHLOROETHYL VINYL ETHER	ND	ND	µg/L	14	0	0.0%	10 - 10	NA		N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	22	0	0.0%	5 - 10	4.9E+01	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	µg/L	23	0	0.0%	10 - 12	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	591-78-6	2-Hexanone	ND	ND	µg/L	15	0	0.0%	10 - 20	NA		N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	22	0	0.0%	5 - 10	9.3E-03	nc	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	µg/L	22	0	0.0%	5 - 10	1.8E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	µg/L	22	0	0.0%	10 - 50	1.1E+01	nc	N	ND*	45%

Table 5.10-3 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
	88-75-5	2-Nitrophenol	ND	ND	µg/L	22	0	0.0%	10 - 24	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	22	0	0.0%	10 - 20	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	22	0	0.0%	10 - 50	3.2E-01	ca**	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	22	0	0.0%	20 - 50	3.6E-01	nc	N	ND*	100%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	22	0	0.0%	5 - 10	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	22	0	0.0%	10 - 20	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	22	0	0.0%	10 - 50	1.5E+01	nc	N	ND*	23%
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	22	0	0.0%	10 - 12	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	µg/L	21	0	0.0%	5 - 10	1.8E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	µg/L	22	0	0.0%	10 - 50	3.2E-01	ca*	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	22	0	0.0%	20 - 50	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	3.7E+01	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	3.7E+01	nc	N	ND	NA
	67-64-1	Acetone	ND	ND	µg/L	14	0	0.0%	20 - 20	5.5E+02	nc	N	ND	NA
	107-02-8	Acrolein	ND	ND	µg/L	6	0	NA	25 - 25	4.2E-03	nc	N	ND*	100%
	107-13-1	Acrylonitrile	ND	ND	µg/L	6	0	NA	25 - 25	1.1E-03	ca*	N	ND*	100%
	7429-90-5	Aluminum	69	560000	µg/L	22	17	77.3%	50 - 200	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	22	0	0.0%	10 - 12	1.2E+00	ca*	N	ND*	100%
Area 39	120-12-7	Anthracene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	1.8E+02	nc	N	ND	NA
	7440-36-0	Antimony	0.088	2.5	µg/L	27	6	22.2%	2 - 500	1.5E+00	nc	Y		NA
	7440-38-2	Arsenic	1.7	9.2	µg/L	26	13	50.0%	5 - 200	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	13	0	0.0%	5 - 5.9	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	8.3	5600	µg/L	22	22	100.0%	0 - 0	2.0E+02	nc	Y		NA
	71-43-2	Benzene	ND	ND	µg/L	38	0	0.0%	0.5 - 5	1.5E-02	ca	N	ND*	100%
	92-87-5	Benzidine	ND	ND	µg/L	21	0	0.0%	10 - 59	2.9E-05	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	9.2E-03	ca	N	ND*	100%
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	4.0E-04	ca	N	ND*	100%
	AER-001-419	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	13	0	0.0%	0.4 - 0.4	4.0E-04	ca	N	ND*	100%
	205-99-2	Benzo(b)fluoranthene	ND	ND	µg/L	10	0	0.0%	10 - 10	9.2E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	21	0	0.0%	0.2 - 10	NA		N	ND	NA
	207-08-9	Benzo(k)fluoranthene	ND	ND	µg/L	10	0	0.0%	10 - 10	5.6E-03	ca	N	ND*	100%
	65-85-0	Benzoic acid	ND	ND	µg/L	22	0	0.0%	20 - 50	1.5E+04	nc	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	22	0	0.0%	5 - 20	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	23	0	0.0%	10 - 12	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	0.1	18	µg/L	23	6	26.1%	0.5 - 32	1.0E-01	nc	Y		NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	22	0	0.0%	5 - 10	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	22	0	0.0%	5 - 10	1.0E-03	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	22	0	0.0%	10 - 12	2.7E-02	ca	N	ND*	100%

Table 5.10-3 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
	117-81-7	Bis(2-ethylhexyl)phthalate	16.6	16.6	µg/L	22	1	4.5%	5 - 50	4.8E-01	ca	Y		NA
	7440-42-8	Boron	9.2	680	µg/L	22	9	40.9%	40 - 400	7.3E+02	nc	N	BSL	NA
	108-86-1	Bromobenzene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	2.0E+00	nc	N	ND	NA
	74-97-5	Bromochloromethane	ND	ND	µg/L	25	0	0.0%	0.5 - 1	NA		N	ND	NA
	75-27-4	Bromodichloromethane	ND	ND	µg/L	39	0	0.0%	0.5 - 5	1.8E-02	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	µg/L	39	0	0.0%	0.5 - 5	8.5E-01	ca	N	ND*	28%
	74-83-9	Bromomethane	ND	ND	µg/L	38	0	0.0%	1 - 10	8.7E-01	nc	N	ND*	100%
	AER-001-005	4-Bromophenyl phenyl ether	ND	ND	µg/L	22	0	0.0%	5 - 10	NA	nc	N	ND	NA
	7440-43-9	Cadmium	0.059	51	µg/L	24	12	50.0%	1 - 20	4.0E-03	nc	Y		NA
	7440-70-2	Calcium	8200	290000	µg/L	22	22	100.0%	0 - 0	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	µg/L	13	0	0.0%	10 - 12	3.4E-01	ca	N	ND*	100%
	75-15-0	Carbon disulfide	ND	ND	µg/L	14	0	0.0%	5 - 5	1.0E+02	nc	N	ND	NA
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	39	0	0.0%	0.5 - 5	1.0E-02	ca*	N	ND*	100%
	108-90-7	Chlorobenzene	ND	ND	µg/L	39	0	0.0%	0.5 - 5	1.1E+01	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	µg/L	38	0	0.0%	1 - 10	4.6E-01	ca	N	ND*	100%
	67-66-3	Chloroform	0.5	7.4	µg/L	36	6	16.7%	0.5 - 5	1.7E-02	ca	Y		NA
	74-87-3	Chloromethane	0.4	0.4	µg/L	37	1	2.7%	0.5 - 10	1.6E+01	ca	N	BSL	NA
Area 39	7440-47-3	Chromium	4.7	2000	µg/L	22	15	68.2%	8 - 40	5.5E+03	nc	N	BSL	NA
	218-01-9	Chrysene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	30	30	µg/L	26	1	3.8%	0.5 - 5	6.1E+00	nc	Y		NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/L	14	0	0.0%	5 - 5	NA		N	ND	NA
	7440-48-4	Cobalt	0.74	340	µg/L	22	12	54.5%	1 - 80	7.3E+01	nc	Y		NA
	7440-50-8	Copper	2.9	590	µg/L	22	14	63.6%	6 - 50	1.7E+01	nc	Y		NA
	96-12-8	DBCP	ND	ND	µg/L	25	0	0.0%	1 - 1	1.6E-04	nc	N	ND*	100%
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	21	0	0.0%	0.2 - 10	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	22	0	0.0%	10 - 12	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	ND	ND	µg/L	38	0	0.0%	0.5 - 5	1.3E-02	ca	N	ND*	100%
	74-95-3	Dibromomethane	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	6.1E+00	nc	N	ND	NA
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	39	0	0.0%	0.5 - 10	3.9E+01	nc	N	ND	NA
	68334-30-5	Diesel Range Organics (C10-C28)	ND	ND	µg/L	3	0	0.0%	100 - 300000	NA		N	ITC	NA
	60-29-7	Diethyl ether	NA	NA	µg/L	NA	NA	NA	NA	1.2E+02	nc	N	NA	NA
	84-66-2	Diethyl phthalate	ND	ND	µg/L	22	0	0.0%	10 - 12	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	22	0	0.0%	10 - 12	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	22	0	0.0%	10 - 20	3.6E+02	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	22	0	0.0%	5 - 10	1.5E+02	nc	N	ND	NA

Table 5.10-3 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

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Area 39	64-17-5	Ethanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	100-41-4	Ethylbenzene	ND	ND	µg/L	38	0	0.0%	0.5 - 5	3.0E+01	nc	N	BSL	NA
	106-93-4	Ethylene Dibromide	NA	NA	µg/L	NA	NA	NA	NA	5.6E-04		N	NA	NA
	206-44-0	Fluoranthene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	1.5E+02	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	2.4E+01	nc	N	ND	NA
	76-13-1	Freon 113	1.7	7.6	µg/L	21	5	23.8%	0.5 - 5	4.0E+02	nc	Y		NA
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	22	0	0.0%	5 - 10	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	39	0	0.0%	1 - 20	8.6E-02	ca*	N	ND*	100%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	22	0	0.0%	10 - 24	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	22	0	0.0%	5 - 10	4.8E-01	ca**	N	ND*	100%
	18540-29-9	Hexavalent Chromium	ND	ND	µg/L	3	0	0.0%	20 - 20	1.1E+01	nc	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	21	0	0.0%	0.2 - 10	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	140	860000	µg/L	22	19	86.4%	300 - 300	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	22	0	0.0%	5 - 10	7.1E+00	ca	N	ND	NA
	67-63-0	Isopropanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	98-82-8	Isopropylbenzene	ND	ND	µg/L	25	0	NA	0.5 - 0.5	6.6E+01	nc	N	ND	NA
	94114-58-6	Jet fuels	ND	ND	µg/L	1	0	NA	100 - 100	NA		N	ND	NA
	8008-20-6	Kerosene	ND	ND	µg/L	1	0	NA	100 - 100	NA		N	ND	NA
	7439-92-1	Lead	0.57	230	µg/L	22	14	63.6%	60 - 100	0.0E+00		Y		NA
	7439-93-2	Lithium	7.3	260	µg/L	15	8	53.3%	50 - 500	7.3E+01	nc	Y		NA
	7439-95-4	Magnesium	3100	130000	µg/L	22	22	100.0%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	13	14000	µg/L	22	20	90.9%	5 - 5	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	1.4	39	µg/L	23	2	8.7%	0 - 1	1.2E-01	nc	Y		NA
	67-56-1	Methanol	NA	NA	µg/L	NA	NA	NA	NA	1.8E+03	nc	N	NA	NA
	78-93-3	Methyl ethyl ketone	ND	ND	µg/L	14	0	0.0%	20 - 20	7.0E+02	nc	N	ND	NA
	108-10-1	Methyl isobutyl ketone (MIBK)	ND	ND	µg/L	14	0	0.0%	10 - 20	2.0E+02	nc	N	ND	NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	21	0	0.0%	0.5 - 0.5	1.1E+00	ca	N	BSL	NA
	75-09-2	Methylene chloride	ND	ND	µg/L	36	0	0.0%	0.5 - 5	4.0E-01	ca	N	ND*	100%
	7439-98-7	Molybdenum	1.3	130	µg/L	22	11	50.0%	20 - 160	1.8E+01	nc	Y		NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	108-38-3	m-Xylene	NA	NA	µg/L	NA	NA	NA	NA	2.1E+01	nc	N	NA	NA
	91-20-3	Naphthalene	0.55	0.55	µg/L	36	1	2.8%	0.2 - 10	9.3E-03	ca	Y		NA
	71-36-3	n-Butyl alcohol	NA	NA	µg/L	NA	NA	NA	NA	3.6E+02	nc	N	NA	NA
	104-51-8	n-Butylbenzene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA

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Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

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Area 39	3622-84-2	N-Butylbenzenesulfonamide	ND	ND	µg/L	6	0	0.0%	10 - 20	NA		N	ND	NA
	7440-02-0	Nickel	3.2	1300	µg/L	22	12	54.5%	20 - 80	1.2E+00	nc	Y		NA
	14797-55-8	Nitrate	800	15000	µg/L	22	19	86.4%	100 - 100	1.2E+00	nc	Y		NA
	14797-55-8	Nitrate as NO3	90	25000	µg/L	16	16	100.0%	0 - 0	1.0E+03	nc	Y		NA
	GIS-230-001	Nitrate plus Nitrite (as N)	56	56	µg/L	18	1	5.6%	50 - 300	1.0E+02	nc	N	BSL	NA
	S-NINO2	Nitrite as NO2	50	340	µg/L	16	6	NA	100 - 100	1.0E+02	nc	Y		NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	22	0	0.0%	5 - 10	3.4E-01	nc	N	ND*	100%
	556-88-7	Nitroguanidine	ND	ND	µg/L	3	0	0.0%	20 - 20	3.7E+02	nc	N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	µg/L	27	0	0.0%	0.02 - 5.9	1.3E-04	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	22	0	0.0%	10 - 12	9.6E-04	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	µg/L	10	0	0.0%	10 - 10	1.4E+00	ca*	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	13	0	0.0%	5 - 5.9	9.1E+01	nc	N	ND	NA
	71-23-8	n-Propanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	103-65-1	n-Propylbenzene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	95-47-6	o-Xylene	ND	ND	µg/L	8	0	0.0%	0.5 - 5	2.1E+01	nc	N	ND	NA
	12674-11-2	PCB-1016	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N	NA	NA
	11104-28-2	PCB-1221	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N	NA	NA
	11141-16-5	PCB-1232	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N	NA	NA
	53469-21-9	PCB-1242	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N	NA	NA
	12672-29-6	PCB-1248	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca	N	NA	NA
	11097-69-1	PCB-1254	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca	N	NA	NA
	11096-82-5	PCB-1260	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca	N	NA	NA
	1336-36-3	PCB's	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	87-86-5	Pentachlorophenol	ND	ND	µg/L	22	0	0.0%	20 - 50	4.0E-02	ca	N	ND*	100%
	14797-73-0	Perchlorate	3	2500	µg/L	45	28	62.2%	0.4 - 500	3.6E-01	ca/nc	Y		NA
	85-01-8	Phenanthrene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	1.8E+01	nc	N	ND	NA
	108-95-2	Phenol	ND	ND	µg/L	22	0	0.0%	5 - 10	1.1E+03	nc	N	ND	NA
	99-87-6	p-Isopropyltoluene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	NA		N	ND	NA
	7440-09-7	Potassium	800	64000	µg/L	21	19	90.5%	1000 - 1000	NA		N	EN	NA
	106-42-3	p-Xylene	NA	NA	µg/L	NA	NA	NA	NA	2.1E+01	nc	N	NA	NA
	129-00-0	Pyrene	ND	ND	µg/L	22	0	0.0%	0.2 - 10	1.8E+01	nc	N	ND	NA
	78-92-2	sec-Butyl alcohol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	7782-49-2	Selenium	1	8.2	µg/L	24	5	20.8%	2 - 400	1.8E+01	nc	N	BSL	NA
	7440-22-4	Silver	0.028	0.18	µg/L	24	3	12.5%	1 - 80	1.8E+01	nc	N	BSL	NA
	7440-23-5	Sodium	7200	71000	µg/L	22	22	100.0%	0 - 0	NA		N	EN	NA
	8052-41-3	Stoddard solvent	ND	ND	µg/L	1	0	NA	100 - 100	NA		N	ND	NA

Table 5.10-3 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	7440-24-6	Strontium	84	4800	µg/L	14	14	100.0%	0 - 0	2.2E+03	nc	Y		NA
	100-42-5	Styrene	ND	ND	µg/L	34	0	0.0%	0.5 - 5	1.6E+02	nc	N	ND	NA
		2,3,7,8-TCDD (TEQ)	2.3E-06	5.6E-06	µg/L	4	2	50.0%	0.0000006121 - 0.00000167132	4.5E-08	c	Y		NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	25	0	0.0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	127-18-4	Tetrachloroethene	ND	ND	µg/L	39	0	0.0%	0.5 - 5	6.0E-03	ca	N	ND*	100%
	7440-28-0	Thallium	0.17	8	µg/L	26	4	15.4%	1 - 400	1.0E-02	nc	Y		NA
	7440-32-6	Titanium	3.9	29000	µg/L	14	14	100.0%	0 - 0	1.5E+04	nc	Y		NA
	108-88-3	Toluene	22	22	µg/L	39	1	2.6%	0.5 - 5	1.5E+01	nc	Y		NA
	57-12-5	Total Cyanide	NA	NA	µg/L	NA	NA	NA	NA	1.5E+01	nc	N	NA	NA
	GIS-130-010	TPH	ND	ND	µg/L	8	0	0.0%	100 - 200	NA		N	ITC	NA
	156-60-5	trans-1,2-Dichloroethene	0.76	0.76	µg/L	25	1	4.0%	0.5 - 0.5	6.0E+00	nc	N	BSL	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/L	14	0	0.0%	5 - 5	2.0E-02	ca	N	ND*	100%
	79-01-6	Trichloroethene	1.8	230	µg/L	38	6	15.8%	0.5 - 5	2.8E-03	ca	Y		NA
	75-69-4	Trichlorofluoromethane	ND	ND	µg/L	39	0	0.0%	0.5 - 5	7.0E+01	nc	N	ND	NA
	7440-62-2	Vanadium	7.7	1900	µg/L	22	19	86.4%	10 - 20	3.6E+00	nc	Y		NA
	108-05-4	Vinyl Acetate	ND	ND	µg/L	14	0	0.0%	10 - 20	4.1E+01	nc	N	ND	NA
	75-01-4	Vinyl chloride	ND	ND	µg/L	39	0	0.0%	0.5 - 10	2.0E-03	ca	N	ND*	100%
	1330-20-7	Xylene (total)	ND	ND	µg/L	38	0	0.0%	0.5 - 5	2.1E+01	nc	N	ND	NA
	7440-66-6	Zinc	21	68000	µg/L	22	20	90.9%	20 - 100	1.1E+03	nc	Y		NA

Footnotes:
(1) See Table 3
(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ITC = individual toxic compounds associated with the mixture are assessed separately.

Key:
ca = Cancer
COPC = Chemical of potential concern
µg/L = Micrograms per liter
nc = Noncancer

Table 5.10-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	4.3E-02	ca	N	ND*	100%
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.0E+02	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	5.5E-03	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.0E-02	ca	N	ND*	100%
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.0E-01	ca	N	ND*	100%
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.0E+00	nc	N	ND	NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.0E-02	nc	N	ND*	100%
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	5.0E-01	ca	N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	5.6E-04	nc	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	5.0E-01	ca	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.2E+00	nc	N	ND	NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	1.6E-04	nc	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	5.6E-04	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	3.7E+01	ca	N	ND	NA
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.2E-02	nc	N	ND*	100%
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.6E-02	ca*	N	ND*	100%
	103-33-3	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	ND	ND	2	0	0%	200 - 200	6.1E-02	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.2E+00	nc	N	ND	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.8E+01	nc	N	ND	NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	5.0E-02	ca	N	ND*	100%
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.6E-02	ca*	N	ND*	100%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.6E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	9.6E-02	nc**	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	1.1E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	7.3E+01	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	ND	ND	2	0	0%	20 - 20	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	7.3E+00	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.6E+00	nc	N	ND*	100%
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	4.9E+01	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	9.3E-03	ca	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	1.8E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	1.1E+01	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	µg/L	ND	ND	2	0	0%	20 - 20	NA	nc	N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.2E-01	ca**	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	20 - 20	3.6E-01	nc	N	ND*	100%

Table 5.10-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	NA	nc	N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	1.5E+01	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	1.8E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.2E-01	ca*	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	ND	ND	2	0	0%	20 - 20	NA	nc	N	ND	NA
	83-32-9	Acenaphthene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	3.7E+01	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	3.7E+01	nc	N	ND	NA
	7429-90-5	Aluminum	18000	18,000	µg/L	31B-SW01	1	2	1	50%	50 - 50	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	1.2E+00	ca*	N	ND*	100%
	120-12-7	Anthracene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	1.8E+02	nc	N	ND	NA
	7440-36-0	Antimony	0.14	0.16	µg/L	31B-SW01	1	2	2	100%	2 - 2	1.5E+00	nc	N	BSL	NA
	7440-38-2	Arsenic	1.5	2	µg/L	31B-SW02	1	2	2	100%	1 - 1	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	92	230	µg/L	31B-SW01	1	2	2	100%	10 - 10	2.0E+02	nc	Y		NA
	71-43-2	Benzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.5E-02	ca	N	ND*	100%
	92-87-5	Benzidine	ND	ND	µg/L	ND	ND	2	0	0%	50 - 50	2.9E-05	ca	N	ND*	100%
Area 39	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	9.2E-03	ca	N	ND*	100%
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	4.0E-04	ca	N	ND*	100%
	205-99-2	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	ND	ND	2	0	0%	0.4 - 0.4	5.6E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	ND	ND	2	0	0%	0.4 - 0.4	NA	nc	N	ND	NA
	65-85-0	Benzoic acid	ND	ND	µg/L	ND	ND	2	0	0%	20 - 20	1.5E+04	nc	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	0.49	0.83	µg/L	31B-SW02	1	2	2	100%	0.5 - 0.5	1.0E-01	nc	Y		NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	1.0E-03	ca	N	ND*	100%
	108-61-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	2.7E-02	ca	N	ND*	100%
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	4.8E-01	ca	N	ND*	100%
	7440-42-8	Boron	12	18	µg/L	31B-SW01	1	2	2	100%	50 - 50	7.3E+02	nc	N	BSL	NA
	106-86-1	Bromobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.0E+00	nc	N	ND	NA
	74-97-5	Bromochloromethane	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	NA	nc	N	ND	NA
	75-27-4	Bromodichloromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.8E-02	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	8.5E-01	ca*	N	ND	NA
	74-83-9	Bromomethane	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	8.7E-01	nc	N	ND	NA
	7440-43-9	Cadmium	0.049	0.06	µg/L	31B-SW02	1	2	2	100%	1 - 1	4.0E-03	nc	Y		NA
		Calcium	7000	8,100	µg/L	31B-SW01	1	2	2	100%	0 - 0	NA		N	EN	NA

Table 5.10-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	86-74-8	Carbazole	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.4E-01	ca	N	ND*	100%
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.0E-02	ca*	N	ND*	100%
	108-90-7	Chlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.1E+01	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	4.6E-01	ca	N	ND*	100%
	67-66-3	Chloroform	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 3.1	1.7E-02	ca	N	ND*	100%
	74-87-3	Chloromethane	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	1.6E+01	nc	N	ND	NA
	16065-83-1	Chromium	12	12	µg/L	31B-SW01	1	2	1	50%	2 - 2	5.5E+03	nc	N	BSL	NA
	218-01-9	Chrysene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	6.1E+00	nc	N	ND	NA
	7440-48-4	Cobalt	4.9	8	µg/L	31B-SW02	1	2	2	100%	0 - 0	7.3E+01	nc	N	BSL	NA
	7440-50-8	Copper	2	14	µg/L	31B-SW01	1	2	2	100%	0 - 0	1.7E+01	nc	N	BSL	NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	ND	ND	2	0	0%	0.4 - 0.4	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.3E-02	ca	N	ND*	100%
	74-95-3	Dibromomethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	6.1E+00	nc	N	ND	NA
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	3.9E+01	nc	N	ND	NA
		Diesel Range Organics (C10-C28)	NA	NA	µg/L	NA	NA	NA	NA	NA	50 - 160	NA		N	PM	NA
	84-66-2	Diethyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	3.6E+02	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	1.5E+02	nc	N	ND	NA
	100-41-4	Ethylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	3.0E+01	nc	N	ND	NA
	206-44-0	Fluoranthene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	1.5E+02	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	2.4E+01	nc	N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	8.6E-02	ca*	N	ND*	100%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	ND	ND	2	0	0%	20 - 20	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	4.8E-01	ca**	N	ND*	100%
	18540-29-9	Hexavalent Chromium	NA	NA	µg/L	NA	NA	NA	NA	NA	5 - 5	1.1E+01	nc	N		NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	ND	ND	2	0	0%	0.4 - 0.4	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	17000	17,000	µg/L	31B-SW01	1	2	1	50%	40 - 40	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	7.1E+00	ca	N	ND	NA
	98-82-8	Isopropylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	6.6E+01	nc	N	ND	NA
	7439-92-1	Lead	7.8	9	µg/L	31B-SW02	1	2	2	100%	0 - 0	0.0E+00		Y		NA
	7469-93-2	Lithium	ND	ND	µg/L	ND	ND	2	0	0%	50 - 50	7.3E+01	nc	N	ND	NA
	7439-95-4	Magnesium	3100	5,300	µg/L	31B-SW01	1	2	2	100%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	52	300	µg/L	31B-SW01	1	2	2	100%	20 - 20	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	1.2E-01	nc	N	ND	NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.1E+00	ca	N	ND	NA

Table 5.10-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Area 39	75-09-2	Methylene chloride	ND	ND	µg/L	ND	ND	2	0	0%	1 - 5.4	4.0E-01		N	ND*	100%
	7439-98-7	Molybdenum	ND	ND	µg/L	ND	ND	2	0	0%	2 - 2	1.8E+01	nc	N	ND	NA
		Motor Oil Range Organics (C16-C36)	NA	NA	µg/L	ND	ND	NA	NA	NA	100 - 100	NA		N	ITC	NA
	91-20-3	Naphthalene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	9.3E-03	ca	N	ND*	100%
	104-51-48	n-Butylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	7440-02-0	Nickel	12	12	µg/L	31B-SW01	1	2	1	50%	0 - 0	1.2E+00	nc	Y		NA
		Nitrate as NO3	2700	2,700	µg/L	31B-SW02	1	2	1	50%	100 - 100	1.0E+03	nc	Y		NA
		Nitrite as NO2	ND	ND	µg/L	ND	ND	2	0	0%	100 - 5000	1.0E+02	nc	N	ND	NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	3.4E-01	nc	N	ND*	100%
	62-75-9	N-Nitrosodimethylamine	ND	ND	µg/L	ND	ND	2	0	0%	0.0019 - 5	1.3E-04	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	ND	ND	2	0	0%	10 - 10	9.6E-04	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	9.1E+01	ca*	N	ND	NA
	103-65-1	n-Propylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	12674-11-2	PCB-1016	NA	NA	µg/L	ND	ND	NA	NA	NA	1 - 1	9.0E-03	ca**	N	NA	NA
	11104-28-2	PCB-1221	NA	NA	µg/L	ND	ND	NA	NA	NA	2 - 2	9.0E-03	ca**	N	NA	NA
	11141-16-5	PCB-1232	NA	NA	µg/L	ND	ND	NA	NA	NA	1 - 1	9.0E-03	ca**	N	NA	NA
	53469-21-9	PCB-1242	NA	NA	µg/L	ND	ND	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	12672-29-6	PCB-1248	NA	NA	µg/L	ND	ND	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	11097-69-1	PCB-1254	NA	NA	µg/L	ND	ND	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	11096-82-5	PCB-1260	NA	NA	µg/L	ND	ND	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	87-86-5	Pentachlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	20 - 20	4.0E-02	ca	N	ND*	100%
		Perchlorate	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	3.6E-01	ca/nc	N	ND*	100%
	85-01-8	Phenanthrene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	NA	nc	N	ND	NA
	108-95-2	Phenol	ND	ND	µg/L	ND	ND	2	0	0%	5 - 5	1.1E+03	nc	N	ND	NA
	25155-15-1	p-Isopropyltoluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	NA	nc	N	ND	NA
	7440-09-7	Potassium	2000	2,700	µg/L	31B-SW01	1	2	2	100%	500 - 500	NA		N	EN	NA
	129-00-0	Pyrene	ND	ND	µg/L	ND	ND	2	0	0%	0.2 - 0.2	1.8E+01	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	7782-49-2	Selenium	ND	ND	µg/L	ND	ND	2	0	0%	2 - 2	1.8E+01	nc	N	ND	NA
	7440-22-4	Silver	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	1.8E+01	nc	N	ND	NA
	7440-23-5	Sodium	2000	3,400	µg/L	31B-SW02	1	2	2	100%	730 - 730	NA		N	EN	NA
	7440-24-6	Strontium	110	130	µg/L	31B-SW01	1	2	2	100%	0 - 0	2.2E+03	nc	N	BSL	NA
	100-42-5	Styrene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.6E+02	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	127-18-4	Tetrachloroethene	ND	ND	µg/L	ND	1	2	0	0%	0.5 - 0.5	6.0E-03	ca	N	ND*	100%
	7440-28-0	Thallium	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	1.0E-02	nc	N	ND*	100%
	7440-32-6	Titanium	2.8	700	µg/L	31B-SW01	1	2	2	100%	5 - 8.8	1.5E+04	nc	N	BSL	NA
	108-88-3	Toluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	1.5E+01	nc	N	ND	NA

Table 5.10-4 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
		Total Cyanide	NA	NA	µg/L	NA	NA	NA	NA	NA	5 - 5	1.5E+01	nc	N	NA	NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	6.0E+00	nc	N	ND	NA
	79-01-6	Trichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.8E-03	ca	N	ND	NA
Area 39	75-69-4	Trichlorofluoromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	7.0E+01	nc	N	ND	NA
	7440-62-2	Vanadium	30	39	µg/L	31B-SW02	2	2	2	100%	2 - 2	3.6E+00	nc	Y		NA
	75-01-4	Vinyl chloride	ND	ND	µg/L	ND	ND	2	0	0%	0.5 - 0.5	2.0E-03	ca	N	ND	NA
	1330-20-7	Xylenes (total)	ND	ND	µg/L	ND	ND	2	0	0%	1 - 1	2.1E+01	nc	N	ND	NA
	7440-66-6	Zinc	40	40	µg/L	31B-SW01	1	2	1	50%	0 - 0	1.1E+03	nc	N	BSL	NA

Footnotes:

(1) See Table 2.

(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individually

Key:

ca = Cancer
COPC = Chemical of potential concern
µg/L = Micrograms per liter
nc = Noncancer
NA = Not applicable

Table 5.10-5 *Chemical of Potential Concern Summary*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
1,1,1,2-Tetrachloroethane					N	ND*	N	ND*
1,1,1-Trichloroethane	N	BSL			N	ND	N	ND
1,1,2,2-Tetrachloroethane	N	ND*			N	ND*	N	ND*
1,1,2-Trichloroethane	Y				Y		N	ND*
1,1-Dichloroethane	N	BSL			N	ND*	N	ND*
1,1-Dichloroethene	Y						N	ND
1,1-Dichloropropene	N	ND*			N	ND	N	ND*
1,2,3-Trichlorobenzene					N	ND	N	ND
1,2,3-Trichloropropane					N	ND*	N	ND*
1,2,4-Trichlorobenzene	N	ND	N	ND	N	ND*	N	ND
1,2,4-Trimethylbenzene	Y				N	ND*	N	ND
1,2-Dibromo-3-chloropropane					N	ND*	N	ND*
1,2-Dibromoethane (EDB)	N	ND*			N	ND*	N	ND*
1,2-Dichlorobenzene	N	ND	N	ND	N	ND	N	ND
1,2-Dichloroethane	Y				Y		N	ND*
1,2-Dichloroethene (cis/trans)					Y			
1,2-Dichloropropane	N	ND*			N	ND*	N	ND*
1,2-Diphenylhydrazine (as Azobenzene)			N	ND*	N	ND*	N	ND*
1,3,5-Trimethylbenzene	Y				N	ND*	N	ND
1,3-Butadiene	N	NR						
1,3-Dichlorobenzene	N	ND	N	ND	N	ND	N	ND
1,3-Dichloropropane					N	ND	N	ND
1,4-Dichlorobenzene	N	ND*	N	ND*	N	ND*	N	ND*
1,4-Dioxane	Y	0			N	ND*		
1-Methyl-2-Pyrrolidinone					N	ND		
2,2,4-Trimethylpentane	Y							
2,2-Dichloropropane					N	ND	N	ND*
2,4,5-Trichlorophenol			N	ND	N	ND	N	ND
2,4,6-Trichlorophenol			N	ND*	N	ND*	N	ND*
2,4-Dichlorophenol			N	ND	N	ND	N	ND
2,4-Dimethylphenol			N	ND	N	ND	N	ND
2,4-Dinitrophenol			N	ND*	N	ND*	N	ND*
2,4-Dinitrotoluene			N	ND	N	ND	N	ND
2,6-Dinitrotoluene			N	ND	N	ND*	N	ND*
2-Butanone (Methyl Ethyl Ketone)	Y							
2-CHLOROETHYL VINYL ETHER					N	ND		
2-Chloronaphthalene			N	ND	N	ND	N	ND
2-Chlorophenol			N	ND	N	ND*	N	ND*
2-Chlorotoluene					N	ND	N	ND
2-Hexanone	N	BSL			N	ND		
2-Methylnaphthalene			N	ND*	N	ND*	N	ND*
2-Methylphenol			N	ND	N	ND	N	ND
2-Nitroaniline			N	ND	N	ND*	N	ND
2-Nitrophenol			N	ND	N	ND	N	ND
2-Propanol	Y							
3,3'-Dichlorobenzidine			N	ND*	N	ND*	N	ND*
3-Chloropropene	N	ND*						
3-Nitroaniline			N	ND*	N	ND*	N	ND*
4,6-Dinitro-2-methylphenol			N	ND*	N	ND*	N	ND*
4-Bromophenyl phenyl ether			N	ND	N	ND	N	ND
4-Chloro-3-methylphenol			N	ND	N	ND	N	ND
4-Chloroaniline			N	ND	N	ND*	N	ND
4-Chlorophenyl phenyl ether			N	ND	N	ND	N	ND
4-Chlorotoluene					N	ND	N	ND
4-Ethyltoluene	Y							
4-Methyl-2-pentanone	Y							
4-Methylphenol			N	ND	N	ND	N	ND
4-Nitroaniline			N	ND*	N	ND*	N	ND*
4-Nitrophenol			N	ND	N	ND	N	ND
Acenaphthene			N	ND	N	ND	N	ND
Acenaphthylene			N	ND	N	ND	N	ND
Acetone	Y				N	ND		

Table 5.10-5 *Chemical of Potential Concern Summary*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Acrolein					N	ND*		
Acrylonitrile					N	ND*		
Aldrin								
alpha-Chlorotoluene	N	ND*						
Aluminum			Y	32B-SB04 @ 5 ft only	Y		Y	
Aniline			N	ND	N	ND*	N	ND*
Anthracene			N	ND	N	ND	N	ND
Antimony			N	BSL	Y		N	BSL
Arsenic			N	BG	Y		Y	
Azobenzene			N	ND	N	ND*	N	ND*
Barium			N		Y		Y	
Benzene	Y				N	ND*	N	ND*
Benzidine			N	ND*	N	ND*	N	ND*
Benzo (a) anthracene			N	ND*	N	ND*	N	ND*
Benzo (a) pyrene			N	ND*	N	ND*	N	ND*
Benzo (b & k) fluoranthene (total)			N	ND	N	ND*	N	ND*
Benzo (b) fluoranthene			N	ND*				
Benzo (ghi) perylene			N	ND	N	ND	N	ND
Benzo (k) fluoranthene			N	ND*				
Benzoic acid			N	ND	N	ND	N	ND
Benzyl alcohol			N	ND	N	ND	N	ND
Benzyl butyl phthalate			N	ND	N	ND	N	ND
Beryllium			N	BSL	Y		Y	
Bis(2-chloroethoxy)methane			N	ND	N	ND	N	ND
Bis(2-chloroethyl)ether			N	ND*	N	ND*	N	ND*
Bis(2-chloroisopropyl)ether			N	ND*	N	ND*	N	ND*
Bis(2-ethylhexyl)phthalate			Y		Y		N	ND*
Boron			N	BSL	N	BSL	N	BSL
Bromobenzene					N	ND	N	ND
Bromochloromethane					N	ND	N	ND
Bromodichloromethane	Y				N	ND*	N	ND*
Bromoform	N	ND*			N	ND*	N	ND
Bromomethane	N	BSL			N	ND*	N	ND
Butylbenzene	N	ND						
Cadmium			Y		Y		Y	
Calcium					N	EN	N	EN
Carbazole			N	ND	N	ND*	N	ND*
Carbon Disulfide	Y				N	ND		
Carbon Tetrachloride	Y				N	ND*	N	ND*
Chlordane (tech)								
Chlorobenzene	N	BSL			N	ND	N	ND
Chloroethane	N	ND*			N	ND*	N	ND*
Chloroform	Y				Y		N	ND*
Chloromethane	N	BSL			N	BSL	N	ND
Chromium			N	BG	N	BSL	N	BSL
Chromium VI								
Chrysene			N	ND*	N	ND*	N	ND*
cis-1,2-Dichloroethene	Y				Y		N	ND
cis-1,3-Dichloropropene	N	ND*			N	ND		
Cobalt			N	BSL	Y		N	BSL
Copper			N	BSL	Y		N	BSL
Cumene	N	BSL						
Cyclohexane	Y							
Dibenz (a,h) anthracene			N	ND*	N	ND*	N	ND*
Dibenzofuran			N	ND	N	ND*	N	ND*
Dibromochloromethane	Y				N	ND*	N	ND*
Dibromomethane					N	ND	N	ND
Dichlorodifluoromethane					N	ND	N	ND
Dieldrin								

Table 5.10-5 *Chemical of Potential Concern Summary*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Diesel Range Organics (C10-C28)					N	ITC	N	PM
Diethyl ether					N	NA		
Diethyl phthalate			N	ND	N	ND	N	ND
Dimethyl phthalate			N	ND	N	ND	N	ND
Di-n-butyl phthalate			Y		N	ND	N	ND
Di-n-octyl phthalate			N	ND	N	ND	N	ND
Endosulfan sulfate								
Endrin								
Endrin aldehyde								
Ethanol	Y				N	NA		
Ethyl Benzene	Y							
Fluoranthene			N	ND	N	ND	N	ND
Fluorene			N	ND	N	ND	N	ND
Freon 11	N	ND						
Freon 113	Y				Y			
Freon 114	N	ND						
Freon 12	N	BSL						
Heptachlor epoxide								
Heptane	Y							
Hexachlorobenzene			N	ND*	N	ND*	N	ND*
Hexachlorobutadiene	N	ND*	N	ND*	N	ND*	N	ND*
Hexachlorocyclopentadiene			N	ND	N	ND*	N	ND*
Hexachloroethane			N	ND	N	ND*	N	ND*
Hexane	Y							
Hexavalent Chromium					N	ND	N	NA
Indeno (1,2,3-cd) pyrene			N	ND*	N	ND*	N	ND*
Iron					Y		Y	
Isophorone			N	ND	N	ND	N	ND
Isopropanol					N	NA		
Isopropylbenzene					N	ND	N	ND
Jet fuels					N	ND		
Kerosene					N	ND		
Lead			N	BSL	Y		Y	
Lithium			N	BSL	Y		N	ND
m,p-Xylene	Y							
Magnesium					N	EN	N	EN
Manganese			N	BG	Y		Y	
Mercury			N	BSL	Y		N	ND
Methanol					N	NA		
Methoxychlor								
Methyl ethyl ketone					N	ND		
Methyl isobutyl ketone (MIBK)					N	ND		
Methyl tert-butyl ether	N	ND*			N	BSL	N	ND
Methylene Chloride	N	ND*			N	ND*	N	ND*
Molybdenum			N	BSL	Y		N	ND
Motor Oil Range Organics (C16-C36)					N	NA	N	ITC
m-Xylene					N	NA		
Naphthalene			N	ND*	Y		N	ND*
n-Butyl alcohol					N	NA		
n-Butylbenzene					N	ND	N	ND
N-Butylbenzenesulfonamide					N	ND		
Nickel			N	BSL	Y		Y	
Nitrate as NO3					Y		Y	
Nitrate plus Nitrite (as N)					N	BSL		
Nitrite as NO2					Y		N	ND
Nitrobenzene			N	ND*	N	ND*	N	ND*
N-Nitrosodimethylamine			N	ND*	N	ND*	N	ND*
N-Nitrosodi-n-propylamine			N	ND*	N	ND*	N	ND*
N-Nitrosodiphenylamine			N	ND	N	ND*		
N-Nitrosodiphenylamine (as Diphenylamine)								
n-Propanol					N	NA		
n-Propylbenzene					N	ND	N	ND
o-Xylene	Y				N	ND		
Oil & Grease (E413.2-SM5520C Total)					N	NA		

Table 5.10-5 *Chemical of Potential Concern Summary*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil Vapor		Soil		Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
p-Cymene	N	ND						
PCB-1016					N	NA	N	NA
PCB-1221					N	NA	N	NA
PCB-1232					N	NA	N	NA
PCB-1242					N	NA	N	NA
PCB-1248					N	NA	N	NA
PCB-1254					N	NA	N	NA
PCB-1260					N	NA	N	NA
PCB's					N	NA		
Pentachlorophenol			N	ND*	N	ND*	N	ND*
Perchlorate			Y		Y		N	ND*
Petroleum Hydrocarbons								
Phenanthrene			N	ND	N	ND	N	ND
Phenol			N	ND	N	ND	N	ND
p-Isopropyltoluene					N	ND	N	ND
POLYCHLORINATED BIPHENYL								
Potassium					N	EN	N	EN
Propylbenzene	Y							
p-Xylene					N	NA		
Pyrene			N	ND	N	ND	N	ND
sec-Butyl alcohol					N	NA		
sec-Butylbenzene	N	ND			N	ND	N	ND
Selenium			N	BSL	N	BSL	N	ND
Silver			N	BSL	N	BSL	N	ND
Sodium					N	EN	N	EN
Stoddard solvent					N	ND		
Strontium			N	BSL	Y		N	BSL
Styrene	Y				N	ND	N	ND
tert-Butylbenzene	N	ND			N	ND	N	ND
Tetrachloroethene	Y				N	ND*	N	ND*
Tetrahydrofuran	Y							
Thallium			N	PEBG	Y		N	ND*
Tin								
Titanium			N	BSL	Y		N	BSL
Toluene	Y				Y		N	ND
Total Cyanide					N	NA	N	NA
TOTAL RECOV. PETROLEUM HYDROCARBONS								
Toxaphene								
TPH					N	ITC		
trans-1,2-Dichloroethene	N	BSL			N	BSL	N	ND
trans-1,3-Dichloropropene	N	ND*			N	ND*		
Trichloroethene	Y				Y		N	ND
Trichlorofluoromethane					N	ND	N	ND
Vanadium			Y		Y		Y	
Vinyl Acetate					N	ND		
Vinyl Chloride	Y				N	ND*	N	ND
Xylenes (total)							N	ND
Zinc			N	BSL	Y		N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ITC = individual toxic compounds associated with the mixture are assessed separately.
PEBG - Evidence from previous investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Table 5.10-6 *Outdoor Air Exposure Point Concentration Results*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Outdoor Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Inorganics									
Aluminum	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Cadmium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Perchlorate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Vanadium	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds									
2,3,7,8-TCDD TEQ	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Bis(2-ethylhexyl)phthalate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10
Di-n-butyl phthalate	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg, Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter

mg/kg = Milligrams per kilogram

mg/m^3 = Milligrams per cubic meter

PEF = Particulate emission factor

VF = Volatilization factor

Table 5.10-7 ***Residential Soil Vapor to Indoor Air Attenuation Factors***
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors								
	Feet bgs								
Chemical/Feet bgs	**6**	**7**	**7.5**	**10**	**16**	**17**	**20**	**32**	**40**
1,1-Dichloroethene	7.9 E-4	7.0 E-4	6.6 E-4	5.3 E-4	3.5 E-4	3.3 E-4	2.9 E-4	1.9 E-4	1.5 E-4
1,1,2-Trichloroethane	7.1 E-4	6.3 E-4	6.0 E-4	4.7 E-4	3.1 E-4	2.9 E-4	2.7 E-4	1.6 E-4	1.3 E-4
1,2-Dichloroethane	8.7 E-4	7.8 E-4	7.4 E-4	5.9 E-4	4.0 E-4	3.8 E-4	3.3 E-4	2.1 E-4	1.7 E-4
1,4-Dioxane	8.7 E-4	7.8 E-4	7.4 E-4	5.9 E-4	4.0 E-4	3.8 E-4	3.4 E-4	2.1 E-4	1.7 E-4
2-Propanol	7.8 E-4	7.0 E-4	6.6 E-4	5.2 E-4	3.5 E-4	3.3 E-4	3.0 E-4	1.9 E-4	1.5 E-4
Benzene	7.8 E-4	6.9 E-4	6.5 E-4	5.2 E-4	3.5 E-4	3.3 E-4	2.8 E-4	1.8 E-4	1.5 E-4
Bromodichloromethane	3.3 E-4	2.9 E-4	2.7 E-4	2.0 E-4	1.3 E-4	1.2 E-4	1.0 E-4	6.5 E-5	5.2 E-5
Carbon Tetrachloride	7.1 E-4	6.3 E-4	6.0 E-4	4.7 E-4	3.1 E-4	2.9 E-4	2.5 E-4	1.6 E-4	1.3 E-4
Chloroform	8.7 E-4	7.8 E-4	7.4 E-4	5.9 E-4	4.0 E-4	3.8 E-4	3.3 E-4	2.1 E-4	1.7 E-4
cis-1,2-Dichloroethene	6.8 E-4	6.0 E-4	5.7 E-4	4.5 E-4	3.0 E-4	2.8 E-4	2.4 E-4	1.6 E-4	1.3 E-4
Dibromochloromethane	2.3 E-4	2.0 E-4	1.8 E-4	1.4 E-4	8.7 E-5	8.2 E-5	7.3 E-5	4.3 E-5	3.5 E-5
Ethylbenzene	6.9 E-4	6.1 E-4	5.8 E-4	4.6 E-4	3.0 E-4	2.8 E-4	2.5 E-4	1.6 E-4	1.3 E-4
Freon 113	7.1 E-4	6.3 E-4	6.0 E-4	4.7 E-4	3.1 E-4	2.9 E-4	2.5 E-4	1.6 E-4	1.3 E-4
Heptane	1.3 E-3	1.2 E-3	1.1 E-3	9.3 E-4	6.7 E-4	6.4 E-4	5.8 E-4	3.8 E-4	3.1 E-4
Hexane	1.3 E-3	1.2 E-3	1.1 E-3	9.3 E-4	6.7 E-4	6.4 E-4	5.6 E-4	3.8 E-4	3.1 E-4
Tetrachloroethylene	6.7 E-4	5.9 E-4	5.6 E-4	4.4 E-4	2.9 E-4	2.7 E-4	2.4 E-4	1.5 E-4	1.2 E-4
Tetrahydrofuran	8.8 E-4	7.8 E-4	7.4 E-4	6.0 E-4	4.0 E-4	3.8 E-4	3.5 E-4	2.2 E-4	1.8 E-4
Trichloroethylene	7.2 E-4	6.4 E-4	6.0 E-4	4.8 E-4	3.1 E-4	3.0 E-4	2.7 E-4	1.7 E-4	1.3 E-4
Vinyl Chloride	8.8 E-4	7.9 E-4	7.5 E-4	6.0 E-4	4.0 E-4	3.8 E-4	3.5 E-4	2.2 E-4	1.8 E-4
1,2,4-Trimethylbenzene	5.9 E-4	5.2 E-4	4.9 E-4	3.8 E-4	2.5 E-4	2.4 E-4	2.1 E-4	1.3 E-4	1.0 E-4
1,3,5-Trimethylbenzene	5.9 E-4	5.2 E-4	4.9 E-4	3.8 E-4	2.5 E-4	2.3 E-4	2.1 E-4	1.3 E-4	1.0 E-4
2,2,4-Trimethylpentane	7.7 E-4	6.8 E-4	6.5 E-4	5.1 E-4	3.4 E-4	3.2 E-4	2.9 E-4	1.8 E-4	1.5 E-4
2-Butanone (Methyl Ethyl K	7.4 E-4	6.5 E-4	6.2 E-4	4.9 E-4	3.2 E-4	3.1 E-4	2.8 E-4	1.7 E-4	1.4 E-4
4-Ethyltoluene	7.7 E-4	6.8 E-4	6.5 E-4	5.1 E-4	3.4 E-4	3.2 E-4	2.9 E-4	1.8 E-4	1.5 E-4
4-Methyl-2-pentanone	6.9 E-4	6.1 E-4	5.8 E-4	4.6 E-4	3.0 E-4	2.9 E-4	2.6 E-4	1.6 E-4	1.3 E-4
Acetone	9.7 E-4	8.8 E-4	8.4 E-4	6.8 E-4	4.6 E-4	4.4 E-4	4.0 E-4	2.5 E-4	2.1 E-4
Carbon Disulfide	8.7 E-4	7.8 E-4	7.4 E-4	5.9 E-4	4.0 E-4	3.8 E-4	3.4 E-4	2.1 E-4	1.7 E-4
Cyclohexane	7.3 E-4	6.4 E-4	6.1 E-4	4.8 E-4	3.2 E-4	3.0 E-4	2.7 E-4	1.7 E-4	1.4 E-4
Ethanol	1.2 E-3	1.1 E-3	1.0 E-3	8.4 E-4	5.9 E-4	5.7 E-4	5.2 E-4	3.3 E-4	2.7 E-4
m,p-Xylene	7.1 E-4	6.2 E-4	5.9 E-4	4.6 E-4	3.1 E-4	2.9 E-4	2.6 E-4	1.6 E-4	1.3 E-4
o-Xylene	7.7 E-4	6.8 E-4	6.5 E-4	5.1 E-4	3.4 E-4	3.2 E-4	2.9 E-4	1.8 E-4	1.5 E-4
Propylbenzene	5.9 E-4	5.2 E-4	4.9 E-4	3.8 E-4	2.5 E-4	2.3 E-4	2.1 E-4	1.3 E-4	1.0 E-4
Styrene	6.7 E-4	5.9 E-4	5.6 E-4	4.4 E-4	2.9 E-4	2.7 E-4	2.4 E-4	1.5 E-4	1.2 E-4
Toluene	7.7 E-4	6.8 E-4	6.5 E-4	5.1 E-4	3.4 E-4	3.2 E-4	2.9 E-4	1.8 E-4	1.5 E-4

Key:
bgs = Below ground surface

Table 5.10-8 *Commercial Soil Vapor to Indoor Air Attenuation Factors*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil to Indoor Air Attenuation Factors								
	Feet bgs								
Chemical/Feet bgs	**6**	**7**	**7.5**	**10**	**16**	**17**	**20**	**32**	**40**
1,1-Dichloroethene	3.9 E-4	3.5 E-4	3.3 E-4	2.6 E-4	1.8 E-4	1.7 E-4	1.4 E-4	9.4 E-5	7.6 E-5
1,1,2-Trichloroethane	3.6 E-4	3.2 E-4	3.0 E-4	2.4 E-4	1.6 E-4	1.5 E-4	1.3 E-4	8.2 E-5	6.6 E-5
1,2-Dichloroethane	4.3 E-4	3.9 E-4	3.7 E-4	2.9 E-4	2.0 E-4	1.9 E-4	1.6 E-4	1.1 E-4	8.7 E-5
1,4-Dioxane	4.3 E-4	3.9 E-4	3.7 E-4	3.0 E-4	2.0 E-4	1.9 E-4	1.7 E-4	1.1 E-4	8.7 E-5
2-Propanol	3.9 E-4	3.5 E-4	3.3 E-4	2.6 E-4	1.8 E-4	1.7 E-4	1.5 E-4	9.3 E-5	7.5 E-5
Benzene	3.9 E-4	3.4 E-4	3.3 E-4	2.6 E-4	1.7 E-4	1.6 E-4	1.4 E-4	9.2 E-5	7.4 E-5
Bromodichloromethane	1.7 E-4	1.4 E-4	1.3 E-4	1.0 E-4	6.5 E-5	6.1 E-5	5.2 E-5	3.3 E-5	2.6 E-5
Carbon Tetrachloride	3.6 E-4	3.2 E-4	3.0 E-4	2.4 E-4	1.6 E-4	1.5 E-4	1.3 E-4	8.2 E-5	6.6 E-5
Chloroform	4.3 E-4	3.9 E-4	3.7 E-4	2.9 E-4	2.0 E-4	1.9 E-4	1.6 E-4	1.1 E-4	8.7 E-5
cis-1,2-Dichloroethene	3.4 E-4	3.0 E-4	2.9 E-4	2.2 E-4	1.5 E-4	1.4 E-4	1.2 E-4	7.8 E-5	6.3 E-5
Dibromochloromethane	1.1 E-4	9.8 E-5	9.2 E-5	6.9 E-5	4.3 E-5	4.1 E-5	3.7 E-5	2.2 E-5	1.7 E-5
Ethylbenzene	3.5 E-4	3.1 E-4	2.9 E-4	2.3 E-4	1.5 E-4	1.4 E-4	1.2 E-4	7.9 E-5	6.4 E-5
Freon 113	3.6 E-4	3.2 E-4	3.0 E-4	2.4 E-4	1.6 E-4	1.5 E-4	1.3 E-4	8.2 E-5	6.6 E-5
Heptane	6.3 E-4	5.8 E-4	5.5 E-4	4.6 E-4	3.3 E-4	3.2 E-4	2.9 E-4	1.9 E-4	1.6 E-4
Hexane	6.3 E-4	5.8 E-4	5.5 E-4	4.6 E-4	3.3 E-4	3.2 E-4	2.8 E-4	1.9 E-4	1.6 E-4
Tetrachloroethylene	3.4 E-4	3.0 E-4	2.8 E-4	2.2 E-4	1.5 E-4	1.4 E-4	1.2 E-4	7.6 E-5	6.1 E-5
Tetrahydrofuran	4.4 E-4	3.9 E-4	3.7 E-4	3.0 E-4	2.0 E-4	1.9 E-4	1.7 E-4	1.1 E-4	8.8 E-5
Trichloroethylene	3.6 E-4	3.2 E-4	3.0 E-4	2.4 E-4	1.6 E-4	1.5 E-4	1.3 E-4	8.3 E-5	6.7 E-5
Vinyl Chloride	4.4 E-4	3.9 E-4	3.7 E-4	3.0 E-4	2.0 E-4	1.9 E-4	1.7 E-4	1.1 E-4	8.8 E-5
1,2,4-Trimethylbenzene	3.0 E-4	2.6 E-4	2.5 E-4	1.9 E-4	1.2 E-4	1.2 E-4	1.1 E-4	6.5 E-5	5.2 E-5
1,3,5-Trimethylbenzene	2.9 E-4	2.6 E-4	2.4 E-4	1.9 E-4	1.2 E-4	1.2 E-4	1.1 E-4	6.4 E-5	5.2 E-5
2,2,4-Trimethylpentane	3.8 E-4	3.4 E-4	3.2 E-4	2.6 E-4	1.7 E-4	1.6 E-4	1.5 E-4	9.1 E-5	7.3 E-5
2-Butanone (Methyl Ethyl K	3.7 E-4	3.3 E-4	3.1 E-4	2.4 E-4	1.6 E-4	1.5 E-4	1.4 E-4	8.5 E-5	6.9 E-5
4-Ethyltoluene	3.8 E-4	3.4 E-4	3.2 E-4	2.6 E-4	1.7 E-4	1.6 E-4	1.5 E-4	9.1 E-5	7.3 E-5
4-Methyl-2-pentanone	3.5 E-4	3.1 E-4	2.9 E-4	2.3 E-4	1.5 E-4	1.4 E-4	1.3 E-4	7.9 E-5	6.4 E-5
Acetone	4.9 E-4	4.4 E-4	4.2 E-4	3.4 E-4	2.3 E-4	2.2 E-4	2.0 E-4	1.3 E-4	1.0 E-4
Carbon Disulfide	4.3 E-4	3.9 E-4	3.7 E-4	2.9 E-4	2.0 E-4	1.9 E-4	1.7 E-4	1.1 E-4	8.7 E-5
Cyclohexane	3.6 E-4	3.2 E-4	3.0 E-4	2.4 E-4	1.6 E-4	1.5 E-4	1.4 E-4	8.4 E-5	6.8 E-5
Ethanol	5.8 E-4	5.3 E-4	5.1 E-4	4.2 E-4	3.0 E-4	2.8 E-4	2.6 E-4	1.7 E-4	1.4 E-4
m,p-Xylene	3.5 E-4	3.1 E-4	3.0 E-4	2.3 E-4	1.5 E-4	1.5 E-4	1.3 E-4	8.1 E-5	6.5 E-5
o-Xylene	3.8 E-4	3.4 E-4	3.2 E-4	2.6 E-4	1.7 E-4	1.6 E-4	1.5 E-4	9.1 E-5	7.3 E-5
Styrene	3.3 E-4	2.9 E-4	2.8 E-4	2.2 E-4	1.4 E-4	1.4 E-4	1.2 E-4	7.5 E-5	6.1 E-5
Propylbenzene	2.9 E-4	2.6 E-4	2.4 E-4	1.9 E-4	1.2 E-4	1.2 E-4	1.1 E-4	6.4 E-5	5.2 E-5
Toluene	3.8 E-4	3.4 E-4	3.2 E-4	2.6 E-4	1.7 E-4	1.6 E-4	1.5 E-4	9.1 E-5	7.3 E-5

Key:
bgs = Below ground surface

Table 5.10-9 *Source Partitioning Coefficients and Attenuation Factors For Soil Vapor to Outdoor Air*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Attenuation Factor for Sample Depth (Feet bgs)								
Chemical of Potential Concern	**Diffusivity in Air (cm2/s)**	**6**	**7**	**7.5**	**10**	**16**	**17**	**20**	**32**	**40**
1,1-Dichloroethene	9.0 E-2	1.2 E-5	1.0 E-5	9.6 E-6	7.2 E-6	4.5 E-6	4.2 E-6	3.6 E-6	2.2 E-6	1.8 E-6
1,1,2-Trichloroethane	7.8 E-2	1.0 E-5	8.9 E-6	8.3 E-6	6.2 E-6	3.9 E-6	3.7 E-6	3.1 E-6	1.9 E-6	1.6 E-6
1,2-Dichloroethane	1.0 E-1	1.4 E-5	1.2 E-5	1.1 E-5	8.3 E-6	5.2 E-6	4.9 E-6	4.2 E-6	2.6 E-6	2.1 E-6
1,4-Dioxane	9.9 E-2	1.3 E-5	1.1 E-5	1.1 E-5	7.9 E-6	4.9 E-6	4.7 E-6	4.0 E-6	2.5 E-6	2.0 E-6
2-Propanol	8.6 E-2	1.1 E-5	9.8 E-6	9.2 E-6	6.9 E-6	4.3 E-6	4.0 E-6	3.4 E-6	2.1 E-6	1.7 E-6
Benzene	8.8 E-2	1.2 E-5	1.0 E-5	9.4 E-6	7.0 E-6	4.4 E-6	4.1 E-6	3.5 E-6	2.2 E-6	1.8 E-6
Bromodichloromethane	3.0 E-2	4.0 E-6	3.4 E-6	3.2 E-6	2.4 E-6	1.5 E-6	1.4 E-6	1.2 E-6	7.4 E-7	5.9 E-7
Carbon Tetrachloride	7.8 E-2	1.0 E-5	8.9 E-6	8.3 E-6	6.2 E-6	3.9 E-6	3.7 E-6	3.1 E-6	1.9 E-6	1.6 E-6
Chloroform	1.0 E-1	1.4 E-5	1.2 E-5	1.1 E-5	8.3 E-6	5.2 E-6	4.9 E-6	4.2 E-6	2.6 E-6	2.1 E-6
cis-1,2-Dichloroethene	7.4 E-2	9.8 E-6	8.4 E-6	7.8 E-6	5.9 E-6	3.7 E-6	3.5 E-6	2.9 E-6	1.8 E-6	1.5 E-6
Dibromochloromethane	2.0 E-2	2.6 E-6	2.2 E-6	2.1 E-6	1.6 E-6	9.8 E-7	9.2 E-7	7.8 E-7	4.9 E-7	3.9 E-7
Ethylbenzene	7.5 E-2	1.0 E-5	8.6 E-6	8.0 E-6	6.0 E-6	3.7 E-6	3.5 E-6	3.0 E-6	1.9 E-6	1.5 E-6
Freon 113	7.8 E-2	1.0 E-5	8.9 E-6	8.3 E-6	6.2 E-6	3.9 E-6	3.7 E-6	3.1 E-6	1.9 E-6	1.6 E-6
Heptane	6.8 E-2	9.1 E-6	7.8 E-6	7.3 E-6	5.5 E-6	3.4 E-6	3.2 E-6	2.7 E-6	1.7 E-6	1.4 E-6
Hexane	2.0 E-1	2.7 E-5	2.3 E-5	2.1 E-5	1.6 E-5	1.0 E-5	9.4 E-6	8.0 E-6	5.0 E-6	4.0 E-6
Tetrachloroethylene	7.2 E-2	9.6 E-6	8.2 E-6	7.7 E-6	5.8 E-6	3.6 E-6	3.4 E-6	2.9 E-6	1.8 E-6	1.4 E-6
Tetrahydrofuran	1.1 E-1	1.4 E-5	1.2 E-5	1.1 E-5	8.4 E-6	5.2 E-6	4.9 E-6	4.2 E-6	2.6 E-6	2.1 E-6
Trichloroethylene	7.9 E-2	1.1 E-5	9.0 E-6	8.4 E-6	6.3 E-6	3.9 E-6	3.7 E-6	3.2 E-6	2.0 E-6	1.6 E-6
Vinyl Chloride	7.9 E-2	1.1 E-5	9.0 E-6	8.4 E-6	6.3 E-6	3.9 E-6	3.7 E-6	3.2 E-6	2.0 E-6	1.6 E-6
1,3,5-Trimethylbenzene	6.0 E-2	8.0 E-6	6.9 E-6	6.4 E-6	4.8 E-6	3.0 E-6	2.8 E-6	2.4 E-6	1.5 E-6	1.2 E-6
1,2,4-Trimethylbenzene	6.1 E-2	8.1 E-6	6.9 E-6	6.5 E-6	4.8 E-6	3.0 E-6	2.8 E-6	2.4 E-6	1.5 E-6	1.2 E-6
2,2,4-Trimethylpentane	8.7 E-2	1.2 E-5	9.9 E-6	9.3 E-6	6.9 E-6	4.3 E-6	4.1 E-6	3.5 E-6	2.2 E-6	1.7 E-6
2-Butanone (Methyl Ethyl Ketone)	8.1 E-2	1.1 E-5	9.2 E-6	8.6 E-6	6.5 E-6	4.0 E-6	3.8 E-6	3.2 E-6	2.0 E-6	1.6 E-6
4-Ethyltoluene	8.7 E-2	1.2 E-5	9.9 E-6	9.3 E-6	6.9 E-6	4.3 E-6	4.1 E-6	3.5 E-6	2.2 E-6	1.7 E-6
4-Methyl-2-pentanone	7.5 E-2	1.0 E-5	8.6 E-6	8.0 E-6	6.0 E-6	3.7 E-6	3.5 E-6	3.0 E-6	1.9 E-6	1.5 E-6
Acetone	1.2 E-1	1.7 E-5	1.4 E-5	1.3 E-5	9.9 E-6	6.2 E-6	5.8 E-6	5.0 E-6	3.1 E-6	2.5 E-6
Carbon Disulfide	1.0 E-1	1.4 E-5	1.2 E-5	1.1 E-5	8.3 E-6	5.2 E-6	4.9 E-6	4.2 E-6	2.6 E-6	2.1 E-6
Cyclohexane	8.0 E-2	1.1 E-5	9.1 E-6	8.5 E-6	6.4 E-6	4.0 E-6	3.8 E-6	3.2 E-6	2.0 E-6	1.6 E-6
Ethanol	1.6 E-1	2.1 E-5	1.8 E-5	1.7 E-5	1.3 E-5	7.8 E-6	7.4 E-6	6.3 E-6	3.9 E-6	3.1 E-6
m,p-Xylene	7.7 E-2	1.0 E-5	8.8 E-6	8.2 E-6	6.1 E-6	3.8 E-6	3.6 E-6	3.1 E-6	1.9 E-6	1.5 E-6
o-Xylene	8.7 E-2	1.2 E-5	9.9 E-6	9.3 E-6	6.9 E-6	4.3 E-6	4.1 E-6	3.5 E-6	2.2 E-6	1.7 E-6
Styrene	7.1 E-2	9.5 E-6	8.1 E-6	7.6 E-6	5.7 E-6	3.5 E-6	3.3 E-6	2.8 E-6	1.8 E-6	1.4 E-6
Propylbenzene	6.0 E-2	8.0 E-6	6.9 E-6	6.4 E-6	4.8 E-6	3.0 E-6	2.8 E-6	2.4 E-6	1.5 E-6	1.2 E-6
Toluene	8.7 E-2	1.2 E-5	9.9 E-6	9.3 E-6	6.9 E-6	4.3 E-6	4.1 E-6	3.5 E-6	2.2 E-6	1.7 E-6

a = USEPA, 1988, Superfund Exposure Assessment Manual

Ambient Air Attenuation $\frac{\text{Dia x Pa ^ (4/3) x (Area) x 1 / d}}{\text{w x h x u x 1,000,000 cm}^3/\text{m}^3}$

Dia =	chemical specific	cm^2/s	Diffusivity in Air
Pa =	0.43	unitless	Total porosity
Area =	2.0 E+7	cm^2	Area (assume 4500 cm x 4500 cm)
d =	305	cm	Depth to shallow soil gas concentration (10 feet)
w =	45	m	Width of exposure area perpendicular to wind speed
h =	2.0	m	Breathing zone height
u =	3.0	m/s	Wind speed

Notes and Key:

b = See Appendix A for calculations.
cm^2/s = Square Centimeter per second
cm = Centimeter
m = Meter
m/s = Meter per second
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
cm^3 = Cubic centimeter
m^3 = Cubic meter

Table 5.10-10 *Residential Groundwater to Indoor Air Attenuation Factors*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	AF ($\mu g/m^3$ per $\mu g/L$)	
Chemical	**Layer S (40 ft bgs)**	**Layer Y (15 ft bgs)**
1,1-Dichloroethene	1.5 E-1	3.4 E-1
1,2-Dichloroethane	6.3 E-3	1.4 E-2
1,2-Dichloroethene (cis/trans)	1.9 E-2	4.5 E-2
1,1,2-Trichloroethane	4.5 E-3	1.0 E-2
Chloroform	2.4 E-2	5.4 E-2
cis-1,2-Dichloroethene	1.9 E-2	4.5 E-2
Naphthalene	1.8 E-3	4.2 E-3
Freon 113	2.4 E+0	5.6 E+0
Toluene	3.6 E-2	8.4 E-2
Trichloroethene	5.1 E-2	1.2 E-1

Key:
AF = Attenuation Factor
bgs = Below ground surface
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter

Table 5.10-11 *Commercial Groundwater to Indoor Air Attenuation Factors*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	AF (µg/m^3 per µg/L)	
Chemical	**Layer S (40 ft bgs)**	**Layer Y (15 ft bgs)**
1,1-Dichloroethene	7.4 E-2	1.7 E-1
1,2-Dichloroethane	3.2 E-3	7.2 E-3
1,2-Dichloroethene (cis/trans)	9.6 E-3	2.2 E-2
Chloroform	1.2 E-2	2.7 E-2
cis-1,2-Dichloroethene	9.6 E-3	2.2 E-2
1,1,2-Trichloroethane	2.2 E-3	5.2 E-3
Naphthalene	8.9 E-4	2.1 E-3
Freon 113	1.2 E+0	2.8 E+0
Toluene	1.8 E-2	4.2 E-2
Trichloroethene	2.6 E-2	6.0 E-2

Key:
AF = Attenuation Factor
bgs = Below ground surface
µg/m^3 = Micrograms per cubic meter
µg/L = Micrograms per liter

Table 5.10-12 ***Soil Unit Hazard and Unit Cancer Risk Results-Resident***
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Aluminum	1.0 E+0	1.3 E-5	0.0 E+0	3.4 E-7	1.3 E-5	1.4 E-6	0.0 E+0	1.4 E-7	1.5 E-6	NA	NA	NA	NA
Cadmium	1.0 E+0	1.3 E-2	1.4 E-3	4.7 E-7	1.4 E-2	1.4 E-3	2.2 E-4	2.0 E-7	1.6 E-3	NA	NA	1.6 E-9	1.6 E-9
Perchlorate	1.0 E+0	1.8 E-2	0.0 E+0	NA	1.8 E-2	2.0 E-3	0.0 E+0	NA	2.0 E-3	NA	NA	NA	NA
Vanadium	1.0 E+0	2.6 E-3	0.0 E+0	9.4 E-8	2.6 E-3	2.7 E-4	0.0 E+0	4.0 E-8	2.7 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds													
2,3,7,8-TCDD TEQ	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	2.2 E-2	1.6 E-5	2.6 E-1
Bis(2-ethylhexyl)phthalate	1.0 E+0	6.4 E-4	1.8 E-4	2.4 E-8	8.2 E-4	6.8 E-5	2.7 E-5	1.0 E-8	9.6 E-5	2.2 E-8	6.9 E-9	1.5 E-12	2.9 E-8
Di-n-butyl phthalate	1.0 E+0	1.3 E-4	3.6 E-5	4.7 E-9	1.6 E-4	1.4 E-5	5.5 E-6	2.0 E-9	1.9 E-5	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.10-13 *Inhalation Unit Hazard and Unit Cancer Risk Results-Resident*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,1,2-Trichloroethane	1.0 E+0	1.6 E+2	6.8 E+1	8.5 E-3
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
2-Propanol	1.0 E+0	2.5 E+2	1.1 E+2	NA
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.9 E-2
Carbon Tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Dibromochloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.4 E-2
Ethylbenzene	1.0 E+0	2.2 E+0	9.6 E-1	1.3 E-3
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Heptane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Hexane	1.0 E+0	3.2 E+0	1.4 E+0	NA
Tetrachloroethylene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	7.4 E+0	3.2 E+0	1.0 E-3
Trichloroethylene	1.0 E+0	3.8 E+0	1.6 E+0	1.0 E-3
Vinyl Chloride	1.0 E+0	2.2 E+1	9.6 E+0	4.0 E-2
1,2,4-Trimethylbenzene	1.0 E+0	3.2 E+2	1.4 E+2	NA
1,3,5-Trimethylbenzene	1.0 E+0	3.8 E+2	1.6 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	2.2 E+1	9.6 E+0	NA
2-Butanone (Methyl Ethyl K	1.0 E+0	4.5 E-1	1.9 E-1	NA
4-Ethyltoluene	1.0 E+0	2.2 E+1	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	7.5 E-1	3.2 E-1	NA
Acetone	1.0 E+0	7.1 E-1	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Cyclohexane	1.0 E+0	3.7 E-1	1.6 E-1	NA
Ethanol	1.0 E+0	1.3 E+0	5.5 E-1	NA
m,p-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
o-Xylene	1.0 E+0	2.2 E+1	9.6 E+0	NA
Propylbenzene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Styrene	1.0 E+0	2.5 E+0	1.1 E+0	NA
Toluene	1.0 E+0	7.5 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.10-14
Location-Specific Soil Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Child Non-Cancer Hazard Index							
Sample Name	**Depth**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**HI**
Unit Hazard Child		1.3 E-5	8.2 E-4	1.4 E-2	1.6 E-4	1.8 E-2	2.6 E-3	NA								
Unit Hazard Adult		1.5 E-6	9.6 E-5	1.6 E-3	1.9 E-5	2.0 E-3	2.7 E-4	NA								
Unit Risk		NA	2.9 E-8	1.6 E-9	NA	NA	NA	2.6 E-1								
29B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA
29B-SB04	1.5			0.44			56		NA	NA	6.3 E-3	NA	NA	1.4 E-1	NA	1.5 E-1
29B-SB04	5			0.34			45		NA	NA	4.8 E-3	NA	NA	1.2 E-1	NA	1.2 E-1
29B-SB04	11						92		NA	NA	NA	NA	NA	2.4 E-1	NA	2.4 E-1
29B-SB05	0.5			0.31			67		NA	NA	4.4 E-3	NA	NA	1.7 E-1	NA	1.8 E-1
29B-SB05	1						75		NA	NA	NA	NA	NA	1.9 E-1	NA	1.9 E-1
29B-SB05	5			0.43			97		NA	NA	6.1 E-3	NA	NA	2.5 E-1	NA	2.5 E-1
29B-SB05	11			0.44			99		NA	NA	6.3 E-3	NA	NA	2.5 E-1	NA	2.6 E-1
29B-SB06	1.5			0.30			76		NA	NA	4.3 E-3	NA	NA	1.9 E-1	NA	2.0 E-1
29B-SB06	5			0.74			110		NA	NA	1.1 E-2	NA	NA	2.8 E-1	NA	2.9 E-1
29B-SB06	11						99		NA	NA	NA	NA	NA	2.5 E-1	NA	2.5 E-1
29B-SB07	1			0.29			75		NA	NA	4.1 E-3	NA	NA	1.9 E-1	NA	2.0 E-1
29B-SB07	4.5			0.38		0.077	41		NA	NA	5.4 E-3	NA	1.4 E-3	1.0 E-1	NA	1.1 E-1
29B-SB08	1.5			0.23			38		NA	NA	3.3 E-3	NA	NA	9.7 E-2	NA	1.0 E-1
29B-SB08	5			0.52			84		NA	NA	7.4 E-3	NA	NA	2.1 E-1	NA	2.2 E-1
29B-SB08	11.5						82		NA	NA	NA	NA	NA	2.1 E-1	NA	2.1 E-1
29B-SB09	1.5			0.45			88		NA	NA	6.4 E-3	NA	NA	2.3 E-1	NA	2.3 E-1
29B-SB09	5			1.5			280		NA	NA	2.1 E-2	NA	NA	7.2 E-1	NA	7.4 E-1
29B-SB09	11.5						60		NA	NA	NA	NA	NA	1.5 E-1	NA	1.5 E-1
29B-SB10	1.5			0.24			44		NA	NA	3.4 E-3	NA	NA	1.1 E-1	NA	1.2 E-1
29B-SB10	5			0.55			83		NA	NA	7.8 E-3	NA	NA	2.1 E-1	NA	2.2 E-1
29B-SB10	11.5						100		NA	NA	NA	NA	NA	2.6 E-1	NA	2.6 E-1
29B-SB11	1.5			0.66			120		NA	NA	9.4 E-3	NA	NA	3.1 E-1	NA	3.2 E-1
29B-SB11	5			0.58			94		NA	NA	8.2 E-3	NA	NA	2.4 E-1	NA	2.5 E-1
29B-SB11	11.5			0.57			63		NA	NA	8.1 E-3	NA	NA	1.6 E-1	NA	1.7 E-1
30B-SB01	0				2.0			0.0000042	NA	NA	NA	3.3 E-4	NA	NA	NA	3.3 E-4
30B-SB01	0.01				2.0			0.00000054	NA	NA	NA	3.3 E-4	NA	NA	NA	3.3 E-4
30B-SB01	3								NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	5				2.5				NA	NA	NA	4.1 E-4	NA	NA	NA	4.1 E-4
30B-SB01	10					6.0			NA	NA	NA	NA	1.1 E-1	NA	NA	1.1 E-1
30B-SB02	0		2.4		2.4	7.0		0.00030	NA	2.0 E-3	NA	3.9 E-4	1.3 E-1	NA	NA	1.3 E-1
30B-SB02	0.01		2.4		2.4			0.00012	NA	2.0 E-3	NA	3.9 E-4	NA	NA	NA	2.3 E-3
30B-SB02	3					5.0			NA	NA	NA	NA	9.1 E-2	NA	NA	9.1 E-2
30B-SB02	5				1.5				NA	NA	NA	2.5 E-4	NA	NA	NA	2.5 E-4
30B-SB02	10				0.70				NA	NA	NA	1.1 E-4	NA	NA	NA	1.1 E-4
30B-SB03	0							0.000000053	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	0.01								NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	3								NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	5				2.5				NA	NA	NA	4.0 E-4	NA	NA	NA	4.0 E-4
30B-SB03	10				0.69				NA	NA	NA	1.1 E-4	NA	NA	NA	1.1 E-4
30B-SB04	1			0.53		0.49	73		NA	NA	7.5 E-3	NA	8.9 E-3	1.9 E-1	NA	2.0 E-1
30B-SB04	5			0.42		0.23	90		NA	NA	6.0 E-3	NA	4.2 E-3	2.3 E-1	NA	2.4 E-1
30B-SB04	11			0.44		0.11	200		NA	NA	6.3 E-3	NA	2.0 E-3	5.1 E-1	NA	5.2 E-1
30B-SB05	1			0.58			94		NA	NA	8.2 E-3	NA	NA	2.4 E-1	NA	2.5 E-1
30B-SB05	5			0.75			170		NA	NA	1.1 E-2	NA	NA	4.3 E-1	NA	4.5 E-1
30B-SB06	1			0.34			49		NA	NA	4.8 E-3	NA	NA	1.3 E-1	NA	1.3 E-1
30B-SB06	5			0.84			79		NA	NA	1.2 E-2	NA	NA	2.0 E-1	NA	2.1 E-1
30B-SB06	11			0.68			75		NA	NA	9.7 E-3	NA	NA	1.9 E-1	NA	2.0 E-1
30B-SB07	1			0.54			45		NA	NA	7.7 E-3	NA	NA	1.2 E-1	NA	1.2 E-1
30B-SB07	5			0.53			73		NA	NA	7.5 E-3	NA	NA	1.9 E-1	NA	1.9 E-1
30B-SB07	11			0.41			61		NA	NA	5.8 E-3	NA	NA	1.6 E-1	NA	1.6 E-1
30B-SB08	1			0.40			80		NA	NA	5.7 E-3	NA	NA	2.0 E-1	NA	2.1 E-1

Table 5.10-14
Location-Specific Soil Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Child Non-Cancer Hazard Index							
Sample Name	**Depth**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**HI**
Unit Hazard Child		1.3 E-5	8.2 E-4	1.4 E-2	1.6 E-4	1.8 E-2	2.6 E-3	NA								
Unit Hazard Adult		1.5 E-6	9.6 E-5	1.6 E-3	1.9 E-5	2.0 E-3	2.7 E-4	NA								
Unit Risk		NA	2.9 E-8	1.6 E-9	NA	NA	NA	2.6 E-1								
30B-SB08	5			0.46			250		NA	NA	6.5 E-3	NA	NA	6.4 E-1	NA	6.5 E-1
30B-SB08	11			0.38			230		NA	NA	5.4 E-3	NA	NA	5.9 E-1	NA	5.9 E-1
31B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA
31B-SB02	1.5			0.54			77		NA	NA	7.7 E-3	NA	NA	2.0 E-1	NA	2.0 E-1
31B-SB02	5			0.67			190		NA	NA	9.5 E-3	NA	NA	4.9 E-1	NA	5.0 E-1
31B-SB02	11			0.76		0.035	120		NA	NA	1.1 E-2	NA	6.4 E-4	3.1 E-1	NA	3.2 E-1
31B-SD01	0.25						58		NA	NA	NA	NA	NA	1.5 E-1	NA	1.5 E-1
31B-SD01	1.5						79		NA	NA	NA	NA	NA	2.0 E-1	NA	2.0 E-1
31B-SD02	0.25						70		NA	NA	NA	NA	NA	1.8 E-1	NA	1.8 E-1
31B-SD02	1.5						75		NA	NA	NA	NA	NA	1.9 E-1	NA	1.9 E-1
32B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA
32B-SB02	2			0.37			57		NA	NA	5.3 E-3	NA	NA	1.5 E-1	NA	1.5 E-1
32B-SB02	5			0.18			30		NA	NA	2.6 E-3	NA	NA	7.7 E-2	NA	7.9 E-2
32B-SB02	11			0.50			56		NA	NA	7.1 E-3	NA	NA	1.4 E-1	NA	1.5 E-1
32B-SB03	1.5			0.39			48		NA	NA	5.5 E-3	NA	NA	1.2 E-1	NA	1.3 E-1
32B-SB03	5			0.69			95		NA	NA	9.8 E-3	NA	NA	2.4 E-1	NA	2.5 E-1
32B-SB03	11.5			0.50			90		NA	NA	7.1 E-3	NA	NA	2.3 E-1	NA	2.4 E-1
32B-SB04	1.5			0.35			48		NA	NA	5.0 E-3	NA	NA	1.2 E-1	NA	1.3 E-1
32B-SB04	5	69000		0.81			140		9.1 E-1	NA	1.2 E-2	NA	NA	3.6 E-1	NA	1.3 E+0
32B-SB04	11.5			0.77			130		NA	NA	1.1 E-2	NA	NA	3.3 E-1	NA	3.4 E-1
32B-SB05	1.5			0.31			60		NA	NA	4.4 E-3	NA	NA	1.5 E-1	NA	1.6 E-1
32B-SB05	5			0.46			97		NA	NA	6.5 E-3	NA	NA	2.5 E-1	NA	2.5 E-1
33B-SB01	1				0.91				NA	NA	NA	1.5 E-4	NA	NA	NA	1.5 E-4
33B-SB01	5				4.5				NA	NA	NA	7.4 E-4	NA	NA	NA	7.4 E-4
33B-SB01	10				2.9				NA	NA	NA	4.8 E-4	NA	NA	NA	4.8 E-4
33B-SB02	1				2.8				NA	NA	NA	4.6 E-4	NA	NA	NA	4.6 E-4
33B-SB02	5				6.1				NA	NA	NA	1.0 E-3	NA	NA	NA	1.0 E-3
33B-SB02	10				0.71				NA	NA	NA	1.2 E-4	NA	NA	NA	1.2 E-4
33B-SB03	1.5			3.9			78		NA	NA	5.5 E-2	NA	NA	2.0 E-1	NA	2.5 E-1
33B-SB03	5			0.61		0.75	81		NA	NA	8.7 E-3	NA	1.4 E-2	2.1 E-1	NA	2.3 E-1
33B-SB03	11			0.41		1.6	75		NA	NA	5.8 E-3	NA	2.9 E-2	1.9 E-1	NA	2.3 E-1
33B-WS	1			0.63		0.27	99		NA	NA	9.0 E-3	NA	4.9 E-3	2.5 E-1	NA	2.7 E-1
34B-SB01	1				8.7				NA	NA	NA	1.4 E-3	NA	NA	NA	1.4 E-3
34B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	10				4.1				NA	NA	NA	6.7 E-4	NA	NA	NA	6.7 E-4
34B-SB02	1.5			0.44			52		NA	NA	6.3 E-3	NA	NA	1.3 E-1	NA	1.4 E-1
34B-SB02	11			0.60		0.023	100		NA	NA	8.5 E-3	NA	4.2 E-4	2.6 E-1	NA	2.6 E-1
29B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	0.5								NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	0.5								NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	2.5								NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS05	2.5								NA	NA	NA	NA	NA	NA	NA	NA
31B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA
31B-AH11	3								NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0								NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0.01								NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-14
Location-Specific Soil Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Child Non-Cancer Hazard Index							
Sample Name	**Depth**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**HI**
Unit Hazard Child		1.3 E-5	8.2 E-4	1.4 E-2	1.6 E-4	1.8 E-2	2.6 E-3	NA								
Unit Hazard Adult		1.5 E-6	9.6 E-5	1.6 E-3	1.9 E-5	2.0 E-3	2.7 E-4	NA								
Unit Risk		NA	2.9 E-8	1.6 E-9	NA	NA	NA	2.6 E-1								
34B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	0							0.00011	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH01	0.01							0.000080	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH11	0							0.000080	NA	NA	NA	NA	NA	NA	NA	NA
30B-AH02	0.01							0.0000634	NA	NA	NA	NA	NA	NA	NA	NA
30B-AH02	0							0.0000634	NA	NA	NA	NA	NA	NA	NA	NA
29B-AH01	1							0.000060	NA	NA	NA	NA	NA	NA	NA	NA
30B-AH01	0.01							0.000055	NA	NA	NA	NA	NA	NA	NA	NA
30B-AH01	0							0.000055	NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	3							0.000055	NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	0.01							0.000012	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS05	0.5							0.0000026	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS02	0.5							0.0000022	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS03	0.5							0.00000033	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS02	0.5							0.00000030	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS03	2.5							0.00000029	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS01	0.5							0.00000026	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS03	0.5							0.00000025	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS03	2.5							0.00000024	NA	NA	NA	NA	NA	NA	NA	NA
32B-HP05	0.01							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	0							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA
32B-HP05	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-14
Location-Specific Soil Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	Depth	Aluminum	Bis(2-ethylhexyl)phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl)phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
29B-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB04	1.5	NA	NA	7.0 E-4	NA	NA	1.5 E-2	NA	1.6 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
29B-SB04	5	NA	NA	5.4 E-4	NA	NA	1.2 E-2	NA	1.3 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
29B-SB04	11	NA	NA	NA	NA	NA	2.5 E-2	NA	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	0.5	NA	NA	4.9 E-4	NA	NA	1.8 E-2	NA	1.9 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
29B-SB05	1	NA	NA	NA	NA	NA	2.1 E-2	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	5	NA	NA	6.8 E-4	NA	NA	2.7 E-2	NA	2.7 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
29B-SB05	11	NA	NA	7.0 E-4	NA	NA	2.7 E-2	NA	2.8 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
29B-SB06	1.5	NA	NA	4.8 E-4	NA	NA	2.1 E-2	NA	2.1 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
29B-SB06	5	NA	NA	1.2 E-3	NA	NA	3.0 E-2	NA	3.1 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
29B-SB06	11	NA	NA	NA	NA	NA	2.7 E-2	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB07	1	NA	NA	4.6 E-4	NA	NA	2.1 E-2	NA	2.1 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
29B-SB07	4.5	NA	NA	6.0 E-4	NA	1.5 E-4	1.1 E-2	NA	1.2 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
29B-SB08	1.5	NA	NA	3.7 E-4	NA	NA	1.0 E-2	NA	1.1 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
29B-SB08	5	NA	NA	8.3 E-4	NA	NA	2.3 E-2	NA	2.4 E-2	NA	NA	9 E-10	NA	NA	NA	NA	9 E-10
29B-SB08	11.5	NA	NA	NA	NA	NA	2.2 E-2	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB09	1.5	NA	NA	7.1 E-4	NA	NA	2.4 E-2	NA	2.5 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
29B-SB09	5	NA	NA	2.4 E-3	NA	NA	7.7 E-2	NA	7.9 E-2	NA	NA	2 E-9	NA	NA	NA	NA	2 E-9
29B-SB09	11.5	NA	NA	NA	NA	NA	1.6 E-2	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB10	1.5	NA	NA	3.8 E-4	NA	NA	1.2 E-2	NA	1.2 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
29B-SB10	5	NA	NA	8.7 E-4	NA	NA	2.3 E-2	NA	2.4 E-2	NA	NA	9 E-10	NA	NA	NA	NA	9 E-10
29B-SB10	11.5	NA	NA	NA	NA	NA	2.7 E-2	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB11	1.5	NA	NA	1.0 E-3	NA	NA	3.3 E-2	NA	3.4 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
29B-SB11	5	NA	NA	9.2 E-4	NA	NA	2.6 E-2	NA	2.7 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
29B-SB11	11.5	NA	NA	9.1 E-4	NA	NA	1.7 E-2	NA	1.8 E-2	NA	NA	9 E-10	NA	NA	NA	NA	9 E-10
30B-SB01	0	NA	NA	NA	3.9 E-5	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	NA	NA	1 E-6	1 E-6
30B-SB01	0.01	NA	NA	NA	3.8 E-5	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	NA	1 E-7	1 E-7
30B-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	5	NA	NA	NA	4.8 E-5	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	10	NA	NA	NA	NA	1.2 E-2	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	0	NA	2.3 E-4	NA	4.6 E-5	1.4 E-2	NA	NA	1.4 E-2	NA	7 E-8	NA	NA	NA	NA	8 E-5	8 E-5
30B-SB02	0.01	NA	2.3 E-4	NA	4.6 E-5	NA	NA	NA	2.8 E-4	NA	7 E-8	NA	NA	NA	NA	3 E-5	3 E-5
30B-SB02	3	NA	NA	NA	NA	9.8 E-3	NA	NA	9.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	5	NA	NA	NA	2.9 E-5	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	10	NA	NA	NA	1.3 E-5	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	1 E-8
30B-SB03	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	5	NA	NA	NA	4.7 E-5	NA	NA	NA	4.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	10	NA	NA	NA	1.3 E-5	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB04	1	NA	NA	8.4 E-4	NA	9.6 E-4	2.0 E-2	NA	2.2 E-2	NA	NA	9 E-10	NA	NA	NA	NA	9 E-10
30B-SB04	5	NA	NA	6.7 E-4	NA	4.5 E-4	2.5 E-2	NA	2.6 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
30B-SB04	11	NA	NA	7.0 E-4	NA	2.2 E-4	5.5 E-2	NA	5.6 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
30B-SB05	1	NA	NA	9.2 E-4	NA	NA	2.6 E-2	NA	2.7 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
30B-SB05	5	NA	NA	1.2 E-3	NA	NA	4.7 E-2	NA	4.8 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
30B-SB06	1	NA	NA	5.4 E-4	NA	NA	1.3 E-2	NA	1.4 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
30B-SB06	5	NA	NA	1.3 E-3	NA	NA	2.2 E-2	NA	2.3 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
30B-SB06	11	NA	NA	1.1 E-3	NA	NA	2.1 E-2	NA	2.2 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
30B-SB07	1	NA	NA	8.6 E-4	NA	NA	1.2 E-2	NA	1.3 E-2	NA	NA	9 E-10	NA	NA	NA	NA	9 E-10
30B-SB07	5	NA	NA	8.4 E-4	NA	NA	2.0 E-2	NA	2.1 E-2	NA	NA	9 E-10	NA	NA	NA	NA	9 E-10
30B-SB07	11	NA	NA	6.5 E-4	NA	NA	1.7 E-2	NA	1.7 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
30B-SB08	1	NA	NA	6.4 E-4	NA	NA	2.2 E-2	NA	2.3 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10

Table 5.10-14
Location-Specific Soil Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	Depth	Aluminum	Bis(2-ethylhexyl)phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl)phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
30B-SB08	5	NA	NA	7.3 E-4	NA	NA	6.9 E-2	NA	6.9 E-2	NA	NA	8 E-10	NA	NA	NA	NA	8 E-10
30B-SB08	11	NA	NA	6.0 E-4	NA	NA	6.3 E-2	NA	6.4 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
31B-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB02	1.5	NA	NA	8.6 E-4	NA	NA	2.1 E-2	NA	2.2 E-2	NA	NA	9 E-10	NA	NA	NA	NA	9 E-10
31B-SB02	5	NA	NA	1.1 E-3	NA	NA	5.2 E-2	NA	5.3 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
31B-SB02	11	NA	NA	1.2 E-3	NA	6.8 E-5	3.3 E-2	NA	3.4 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
31B-SD01	0.25	NA	NA	NA	NA	NA	1.6 E-2	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD01	1.5	NA	NA	NA	NA	NA	2.2 E-2	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	0.25	NA	NA	NA	NA	NA	1.9 E-2	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	1.5	NA	NA	NA	NA	NA	2.1 E-2	NA	2.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB02	2	NA	NA	5.9 E-4	NA	NA	1.6 E-2	NA	1.6 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
32B-SB02	5	NA	NA	2.9 E-4	NA	NA	8.2 E-3	NA	8.5 E-3	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
32B-SB02	11	NA	NA	7.9 E-4	NA	NA	1.5 E-2	NA	1.6 E-2	NA	NA	8 E-10	NA	NA	NA	NA	8 E-10
32B-SB03	1.5	NA	NA	6.2 E-4	NA	NA	1.3 E-2	NA	1.4 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
32B-SB03	5	NA	NA	1.1 E-3	NA	NA	2.6 E-2	NA	2.7 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
32B-SB03	11.5	NA	NA	7.9 E-4	NA	NA	2.5 E-2	NA	2.5 E-2	NA	NA	8 E-10	NA	NA	NA	NA	8 E-10
32B-SB04	1.5	NA	NA	5.6 E-4	NA	NA	1.3 E-2	NA	1.4 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
32B-SB04	5	1.0 E-1	NA	1.3 E-3	NA	NA	3.8 E-2	NA	1.4 E-1	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
32B-SB04	11.5	NA	NA	1.2 E-3	NA	NA	3.6 E-2	NA	3.7 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
32B-SB05	1.5	NA	NA	4.9 E-4	NA	NA	1.6 E-2	NA	1.7 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
32B-SB05	5	NA	NA	7.3 E-4	NA	NA	2.7 E-2	NA	2.7 E-2	NA	NA	8 E-10	NA	NA	NA	NA	8 E-10
33B-SB01	1	NA	NA	NA	1.7 E-5	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	5	NA	NA	NA	8.7 E-5	NA	NA	NA	8.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	10	NA	NA	NA	5.6 E-5	NA	NA	NA	5.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	1	NA	NA	NA	5.4 E-5	NA	NA	NA	5.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	5	NA	NA	NA	1.2 E-4	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	10	NA	NA	NA	1.4 E-5	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB03	1.5	NA	NA	6.2 E-3	NA	NA	2.1 E-2	NA	2.8 E-2	NA	NA	6 E-9	NA	NA	NA	NA	6 E-9
33B-SB03	5	NA	NA	9.7 E-4	NA	1.5 E-3	2.2 E-2	NA	2.5 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
33B-SB03	11	NA	NA	6.5 E-4	NA	3.1 E-3	2.1 E-2	NA	2.4 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
33B-WS	1	NA	NA	1.0 E-3	NA	5.3 E-4	2.7 E-2	NA	2.9 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
34B-SB01	1	NA	NA	NA	1.7 E-4	NA	NA	NA	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	10	NA	NA	NA	7.9 E-5	NA	NA	NA	7.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB02	1.5	NA	NA	7.0 E-4	NA	NA	1.4 E-2	NA	1.5 E-2	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
34B-SB02	11	NA	NA	9.5 E-4	NA	4.5 E-5	2.7 E-2	NA	2.8 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
29B-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH11	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-14
Location-Specific Soil Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	**Depth**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**HI**	**Aluminum**	**Bis(2-ethylhexyl)phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**ILCR**
Unit Hazard Child																	
Unit Hazard Adult																	
Unit Risk																	
34B-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5	3 E-5
31B-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	2 E-5
31B-AH11	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	2 E-5
30B-AH02	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	2 E-5
30B-AH02	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	2 E-5
29B-AH01	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-5	2 E-5
30B-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	1 E-5
30B-AH01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	1 E-5
34B-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	1 E-5
34B-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	3 E-6
30B-SNS05	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	7 E-7
30B-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7	6 E-7
30B-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	8 E-8
34B-SNS02	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-8	8 E-8
30B-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	7 E-8
34B-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8	7 E-8
34B-SNS03	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	6 E-8
34B-SNS03	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-8	6 E-8
32B-HP05	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3 E-9
32B-SB01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3 E-9
32B-HP05	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	4 E-10
32B-SB01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-10	4 E-10

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.10-15
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																																		
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride
Unit Hazard Child		1.6 E+2	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	4.9 E+1	6.4 E+1	3.7 E-1	3.2 E+1	1.3 E+0	2.2 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		6.8 E+1	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	1.4 E+1	5.5 E-1	9.6 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		8.5 E-3	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	1.2 E-2	NA	NA	1.4 E-2	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
30B-SP10	10			7.6				17					75	6.6		7.8	33							27	6.0	7.7	10			13		4.2	12	91	
30B-SP10	20																																			
30B-SP11	10							16	39				240	9.4											7.8	12							11		
30B-SP11	20							26	110				1000	28		11				10		31			34	77	9.0			14		23	28		
30B-SP12	10							18	24				210			7.5						18					7.6			15			6.6		
30B-SP13	10		44	40		13		7.0	110		62		240	28		3.9	20	19		11		24	92	380	38	30	340	88	14	12	18	9.4	510	830	
30B-SP13	20		180	19		7.0		18	190		32	7.0	180	52	13		66	78		30		68	82	1500	68	78	260	71	8.0	10	38	14	610	2500	
30B-SP14	10								32				180	21								15			14	31	11				31	9.4	36		
30B-SP14	20		820	42					50		54			23		25	1700	800		11			68	1800	28	23	250	76			530		330	24000	
30B-SP15	10		69	30		8.0		5.6	110		48		57	33		4.7	4400	22				13	72	910	42	42	270	56	10				480	920	
30B-SP15	16		36	36		13		94	1700	40	64		1600	320		70	280	96				410	220	110	360	1200	650	160	16				1900	96	
30B-SP17	10								32	19			250	4.5																					
30B-SP17	20		11						30				210	48		39							6.8	990	24	72		6.4					50	64	
30B-SP18	10												240	32		6.9								12	9.2	30									4.9
30B-SP19	10								33				200	18		8.4								53	9.1	23		6.5							
30B-SP20	10							21	57	27			1300	26		18				30		190		330	35	98									
30B-SP20	20								29				400	12		6.7							12	1300	11	10		14						63	
30B-SP21	10												130			16						27				4.8							8.4		
30B-SP21	20								49	13			250	5.2		7.5						73				8.8							10		
30B-SP22	10												590	17		5.4	190					22	6.2	980	16	20	13						27	18	
30B-SP22	20								33				500	10			160					33		920	8.7	10	14						17	20	
30B-SP23	10								47				460	5.1		3.8	59					64	5.7	53	7.2	4.8	17	6.0					25	8.6	
30B-SP23	20								34			6	220	9.1		8.7	360					41		330	10	14	12						25	39	
32B-SP07	10								56				150	100		26				4.6			8.9	95	24	83	10						90		
32B-SP07	20												77	19		37								1200	200	260						19	34	10	
32B-SP08	10								35				100	25		28									19	69							25		
32B-SP08	17																																5.2		
32B-SP08	20				13				95			9.4	280	90		63						35	6.6	560	460	890	6.8					27	450	13	
32B-SP08	40						27		26	13			160	13		28						19		850	94	280						49	36	14	
32B-SP09	10													16		9.9		16							78	240	5.3						36	8.6	
32B-SP09	20												59	6.4		4.5		12							20	35	6.9					8.4	68		
32B-SP10	10												61	9.7	36	10		30	9.2		12	12			50	130						9.5	23	440	
32B-SP10	20								18	12			130	31		21			5.2	5.4		22			120	280	5.2					20	79	230	
32B-SP11	10		280															94													77			88000	
32B-SP11	20		560															100																130000	
33B-SP09	10		200						20				120	11		7.3		26				19			37	79						26	28	270	
33B-SP09	20		1500		5.3		17						110	11		12		130	5.4			18			48	87						33	27	1300	
33B-SP10	10															8.2									18	13							8.5	7.4	
33B-SP11	10		9.0		15								87	5.0		13		100	160	5		41			61	79						13	14	1200	
33B-SP11	20	18	640		34				30	12			130	8.3		25	7.2	640	1000	7.2		36			70	120						11	20	15000	
33B-SP12	10		11										80		30	6.4		26			13			13	12	21					21	12	14	140	
33B-SP12	20		12				20						150	5.9	33	10		22				11			31	72					8.8	23	25	89	
33B-SP13	7.5			55		24		12	160	18	94		380	49		5.7				16		140	130		60	97	500	150	22				590		
33B-SP13	20			54		19		15	220	13	82		310	57		4.9				23		51	130		80	66	500	120	18			13	870		
33B-SP14	10		27000							15000						1600		1600		810						520	550						460	1000000	
33B-SP14	20		28000							11000						1400		1700		530							510							1100000	
33B-SP15	10		440	14					19		11		150	4.7		31		10				12			27	40						6.5	180	920	
33B-SP15	20		17000	12				10	30		10	7.2	420	8.2		22	20			120		16		12	25	130						98	240	4100	
33B-SP16	10													3.7												5.1						7.1			
33B-SP16	20								73				330	12		4.4						12			7.2	15	8.8					12	57		
33B-SP16	32								23				230	34		6.5						18			28	62	6.6					13	35	10	
33B-SP17	6																									6.4						3.8	8.4		
33B-SP17	20		55						32				500									19				5.3							8.8	150	
33B-SP18	7								200	21		6.4	990	18								33	11		20	32	12	7.7				8.1	41		
33B-SP18	20								110	24		29	510	9.4		23						86			16	16	9.1						24		
33B-SP19	10							46			10		88	31	12	12		18		83			22		38	110	80	19					180	360	
33B-SP19	20							34			11									51			41		30	63	140	38					270	45	
33B-SP20	10		1000	68		21			47		85		340	48		23		17	33	16		370	110		38	57	460	120	18				630	16000	
33B-SP20	20		110	98		26		16			110		86	62		5.8				16		13	140		69	57	560	150	22				970	3700	
33B-SP21	10		43000															2100															12000	1700000	
33B-SP21	20		60000															2300															13000	1700000	
35B-SP04	10								51				170	15		14									13	42	5.7						21		
35B-SP04	20								62				200	30		46		190		9.3		16			20	130	7.3					16	23		

Table 5.10-15
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																																		
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard Child																																				
Unit Hazard Adult																																				
Unit Risk																																				
30B-SP10	10	NA	NA	9.3 E-4	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	3.6 E-5	2.5 E-4	NA	1.5 E-5	8.7 E-4	NA	NA	NA	NA	NA	NA	9.4 E-7	1.8 E-5	2.3 E-5	1.0 E-4	NA	NA	1.4 E-5	NA	1.9 E-5	4.6 E-5	1.6 E-4	NA	2.7 E-3
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	NA	1.8 E-4	8.5 E-6	NA	NA	NA	1.2 E-4	3.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	3.6 E-5	NA	NA	NA	NA	NA	NA	4.2 E-5	NA	NA	7.7 E-4
30B-SP11	20	NA	NA	NA	NA	NA	NA	1.7 E-4	1.4 E-5	NA	NA	NA	2.9 E-4	5.9 E-4	NA	1.2 E-5	NA	NA	NA	1.0 E-6	NA	2.1 E-5	NA	NA	6.3 E-5	1.4 E-4	5.3 E-5	NA	NA	8.5 E-6	NA	5.9 E-5	6.1 E-5	NA	NA	1.5 E-3
30B-SP12	10	NA	NA	NA	NA	NA	NA	2.1 E-4	5.2 E-6	NA	NA	NA	1.0 E-4	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	7.9 E-5	NA	NA	1.6 E-5	NA	NA	2.5 E-5	NA	NA	4.7 E-4
30B-SP13	10	NA	7.4 E-4	4.9 E-3	NA	1.9 E-3	NA	8.0 E-5	2.4 E-5	NA	7.1 E-4	NA	1.2 E-4	1.1 E-3	NA	7.3 E-6	5.3 E-4	5.5 E-4	NA	2.0 E-6	NA	2.6 E-5	9.4 E-5	1.3 E-5	1.1 E-4	8.9 E-5	3.5 E-3	1.0 E-3	3.4 E-4	1.3 E-5	5.1 E-4	4.2 E-5	2.0 E-3	1.5 E-3	NA	2.0 E-2
30B-SP13	20	NA	1.7 E-3	1.3 E-3	NA	5.5 E-4	NA	1.2 E-4	2.4 E-5	NA	2.1 E-4	1.3 E-6	5.1 E-5	1.1 E-3	4.3 E-5	NA	9.4 E-4	1.3 E-3	NA	3.0 E-6	NA	4.5 E-5	4.5 E-5	2.8 E-5	1.3 E-4	1.4 E-4	1.5 E-3	4.7 E-4	1.1 E-4	6.1 E-6	5.7 E-4	3.6 E-5	1.3 E-3	2.5 E-3	NA	1.4 E-2
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	7.0 E-6	NA	NA	NA	8.7 E-5	8.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	4.2 E-5	9.2 E-5	1.1 E-4	NA	NA	NA	8.7 E-4	4.2 E-5	1.4 E-4	NA	NA	2.2 E-3
30B-SP14	20	NA	7.6 E-3	2.8 E-3	NA	NA	NA	NA	6.2 E-6	NA	3.5 E-4	NA	NA	4.8 E-4	NA	2.7 E-5	2.4 E-2	1.3 E-2	NA	1.1 E-6	NA	NA	3.7 E-5	3.4 E-5	5.2 E-5	4.1 E-5	1.5 E-3	5.0 E-4	NA	NA	8.0 E-3	NA	7.2 E-4	2.4 E-2	NA	8.4 E-2
30B-SP15	10	NA	1.2 E-3	3.7 E-3	NA	1.1 E-3	NA	6.4 E-5	2.4 E-5	NA	5.5 E-4	NA	2.7 E-5	1.3 E-3	NA	8.9 E-6	1.2 E-1	6.4 E-4	NA	NA	NA	1.4 E-5	7.3 E-5	3.2 E-5	1.2 E-4	1.2 E-4	2.8 E-3	6.4 E-4	2.4 E-4	NA	NA	NA	1.8 E-3	1.6 E-3	NA	1.3 E-1
30B-SP15	16	NA	4.1 E-4	2.9 E-3	NA	1.2 E-3	NA	7.2 E-4	2.5 E-4	3.4 E-3	4.9 E-4	NA	5.3 E-4	8.2 E-3	NA	8.9 E-5	4.9 E-3	1.9 E-3	NA	NA	NA	3.1 E-4	1.5 E-4	2.5 E-6	7.7 E-4	2.6 E-3	4.5 E-3	1.2 E-3	2.5 E-4	NA	NA	NA	4.9 E-3	1.1 E-4	NA	4.0 E-2
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	7.0 E-6	2.4 E-3	NA	NA	1.2 E-4	1.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-3
30B-SP17	20	NA	1.0 E-4	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	6.0 E-5	1.0 E-3	NA	4.3 E-5	NA	NA	NA	NA	NA	NA	3.7 E-6	1.9 E-5	4.5 E-5	1.3 E-4	NA	4.2 E-5	NA	NA	NA	NA	1.1 E-4	6.5 E-5	NA	1.6 E-3
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.2 E-3	NA	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	4.2 E-7	2.7 E-5	8.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-5	1.5 E-3
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	9.6 E-5	6.9 E-4	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	2.7 E-5	6.8 E-5	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	NA	9.8 E-4
30B-SP20	10	NA	NA	NA	NA	NA	NA	2.4 E-4	1.2 E-5	3.5 E-3	NA	NA	6.2 E-4	1.0 E-3	NA	3.4 E-5	NA	NA	NA	5.4 E-6	NA	2.0 E-4	NA	1.2 E-5	1.0 E-4	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-3
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	NA	NA	1.1 E-4	2.5 E-4	NA	7.3 E-6	NA	NA	NA	NA	NA	NA	6.6 E-6	2.5 E-5	2.1 E-5	1.8 E-5	NA	9.2 E-5	NA	NA	NA	NA	NA	6.4 E-5	NA	6.0 E-4
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-5	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	1.7 E-4
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	6.1 E-6	9.6 E-4	NA	NA	7.1 E-5	1.1 E-4	NA	8.2 E-6	NA	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	1.2 E-3
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	6.5 E-4	NA	1.0 E-5	5.0 E-3	NA	NA	NA	NA	2.4 E-5	6.3 E-6	3.4 E-5	4.7 E-5	5.9 E-5	1.4 E-4	NA	NA	NA	NA	NA	1.0 E-4	3.2 E-5	NA	6.4 E-3
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	4.1 E-6	NA	NA	NA	1.4 E-4	2.1 E-4	NA	NA	2.3 E-3	NA	NA	NA	NA	2.2 E-5	NA	1.7 E-5	1.6 E-5	1.8 E-5	8.2 E-5	NA	NA	NA	NA	NA	3.7 E-5	2.0 E-5	NA	2.8 E-3
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	2.2 E-4	2.0 E-4	NA	7.2 E-6	1.6 E-3	NA	NA	NA	NA	6.9 E-5	5.8 E-6	1.9 E-6	2.1 E-5	1.4 E-5	1.8 E-4	6.9 E-5	NA	NA	NA	NA	9.6 E-5	1.5 E-5	NA	2.5 E-3
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	4.2 E-6	NA	NA	1.2 E-6	6.3 E-5	1.9 E-4	NA	9.5 E-6	5.1 E-3	NA	NA	NA	NA	2.7 E-5	NA	6.2 E-6	1.9 E-5	2.5 E-5	7.1 E-5	NA	NA	NA	NA	NA	5.5 E-5	4.0 E-5	NA	5.6 E-3
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	7.2 E-5	3.9 E-3	NA	4.9 E-5	NA	NA	NA	8.2 E-7	NA	NA	9.1 E-6	3.3 E-6	7.1 E-5	2.5 E-4	1.0 E-4	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	4.8 E-3
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	4.0 E-4	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	3.7 E-4	4.7 E-4	NA	NA	NA	NA	NA	4.9 E-5	7.4 E-5	1.0 E-5	NA	1.5 E-3
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	7.6 E-6	NA	NA	NA	4.8 E-5	9.6 E-4	NA	5.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-5	2.0 E-4	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	1.4 E-3
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	1.3 E-5
32B-SP08	20	NA	NA	NA	1.9 E-3	NA	NA	NA	1.2 E-5	NA	NA	1.8 E-6	8.0 E-5	1.9 E-3	NA	6.9 E-5	NA	NA	NA	NA	NA	2.3 E-5	3.6 E-6	1.1 E-5	8.6 E-4	1.6 E-3	4.0 E-5	NA	NA	NA	NA	7.0 E-5	9.8 E-4	1.3 E-5	NA	7.6 E-3
32B-SP08	40	NA	NA	NA	NA	NA	3.5 E-6	NA	1.6 E-6	4.8 E-4	NA	NA	2.3 E-5	1.4 E-4	NA	1.6 E-5	NA	NA	NA	NA	NA	6.6 E-6	NA	8.4 E-6	9.4 E-5	2.8 E-4	NA	NA	NA	NA	NA	6.4 E-5	3.9 E-5	7.1 E-6	NA	1.2 E-3
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	NA	1.9 E-5	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	2.3 E-4	7.1 E-4	5.5 E-5	NA	NA	NA	NA	NA	1.4 E-4	1.5 E-5	NA	2.3 E-3
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	1.3 E-4	NA	4.9 E-6	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	3.7 E-5	6.3 E-5	4.1 E-5	NA	NA	NA	NA	NA	2.2 E-5	1.5 E-4	NA	6.6 E-4
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	3.7 E-4	2.3 E-4	1.9 E-5	NA	8.7 E-4	2.6 E-4	NA	5.3 E-5	1.3 E-5	NA	NA	1.5 E-4	3.9 E-4	NA	NA	NA	NA	NA	4.2 E-5	8.8 E-5	7.9 E-4	NA	3.3 E-3
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	8.9 E-4	NA	NA	3.7 E-5	6.5 E-4	NA	2.3 E-5	NA	NA	8.0 E-5	5.5 E-7	NA	1.5 E-5	NA	NA	2.2 E-4	5.0 E-4	3.1 E-5	NA	NA	NA	NA	5.2 E-5	1.7 E-4	2.3 E-4	NA	2.9 E-3
32B-SP11	10	NA	4.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	1.6 E-1	NA	1.7 E-1
32B-SP11	20	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	1.4 E-1
33B-SP09	10	NA	3.4 E-3	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	5.8 E-5	4.2 E-4	NA	1.4 E-5	NA	7.5 E-4	NA	NA	NA	2.0 E-5	NA	NA	1.1 E-4	2.3 E-4	NA	NA	NA	NA	NA	1.2 E-4	1.1 E-4	4.8 E-4	NA	5.7 E-3
33B-SP09	20	NA	1.4 E-2	NA	7.9 E-4	NA	4.4 E-6	NA	NA	NA	NA	NA	3.1 E-5	2.3 E-4	NA	1.3 E-5	NA	2.1 E-3	8.3 E-5	NA	NA	1.2 E-5	NA	NA	9.0 E-5	1.6 E-4	NA	NA	NA	NA	NA	8.5 E-5	5.9 E-5	1.3 E-3	NA	1.9 E-2
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	3.9 E-5	NA	NA	NA	NA	NA	NA	3.3 E-5	1.3 E-5	NA	1.5 E-4
33B-SP11	10	NA	1.5 E-4	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	1.9 E-4	NA	2.4 E-5	NA	2.9 E-3	4.6 E-3	9.0 E-7	NA	4.4 E-5	NA	NA	1.8 E-4	2.3 E-4	NA	NA	NA	NA	NA	5.8 E-5	5.4 E-5	2.1 E-3	NA	1.5 E-2
33B-SP11	20	7.7 E-4	5.9 E-3	NA	5.1 E-3	NA	NA	NA	3.7 E-6	8.9 E-4	NA	NA	3.7 E-5	1.7 E-4	NA	2.7 E-5	1.0 E-4	1.0 E-2	1.5 E-2	7.3 E-7	NA	2.4 E-5	NA	NA	1.3 E-4	2.2 E-4	NA	NA	NA	NA	NA	2.8 E-5	4.4 E-5	1.5 E-2	NA	5.4 E-2
33B-SP12	10	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	2.0 E-4	1.2 E-5	NA	7.5 E-4	NA	NA	5.7 E-5	NA	NA	4.5 E-7	3.6 E-5	6.2 E-5	NA	NA	NA	NA	5.9 E-4	5.3 E-5	5.4 E-5	2.5 E-4	NA	2.3 E-3
33B-SP12	20	NA	1.1 E-4	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	4.3 E-5	1.2 E-4	1.1 E-4	1.1 E-5	NA	3.5 E-4	NA	NA	NA	7.3 E-6	NA	NA	5.8 E-5	1.3 E-4	NA	NA	NA	NA	1.3 E-4	5.9 E-5	5.5 E-5	9.0 E-5	NA	1.3 E-3
33B-SP13	7.5	NA	NA	8.6 E-3	NA	4.4 E-3	NA	1.7 E-4	4.4 E-5	2.9 E-3	1.4 E-3	NA	2.3 E-4	2.4 E-3	NA	1.3 E-5	NA	NA	NA	3.6 E-6	NA	1.8 E-4	1.7 E-4	NA	2.1 E-4	3.4 E-4	6.6 E-3	2.2 E-3	6.9 E-4	NA	NA	NA	2.9 E-3	NA	NA	3.3 E-2
33B-SP13	20	NA	NA	3.7 E-3	NA	1.5 E-3	NA	9.9 E-5	2.7 E-5	9.6 E-4	5.4 E-4	NA	8.8 E-5	1.2 E-3	NA	5.4 E-6	NA	NA	NA	2.3 E-6	NA	3.4 E-5	7.1 E-5	NA	1.5 E-4	1.2 E-4	2.9 E-3	7.9 E-4	2.4 E-4	NA	NA	3.4 E-5	1.9 E-3	NA	NA	1.4 E-2
33B-SP14	10	NA	4.5 E-1	NA	NA	NA	NA	NA	NA	1.9 E+0	NA	NA	NA	NA	NA	3.0 E-3	NA	4.6 E-2	NA	1.4 E-4	NA	NA	NA	NA	NA	1.5 E-3	5.7 E-3	NA	NA	NA	NA	NA	1.8 E-3	1.8 E+0	NA	4.2 E+0
33B-SP14	20	NA	2.6 E-1	NA	NA	NA	NA	NA	NA	8.1 E-1	NA	NA	NA	NA	NA	1.5 E-3	NA	2.7 E-2	NA	5.4 E-5	NA	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	1.1 E+0	NA	2.2 E+0
33B-SP15	10	NA	7.4 E-3	1.7 E-3	NA	NA	NA	NA	4.1 E-6	NA	1.3 E-4	NA	7.2 E-5	1.8 E-4	NA	5.8 E-5	NA	2.9 E-4	NA	NA	NA	1.3 E-5	NA	NA	8.0 E-5	1.2 E-4	NA	NA	NA	NA	NA	2.9 E-5	6.9 E-4	1.6 E-3	NA	1.2 E-2
33B-SP15	20	NA	1.6 E-1	8.1 E-4	NA	NA	NA	6.6 E-5	3.7 E-6	NA	6.6 E-5	1.4 E-6	1.2 E-4	1.7 E-4	NA	2.4 E-5	2.8 E-4	NA	NA	1.2 E-5	NA	1.1 E-5	NA	2.3 E-7	4.7 E-5	2.3 E-4	NA	NA	NA	NA	NA	2.5 E-4	5.3 E-4	4.2 E-3	NA	1.6 E-1
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	1.9 E-4
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	9.1 E-6	NA	NA	NA	9.4 E-5	2.5 E-4	NA	4.8 E-6	NA	NA	NA	NA	NA	8.0 E-6	NA	NA	1.3 E-5	2.7 E-5	5.2 E-5	NA	NA	NA	NA	3.1 E-5	1.2 E-4	NA	NA	6.2 E-4
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	4.1 E-5	4.6 E-4	NA	4.4 E-6	NA	NA	NA	NA	NA	7.7 E-6	NA	NA	3.4 E-5	7.5 E-5	2.4 E-5	NA	NA	NA	NA	2.1 E-5	4.7 E-5	6.2 E-6	NA	7.3 E-4
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	2.5 E-5	4.8 E-5	NA	NA	9.9 E-5
33B-SP17	20	NA	5.1 E-4	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	9.5 E-6	NA	NA	NA	NA	NA	NA	1.9 E-5	1.5 E-4	NA	8.5 E-4
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	3.6 E-3	NA	2.9 E-6	6.2 E-4	9.2 E-4	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	1.5 E-5	NA	7.4 E-5	1.2 E-4	1.7 E-4	1.2 E-4	NA	NA	NA	4.7 E-5	2.1 E-4	NA	NA	6.0 E-3
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	1.8 E-3	NA	5.6 E-6	1.5 E-4	2.0 E-4	NA	2.5 E-5	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	3.0 E-5	2.9 E-5	5.4 E-5	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	2.4 E-3
33B-SP19	10	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	1.1 E-4	NA	4.2 E-5	1.2 E-3	7.8 E-5	2.3 E-5	NA	5.2 E-4	NA	1.5 E-5	NA	NA	2.2 E-5	NA	1.1 E-4	3.3 E-4	8.3 E-4	2.2 E-4	NA	NA	NA	NA	6.9 E-4	6.4 E-4	NA	5.4 E-3
33B-SP19	20	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	7.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	2.3 E-5	NA	5.6 E-5	1.1 E-4	8.2 E-4	2.5 E-4	NA	NA	NA	NA	5.9 E-4	4.6 E-5	NA	2.2 E-3
33B-SP20	10	NA	1.7 E-2	8.3 E-3	NA	3.0 E-3	NA	NA	1.0 E-5	NA	9.8 E-4	NA	1.6 E-4	1.8 E-3	NA	4.3 E-5	NA	4.9 E-4	9.5 E-4	2.9 E-6	NA	4.0 E-4	1.1 E-4	NA	1.1 E-4	1.7 E-4	4.8 E-3	1.4 E-3	4.4 E-4	NA	NA	NA	2.4 E-3	2.9 E-2	NA	7.1 E-2
33B-SP20	20	NA	1.0 E-3	6.6 E-3	NA	2.1 E-3	NA	1.1 E-4	NA	NA	7.2 E-4	NA	2.5 E-5	1.3 E-3	NA	6.4 E-6	NA	NA	NA	1.6 E-6	NA	8.6 E-6	7.7 E-5	NA	1.3 E-4	1.0 E-4	3.3 E-3	9.9 E-4	3.0 E-4	NA	NA	NA	2.1 E-3	3.7 E-3	NA	2.3 E-2
33B-SP21	10	NA	7.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	3.0 E+0	NA	3.9 E+0
33B-SP21	20	NA	5.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	1.7 E+0	NA	2.3 E+0
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	8.2 E-5	5.8 E-4	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	1.2 E-4	5.9 E-5	NA	NA	NA	NA	NA	8.0 E-5	NA	NA	1.0 E-3
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	NA	NA	5.7 E-5	6.3 E-4	NA	5.0 E-5	NA	3.1 E-3	NA	9.4 E-7	NA	1.1 E-5	NA	NA	3.7 E-5	2.3 E-4	4.3 E-5	NA	NA	NA	NA	4.1 E-5	5.0 E-5	NA	NA	4.2 E-3

Table 5.10-15
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																																			
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride	HI
Unit Hazard Child																																					
Unit Hazard Adult																																					
Unit Risk																																					
30B-SP10	10	NA	NA	4.0 E-4	NA	NA	NA	8.4 E-5	NA	NA	NA	NA	1.5 E-5	1.1 E-4	NA	6.3 E-6	3.7 E-4	NA	NA	NA	NA	NA	NA	4.0 E-7	7.6 E-6	9.8 E-6	4.5 E-5	NA	NA	6.0 E-6	NA	8.0 E-6	2.0 E-5	7.0 E-5	NA	1.1 E-3
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	NA	7.9 E-5	3.6 E-6	NA	NA	NA	4.9 E-5	1.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-6	1.5 E-5	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	3.3 E-4
30B-SP11	20	NA	NA	NA	NA	NA	NA	7.3 E-5	5.8 E-6	NA	NA	NA	1.2 E-4	2.5 E-4	NA	5.2 E-6	NA	NA	NA	4.4 E-7	NA	8.8 E-6	NA	NA	2.7 E-5	5.9 E-5	2.3 E-5	NA	NA	3.7 E-6	NA	2.5 E-5	2.6 E-5	NA	NA	6.3 E-4
30B-SP12	10	NA	NA	NA	NA	NA	NA	8.9 E-5	2.2 E-6	NA	NA	NA	4.3 E-5	NA	NA	6.1 E-6	NA	NA	NA	NA	NA	8.3 E-6	NA	NA	NA	NA	3.4 E-5	NA	NA	7.0 E-6	NA	NA	1.1 E-5	NA	NA	2.0 E-4
30B-SP13	10	NA	3.2 E-4	2.1 E-3	NA	8.0 E-4	NA	3.4 E-5	1.0 E-5	NA	3.1 E-4	NA	4.9 E-5	4.6 E-4	NA	3.1 E-6	2.3 E-4	2.4 E-4	NA	8.4 E-7	NA	1.1 E-5	4.0 E-5	5.7 E-6	4.8 E-5	3.8 E-5	1.5 E-3	4.3 E-4	1.5 E-4	5.6 E-6	2.2 E-4	1.8 E-5	8.4 E-4	6.4 E-4	NA	8.5 E-3
30B-SP13	20	NA	7.1 E-4	5.5 E-4	NA	2.4 E-4	NA	5.1 E-5	1.0 E-5	NA	9.0 E-5	5.8 E-7	2.2 E-5	4.7 E-4	1.8 E-5	NA	4.0 E-4	5.4 E-4	NA	1.3 E-6	NA	1.9 E-5	1.9 E-5	1.2 E-5	5.4 E-5	6.0 E-5	6.6 E-4	2.0 E-4	4.6 E-5	2.6 E-6	2.5 E-4	1.5 E-5	5.7 E-4	1.1 E-3	NA	6.1 E-3
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	3.7 E-5	3.5 E-4	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	NA	NA	1.8 E-5	3.9 E-5	4.9 E-5	NA	NA	NA	3.7 E-4	1.8 E-5	5.9 E-5	NA	NA	9.5 E-4
30B-SP14	20	NA	3.2 E-3	1.2 E-3	NA	NA	NA	NA	2.7 E-6	NA	1.5 E-4	NA	NA	2.1 E-4	NA	1.2 E-5	1.0 E-2	5.5 E-3	NA	4.8 E-7	NA	NA	1.6 E-5	1.5 E-5	2.2 E-5	1.8 E-5	6.3 E-4	2.1 E-4	NA	NA	3.4 E-3	NA	3.1 E-4	1.0 E-2	NA	3.6 E-2
30B-SP15	10	NA	5.0 E-4	1.6 E-3	NA	4.9 E-4	NA	2.8 E-5	1.0 E-5	NA	2.4 E-4	NA	1.2 E-5	5.4 E-4	NA	3.8 E-6	5.0 E-2	2.7 E-4	NA	NA	NA	6.0 E-6	3.1 E-5	1.4 E-5	5.3 E-5	5.3 E-5	1.2 E-3	2.8 E-4	1.0 E-4	NA	NA	NA	7.9 E-4	7.0 E-4	NA	5.7 E-2
30B-SP15	16	NA	1.7 E-4	1.2 E-3	NA	5.2 E-4	NA	3.1 E-4	1.1 E-4	1.5 E-3	2.1 E-4	NA	2.3 E-4	3.5 E-3	NA	3.8 E-5	2.1 E-3	8.1 E-4	NA	NA	NA	1.3 E-4	6.3 E-5	1.1 E-6	3.3 E-4	1.1 E-3	1.9 E-3	5.3 E-4	1.1 E-4	NA	NA	NA	2.1 E-3	4.9 E-5	NA	1.7 E-2
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	3.0 E-6	1.0 E-3	NA	NA	5.2 E-5	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3
30B-SP17	20	NA	4.3 E-5	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	2.6 E-5	4.3 E-4	NA	1.8 E-5	NA	NA	NA	NA	NA	NA	1.6 E-6	8.0 E-6	1.9 E-5	5.5 E-5	NA	1.8 E-5	NA	NA	NA	NA	4.7 E-5	2.8 E-5	NA	7.0 E-4
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	5.3 E-4	NA	5.6 E-6	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	1.2 E-5	3.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	6.6 E-4
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	4.1 E-5	3.0 E-4	NA	6.8 E-6	NA	NA	NA	NA	NA	NA	NA	7.9 E-7	1.2 E-5	2.9 E-5	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	NA	4.2 E-4
30B-SP20	10	NA	NA	NA	NA	NA	NA	1.0 E-4	5.3 E-6	1.5 E-3	NA	NA	2.7 E-4	4.3 E-4	NA	1.5 E-5	NA	NA	NA	2.3 E-6	NA	8.8 E-5	NA	4.9 E-6	4.5 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	4.9 E-5	1.1 E-4	NA	3.1 E-6	NA	NA	NA	NA	NA	NA	2.8 E-6	1.1 E-5	8.8 E-6	7.7 E-6	NA	3.9 E-5	NA	NA	NA	NA	NA	2.7 E-5	NA	2.6 E-4
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	6.1 E-6	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	7.2 E-5
30B-SP21	20	NA	NA	NA	NA	NA	NA	2.6 E-6	4.1 E-4	NA	NA	NA	3.1 E-5	4.7 E-5	NA	3.5 E-6	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	6.8 E-6	NA	NA	NA	NA	NA	NA	9.4 E-6	NA	NA	5.3 E-4
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	2.8 E-4	NA	4.4 E-6	2.1 E-3	NA	NA	NA	NA	1.0 E-5	2.7 E-6	1.5 E-5	2.0 E-5	2.5 E-5	5.8 E-5	NA	NA	NA	NA	NA	4.4 E-5	1.4 E-5	NA	2.7 E-3
30B-SP22	20	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	6.1 E-5	9.0 E-5	NA	NA	9.7 E-4	NA	NA	NA	NA	9.4 E-6	NA	7.4 E-6	7.0 E-6	7.7 E-6	3.5 E-5	NA	NA	NA	NA	NA	1.6 E-5	8.7 E-6	NA	1.2 E-3
30B-SP23	10	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	9.5 E-5	8.4 E-5	NA	3.1 E-6	6.7 E-4	NA	NA	NA	NA	3.0 E-5	2.5 E-6	7.9 E-7	9.2 E-6	6.1 E-6	7.6 E-5	3.0 E-5	NA	NA	NA	NA	4.1 E-5	6.6 E-6	NA	1.1 E-3
30B-SP23	20	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	4.9 E-7	2.7 E-5	8.2 E-5	NA	4.1 E-6	2.2 E-3	NA	NA	NA	NA	1.2 E-5	NA	2.7 E-6	8.0 E-6	1.1 E-5	3.0 E-5	NA	NA	NA	NA	NA	2.3 E-5	1.7 E-5	NA	2.4 E-3
32B-SP07	10	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	NA	NA	NA	3.1 E-5	1.7 E-3	NA	2.1 E-5	NA	NA	NA	3.5 E-7	NA	NA	3.9 E-6	1.4 E-6	3.1 E-5	1.1 E-4	4.5 E-5	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	2.0 E-3
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-6	1.7 E-4	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	9.7 E-6	1.6 E-4	2.0 E-4	NA	NA	NA	NA	NA	2.1 E-5	3.2 E-5	4.3 E-6	NA	6.2 E-4
32B-SP08	10	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	2.1 E-5	4.1 E-4	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	8.8 E-5	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	6.1 E-4
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	5.4 E-6
32B-SP08	20	NA	NA	NA	8.3 E-4	NA	NA	NA	5.0 E-6	NA	NA	7.8 E-7	3.4 E-5	8.1 E-4	NA	3.0 E-5	NA	NA	NA	NA	NA	9.9 E-6	1.6 E-6	4.5 E-6	3.7 E-4	6.8 E-4	1.7 E-5	NA	NA	NA	NA	3.0 E-5	4.2 E-4	5.6 E-6	NA	3.3 E-3
32B-SP08	40	NA	NA	NA	NA	NA	1.5 E-6	NA	6.9 E-7	2.1 E-4	NA	NA	1.0 E-5	6.1 E-5	NA	6.7 E-6	NA	NA	NA	NA	NA	2.8 E-6	NA	3.6 E-6	4.0 E-5	1.2 E-4	NA	NA	NA	NA	NA	2.7 E-5	1.7 E-5	3.0 E-6	NA	5.0 E-4
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	8.0 E-6	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	9.9 E-5	3.1 E-4	2.4 E-5	NA	NA	NA	NA	NA	5.9 E-5	6.6 E-6	NA	9.6 E-4
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-6	5.8 E-5	NA	2.1 E-6	NA	8.3 E-5	NA	NA	NA	NA	NA	NA	1.6 E-5	2.7 E-5	1.7 E-5	NA	NA	NA	NA	NA	9.3 E-6	6.4 E-5	NA	2.8 E-4
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	1.6 E-4	1.0 E-4	8.1 E-6	NA	3.7 E-4	1.1 E-4	NA	2.3 E-5	5.5 E-6	NA	NA	6.4 E-5	1.7 E-4	NA	NA	NA	NA	NA	1.8 E-5	3.8 E-5	3.4 E-4	NA	1.4 E-3
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	3.8 E-4	NA	NA	1.6 E-5	2.8 E-4	NA	9.9 E-6	NA	NA	3.4 E-5	2.4 E-7	NA	6.3 E-6	NA	NA	9.6 E-5	2.2 E-4	1.3 E-5	NA	NA	NA	NA	2.2 E-5	7.4 E-5	1.0 E-4	NA	1.2 E-3
32B-SP11	10	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-4	NA	NA	6.7 E-2	NA	7.2 E-2
32B-SP11	20	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-2	NA	5.9 E-2
33B-SP09	10	NA	1.4 E-3	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	2.5 E-5	1.8 E-4	NA	5.9 E-6	NA	3.2 E-4	NA	NA	NA	8.8 E-6	NA	NA	4.7 E-5	1.0 E-4	NA	NA	NA	NA	NA	4.9 E-5	4.6 E-5	2.1 E-4	NA	2.4 E-3
33B-SP09	20	NA	5.9 E-3	NA	3.4 E-4	NA	1.9 E-6	NA	NA	NA	NA	NA	1.3 E-5	9.9 E-5	NA	5.6 E-6	NA	9.0 E-4	3.6 E-5	NA	NA	5.1 E-6	NA	NA	3.8 E-5	6.7 E-5	NA	NA	NA	NA	NA	3.7 E-5	2.5 E-5	5.6 E-4	NA	8.1 E-3
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-5	1.7 E-5	NA	NA	NA	NA	NA	NA	1.4 E-5	5.7 E-6	NA	6.6 E-5
33B-SP11	10	NA	6.5 E-5	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	8.3 E-5	NA	1.0 E-5	NA	1.2 E-3	2.0 E-3	3.8 E-7	NA	1.9 E-5	NA	NA	7.8 E-5	1.0 E-4	NA	NA	NA	NA	NA	2.5 E-5	2.3 E-5	9.2 E-4	NA	6.3 E-3
33B-SP11	20	3.3 E-4	2.5 E-3	NA	2.2 E-3	NA	NA	NA	1.6 E-6	3.8 E-4	NA	NA	1.6 E-5	7.5 E-5	NA	1.2 E-5	4.4 E-5	4.4 E-3	6.6 E-3	3.1 E-7	NA	1.0 E-5	NA	NA	5.6 E-5	9.2 E-5	NA	NA	NA	NA	NA	1.2 E-5	1.9 E-5	6.5 E-3	NA	2.3 E-2
33B-SP12	10	NA	7.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	8.4 E-5	5.2 E-6	NA	3.2 E-4	NA	NA	2.5 E-5	NA	NA	1.9 E-7	1.5 E-5	2.7 E-5	NA	NA	NA	NA	2.5 E-4	2.3 E-5	2.3 E-5	1.1 E-4	NA	9.8 E-4
33B-SP12	20	NA	4.7 E-5	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	1.8 E-5	5.3 E-5	4.7 E-5	4.7 E-6	NA	1.5 E-4	NA	NA	NA	3.1 E-6	NA	NA	2.5 E-5	5.5 E-5	NA	NA	NA	NA	5.7 E-5	2.5 E-5	2.3 E-5	3.9 E-5	NA	5.5 E-4
33B-SP13	7.5	NA	NA	3.7 E-3	NA	1.9 E-3	NA	7.5 E-5	1.9 E-5	1.3 E-3	5.8 E-4	NA	9.7 E-5	1.0 E-3	NA	5.8 E-6	NA	NA	NA	1.6 E-6	NA	7.8 E-5	7.2 E-5	NA	9.1 E-5	1.5 E-4	2.8 E-3	9.3 E-4	2.9 E-4	NA	NA	NA	1.2 E-3	NA	NA	1.4 E-2
33B-SP13	20	NA	NA	1.6 E-3	NA	6.5 E-4	NA	4.2 E-5	1.2 E-5	4.1 E-4	2.3 E-4	NA	3.8 E-5	5.1 E-4	NA	2.3 E-6	NA	NA	NA	1.0 E-6	NA	1.4 E-5	3.1 E-5	NA	6.4 E-5	5.1 E-5	1.3 E-3	3.4 E-4	1.0 E-4	NA	NA	1.4 E-5	8.2 E-4	NA	NA	6.2 E-3
33B-SP14	10	NA	1.9 E-1	NA	NA	NA	NA	NA	NA	8.3 E-1	NA	NA	NA	NA	NA	1.3 E-3	NA	2.0 E-2	NA	6.2 E-5	NA	NA	NA	NA	NA	6.6 E-4	2.5 E-3	NA	NA	NA	NA	NA	7.5 E-4	7.7 E-1	NA	1.8 E+0
33B-SP14	20	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	3.5 E-1	NA	NA	NA	NA	NA	6.6 E-4	NA	1.2 E-2	NA	2.3 E-5	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	4.8 E-1	NA	9.5 E-1
33B-SP15	10	NA	3.2 E-3	7.3 E-4	NA	NA	NA	NA	1.8 E-6	NA	5.4 E-5	NA	3.1 E-5	7.8 E-5	NA	2.5 E-5	NA	1.2 E-4	NA	NA	NA	5.5 E-6	NA	NA	3.4 E-5	5.1 E-5	NA	NA	NA	NA	NA	1.2 E-5	3.0 E-4	7.0 E-4	NA	5.3 E-3
33B-SP15	20	NA	6.7 E-2	3.5 E-4	NA	NA	NA	2.8 E-5	1.6 E-6	NA	2.8 E-5	5.9 E-7	5.1 E-5	7.4 E-5	NA	1.0 E-5	1.2 E-4	NA	NA	5.2 E-6	NA	4.5 E-6	NA	9.7 E-8	2.0 E-5	1.0 E-4	NA	NA	NA	NA	NA	1.1 E-4	2.3 E-4	1.8 E-3	NA	7.0 E-2
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	8.1 E-5
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	NA	4.0 E-5	1.1 E-4	NA	2.1 E-6	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	5.8 E-6	1.2 E-5	2.2 E-5	NA	NA	NA	NA	1.3 E-5	5.3 E-5	NA	NA	2.6 E-4
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	7.5 E-7	NA	NA	NA	1.8 E-5	2.0 E-4	NA	1.9 E-6	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	1.5 E-5	3.2 E-5	1.0 E-5	NA	NA	NA	NA	9.0 E-6	2.0 E-5	2.7 E-6	NA	3.1 E-4
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	1.1 E-5	2.1 E-5	NA	NA	4.2 E-5
33B-SP17	20	NA	2.2 E-4	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	6.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-6	NA	NA	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	8.3 E-6	6.5 E-5	NA	3.6 E-4
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	1.5 E-3	NA	1.3 E-6	2.6 E-4	4.0 E-4	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	6.5 E-6	NA	3.2 E-5	5.1 E-5	7.2 E-5	5.1 E-5	NA	NA	NA	2.0 E-5	9.0 E-5	NA	NA	2.6 E-3
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	7.6 E-4	NA	2.4 E-6	6.2 E-5	8.5 E-5	NA	1.1 E-5	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	1.3 E-5	1.2 E-5	2.3 E-5	NA	NA	NA	NA	NA	2.3 E-5	NA	NA	1.0 E-3
33B-SP19	10	NA	NA	NA	NA	NA	NA	2.3 E-4	NA	NA	4.9 E-5	NA	1.8 E-5	5.1 E-4	3.4 E-5	9.7 E-6	NA	2.2 E-4	NA	6.4 E-6	NA	NA	9.6 E-6	NA	4.8 E-5	1.4 E-4	3.6 E-4	9.4 E-5	NA	NA	NA	NA	3.0 E-4	2.8 E-4	NA	2.3 E-3
33B-SP19	20	NA	NA	NA	NA	NA	NA	9.6 E-5	NA	NA	3.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	9.6 E-6	NA	2.4 E-5	4.8 E-5	3.5 E-4	1.1 E-4	NA	NA	NA	NA	2.5 E-4	2.0 E-5	NA	9.4 E-4
33B-SP20	10	NA	7.2 E-3	3.6 E-3	NA	1.3 E-3	NA	NA	4.4 E-6	NA	4.2 E-4	NA	7.0 E-5	7.9 E-4	NA	1.9 E-5	NA	2.1 E-4	4.1 E-4	1.2 E-6	NA	1.7 E-4	4.8 E-5	NA	4.8 E-5	7.2 E-5	2.1 E-3	5.9 E-4	1.9 E-4	NA	NA	NA	1.0 E-3	1.2 E-2	NA	3.0 E-2
33B-SP20	20	NA	4.3 E-4	2.8 E-3	NA	8.8 E-4	NA	4.5 E-5	NA	NA	3.1 E-4	NA	1.1 E-5	5.6 E-4	NA	2.7 E-6	NA	NA	NA	7.0 E-7	NA	3.7 E-6	3.3 E-5	NA	5.5 E-5	4.4 E-5	1.4 E-3	4.2 E-4	1.3 E-4	NA	NA	NA	9.1 E-4	1.6 E-3	NA	9.7 E-3
33B-SP21	10	NA	3.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	1.3 E+0	NA	1.7 E+0
33B-SP21	20	NA	2.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	7.4 E-1	NA	1.0 E+0
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	NA	3.5 E-5	2.5 E-4	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	5.3 E-5	2.5 E-5	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	4.3 E-4
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	2.4 E-5	2.7 E-4	NA	2.2 E-5	NA	1.3 E-3	NA	4.0 E-7	NA	4.5 E-6	NA	NA	1.6 E-5	1.0 E-4	1.8 E-5	NA	NA	NA	NA	1.8 E-5	2.2 E-5	NA	NA	1.8 E-3

Table 5.10-15
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																																		
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	ILCR
Unit Hazard Child																																				
Unit Hazard Adult																																				
Unit Risk																																				
30B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	3.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	4.5 E-8	NA	4 E-7
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-8
30B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	NA	1 E-7
30B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	2.1 E-7	1.3 E-7	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	5.7 E-9	NA	4.1 E-7	NA	1 E-6
30B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	2.6 E-8	NA	3.7 E-7	3.1 E-7	NA	NA	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	4.9 E-9	NA	7.0 E-7	NA	2 E-6
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	5.7 E-9	NA	NA	NA	2 E-7
30B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	NA	NA	9.6 E-6	3.1 E-6	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	6.7 E-6	NA	2 E-5
30B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	4.6 E-5	1.6 E-7	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-7	NA	5 E-5
30B-SP15	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	1.9 E-6	4.6 E-7	NA	NA	NA	NA	8.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	4 E-6
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
30B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	2 E-7
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	4 E-7
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
30B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	7 E-8
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	3.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	2 E-6
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	9.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	1 E-6
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	6.2 E-7	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	7 E-7
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	2 E-6
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	2.8 E-9	NA	9 E-8
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
32B-SP08	20	NA	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-9	NA	3.6 E-9	NA	5 E-7
32B-SP08	40	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-9	NA	2.0 E-9	NA	6 E-8
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	2 E-7
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	8 E-8
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	1.4 E-7	NA	NA	2.1 E-7	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	2.2 E-7	NA	7 E-7
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-9	NA	6.5 E-8	NA	2 E-7
32B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	4.4 E-5	NA	4 E-5
32B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	4 E-5
33B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-8	NA	1.3 E-7	NA	4 E-7
33B-SP09	20	NA	NA	NA	2.4 E-8	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	5.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	3.6 E-7	NA	1 E-6
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	4 E-9
33B-SP11	10	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	NA	7.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-9	NA	5.9 E-7	NA	1 E-6
33B-SP11	20	4.1 E-8	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	4.1 E-8	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	4.2 E-6	NA	7 E-6
33B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	1.8 E-7	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	7.2 E-9	NA	6.9 E-8	NA	4 E-7
33B-SP12	20	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	2.5 E-8	6.6 E-8	NA	NA	8.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-9	8.1 E-9	NA	2.5 E-8	NA	2 E-7
33B-SP13	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-7
33B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-9	NA	NA	NA	3 E-7
33B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-4	NA	5 E-4
33B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-4	NA	3 E-4
33B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-8	NA	NA	NA	7.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	4.6 E-7	NA	6 E-7
33B-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-8	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-8	NA	1.2 E-6	NA	1 E-6
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-9	NA	NA	NA	3 E-8
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	NA	NA	5 E-8
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	1.7 E-9	NA	1 E-7
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	NA	3 E-9
33B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	4 E-8
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-9	NA	NA	NA	2 E-7
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8
33B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	4.7 E-8	NA	NA	1.3 E-7	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	6 E-7
33B-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	3 E-8
33B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-7	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	6.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-6	NA	8 E-6
33B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	1 E-6
33B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	9 E-4
33B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	5 E-4
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	NA	NA	NA	9 E-7

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.10-7) x the unit hazard or unit risk for the chemical).

Table 5.10-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																																	
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride
Unit Hazard Child		1.6 E+2	3.2 E+1	3.2 E+2	4.6 E+2	3.8 E+2	7.5 E-1	2.2 E+1	4.5 E-1	2.5 E+2	2.2 E+1	7.5 E-1	7.1 E-1	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	4.9 E+1	6.4 E+1	3.7 E-1	3.2 E+1	1.3 E+0	2.2 E+0	7.4 E-2	3.2 E+0	3.2 E+0	2.2 E+1	2.2 E+1	6.4 E+1	2.5 E+0	6.4 E+1	7.4 E+0	7.5 E+0	3.8 E+0	2.2 E+1
Unit Hazard Adult		6.8 E+1	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	1.4 E+1	5.5 E-1	9.6 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0	9.6 E+0
Unit Risk		8.5 E-3	NA	NA	1.4 E-2	NA	4.0 E-3	NA	NA	NA	NA	NA	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	1.2 E-2	NA	NA	1.4 E-2	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	3.1 E-3	1.0 E-3	NA	1.0 E-3	4.0 E-2
30B-SP10	10			7.6				17					75	6.6		7.8	33							27	6.0	7.7	10			13		4.2	12	91	
30B-SP10	20																																		
30B-SP11	10							16	39				240	9.4											7.8	12							11		
30B-SP11	20							26	110				1000	28		11				10		31			34	77	9.0			14		23	28		
30B-SP12	10							18	24				210			7.5						18					7.6			15			6.6		
30B-SP13	10		44	40		13		7.0	110		62		240	28		3.9	20	19		11		24	92	380	38	30	340	88	14	12	18	9.4	510	830	
30B-SP13	20		180	19		7.0		18	190		32	7.0	180	52	13		66	78		30		68	82	1500	68	78	260	71	8.0	10	38	14	610	2500	
30B-SP14	10								32				180	21								15			14	31	11				31	9.4	36		
30B-SP14	20		820	42					50		54			23		25	1700	800		11			68	1800	28	23	250	76			530		330	24000	
30B-SP15	10		69	30		8		5.6	110		48		57	33		4.7	4400	22				13	72	910	42	42	270	56	10				480	920	
30B-SP15	16		36	36		13		94	1700	40	64		1600	320		70	280	96				410	220	110	360	1200	650	160	16				1900	96	
30B-SP17	10								32	19			250	4.5																					
30B-SP17	20		11						30				210	48		39							6.8	990	24	72		6.4					50	64	
30B-SP18	10												240	32		6.9								12	9.2	30									4.9
30B-SP19	10								33				200	18		8.4								53	9.1	23		6.5							
30B-SP20	10							21	57	27			1300	26		18				30		190		330	35	98									
30B-SP20	20								29				400	12		6.7							12	1300	11	10		14						63	
30B-SP21	10												130			16						27				4.8							8.4		
30B-SP21	20								49	13			250	5.2		7.5						73				8.8							10		
30B-SP22	10												590	17		5.4	190					22	6.2	980	16	20	13						27	18	
30B-SP22	20								33				500	10			160					33		920	8.7	10	14						17	20	
30B-SP23	10								47				460	5.1		3.8	59					64	5.7	53	7.2	4.8	17	6.0					25	8.6	
30B-SP23	20								34			6.0	220	9.1		8.7	360					41		330	10	14	12						25	39	
32B-SP07	10								56				150	100		26				4.6			8.9	95	24	83	10						90		
32B-SP07	20												77	19		37								1200	200	260						19	34	10	
32B-SP08	10								35				100	25		28									19	69							25		
32B-SP08	17																																5.2		
32B-SP08	20				13				95			9.4	280	90		63						35	6.6	560	460	890	6.8					27	450	13	
32B-SP08	40						27		26	13			160	13		28						19		850	94	280						49	36	14	
32B-SP09	10													16		9.9		16							78	240	5.3						36	8.6	
32B-SP09	20												59	6.4		4.5		12							20	35	6.9					8.4	68		
32B-SP10	10												61	9.7	36	10		30	9.2		12	12			50	130						9.5	23	440	
32B-SP10	20								18	12			130	31		21			5.2	5.4		22			120	280	5.2					20	79	230	
32B-SP11	10		280															77				94									77			88000	
32B-SP11	20		560															100																130000	
33B-SP09	10		200						20				120	11		7.3		26				19			37	79						26	28	270	
33B-SP09	20		1500		5.3		17						110	11		12		130	5.4			18			48	87						33	27	1300	
33B-SP10	10															8.2									18	13							8.5	7.4	
33B-SP11	10		9.0		15								87	5.0		13		100	160	5.0		41			61	79						13	14	1200	
33B-SP11	20	18	640		34				30	12			130	8.3		25	7.2	640	1000	7.2		36			70	120						11	20	15000	
33B-SP12	10		11										80		30	6.4		26			13			13	12	21					21	12	14	140	
33B-SP12	20		12				20						150	5.9	33	10		22				11			31	72					8.8	23	25	89	
33B-SP13	7.5			55		24		12	160	18	94		380	49		5.7				16		140	130		60	97	500	150	22				590		
33B-SP13	20			54		19		15	220	13	82		310	57		4.9				23		51	130		80	66	500	120	18			13	870		
33B-SP14	10		27000							15000						1600		1600		810						520	550						460	1000000	
33B-SP14	20		28000							11000						1400		1700		530							510							1100000	
33B-SP15	10		440	14					19		11		150	4.7		31		10				12			27	40						6.5	180	920	
33B-SP15	20		17000	12				10	30		10	7.2	420	8.2		22	20			120		16		12	25	130						98	240	4100	
33B-SP16	10													3.7												5.1						7.1			
33B-SP16	20								73				330	12		4.4						12			7.2	15	8.8					12	57		
33B-SP16	32								23				230	34		6.5						18			28	62	6.6					13	35	10	
33B-SP17	6																									6.4						3.8	8.4		
33B-SP17	20		55						32				500									19				5.3							8.8	150	
33B-SP18	7								200	21		6.4	990	18								33	11		20	32	12	7.7				8.1	41		
33B-SP18	20								110	24		29	510	9.4		23						86			16	16	9.1						24		
33B-SP19	10							46			10		88	31	12	12		18		83			22		38	110	80	19					180	360	
33B-SP19	20							34			11									51			41		30	63	140	38					270	45	
33B-SP20	10		1000	68		21			47		85		340	48		23		17	33	16		370	110		38	57	460	120	18				630	16000	
33B-SP20	20		110	98		26		16			110		86	62		5.8				16		13	140		69	57	560	150	22				970	3700	
33B-SP21	10		43000															2100															12000	1700000	
33B-SP21	20		60000															2300															13000	1700000	
35B-SP04	10								51				170	15		14									13	42	5.7						21		
35B-SP04	20								62				200	30		46		190		9.3		16			20	130	7.3					16	23		

Table 5.10-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																																		
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichlor omethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride	HI
Unit Hazard Child																																				
Unit Hazard Adult																																				
Unit Risk																																				
30B-SP10	10	NA	NA	1.2 E-5	NA	NA	NA	2.6 E-6	NA	NA	NA	NA	5.3 E-7	3.4 E-6	NA	2.1 E-7	1.1 E-5	NA	NA	NA	NA	NA	NA	1.3 E-8	1.0 E-7	3.9 E-7	1.4 E-6	NA	NA	1.8 E-7	NA	2.6 E-7	6.2 E-7	2.2 E-6	NA	3.5 E-5
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	NA	2.5 E-6	1.1 E-7	NA	NA	NA	1.7 E-6	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	6.1 E-7	NA	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	1.1 E-5
30B-SP11	20	NA	NA	NA	NA	NA	NA	2.0 E-6	1.6 E-7	NA	NA	NA	3.5 E-6	7.3 E-6	NA	1.5 E-7	NA	NA	NA	1.2 E-8	NA	2.5 E-7	NA	NA	3.0 E-7	2.0 E-6	6.2 E-7	NA	NA	9.9 E-8	NA	7.2 E-7	7.3 E-7	NA	NA	1.8 E-5
30B-SP12	10	NA	NA	NA	NA	NA	NA	2.8 E-6	6.9 E-8	NA	NA	NA	1.5 E-6	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	2.9 E-7	NA	NA	NA	NA	1.0 E-6	NA	NA	2.1 E-7	NA	NA	3.4 E-7	NA	NA	6.4 E-6
30B-SP13	10	NA	1.0 E-5	6.2 E-5	NA	2.4 E-5	NA	1.1 E-6	3.2 E-7	NA	9.6 E-6	NA	1.7 E-6	1.5 E-5	NA	1.0 E-7	7.0 E-6	7.8 E-6	NA	2.6 E-8	NA	3.8 E-7	1.2 E-6	1.8 E-7	6.6 E-7	1.5 E-6	4.7 E-5	1.4 E-5	4.3 E-6	1.7 E-7	6.6 E-6	5.9 E-7	2.6 E-5	2.0 E-5	NA	2.6 E-4
30B-SP13	20	NA	2.1 E-5	1.5 E-5	NA	6.3 E-6	NA	1.4 E-6	2.7 E-7	NA	2.5 E-6	1.6 E-8	6.3 E-7	1.4 E-5	4.9 E-7	NA	1.1 E-5	1.6 E-5	NA	3.6 E-8	NA	5.4 E-7	5.5 E-7	3.5 E-7	5.9 E-7	2.0 E-6	1.8 E-5	5.5 E-6	1.2 E-6	7.0 E-8	7.0 E-6	4.4 E-7	1.6 E-5	3.0 E-5	NA	1.7 E-4
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	1.3 E-6	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	2.4 E-7	1.6 E-6	1.5 E-6	NA	NA	NA	1.1 E-5	5.9 E-7	1.9 E-6	NA	NA	3.0 E-5
30B-SP14	20	NA	9.4 E-5	3.2 E-5	NA	NA	NA	NA	7.2 E-8	NA	4.2 E-6	NA	NA	6.0 E-6	NA	3.3 E-7	3.0 E-4	1.6 E-4	NA	1.3 E-8	NA	NA	4.6 E-7	4.2 E-7	2.4 E-7	5.9 E-7	1.7 E-5	5.9 E-6	NA	NA	9.7 E-5	NA	8.6 E-6	2.8 E-4	NA	1.0 E-3
30B-SP15	10	NA	1.6 E-5	4.6 E-5	NA	1.4 E-5	NA	8.7 E-7	3.2 E-7	NA	7.5 E-6	NA	4.0 E-7	1.7 E-5	NA	1.2 E-7	1.5 E-3	9.0 E-6	NA	NA	NA	2.1 E-7	9.6 E-7	4.2 E-7	7.3 E-7	2.1 E-6	3.7 E-5	8.7 E-6	3.1 E-6	NA	NA	NA	2.5 E-5	2.2 E-5	NA	1.7 E-3
30B-SP15	16	NA	5.2 E-6	3.5 E-5	NA	1.5 E-5	NA	9.1 E-6	3.1 E-6	4.2 E-5	6.2 E-6	NA	7.0 E-6	1.0 E-4	NA	1.2 E-6	6.1 E-5	2.5 E-5	NA	NA	NA	4.1 E-6	1.8 E-6	3.2 E-8	3.9 E-6	3.8 E-5	5.6 E-5	1.6 E-5	3.1 E-6	NA	NA	NA	6.2 E-5	1.4 E-6	NA	5.0 E-4
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	3.2 E-5	NA	NA	1.8 E-6	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5
30B-SP17	20	NA	1.3 E-6	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	7.4 E-7	1.3 E-5	NA	5.2 E-7	NA	NA	NA	NA	NA	NA	4.6 E-8	2.3 E-7	2.1 E-7	1.8 E-6	NA	5.0 E-7	NA	NA	NA	NA	1.3 E-6	7.6 E-7	NA	2.0 E-5
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	1.7 E-5	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	5.6 E-9	1.6 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-7	2.1 E-5
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	NA	1.4 E-6	9.4 E-6	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	1.6 E-7	1.2 E-6	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	1.3 E-5
30B-SP20	10	NA	NA	NA	NA	NA	NA	3.3 E-6	1.6 E-7	4.6 E-5	NA	NA	9.1 E-6	1.4 E-5	NA	4.8 E-7	NA	NA	NA	7.1 E-8	NA	3.0 E-6	NA	1.5 E-7	6.1 E-7	5.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-5
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	1.4 E-6	3.1 E-6	NA	8.9 E-8	NA	NA	NA	NA	NA	NA	8.0 E-8	3.0 E-7	9.6 E-8	2.6 E-7	NA	1.1 E-6	NA	NA	NA	NA	NA	7.5 E-7	NA	7.2 E-6
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-7	NA	NA	4.2 E-7	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	2.5 E-7	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	2.5 E-6
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	1.1 E-5	NA	NA	8.8 E-7	1.4 E-6	NA	1.0 E-7	NA	NA	NA	NA	NA	5.8 E-7	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	1.4 E-5
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-6	8.9 E-6	NA	1.4 E-7	6.6 E-5	NA	NA	NA	NA	3.5 E-7	8.3 E-8	4.5 E-7	2.8 E-7	1.0 E-6	1.8 E-6	NA	NA	NA	NA	NA	1.4 E-6	4.3 E-7	NA	8.5 E-5
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	4.8 E-8	NA	NA	NA	1.8 E-6	2.6 E-6	NA	NA	2.8 E-5	NA	NA	NA	NA	2.6 E-7	NA	2.1 E-7	7.6 E-8	2.6 E-7	9.6 E-7	NA	NA	NA	NA	NA	4.4 E-7	2.4 E-7	NA	3.5 E-5
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	3.2 E-6	2.7 E-6	NA	1.0 E-7	2.1 E-5	NA	NA	NA	NA	1.0 E-6	7.6 E-8	2.5 E-8	1.3 E-7	2.5 E-7	2.3 E-6	9.3 E-7	NA	NA	NA	NA	1.3 E-6	2.0 E-7	NA	3.3 E-5
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	1.3 E-8	7.7 E-7	2.4 E-6	NA	1.2 E-7	6.3 E-5	NA	NA	NA	NA	3.3 E-7	NA	7.6 E-8	8.7 E-8	3.6 E-7	8.2 E-7	NA	NA	NA	NA	NA	6.5 E-7	4.6 E-7	NA	6.9 E-5
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	1.1 E-6	5.2 E-5	NA	6.9 E-7	NA	NA	NA	1.1 E-8	NA	NA	1.2 E-7	4.4 E-8	4.2 E-7	4.2 E-6	1.4 E-6	NA	NA	NA	NA	NA	4.7 E-6	NA	NA	6.5 E-5
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	5.0 E-6	NA	4.9 E-7	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	1.7 E-6	6.6 E-6	NA	NA	NA	NA	NA	5.9 E-7	8.8 E-7	1.2 E-7	NA	1.6 E-5
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	7.0 E-7	1.3 E-5	NA	7.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-7	3.5 E-6	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	2.0 E-5
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	1.6 E-7
32B-SP08	20	NA	NA	NA	2.5 E-5	NA	NA	NA	1.4 E-7	NA	NA	2.1 E-8	9.8 E-7	2.4 E-5	NA	8.4 E-7	NA	NA	NA	NA	NA	2.8 E-7	4.4 E-8	1.3 E-7	4.0 E-6	2.3 E-5	4.7 E-7	NA	NA	NA	NA	8.4 E-7	1.2 E-5	1.5 E-7	NA	9.0 E-5
32B-SP08	40	NA	NA	NA	NA	NA	4.0 E-8	NA	1.9 E-8	5.5 E-6	NA	NA	2.8 E-7	1.7 E-6	NA	1.9 E-7	NA	NA	NA	NA	NA	7.6 E-8	NA	9.8 E-8	4.1 E-7	3.6 E-6	NA	NA	NA	NA	NA	7.6 E-7	4.7 E-7	8.3 E-8	NA	1.3 E-5
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	2.6 E-7	NA	6.5 E-6	NA	NA	NA	NA	NA	NA	1.4 E-6	1.2 E-5	7.3 E-7	NA	NA	NA	NA	NA	1.9 E-6	2.0 E-7	NA	3.2 E-5
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	1.7 E-6	NA	6.0 E-8	NA	2.5 E-6	NA	NA	NA	NA	NA	NA	1.7 E-7	8.9 E-7	4.7 E-7	NA	NA	NA	NA	2.6 E-7	1.8 E-6	NA	NA	8.0 E-6
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	5.1 E-6	2.7 E-6	2.7 E-7	NA	1.2 E-5	3.5 E-6	NA	6.0 E-7	1.9 E-7	NA	NA	8.7 E-7	6.6 E-6	NA	NA	NA	NA	NA	5.9 E-7	1.2 E-6	1.0 E-5	NA	4.5 E-5
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	1.0 E-5	NA	NA	4.6 E-7	8.1 E-6	NA	2.8 E-7	NA	NA	9.8 E-7	6.4 E-9	NA	1.8 E-7	NA	NA	1.0 E-6	7.1 E-6	3.6 E-7	NA	NA	NA	NA	6.2 E-7	2.0 E-6	2.7 E-6	NA	3.4 E-5
32B-SP11	10	NA	6.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	2.1 E-3	NA	2.2 E-3
32B-SP11	20	NA	6.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	1.6 E-3
33B-SP09	10	NA	4.6 E-5	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	8.4 E-7	5.7 E-6	NA	1.9 E-7	NA	1.1 E-5	NA	NA	NA	3.0 E-7	NA	NA	6.5 E-7	4.0 E-6	NA	NA	NA	NA	NA	1.6 E-6	1.5 E-6	6.4 E-6	NA	7.8 E-5
33B-SP09	20	NA	1.7 E-4	NA	1.0 E-5	NA	5.0 E-8	NA	NA	NA	NA	NA	3.9 E-7	2.9 E-6	NA	1.6 E-7	NA	2.7 E-5	1.0 E-6	NA	NA	1.4 E-7	NA	NA	4.2 E-7	2.2 E-6	NA	NA	NA	NA	NA	1.0 E-6	7.0 E-7	1.5 E-5	NA	2.3 E-4
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	6.6 E-7	NA	NA	NA	NA	NA	NA	4.4 E-7	1.8 E-7	NA	1.8 E-6
33B-SP11	10	NA	2.1 E-6	NA	5.7 E-5	NA	NA	NA	NA	NA	NA	NA	6.1 E-7	2.6 E-6	NA	3.5 E-7	NA	4.1 E-5	6.0 E-5	1.2 E-8	NA	6.6 E-7	NA	NA	1.1 E-6	4.0 E-6	NA	NA	NA	NA	NA	8.1 E-7	7.3 E-7	2.8 E-5	NA	2.0 E-4
33B-SP11	20	9.0 E-6	7.4 E-5	NA	6.4 E-5	NA	NA	NA	4.3 E-8	1.0 E-5	NA	NA	4.6 E-7	2.2 E-6	NA	3.3 E-7	1.3 E-6	1.3 E-4	1.9 E-4	8.6 E-9	NA	2.9 E-7	NA	NA	6.1 E-7	3.1 E-6	NA	NA	NA	NA	NA	3.4 E-7	5.2 E-7	1.8 E-4	NA	6.6 E-4
33B-SP12	10	NA	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	2.3 E-6	1.7 E-7	NA	1.1 E-5	NA	NA	6.5 E-7	NA	NA	6.0 E-9	2.1 E-7	1.1 E-6	NA	NA	NA	NA	7.7 E-6	7.5 E-7	7.3 E-7	3.3 E-6	NA	3.1 E-5
33B-SP12	20	NA	1.4 E-6	NA	NA	NA	5.9 E-8	NA	NA	NA	NA	NA	5.3 E-7	1.5 E-6	1.3 E-6	1.3 E-7	NA	4.5 E-6	NA	NA	NA	8.8 E-8	NA	NA	2.7 E-7	1.8 E-6	NA	NA	NA	NA	1.6 E-6	7.2 E-7	6.5 E-7	1.1 E-6	NA	1.6 E-5
33B-SP13	7.5	NA	NA	1.1 E-4	NA	5.8 E-5	NA	2.5 E-6	6.2 E-7	4.1 E-5	1.9 E-5	NA	3.6 E-6	3.4 E-5	NA	2.0 E-7	NA	NA	NA	5.1 E-8	NA	3.0 E-6	2.3 E-6	NA	1.4 E-6	6.6 E-6	9.2 E-5	3.1 E-5	9.0 E-6	NA	NA	NA	4.1 E-5	NA	NA	4.6 E-4
33B-SP13	20	NA	NA	4.2 E-5	NA	1.7 E-5	NA	1.2 E-6	3.2 E-7	1.1 E-5	6.4 E-6	NA	1.1 E-6	1.5 E-5	NA	6.5 E-8	NA	NA	NA	2.7 E-8	NA	4.1 E-7	8.7 E-7	NA	7.0 E-7	1.7 E-6	3.4 E-5	9.3 E-6	2.8 E-6	NA	NA	4.1 E-7	2.3 E-5	NA	NA	1.7 E-4
33B-SP14	10	NA	6.2 E-3	NA	NA	NA	NA	NA	NA	2.5 E-2	NA	NA	NA	NA	NA	4.2 E-5	NA	6.5 E-4	NA	1.9 E-6	NA	NA	NA	NA	NA	2.7 E-5	7.6 E-5	NA	NA	NA	NA	NA	2.4 E-5	2.4 E-2	NA	5.6 E-2
33B-SP14	20	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	1.9 E-5	NA	3.5 E-4	NA	6.3 E-7	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	2.6 E-2
33B-SP15	10	NA	1.0 E-4	2.2 E-5	NA	NA	NA	NA	5.5 E-8	NA	1.7 E-6	NA	1.1 E-6	2.5 E-6	NA	8.2 E-7	NA	4.1 E-6	NA	NA	NA	1.9 E-7	NA	NA	4.7 E-7	2.0 E-6	NA	NA	NA	NA	NA	4.1 E-7	9.3 E-6	2.2 E-5	NA	1.7 E-4
33B-SP15	20	NA	2.0 E-3	9.3 E-6	NA	NA	NA	7.8 E-7	4.3 E-8	NA	7.8 E-7	1.6 E-8	1.5 E-6	2.1 E-6	NA	2.9 E-7	3.5 E-6	NA	NA	1.4 E-7	NA	1.3 E-7	NA	2.8 E-9	2.2 E-7	3.3 E-6	NA	NA	NA	NA	NA	3.1 E-6	6.2 E-6	4.9 E-5	NA	2.0 E-3
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	2.6 E-6
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	1.2 E-6	3.1 E-6	NA	5.8 E-8	NA	NA	NA	NA	NA	9.6 E-8	NA	NA	6.3 E-8	3.8 E-7	6.0 E-7	NA	NA	NA	NA	3.7 E-7	1.5 E-6	NA	NA	7.5 E-6
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	NA	5.1 E-7	5.6 E-6	NA	5.4 E-8	NA	NA	NA	NA	NA	9.0 E-8	NA	NA	1.5 E-7	9.9 E-7	2.8 E-7	NA	NA	NA	NA	2.5 E-7	5.7 E-7	7.4 E-8	NA	8.5 E-6
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	NA	3.9 E-7	7.3 E-7	NA	NA	1.7 E-6
33B-SP17	20	NA	6.3 E-6	NA	NA	NA	NA	NA	4.6 E-8	NA	NA	NA	1.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	1.4 E-7	NA	NA	NA	NA	NA	NA	2.3 E-7	1.8 E-6	NA	1.0 E-5
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	5.1 E-5	NA	4.1 E-8	9.9 E-6	1.3 E-5	NA	NA	NA	NA	NA	NA	NA	7.6 E-7	2.1 E-7	NA	5.0 E-7	2.3 E-6	2.4 E-6	1.7 E-6	NA	NA	NA	7.2 E-7	3.0 E-6	NA	NA	8.7 E-5
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	2.0 E-5	NA	6.5 E-8	1.8 E-6	2.5 E-6	NA	3.1 E-7	NA	NA	NA	NA	NA	6.9 E-7	NA	NA	1.4 E-7	4.1 E-7	6.3 E-7	NA	NA	NA	NA	NA	6.2 E-7	NA	NA	2.8 E-5
33B-SP19	10	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	NA	1.6 E-6	NA	6.2 E-7	1.6 E-5	9.1 E-7	3.2 E-7	NA	7.4 E-6	NA	2.0 E-7	NA	NA	2.9 E-7	NA	6.6 E-7	5.6 E-6	1.1 E-5	3.0 E-6	NA	NA	NA	NA	9.3 E-6	8.5 E-6	NA	7.3 E-5
33B-SP19	20	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	NA	8.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	2.7 E-7	NA	2.6 E-7	1.6 E-6	9.6 E-6	3.0 E-6	NA	NA	NA	NA	7.0 E-6	5.3 E-7	NA	2.6 E-5
33B-SP20	10	NA	2.3 E-4	1.1 E-4	NA	3.8 E-5	NA	NA	1.4 E-7	NA	1.3 E-5	NA	2.4 E-6	2.5 E-5	NA	6.1 E-7	NA	6.9 E-6	1.2 E-5	3.8 E-8	NA	5.9 E-6	1.5 E-6	NA	6.6 E-7	2.9 E-6	6.3 E-5	1.9 E-5	5.5 E-6	NA	NA	NA	3.3 E-5	3.8 E-4	NA	9.4 E-4
33B-SP20	20	NA	1.3 E-5	7.6 E-5	NA	2.4 E-5	NA	1.2 E-6	NA	NA	8.6 E-6	NA	3.0 E-7	1.6 E-5	NA	7.7 E-8	NA	NA	NA	1.9 E-8	NA	1.0 E-7	9.4 E-7	NA	6.0 E-7	1.5 E-6	3.8 E-5	1.2 E-5	3.4 E-6	NA	NA	NA	2.5 E-5	4.4 E-5	NA	2.6 E-4
33B-SP21	10	NA	9.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-4	4.0 E-2	NA	5.2 E-2
33B-SP21	20	NA	6.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	2.0 E-2	NA	2.8 E-2
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	1.2 E-6	7.8 E-6	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	2.1 E-6	7.8 E-7	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	1.4 E-5
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	9.0 E-8	NA	NA	NA	7.0 E-7	7.8 E-6	NA	6.1 E-7	NA	3.9 E-5	NA	1.1 E-8	NA	1.3 E-7	NA	NA	1.7 E-7	3.3 E-6	5.0 E-7	NA	NA	NA	NA	5.0 E-7	6.0 E-7	NA	NA	5.3 E-5

Table 5.10-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																																			
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard Child																																					
Unit Hazard Adult																																					
Unit Risk																																					
30B-SP10	10	NA	NA	5.0 E-6	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	2.3 E-7	1.5 E-6	NA	8.9 E-8	4.9 E-6	NA	NA	NA	NA	NA	NA	5.4 E-9	4.5 E-8	1.7 E-7	5.9 E-7	NA	NA	7.9 E-8	NA	1.1 E-7	2.7 E-7	9.3 E-7	NA	1.5 E-5
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	NA	1.1 E-6	4.8 E-8	NA	NA	NA	7.2 E-7	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	2.6 E-7	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	4.5 E-6
30B-SP11	20	NA	NA	NA	NA	NA	NA	8.7 E-7	6.8 E-8	NA	NA	NA	1.5 E-6	3.1 E-6	NA	6.3 E-8	NA	NA	NA	5.1 E-9	NA	1.1 E-7	NA	NA	1.3 E-7	8.4 E-7	2.7 E-7	NA	NA	4.2 E-8	NA	3.1 E-7	3.1 E-7	NA	NA	7.6 E-6
30B-SP12	10	NA	NA	NA	NA	NA	NA	1.2 E-6	3.0 E-8	NA	NA	NA	6.3 E-7	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	4.5 E-7	NA	NA	9.1 E-8	NA	NA	1.5 E-7	NA	NA	2.8 E-6
30B-SP13	10	NA	4.3 E-6	2.7 E-5	NA	1.0 E-5	NA	4.7 E-7	1.4 E-7	NA	4.1 E-6	NA	7.2 E-7	6.3 E-6	NA	4.4 E-8	3.0 E-6	3.3 E-6	NA	1.1 E-8	NA	1.6 E-7	5.3 E-7	7.5 E-8	2.8 E-7	6.6 E-7	2.0 E-5	5.9 E-6	1.8 E-6	7.2 E-8	2.8 E-6	2.5 E-7	1.1 E-5	8.4 E-6	NA	1.1 E-4
30B-SP13	20	NA	8.9 E-6	6.3 E-6	NA	2.7 E-6	NA	6.0 E-7	1.2 E-7	NA	1.1 E-6	6.7 E-9	2.7 E-7	5.8 E-6	2.1 E-7	NA	4.9 E-6	6.8 E-6	NA	1.5 E-8	NA	2.3 E-7	2.4 E-7	1.5 E-7	2.5 E-7	8.5 E-7	7.7 E-6	2.4 E-6	5.3 E-7	3.0 E-8	3.0 E-6	1.9 E-7	6.8 E-6	1.3 E-5	NA	7.3 E-5
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	5.4 E-7	4.7 E-6	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	1.0 E-7	6.8 E-7	6.5 E-7	NA	NA	NA	4.9 E-6	2.5 E-7	8.0 E-7	NA	NA	1.3 E-5
30B-SP14	20	NA	4.0 E-5	1.4 E-5	NA	NA	NA	NA	3.1 E-8	NA	1.8 E-6	NA	NA	2.6 E-6	NA	1.4 E-7	1.3 E-4	7.0 E-5	NA	5.6 E-9	NA	NA	2.0 E-7	1.8 E-7	1.0 E-7	2.5 E-7	7.4 E-6	2.5 E-6	NA	NA	4.2 E-5	NA	3.7 E-6	1.2 E-4	NA	4.3 E-4
30B-SP15	10	NA	6.8 E-6	2.0 E-5	NA	6.2 E-6	NA	3.7 E-7	1.4 E-7	NA	3.2 E-6	NA	1.7 E-7	7.4 E-6	NA	5.3 E-8	6.6 E-4	3.9 E-6	NA	NA	NA	8.9 E-8	4.1 E-7	1.8 E-7	3.1 E-7	9.2 E-7	1.6 E-5	3.7 E-6	1.3 E-6	NA	NA	NA	1.1 E-5	9.4 E-6	NA	7.5 E-4
30B-SP15	16	NA	2.2 E-6	1.5 E-5	NA	6.3 E-6	NA	3.9 E-6	1.3 E-6	1.8 E-5	2.7 E-6	NA	3.0 E-6	4.5 E-5	NA	5.0 E-7	2.6 E-5	1.1 E-5	NA	NA	NA	1.8 E-6	7.9 E-7	1.4 E-8	1.7 E-6	1.6 E-5	2.4 E-5	6.7 E-6	1.3 E-6	NA	NA	NA	2.6 E-5	6.1 E-7	NA	2.1 E-4
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	1.4 E-5	NA	NA	7.5 E-7	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5
30B-SP17	20	NA	5.4 E-7	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	3.2 E-7	5.4 E-6	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	2.0 E-8	9.8 E-8	9.0 E-8	7.9 E-7	NA	2.1 E-7	NA	NA	NA	NA	5.6 E-7	3.3 E-7	NA	8.6 E-6
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-7	7.2 E-6	NA	7.9 E-8	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	6.9 E-8	6.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	9.0 E-6
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	NA	6.0 E-7	4.0 E-6	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	6.8 E-8	5.0 E-7	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	5.8 E-6
30B-SP20	10	NA	NA	NA	NA	NA	NA	1.4 E-6	7.1 E-8	2.0 E-5	NA	NA	3.9 E-6	5.8 E-6	NA	2.0 E-7	NA	NA	NA	3.1 E-8	NA	1.3 E-6	NA	6.5 E-8	2.6 E-7	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	6.0 E-7	1.3 E-6	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	3.4 E-8	1.3 E-7	4.1 E-8	1.1 E-7	NA	4.7 E-7	NA	NA	NA	NA	NA	3.2 E-7	NA	3.1 E-6
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	1.1 E-6
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	4.7 E-6	NA	NA	3.8 E-7	5.8 E-7	NA	4.3 E-8	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	6.2 E-6
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	3.8 E-6	NA	6.1 E-8	2.8 E-5	NA	NA	NA	NA	1.5 E-7	3.6 E-8	1.9 E-7	1.2 E-7	4.4 E-7	7.7 E-7	NA	NA	NA	NA	NA	6.0 E-7	1.8 E-7	NA	3.7 E-5
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	7.5 E-7	1.1 E-6	NA	NA	1.2 E-5	NA	NA	NA	NA	1.1 E-7	NA	9.1 E-8	3.3 E-8	1.1 E-7	4.1 E-7	NA	NA	NA	NA	NA	1.9 E-7	1.0 E-7	NA	1.5 E-5
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	1.4 E-6	1.1 E-6	NA	4.3 E-8	8.8 E-6	NA	NA	NA	NA	4.4 E-7	3.3 E-8	1.1 E-8	5.4 E-8	1.1 E-7	1.0 E-6	4.0 E-7	NA	NA	NA	NA	5.6 E-7	8.7 E-8	NA	1.4 E-5
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	5.7 E-9	3.3 E-7	1.0 E-6	NA	4.9 E-8	2.7 E-5	NA	NA	NA	NA	1.4 E-7	NA	3.3 E-8	3.7 E-8	1.5 E-7	3.5 E-7	NA	NA	NA	NA	NA	2.8 E-7	2.0 E-7	NA	2.9 E-5
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	4.5 E-7	2.2 E-5	NA	3.0 E-7	NA	NA	NA	4.7 E-9	NA	NA	5.1 E-8	1.9 E-8	1.8 E-7	1.8 E-6	5.9 E-7	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	2.8 E-5
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	2.1 E-6	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	7.5 E-7	2.8 E-6	NA	NA	NA	NA	NA	2.5 E-7	3.8 E-7	5.1 E-8	NA	6.8 E-6
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	3.0 E-7	5.6 E-6	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	8.5 E-6
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-8	NA	NA	6.8 E-8
32B-SP08	20	NA	NA	NA	1.1 E-5	NA	NA	NA	5.9 E-8	NA	NA	9.0 E-9	4.2 E-7	1.0 E-5	NA	3.6 E-7	NA	NA	NA	NA	NA	1.2 E-7	1.9 E-8	5.6 E-8	1.7 E-6	9.7 E-6	2.0 E-7	NA	NA	NA	NA	3.6 E-7	5.0 E-6	6.6 E-8	NA	3.9 E-5
32B-SP08	40	NA	NA	NA	NA	NA	1.7 E-8	NA	8.0 E-9	2.4 E-6	NA	NA	1.2 E-7	7.3 E-7	NA	8.0 E-8	NA	NA	NA	NA	NA	3.3 E-8	NA	4.2 E-8	1.8 E-7	1.5 E-6	NA	NA	NA	NA	NA	3.3 E-7	2.0 E-7	3.6 E-8	NA	5.6 E-6
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	1.1 E-7	NA	2.8 E-6	NA	NA	NA	NA	NA	NA	5.8 E-7	5.3 E-6	3.1 E-7	NA	NA	NA	NA	NA	8.0 E-7	8.7 E-8	NA	1.4 E-5
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	7.2 E-7	NA	2.6 E-8	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	7.5 E-8	3.8 E-7	2.0 E-7	NA	NA	NA	NA	1.1 E-7	7.6 E-7	NA	NA	3.4 E-6
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	2.2 E-6	1.2 E-6	1.1 E-7	NA	5.3 E-6	1.5 E-6	NA	2.6 E-7	8.2 E-8	NA	NA	3.7 E-7	2.8 E-6	NA	NA	NA	NA	NA	2.5 E-7	5.1 E-7	4.5 E-6	NA	1.9 E-5
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	4.3 E-6	NA	NA	2.0 E-7	3.5 E-6	NA	1.2 E-7	NA	NA	4.2 E-7	2.8 E-9	NA	7.6 E-8	NA	NA	4.5 E-7	3.1 E-6	1.5 E-7	NA	NA	NA	NA	2.7 E-7	8.8 E-7	1.2 E-6	NA	1.5 E-5
32B-SP11	10	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	8.9 E-4	NA	9.5 E-4
32B-SP11	20	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	NA	7.0 E-4
33B-SP09	10	NA	2.0 E-5	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	3.6 E-7	2.5 E-6	NA	8.3 E-8	NA	4.6 E-6	NA	NA	NA	1.3 E-7	NA	NA	2.8 E-7	1.7 E-6	NA	NA	NA	NA	NA	6.9 E-7	6.2 E-7	2.7 E-6	NA	3.3 E-5
33B-SP09	20	NA	7.4 E-5	NA	4.3 E-6	NA	2.1 E-8	NA	NA	NA	NA	NA	1.7 E-7	1.2 E-6	NA	6.8 E-8	NA	1.1 E-5	4.3 E-7	NA	NA	6.2 E-8	NA	NA	1.8 E-7	9.5 E-7	NA	NA	NA	NA	NA	4.4 E-7	3.0 E-7	6.6 E-6	NA	1.0 E-4
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	2.8 E-7	NA	NA	NA	NA	NA	NA	1.9 E-7	7.5 E-8	NA	7.8 E-7
33B-SP11	10	NA	8.9 E-7	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	1.1 E-6	NA	1.5 E-7	NA	1.8 E-5	2.6 E-5	5.1 E-9	NA	2.8 E-7	NA	NA	4.6 E-7	1.7 E-6	NA	NA	NA	NA	NA	3.5 E-7	3.1 E-7	1.2 E-5	NA	8.5 E-5
33B-SP11	20	3.8 E-6	3.2 E-5	NA	2.8 E-5	NA	NA	NA	1.9 E-8	4.3 E-6	NA	NA	2.0 E-7	9.3 E-7	NA	1.4 E-7	5.4 E-7	5.6 E-5	8.1 E-5	3.7 E-9	NA	1.2 E-7	NA	NA	2.6 E-7	1.3 E-6	NA	NA	NA	NA	NA	1.5 E-7	2.2 E-7	7.6 E-5	NA	2.8 E-4
33B-SP12	10	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	9.8 E-7	7.3 E-8	NA	4.6 E-6	NA	NA	2.8 E-7	NA	NA	2.6 E-9	9.0 E-8	4.6 E-7	NA	NA	NA	NA	3.3 E-6	3.2 E-7	3.1 E-7	1.4 E-6	NA	1.3 E-5
33B-SP12	20	NA	5.9 E-7	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	2.3 E-7	6.6 E-7	5.4 E-7	5.7 E-8	NA	1.9 E-6	NA	NA	NA	3.8 E-8	NA	NA	1.2 E-7	7.9 E-7	NA	NA	NA	NA	6.9 E-7	3.1 E-7	2.8 E-7	4.5 E-7	NA	6.7 E-6
33B-SP13	7.5	NA	NA	4.9 E-5	NA	2.5 E-5	NA	1.1 E-6	2.6 E-7	1.7 E-5	8.4 E-6	NA	1.5 E-6	1.5 E-5	NA	8.6 E-8	NA	NA	NA	2.2 E-8	NA	1.3 E-6	1.0 E-6	NA	6.0 E-7	2.8 E-6	3.9 E-5	1.3 E-5	3.9 E-6	NA	NA	NA	1.7 E-5	NA	NA	2.0 E-4
33B-SP13	20	NA	NA	1.8 E-5	NA	7.4 E-6	NA	5.0 E-7	1.4 E-7	4.7 E-6	2.7 E-6	NA	4.7 E-7	6.4 E-6	NA	2.8 E-8	NA	NA	NA	1.2 E-8	NA	1.8 E-7	3.7 E-7	NA	3.0 E-7	7.2 E-7	1.5 E-5	4.0 E-6	1.2 E-6	NA	NA	1.7 E-7	9.7 E-6	NA	NA	7.2 E-5
33B-SP14	10	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	1.8 E-5	NA	2.8 E-4	NA	8.3 E-7	NA	NA	NA	NA	NA	1.1 E-5	3.2 E-5	NA	NA	NA	NA	NA	1.0 E-5	1.0 E-2	NA	2.4 E-2
33B-SP14	20	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	8.0 E-6	NA	1.5 E-4	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	5.6 E-3	NA	1.1 E-2
33B-SP15	10	NA	4.3 E-5	9.3 E-6	NA	NA	NA	NA	2.4 E-8	NA	7.3 E-7	NA	4.5 E-7	1.1 E-6	NA	3.5 E-7	NA	1.8 E-6	NA	NA	NA	8.2 E-8	NA	NA	2.0 E-7	8.8 E-7	NA	NA	NA	NA	NA	1.7 E-7	4.0 E-6	9.4 E-6	NA	7.2 E-5
33B-SP15	20	NA	8.4 E-4	4.0 E-6	NA	NA	NA	3.3 E-7	1.9 E-8	NA	3.3 E-7	6.9 E-9	6.3 E-7	9.2 E-7	NA	1.3 E-7	1.5 E-6	NA	NA	6.1 E-8	NA	5.5 E-8	NA	1.2 E-9	9.4 E-8	1.4 E-6	NA	NA	NA	NA	NA	1.3 E-6	2.7 E-6	2.1 E-5	NA	8.7 E-4
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.1 E-6
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	5.0 E-7	1.3 E-6	NA	2.5 E-8	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	2.7 E-8	1.6 E-7	2.6 E-7	NA	NA	NA	NA	1.6 E-7	6.3 E-7	NA	NA	3.2 E-6
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	2.2 E-7	2.4 E-6	NA	2.3 E-8	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	6.5 E-8	4.2 E-7	1.2 E-7	NA	NA	NA	NA	1.1 E-7	2.4 E-7	3.2 E-8	NA	3.7 E-6
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	1.7 E-7	3.1 E-7	NA	NA	7.1 E-7
33B-SP17	20	NA	2.7 E-6	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	9.8 E-8	7.6 E-7	NA	4.5 E-6
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	3.5 E-7	2.2 E-5	NA	1.8 E-8	4.3 E-6	5.8 E-6	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	9.0 E-8	NA	2.1 E-7	1.0 E-6	1.0 E-6	7.3 E-7	NA	NA	NA	3.1 E-7	1.3 E-6	NA	NA	3.7 E-5
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	6.8 E-8	8.7 E-6	NA	2.8 E-8	7.7 E-7	1.1 E-6	NA	1.3 E-7	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	6.0 E-8	1.8 E-7	2.7 E-7	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	1.2 E-5
33B-SP19	10	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	6.7 E-7	NA	2.7 E-7	6.9 E-6	3.9 E-7	1.4 E-7	NA	3.2 E-6	NA	8.5 E-8	NA	NA	1.3 E-7	NA	2.8 E-7	2.4 E-6	4.7 E-6	1.3 E-6	NA	NA	NA	NA	4.0 E-6	3.7 E-6	NA	3.1 E-5
33B-SP19	20	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	1.2 E-7	NA	1.1 E-7	6.9 E-7	4.1 E-6	1.3 E-6	NA	NA	NA	NA	3.0 E-6	2.3 E-7	NA	1.1 E-5
33B-SP20	10	NA	9.8 E-5	4.5 E-5	NA	1.6 E-5	NA	NA	5.8 E-8	NA	5.7 E-6	NA	1.0 E-6	1.1 E-5	NA	2.6 E-7	NA	3.0 E-6	5.3 E-6	1.6 E-8	NA	2.5 E-6	6.3 E-7	NA	2.8 E-7	1.2 E-6	2.7 E-5	8.0 E-6	2.4 E-6	NA	NA	NA	1.4 E-5	1.6 E-4	NA	4.0 E-4
33B-SP20	20	NA	5.4 E-6	3.2 E-5	NA	1.0 E-5	NA	5.3 E-7	NA	NA	3.7 E-6	NA	1.3 E-7	6.9 E-6	NA	3.3 E-8	NA	NA	NA	8.2 E-9	NA	4.5 E-8	4.0 E-7	NA	2.6 E-7	6.2 E-7	1.6 E-5	5.0 E-6	1.4 E-6	NA	NA	NA	1.1 E-5	1.9 E-5	NA	1.1 E-4
33B-SP21	10	NA	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	1.7 E-2	NA	2.2 E-2
33B-SP21	20	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	8.6 E-3	NA	1.2 E-2
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	5.1 E-7	3.4 E-6	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	9.2 E-7	3.4 E-7	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	5.9 E-6
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	3.0 E-7	3.4 E-6	NA	2.6 E-7	NA	1.7 E-5	NA	4.7 E-9	NA	5.5 E-8	NA	NA	7.5 E-8	1.4 E-6	2.1 E-7	NA	NA	NA	NA	2.1 E-7	2.6 E-7	NA	NA	2.3 E-5

Table 5.10-16
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																																	
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	ILCR
Unit Hazard Child																																					
Unit Hazard Adult																																					
Unit Risk																																					
30B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	4.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	6.0 E-10	NA	6 E-9
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
30B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-11	NA	NA	NA	NA	2 E-9
30B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	2.8 E-9	1.9 E-9	NA	NA	NA	NA	7.1 E-10	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	8.0 E-11	NA	5.5 E-9	NA	1 E-8
30B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	3.0 E-10	NA	4.6 E-9	3.9 E-9	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	5.9 E-11	NA	8.2 E-9	NA	2 E-8
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	8.0 E-11	NA	NA	NA	3 E-9
30B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	1.2 E-7	4.0 E-8	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	7.9 E-8	NA	2 E-7
30B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	6.1 E-7	2.2 E-9	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	6 E-7
30B-SP15	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	2.4 E-8	6.0 E-9	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	5 E-8
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
30B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	3 E-9
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	5 E-9
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
30B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	9 E-10
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	4.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	3 E-8
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-11	NA	1 E-8
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	NA	NA	8.2 E-9	NA	NA	NA	NA	NA	4.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	9 E-9
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	3 E-8
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-11	NA	3.3 E-11	NA	1 E-9
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
32B-SP08	20	NA	NA	NA	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	4.3 E-11	NA	6 E-9
32B-SP08	40	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	2.3 E-11	NA	7 E-10
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	3 E-9
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	NA	NA	1 E-9
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	1.7 E-9	NA	NA	3.0 E-9	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-11	NA	2.9 E-9	NA	9 E-9
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-11	NA	7.6 E-10	NA	2 E-9
32B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	5.8 E-7	NA	6 E-7
32B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	4 E-7
33B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	1.8 E-9	NA	6 E-9
33B-SP09	20	NA	NA	NA	3.0 E-10	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	4.3 E-9	NA	1 E-8
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	NA	5 E-11
33B-SP11	10	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	7.9 E-9	NA	2 E-8
33B-SP11	20	4.8 E-10	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	5.0 E-10	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	4.9 E-8	NA	8 E-8
33B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	2.6 E-9	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-10	1.0 E-10	NA	9.2 E-10	NA	6 E-9
33B-SP12	20	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	3.1 E-10	7.6 E-10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-11	9.8 E-11	NA	2.9 E-10	NA	3 E-9
33B-SP13	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
33B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	NA	NA	NA	4 E-9
33B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	NA	7 E-6
33B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	4 E-6
33B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	NA	6.0 E-9	NA	8 E-9
33B-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	1.3 E-8	NA	2 E-8
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	NA	NA	NA	4 E-10
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	7 E-10
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-11	NA	2.1 E-11	NA	1 E-9
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-11	NA	NA	NA	5 E-11
33B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	5 E-10
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-11	NA	NA	NA	3 E-9
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
33B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	5.5 E-10	NA	NA	1.8 E-9	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	8 E-9
33B-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	3 E-10
33B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	1 E-7
33B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	2 E-8
33B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	1 E-5
33B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-6	NA	6 E-6
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	NA	NA	1 E-8

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.10-9) x the unit hazard or unit risk for the chemical).

Table 5.10-17 ***Surface Water Unit Hazard and Unit Cancer Risk Results - Resident***
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Unit ILCR
Inorganics										
Aluminum	1.0 E+0	1.1 E-7	1.4 E-8	1.2 E-7	2.3 E-8	4.9 E-9	2.8 E-8	NA	NA	NA
Arsenic	1.0 E+0	3.7 E-4	4.8 E-5	4.1 E-4	7.8 E-5	1.6 E-5	9.5 E-5	1.6 E-7	2.8 E-8	1.9 E-7
Barium	1.0 E+0	5.5 E-7	1.0 E-6	1.6 E-6	1.2 E-7	3.5 E-7	4.7 E-7	NA	NA	NA
Beryllium	1.0 E+0	5.5 E-5	1.0 E-3	1.1 E-3	1.2 E-5	3.5 E-4	3.6 E-4	NA	NA	NA
Cadmium	1.0 E+0	1.1 E-4	2.9 E-4	4.0 E-4	2.3 E-5	9.8 E-5	1.2 E-4	NA	NA	NA
Iron	1.0 E+0	1.6 E-7	2.1 E-8	1.8 E-7	3.4 E-8	7.0 E-9	4.1 E-8	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	1.0 E+0	4.6 E-6	1.5 E-5	2.0 E-5	9.8 E-7	5.1 E-6	6.1 E-6	NA	NA	NA
Nickel	1.0 E+0	5.5 E-6	3.6 E-6	9.1 E-6	1.2 E-6	1.2 E-6	2.4 E-6	NA	NA	NA
Nitrate as NO3	1.0 E+0	6.8 E-8	9.0 E-9	7.8 E-8	1.5 E-8	3.1 E-9	1.8 E-8	NA	NA	NA
Vanadium	1.0 E+0	2.2 E-5	1.1 E-4	1.3 E-4	4.7 E-6	3.8 E-5	4.2 E-5	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.10-18
Surface Water Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/L)											Child Non-Cancer Hazard Index											
Sample Name	**Depth**	**Aluminum**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Vanadium**	**Aluminum**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Vanadium**	**HI**
Unit Hazard Child		1.2 E-7	4.1 E-4	1.6 E-6	1.1 E-3	4.0 E-4	1.8 E-7	NA	2.0 E-5	9.1 E-6	7.8 E-8	1.3 E-4												
Unit Hazard Adult		2.8 E-8	9.5 E-5	4.7 E-7	3.6 E-4	1.2 E-4	4.1 E-8	NA	6.1 E-6	2.4 E-6	1.8 E-8	4.2 E-5												
Unit Risk		NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA												
31B-SW01	1	18000	1.5	230	0.49	0.049	17000	7.8	300	12		30	2.2 E-3	6.2 E-4	3.6 E-4	5.3 E-4	2.0 E-5	3.0 E-3	NA	5.9 E-3	1.1 E-4	NA	4.0 E-3	1.7 E-2
31B-SW02	1		1.6	92	0.83	0.06		9.2	52		2700	39	NA	6.6 E-4	1.5 E-4	9.0 E-4	2.4 E-5	NA	NA	1.0 E-3	NA	2.1 E-4	5.2 E-3	8.2 E-3

Table 5.10-18
Surface Water Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index												Incremental Lifetime Cancer Risk												Blood Lead	
Sample Name	**Depth**	**Aluminum**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Vanadium**	**HI**	**Aluminum**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Iron**	**Lead**	**Manganese**	**Nickel**	**Nitrate as NO3**	**Vanadium**	**ILCR**	**Child**	**Adult**
Unit Hazard Child																											
Unit Hazard Adult																											
Unit Risk																											
31B-SW01	1	5.1 E-4	1.4 E-4	1.1 E-4	1.8 E-4	6.0 E-6	6.9 E-4	NA	1.8 E-3	2.9 E-5	NA	1.3 E-3	4.8 E-3	NA	2.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	1.9	0.81
31B-SW02	1	NA	1.5 E-4	4.3 E-5	3.0 E-4	7.3 E-6	NA	NA	3.2 E-4	NA	4.8 E-5	1.7 E-3	2.5 E-3	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-7	1.9	0.82

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.10-19 All Receptors Hazard Index and Cancer Risk Results for Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	Blood Lead	
		Resident			Resident	
Sample Name	**Depth**	**Child**	**Adult**	**Resident**	**Child**	**Adult**
31B-SW01	1	1.7 E-2	4.8 E-3	3 E-7	1.9 E+0	8.1 E-1
31B-SW02	1	8.2 E-3	2.5 E-3	3 E-7	1.9 E+0	8.2 E-1

Notes and Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.10-20 *Groundwater Unit Hazard and Unit Cancer Risk Results - Resident*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Groundwater Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Aluminum	1.0 E+0	6.4 E-5	4.2 E-7	NA	6.4 E-5	2.7 E-5	1.4 E-7	NA	2.8 E-5	NA	NA	NA	NA
Antimony	1.0 E+0	1.6 E-1	7.0 E-3	NA	1.7 E-1	6.8 E-2	2.4 E-3	NA	7.1 E-2	NA	NA	NA	NA
Arsenic	1.0 E+0	2.1 E-1	1.4 E-3	NA	2.1 E-1	9.1 E-2	4.8 E-4	NA	9.2 E-2	1.4 E-4	8.1 E-7	NA	1.4 E-4
Barium	1.0 E+0	3.2 E-4	3.0 E-5	NA	3.5 E-4	1.4 E-4	1.0 E-5	NA	1.5 E-4	NA	NA	NA	NA
Beryllium	1.0 E+0	3.2 E-2	3.0 E-2	NA	6.2 E-2	1.4 E-2	1.0 E-2	NA	2.4 E-2	NA	NA	NA	NA
Cadmium	1.0 E+0	6.4 E-2	8.4 E-3	NA	7.2 E-2	2.7 E-2	2.9 E-3	NA	3.0 E-2	NA	NA	NA	NA
Cobalt	1.0 E+0	3.2 E-3	8.4 E-6	NA	3.2 E-3	1.4 E-3	2.9 E-6	NA	1.4 E-3	NA	NA	NA	NA
Copper	1.0 E+0	1.7 E-3	1.1 E-5	NA	1.7 E-3	7.4 E-4	3.9 E-6	NA	7.4 E-4	NA	NA	NA	NA
Iron	1.0 E+0	9.1 E-5	6.0 E-7	NA	9.2 E-5	3.9 E-5	2.0 E-7	NA	3.9 E-5	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lithium	1.0 E+0	3.2 E-3	2.1 E-5	NA	3.2 E-3	1.4 E-3	7.2 E-6	NA	1.4 E-3	NA	NA	NA	NA
Manganese	1.0 E+0	2.7 E-3	4.4 E-4	NA	3.1 E-3	1.1 E-3	1.5 E-4	NA	1.3 E-3	NA	NA	NA	NA
Mercury	1.0 E+0	2.1 E-1	2.0 E-2	NA	2.3 E-1	9.1 E-2	6.8 E-3	NA	9.8 E-2	NA	NA	NA	NA
Molybdenum	1.0 E+0	1.3 E-2	8.4 E-5	NA	1.3 E-2	5.5 E-3	2.9 E-5	NA	5.5 E-3	NA	NA	NA	NA
Nickel	1.0 E+0	3.2 E-3	1.1 E-4	NA	3.3 E-3	1.4 E-3	3.6 E-5	NA	1.4 E-3	NA	NA	NA	NA
Nitrate as NO3	1.0 E+0	4.0 E-5	2.6 E-7	NA	4.0 E-5	1.7 E-5	8.9 E-8	NA	1.7 E-5	NA	NA	NA	NA
Nitrite as NO2	1.0 E+0	4.0 E-4	2.6 E-6	NA	4.0 E-4	1.7 E-4	8.9 E-7	NA	1.7 E-4	NA	NA	NA	NA
Nitrate	1.0 E+0	4.0 E-5	2.6 E-7	NA	4.0 E-5	1.7 E-5	8.9 E-8	NA	1.7 E-5	NA	NA	NA	NA
Perchlorate	1.0 E+0	9.1 E-2	6.0 E-4	NA	9.2 E-2	3.9 E-2	2.0 E-4	NA	3.9 E-2	NA	NA	NA	NA
Strontium	1.0 E+0	1.1 E-4	7.0 E-7	NA	1.1 E-4	4.6 E-5	2.4 E-7	NA	4.6 E-5	NA	NA	NA	NA
Thallium	1.0 E+0	9.7 E-1	6.4 E-3	NA	9.7 E-1	4.2 E-1	2.2 E-3	NA	4.2 E-1	NA	NA	NA	NA
Titanium	1.0 E+0	1.6 E-5	1.1 E-7	NA	1.6 E-5	6.8 E-6	3.6 E-8	NA	6.9 E-6	NA	NA	NA	NA
Vanadium	1.0 E+0	1.3 E-2	3.2 E-3	NA	1.6 E-2	5.5 E-3	1.1 E-3	NA	6.6 E-3	NA	NA	NA	NA
Zinc	1.0 E+0	2.1 E-4	8.4 E-7	NA	2.1 E-4	9.1 E-5	2.9 E-7	NA	9.2 E-5	NA	NA	NA	NA
Semivolatile Organic Compounds													
Bis(2-ethylhexyl)phthalate	1.0 E+0	3.2 E-3	5.9 E-3	NA	9.1 E-3	1.4 E-3	2.6 E-3	NA	4.0 E-3	2.1 E-7	4.0 E-7	NA	6.0 E-7
2,3,7,8-TCDD (TEQ)	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E+0	8.8 E+1	NA	9.0 E+1
Volatile Organic Compounds													
1,1,2-Trichloroethane	1.0 E+0	1.6 E-2	1.4 E-3	8.0 E-2	9.7 E-2	6.8 E-3	6.4 E-4	3.4 E-2	4.2 E-2	1.1 E-6	9.9 E-8	4.2 E-6	5.4 E-6
1,1-Dichloroethene	1.0 E+0	1.3 E-3	1.8 E-4	1.6 E-2	1.7 E-2	5.5 E-4	7.6 E-5	6.8 E-3	7.5 E-3	NA	NA	NA	NA
1,2-Dichloroethane	1.0 E+0	3.2 E-3	1.6 E-4	2.3 E-1	2.3 E-1	1.4 E-3	6.7 E-5	9.8 E-2	9.9 E-2	1.4 E-6	6.6 E-8	6.8 E-6	8.2 E-6
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA
Chloroform	1.0 E+0	6.4 E-3	5.6 E-4	2.5 E-2	3.2 E-2	2.7 E-3	2.5 E-4	1.1 E-2	1.4 E-2	4.6 E-7	4.1 E-8	6.0 E-6	6.5 E-6
cis-1,2-Dichloroethene	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA
Freon 113	1.0 E+0	2.1 E-6	7.2 E-6	3.7 E-5	4.6 E-5	9.1 E-7	3.9 E-6	1.6 E-5	2.1 E-5	NA	NA	NA	NA
Naphthalene	1.0 E+0	3.2 E-3	2.1 E-3	3.7 E-1	3.8 E-1	1.4 E-3	9.1 E-4	1.6 E-1	1.6 E-1	NA	NA	8.9 E-6	8.9 E-6
Toluene	1.0 E+0	8.0 E-4	2.7 E-4	3.7 E-3	4.8 E-3	3.4 E-4	1.2 E-4	1.6 E-3	2.1 E-3	NA	NA	NA	NA
Trichloroethene	1.0 E+0	2.1 E-1	3.6 E-2	1.9 E-3	2.5 E-1	9.1 E-2	1.6 E-2	8.0 E-4	1.1 E-1	1.9 E-7	3.3 E-8	5.2 E-7	7.5 E-7

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.10-21 *Groundwater Inhalation Hazard and Unit Cancer Risk Results - Resident*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Indoor Vapor Concentration (µg/L)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds				
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E+1	2.7 E+1	NA
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
1,1,2-Trichloroethane	1.0 E+0	1.6 E+2	6.8 E+1	8.5 E-3
Naphthalene	1.0 E+0	7.5 E+2	3.2 E+2	1.8 E-2
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Toluene	1.0 E+0	7.4 E+0	3.2 E+0	NA
Trichloroethene	1.0 E+0	3.7 E+0	1.6 E+0	1.0 E-3

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)																		
Sample Name	**Layer**	**1,1,2-Trichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**2,3,7,8-TCDD (TEQ)**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Bis(2-ethylhexyl) phthalate**	**Cadmium**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cobalt**	**Copper**	**Freon 113**	**Iron**	**Lead**
Unit Hazard Child		9.7 E-2	1.7 E-2	2.3 E-1	3.9 E-2	NA	6.4 E-5	1.7 E-1	2.1 E-1	3.5 E-4	6.2 E-2	9.1 E-3	7.2 E-2	3.2 E-2	3.9 E-2	3.2 E-3	1.7 E-3	4.6 E-5	9.2 E-5	NA
Unit Hazard Adult		4.2 E-2	7.5 E-3	9.9 E-2	1.7 E-2	NA	2.8 E-5	7.1 E-2	9.2 E-2	1.5 E-4	2.4 E-2	4.0 E-3	3.0 E-2	1.4 E-2	1.7 E-2	1.4 E-3	7.4 E-4	2.1 E-5	3.9 E-5	NA
Unit Risk		5.4 E-6	NA	8.2 E-6	NA	9.0 E+1	NA	NA	1.4 E-4	NA	NA	6.0 E-7	NA	6.5 E-6	NA	NA	NA	NA	NA	NA
795	Y						9700			160							70		100000	
796	Y					0.0000023	20000	0.48	2.2	340	0.63		0.82			10	36		68000	170
1317	S						26000			350		17	17				27		30000	230
1575	Y						50000		1.8	680	1.9		51			50	200		62000	31
1576	Y	0.68	2.3	1.1	7.3		560000		4.9	5600	18		16	7.4	30	340	590		860000	200
1577	Y						43000		8.1	530	2.1		4.7			31	58	7.6	73000	15
1578	Y					0.0000056	3800	0.30	1.9	100			0.91			5.5	13	1.9	5400	11
31006	Y																			
31007	S																			
31008	Y						670	0.29	1.7	220			0.099			1.1	7.4		830	1.9
31009	Y						5500		9.2	76						3.1			9700	2.3
31010	S						2100		4.9	45						2.2	17		6900	3.9
31011	S						2100		2.3	41	0.090		0.42	0.50		1.9	12		6300	1.8
31012	S						1700	2.5	7.2	200	0.12		20	0.54		2.8	15		1200	6.3
31017	Y						710	0.088	3.7	10			0.11			0.93	3.5		1000	0.65
31019	Y						69		3.2	8.3			0.09				2.9		140	0.57
31024	S						700	0.31	5.9	110			0.059			0.74	7.7		900	1.4
31025	S													2.0						
31026	Y																			
31027	S																			
31028	Y																			
31029	Y																			
31030	S																			

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration																
Sample Name	**Layer**	**Lithium**	**Manganese**	**Mercury**	**Molybdenum**	**Naphthalene**	**Nickel**	**Nitrate**	**Nitrate as NO3**	**Nitrite as NO2**	**Perchlorate**	**Strontium**	**Thallium**	**Titanium**	**Toluene**	**Trichloroethene**	**Vanadium**	**Zinc**
Unit Hazard Child		3.2 E-3	3.1 E-3	2.3 E-1	1.3 E-2	3.8 E-1	3.3 E-3	4.0 E-5	4.0 E-5	4.0 E-4	9.2 E-2	1.1 E-4	9.7 E-1	1.6 E-5	4.8 E-3	2.5 E-1	1.6 E-2	2.1 E-4
Unit Hazard Adult		1.4 E-3	1.3 E-3	9.8 E-2	5.5 E-3	1.6 E-1	1.4 E-3	1.7 E-5	1.7 E-5	1.7 E-4	3.9 E-2	4.6 E-5	4.2 E-1	6.9 E-6	2.1 E-3	1.1 E-1	6.6 E-3	9.2 E-5
Unit Risk		NA	NA	NA	NA	8.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-7	NA	NA
795	Y		680	39				1100									30	8600
796	Y		750		7.4				5600		18	400		720			170	29000
1317	S		640						90			420		600			77	68000
1575	Y	30	1700		100		590	12000	6700		9.9	620	0.31	2800			170	1700
1576	Y	220	14000	1.4	130		1300	15000	25000		2500	4800	2.4	29000		230	1900	1800
1577	Y		520		5.5		48	4700	1200		96	850	8.0	3100			470	280
1578	Y	9.4	400		4.8		30	9900	9600		230	170		140			34	730
31006	Y								5500	180						2.2		
31007	S								3000									
31008	Y	7.3	120		29		16		17000		110	660		30			7.7	21
31009	Y		170		7.2		22		16000		230	180		260		2.0	48	110
31010	S	46	57		3.6		17		8800			330		65			50	390
31011	S	260	160		2.1		13		1800	110	98	370		50			24	93
31012	S	69	280		25	0.55	21		3500	340	44	4000	0.17	71		1.8	77	200
31017	Y		18				18		15000	50		84		35			29	
31019	Y		13		1.3		3.2		15000	130	250	390		3.9			8.1	40
31024	S	42	24				37		10000	120	5.2	1900		32			19	27
31025	S																	
31026	Y																	
31027	S														22			
31028	Y										150							
31029	Y										630							
31030	S										3.0							

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																		
Sample Name	Layer	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	2,3,7,8-TCDD (TEQ)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bis(2-ethylhexyl) phthalate	Cadmium	Chloroform	cis-1,2-Dichloroethene	Cobalt	Copper	Freon 113	Iron	Lead
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
795	Y	NA	NA	NA	NA	NA	6.2 E-1	NA	NA	5.6 E-2	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	9.2 E+0	NA
796	Y	NA	NA	NA	NA	NA	1.3 E+0	8.0 E-2	4.7 E-1	1.2 E-1	3.9 E-2	NA	5.9 E-2	NA	NA	3.2 E-2	6.3 E-2	NA	6.3 E+0	NA
1317	S	NA	NA	NA	NA	NA	1.7 E+0	NA	NA	1.2 E-1	NA	1.5 E-1	1.2 E+0	NA	NA	NA	4.7 E-2	NA	2.8 E+0	NA
1575	Y	NA	NA	NA	NA	NA	3.2 E+0	NA	3.9 E-1	2.4 E-1	1.2 E-1	NA	3.7 E+0	NA	NA	1.6 E-1	3.5 E-1	NA	5.7 E+0	NA
1576	Y	6.6 E-2	4.0 E-2	2.5 E-1	2.8 E-1	NA	3.6 E+1	NA	1.1 E+0	2.0 E+0	1.1 E+0	NA	1.2 E+0	2.3 E-1	1.2 E+0	1.1 E+0	1.0 E+0	NA	7.9 E+1	NA
1577	Y	NA	NA	NA	NA	NA	2.8 E+0	NA	1.7 E+0	1.9 E-1	1.3 E-1	NA	3.4 E-1	NA	NA	9.9 E-2	1.0 E-1	3.5 E-4	6.7 E+0	NA
1578	Y	NA	NA	NA	NA	NA	2.4 E-1	5.0 E-2	4.1 E-1	3.5 E-2	NA	NA	6.6 E-2	NA	NA	1.8 E-2	2.3 E-2	8.8 E-5	5.0 E-1	NA
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31008	Y	NA	NA	NA	NA	NA	4.3 E-2	4.8 E-2	3.6 E-1	7.7 E-2	NA	NA	7.2 E-3	NA	NA	3.5 E-3	1.3 E-2	NA	7.6 E-2	NA
31009	Y	NA	NA	NA	NA	NA	3.5 E-1	NA	2.0 E+0	2.7 E-2	NA	NA	NA	NA	NA	9.9 E-3	NA	NA	8.9 E-1	NA
31010	S	NA	NA	NA	NA	NA	1.4 E-1	NA	1.1 E+0	1.6 E-2	NA	NA	NA	NA	NA	7.1 E-3	3.0 E-2	NA	6.3 E-1	NA
31011	S	NA	NA	NA	NA	NA	1.4 E-1	NA	4.9 E-1	1.4 E-2	5.6 E-3	NA	3.0 E-2	1.6 E-2	NA	6.1 E-3	2.1 E-2	NA	5.8 E-1	NA
31012	S	NA	NA	NA	NA	NA	1.1 E-1	4.2 E-1	1.5 E+0	7.0 E-2	7.5 E-3	NA	1.4 E+0	1.7 E-2	NA	9.0 E-3	2.6 E-2	NA	1.1 E-1	NA
31017	Y	NA	NA	NA	NA	NA	4.6 E-2	1.5 E-2	7.9 E-1	3.5 E-3	NA	NA	8.0 E-3	NA	NA	3.0 E-3	6.1 E-3	NA	9.2 E-2	NA
31019	Y	NA	NA	NA	NA	NA	4.4 E-3	NA	6.9 E-1	2.9 E-3	NA	NA	6.5 E-3	NA	NA	NA	5.0 E-3	NA	1.3 E-2	NA
31024	S	NA	NA	NA	NA	NA	4.5 E-2	5.2 E-2	1.3 E+0	3.8 E-2	NA	NA	4.3 E-3	NA	NA	2.4 E-3	1.3 E-2	NA	8.3 E-2	NA
31025	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	NA	NA	NA	NA	NA
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																	
Sample Name	**Layer**	**Lithium**	**Manganese**	**Mercury**	**Molybdenum**	**Naphthalene**	**Nickel**	**Nitrate**	**Nitrate as NO3**	**Nitrite as NO2**	**Perchlorate**	**Strontium**	**Thallium**	**Titanium**	**Toluene**	**Trichloroethene**	**Vanadium**	**Zinc**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
795	Y	NA	2.1 E+0	9.1 E+0	NA	NA	NA	4.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-1	1.8 E+0	2.4 E+1
796	Y	NA	2.3 E+0	NA	9.5 E-2	NA	NA	NA	2.3 E-1	NA	1.7 E+0	4.3 E-2	NA	1.2 E-2	NA	NA	2.7 E+0	6.2 E+0	2.2 E+1
1317	S	NA	2.0 E+0	NA	NA	NA	NA	NA	3.6 E-3	NA	NA	4.5 E-2	NA	9.7 E-3	NA	NA	1.2 E+0	1.5 E+1	2.4 E+1
1575	Y	9.7 E-2	5.3 E+0	NA	1.3 E+0	NA	1.9 E+0	4.8 E-1	2.7 E-1	NA	9.1 E-1	6.6 E-2	3.0 E-1	4.5 E-2	NA	NA	2.7 E+0	3.6 E-1	2.8 E+1
1576	Y	7.1 E-1	4.3 E+1	3.3 E-1	1.7 E+0	NA	4.3 E+0	6.0 E-1	1.0 E+0	NA	2.3 E+2	5.1 E-1	2.3 E+0	4.7 E-1	NA	5.8 E+1	3.0 E+1	3.9 E-1	5.0 E+2
1577	Y	NA	1.6 E+0	NA	7.1 E-2	NA	1.6 E-1	1.9 E-1	4.8 E-2	NA	8.8 E+0	9.1 E-2	7.8 E+0	5.0 E-2	NA	NA	7.5 E+0	6.0 E-2	3.9 E+1
1578	Y	3.0 E-2	1.2 E+0	NA	6.2 E-2	NA	9.9 E-2	4.0 E-1	3.9 E-1	NA	2.1 E+1	1.8 E-2	NA	2.3 E-3	NA	NA	5.5 E-1	1.6 E-1	2.5 E+1
31006	Y	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	7.2 E-2	NA	NA	NA	NA	NA	5.5 E-1	NA	NA	8.4 E-1
31007	S	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1
31008	Y	2.3 E-2	3.7 E-1	NA	3.7 E-1	NA	5.3 E-2	NA	6.8 E-1	NA	1.0 E+1	7.1 E-2	NA	4.8 E-4	NA	NA	1.2 E-1	4.5 E-3	1.2 E+1
31009	Y	NA	5.3 E-1	NA	9.3 E-2	NA	7.3 E-2	NA	6.4 E-1	NA	2.1 E+1	1.9 E-2	NA	4.2 E-3	NA	5.0 E-1	7.7 E-1	2.4 E-2	2.7 E+1
31010	S	1.5 E-1	1.8 E-1	NA	4.6 E-2	NA	5.6 E-2	NA	3.5 E-1	NA	NA	3.5 E-2	NA	1.0 E-3	NA	NA	8.0 E-1	8.3 E-2	3.6 E+0
31011	S	8.4 E-1	5.0 E-1	NA	2.7 E-2	NA	4.3 E-2	NA	7.2 E-2	4.4 E-2	9.0 E+0	4.0 E-2	NA	8.0 E-4	NA	NA	3.8 E-1	2.0 E-2	1.2 E+1
31012	S	2.2 E-1	8.7 E-1	NA	3.2 E-1	2.1 E-1	6.9 E-2	NA	1.4 E-1	1.4 E-1	4.0 E+0	4.3 E-1	1.7 E-1	1.1 E-3	NA	4.5 E-1	1.2 E+0	4.3 E-2	1.2 E+1
31017	Y	NA	5.6 E-2	NA	NA	NA	5.9 E-2	NA	6.0 E-1	2.0 E-2	NA	9.0 E-3	NA	5.6 E-4	NA	NA	4.6 E-1	NA	2.2 E+0
31019	Y	NA	4.0 E-2	NA	1.7 E-2	NA	1.1 E-2	NA	6.0 E-1	5.2 E-2	2.3 E+1	4.2 E-2	NA	6.3 E-5	NA	NA	1.3 E-1	8.6 E-3	2.5 E+1
31024	S	1.4 E-1	7.4 E-2	NA	NA	NA	1.2 E-1	NA	4.0 E-1	4.8 E-2	4.8 E-1	2.0 E-1	NA	5.1 E-4	NA	NA	3.0 E-1	5.8 E-3	3.3 E+0
31025	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	1.1 E-1
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E+1	NA	NA	NA	NA	NA	NA	NA	1.4 E+1
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E+1	NA	NA	NA	NA	NA	NA	NA	5.8 E+1
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	2.8 E-1

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																		
Sample Name	**Layer**	**1,1,2-Trichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**2,3,7,8-TCDD (TEQ)**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Bis(2-ethylhexyl) phthalate**	**Cadmium**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cobalt**	**Copper**	**Freon 113**	**Iron**	**Lead**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
795	Y	NA	NA	NA	NA	NA	2.7 E-1	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	3.9 E+0	NA
796	Y	NA	NA	NA	NA	NA	5.5 E-1	3.4 E-2	2.0 E-1	5.0 E-2	1.5 E-2	NA	2.5 E-2	NA	NA	1.4 E-2	2.7 E-2	NA	2.7 E+0	NA
1317	S	NA	NA	NA	NA	NA	7.2 E-1	NA	NA	5.2 E-2	NA	6.7 E-2	5.1 E-1	NA	NA	NA	2.0 E-2	NA	1.2 E+0	NA
1575	Y	NA	NA	NA	NA	NA	1.4 E+0	NA	1.7 E-1	1.0 E-1	4.5 E-2	NA	1.5 E+0	NA	NA	6.9 E-2	1.5 E-1	NA	2.4 E+0	NA
1576	Y	2.8 E-2	1.7 E-2	1.1 E-1	1.2 E-1	NA	1.5 E+1	NA	4.5 E-1	8.2 E-1	4.3 E-1	NA	4.8 E-1	1.0 E-1	5.0 E-1	4.7 E-1	4.4 E-1	NA	3.4 E+1	NA
1577	Y	NA	NA	NA	NA	NA	1.2 E+0	NA	7.4 E-1	7.8 E-2	5.0 E-2	NA	1.4 E-1	NA	NA	4.3 E-2	4.3 E-2	1.6 E-4	2.9 E+0	NA
1578	Y	NA	NA	NA	NA	NA	1.0 E-1	2.1 E-2	1.7 E-1	1.5 E-2	NA	NA	2.8 E-2	NA	NA	7.5 E-3	9.7 E-3	3.9 E-5	2.1 E-1	NA
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31008	Y	NA	NA	NA	NA	NA	1.8 E-2	2.1 E-2	1.6 E-1	3.2 E-2	NA	NA	3.0 E-3	NA	NA	1.5 E-3	5.5 E-3	NA	3.3 E-2	NA
31009	Y	NA	NA	NA	NA	NA	1.5 E-1	NA	8.4 E-1	1.1 E-2	NA	NA	NA	NA	NA	4.3 E-3	NA	NA	3.8 E-1	NA
31010	S	NA	NA	NA	NA	NA	5.8 E-2	NA	4.5 E-1	6.6 E-3	NA	NA	NA	NA	NA	3.0 E-3	1.3 E-2	NA	2.7 E-1	NA
31011	S	NA	NA	NA	NA	NA	5.8 E-2	NA	2.1 E-1	6.0 E-3	2.2 E-3	NA	1.3 E-2	6.8 E-3	NA	2.6 E-3	8.9 E-3	NA	2.5 E-1	NA
31012	S	NA	NA	NA	NA	NA	4.7 E-2	1.8 E-1	6.6 E-1	2.9 E-2	2.9 E-3	NA	6.1 E-1	7.3 E-3	NA	3.8 E-3	1.1 E-2	NA	4.7 E-2	NA
31017	Y	NA	NA	NA	NA	NA	2.0 E-2	6.2 E-3	3.4 E-1	1.5 E-3	NA	NA	3.3 E-3	NA	NA	1.3 E-3	2.6 E-3	NA	3.9 E-2	NA
31019	Y	NA	NA	NA	NA	NA	1.9 E-3	NA	2.9 E-1	1.2 E-3	NA	NA	2.7 E-3	NA	NA	NA	2.2 E-3	NA	5.5 E-3	NA
31024	S	NA	NA	NA	NA	NA	1.9 E-2	2.2 E-2	5.4 E-1	1.6 E-2	NA	NA	1.8 E-3	NA	NA	1.0 E-3	5.7 E-3	NA	3.5 E-2	NA
31025	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																	
Sample Name	**Layer**	**Lithium**	**Manganese**	**Mercury**	**Molybdenum**	**Naphthalene**	**Nickel**	**Nitrate**	**Nitrate as NO3**	**Nitrite as NO2**	**Perchlorate**	**Strontium**	**Thallium**	**Titanium**	**Toluene**	**Trichloroethene**	**Vanadium**	**Zinc**	**HI**
Unit Hazard Child																			
Unit Hazard Adult																			
Unit Risk																			
795	Y	NA	8.8 E-1	3.8 E+0	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	7.9 E-1	1.0 E+1
796	Y	NA	9.7 E-1	NA	4.1 E-2	NA	NA	NA	9.6 E-2	NA	7.1 E-1	1.8 E-2	NA	5.0 E-3	NA	NA	1.1 E+0	2.7 E+0	9.2 E+0
1317	S	NA	8.3 E-1	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	1.9 E-2	NA	4.1 E-3	NA	NA	5.1 E-1	6.2 E+0	1.0 E+1
1575	Y	4.1 E-2	2.2 E+0	NA	5.5 E-1	NA	8.3 E-1	2.1 E-1	1.2 E-1	NA	3.9 E-1	2.8 E-2	1.3 E-1	1.9 E-2	NA	NA	1.1 E+0	1.6 E-1	1.2 E+1
1576	Y	3.0 E-1	1.8 E+1	1.4 E-1	7.2 E-1	NA	1.8 E+0	2.6 E-1	4.3 E-1	NA	9.8 E+1	2.2 E-1	1.0 E+0	2.0 E-1	NA	2.5 E+1	1.3 E+1	1.6 E-1	2.1 E+2
1577	Y	NA	6.7 E-1	NA	3.0 E-2	NA	6.7 E-2	8.1 E-2	2.1 E-2	NA	3.8 E+0	3.9 E-2	3.3 E+0	2.1 E-2	NA	NA	3.1 E+0	2.6 E-2	1.6 E+1
1578	Y	1.3 E-2	5.2 E-1	NA	2.6 E-2	NA	4.2 E-2	1.7 E-1	1.7 E-1	NA	9.0 E+0	7.8 E-3	NA	9.6 E-4	NA	NA	2.2 E-1	6.7 E-2	1.1 E+1
31006	Y	NA	NA	NA	NA	NA	NA	NA	9.5 E-2	3.1 E-2	NA	NA	NA	NA	NA	2.4 E-1	NA	NA	3.6 E-1
31007	S	NA	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-2
31008	Y	1.0 E-2	1.5 E-1	NA	1.6 E-1	NA	2.2 E-2	NA	2.9 E-1	NA	4.3 E+0	3.0 E-2	NA	2.1 E-4	NA	NA	5.1 E-2	1.9 E-3	5.3 E+0
31009	Y	NA	2.2 E-1	NA	4.0 E-2	NA	3.1 E-2	NA	2.8 E-1	NA	9.0 E+0	8.3 E-3	NA	1.8 E-3	NA	2.2 E-1	3.2 E-1	1.0 E-2	1.2 E+1
31010	S	6.3 E-2	7.4 E-2	NA	2.0 E-2	NA	2.4 E-2	NA	1.5 E-1	NA	NA	1.5 E-2	NA	4.5 E-4	NA	NA	3.3 E-1	3.6 E-2	1.5 E+0
31011	S	3.6 E-1	2.1 E-1	NA	1.2 E-2	NA	1.8 E-2	NA	3.1 E-2	1.9 E-2	3.9 E+0	1.7 E-2	NA	3.4 E-4	NA	NA	1.6 E-1	8.5 E-3	5.2 E+0
31012	S	9.5 E-2	3.6 E-1	NA	1.4 E-1	8.9 E-2	3.0 E-2	NA	6.0 E-2	5.9 E-2	1.7 E+0	1.8 E-1	7.1 E-2	4.9 E-4	NA	1.9 E-1	5.1 E-1	1.8 E-2	5.1 E+0
31017	Y	NA	2.3 E-2	NA	NA	NA	2.5 E-2	NA	2.6 E-1	8.6 E-3	NA	3.9 E-3	NA	2.4 E-4	NA	NA	1.9 E-1	NA	9.2 E-1
31019	Y	NA	1.7 E-2	NA	7.2 E-3	NA	4.5 E-3	NA	2.6 E-1	2.2 E-2	9.8 E+0	1.8 E-2	NA	2.7 E-5	NA	NA	5.3 E-2	3.7 E-3	1.1 E+1
31024	S	5.8 E-2	3.1 E-2	NA	NA	NA	5.2 E-2	NA	1.7 E-1	2.1 E-2	2.0 E-1	8.7 E-2	NA	2.2 E-4	NA	NA	1.3 E-1	2.5 E-3	1.4 E+0
31025	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	4.5 E-2
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E+0	NA	NA	NA	NA	NA	NA	NA	5.9 E+0
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E+1	NA	NA	NA	NA	NA	NA	NA	2.5 E+1
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	1.2 E-1

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		
Sample Name	**Layer**	**1,1,2-Trichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**2,3,7,8-TCDD (TEQ)**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Bis(2-ethylhexyl) phthalate**	**Cadmium**	**Chloroform**	**cis-1,2-Dichloroethene**	**Cobalt**	**Copper**	**Freon 113**	**Iron**	**Lead**
Unit Hazard Child																				
Unit Hazard Adult																				
Unit Risk																				
795	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
796	Y	NA	NA	NA	NA	2.1 E-4	NA	NA	3.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1317	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA
1575	Y	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1576	Y	3.7 E-6	NA	9.0 E-6	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA
1577	Y	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1578	Y	NA	NA	NA	NA	5.0 E-4	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31008	Y	NA	NA	NA	NA	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31009	Y	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31010	S	NA	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31011	S	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA
31012	S	NA	NA	NA	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA
31017	Y	NA	NA	NA	NA	NA	NA	NA	5.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31019	Y	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31024	S	NA	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31025	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-22
Groundwater Location-Specific Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																		Blood Lead	
Sample Name	**Layer**	**Lithium**	**Manganese**	**Mercury**	**Molybdenum**	**Naphthalene**	**Nickel**	**Nitrate**	**Nitrate as NO3**	**Nitrite as NO2**	**Perchlorate**	**Strontium**	**Thallium**	**Titanium**	**Toluene**	**Trichloroethene**	**Vanadium**	**Zinc**	**ILCR**	**Child**	**Adult**
Unit Hazard Child																					
Unit Hazard Adult																					
Unit Risk																					
795	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
796	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-4	83	41
1317	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	112	56
1575	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4	17	8
1576	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	NA	9 E-4	97	49
1577	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-3	9.0	4.4
1578	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-4	7.0	3.5
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	2 E-6	NA	NA
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31008	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-4	2.7	1.3
31009	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	1 E-3	2.9	1.4
31010	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-4	3.6	1.8
31011	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-4	2.6	1.3
31012	S	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	1 E-3	4.8	2.3
31017	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-4	2.1	1.0
31019	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-4	2.0	1.0
31024	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-4	2.4	1.2
31025	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	NA	NA
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.10-23
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/L)									
Sample Name	**Layer**	**1,1,2-Trichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Naphthalene**	**Toluene**	**Trichloroethene**
Unit Hazard Child		1.6 E+2	3.2 E+1	4.6 E+2	6.4 E+1	4.9 E+1	6.4 E+1	7.4 E-2	7.5 E+2	7.4 E+0	3.7 E+0
Unit Hazard Adult		6.8 E+1	1.4 E+1	2.0 E+2	2.7 E+1	2.1 E+1	2.7 E+1	3.2 E-2	3.2 E+2	3.2 E+0	1.6 E+0
Unit Risk		8.5 E-3	NA	1.4 E-2	NA	1.2 E-2	NA	NA	1.8 E-2	NA	1.0 E-3
795	Y										
796	Y										
1317	S										
1575	Y										
1576	Y	0.68	2.3	1.1	7.3	7.4	30				230
1577	Y							7.6			
1578	Y							1.9			
31006	Y										2.2
31007	S										
31008	Y										
31009	Y										2.0
31010	S										
31011	S					0.50					
31012	S					0.54			0.55		1.8
31017	Y										
31019	Y										
31024	S										
31025	S					2.0					
31026	Y										
31027	S									22	
31028	Y										
31029	Y										
31030	S										

Table 5.10-23
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index										
Sample Name	**Layer**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Chloroform**	**cis-1,2-Dichloroethene**	**1,1,2-Trichloroethane**	**Naphthalene**	**Freon 113**	**Toluene**	**Trichloroethene**	**HI**
Unit Hazard Child												
Unit Hazard Adult												
Unit Risk												
795	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
796	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1317	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1575	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1576	Y	7.5 E-3	1.5 E-2	3.1 E-3	2.0 E-2	2.1 E-2	5.0 E-2	NA	NA	NA	1.0 E-1	2.2 E-1
1577	Y	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	2.4 E-2
1578	Y	NA	NA	NA	NA	NA	NA	6.0 E-3	NA	NA	NA	6.0 E-3
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-4	9.8 E-4
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31008	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31009	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-4	8.9 E-4
31010	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31011	S	NA	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	6.1 E-4
31012	S	NA	NA	NA	NA	6.6 E-4	NA	NA	9.8 E-5	NA	3.4 E-4	1.1 E-3
31017	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31019	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31024	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31025	S	NA	NA	NA	NA	2.4 E-3	NA	NA	NA	NA	NA	2.4 E-3
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	5.9 E-3
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-23
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index										
Sample Name	**Layer**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Chloroform**	**cis-1,2-Dichloroethene**	**1,1,2-Trichloroethane**	**Naphthalene**	**Freon 113**	**Toluene**	**Trichloroethene**	**HI**
Unit Hazard Child												
Unit Hazard Adult												
Unit Risk												
795	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
796	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1317	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1575	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1576	Y	3.2 E-3	6.5 E-3	1.3 E-3	8.4 E-3	9.1 E-3	2.1 E-2	NA	NA	NA	4.4 E-2	9.4 E-2
1577	Y	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	1.0 E-2
1578	Y	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	NA	2.6 E-3
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	4.2 E-4
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31008	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31009	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	3.8 E-4
31010	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31011	S	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	2.6 E-4
31012	S	NA	NA	NA	NA	2.8 E-4	NA	NA	4.2 E-5	NA	1.5 E-4	4.7 E-4
31017	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31019	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31024	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31025	S	NA	NA	NA	NA	1.0 E-3	NA	NA	NA	NA	NA	1.0 E-3
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	2.5 E-3
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-23
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk										
Sample Name	**Layer**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Chloroform**	**cis-1,2-Dichloroethene**	**1,1,2-Trichloroethane**	**Naphthalene**	**Freon 113**	**Toluene**	**Trichloroethene**	**ILCR**
Unit Hazard Child												
Unit Hazard Adult												
Unit Risk												
795	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
796	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
1317	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
1575	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
1576	Y	NA	4.5 E-7	NA	4.8 E-6	NA	2.7 E-6	NA	NA	NA	2.9 E-5	4 E-5
1577	Y	NA	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	6 E-7
1578	Y	NA	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	1 E-7
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	3 E-7
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31008	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31009	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	2 E-7
31010	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31011	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31012	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	1 E-7
31017	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31019	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31024	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31025	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x indoor air attenuation factor (from Table 5.10-10) x the unit hazard or unit risk for the chemical).

Table 5.10-25 *Inhalation Unit Hazard and Unit Cancer Risk Results - Construction Worker Area 39 Management Area Boundary Operable Unit Risk Assessment Aerojet Superfund Site Sacramento County, California*

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,1,2-Trichloroethane	1.0 E+0	4.9 E+1	1.6 E-4
1,2-Dichloroethane	1.0 E+0	1.4 E+2	2.5 E-4
1,4-Dioxane	1.0 E+0	2.3 E-1	7.5 E-5
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	2.8 E-4
Bromodichloromethane	1.0 E+0	9.8 E+0	3.6 E-4
Carbon Tetrachloride	1.0 E+0	1.7 E+1	4.2 E-4
Chloroform	1.0 E+0	1.5 E+1	2.3 E-4
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Dibromochloromethane	1.0 E+0	9.8 E+0	2.6 E-4
EthylBenzene	1.0 E+0	6.8 E-1	2.4 E-5
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	5.9 E-5
Tetrahydrofuran	1.0 E+0	2.3 E+0	1.9 E-5
Trichloroethylene	1.0 E+0	1.2 E+0	2.0 E-5
Vinyl Chloride	1.0 E+0	6.8 E+0	7.5 E-4
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Styrene	1.0 E+0	7.6 E-1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter

Table 5.10-24 ***Unit Soil Hazard and Unit Cancer Risk Results - Construction Worker***
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Aluminum	1.0 E+0	3.2 E-6	0.0 E+0	2.2 E-5	2.6 E-5	NA	NA	NA	NA
Cadmium	1.0 E+0	3.2 E-3	3.9 E-4	9.8 E-5	3.7 E-3	NA	NA	2.1 E-8	2.1 E-8
Perchlorate	1.0 E+0	4.6 E-3	0.0 E+0	NA	4.6 E-3	NA	NA	NA	NA
Vanadium	1.0 E+0	6.5 E-4	0.0 E+0	2.0 E-5	6.7 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds									
2,3,7,8-TCDD TEQ	1.0 E+0	NA	NA	NA	NA	6.9 E-3	6.2 E-4	2.1 E-4	7.8 E-3
Bis(2-ethylhexyl)phthalate	1.0 E+0	1.6 E-4	4.8 E-5	4.9 E-6	2.1 E-4	6.5 E-10	1.9 E-10	2.0 E-11	8.6 E-10
Di-n-butyl phthalate	1.0 E+0	3.2 E-5	9.7 E-6	9.8 E-7	4.3 E-5	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram

Table 5.10-26
Location-Specific Soil Risk Assessment Results - Construction Workers
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	Depth	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
Unit Hazard		2.6 E-5	2.1 E-4	3.7 E-3	4.3 E-5	4.6 E-3	6.7 E-4	NA																
Unit Risk		NA	8.6 E-10	2.1 E-8	NA	NA	NA	7.8 E-3																
29B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB04	1.5			0.44			56		NA	NA	1.6 E-3	NA	NA	3.7 E-2	NA	3.9 E-2	NA	NA	9.2 E-9	NA	NA	NA	NA	9 E-9
29B-SB04	5			0.34			45		NA	NA	1.3 E-3	NA	NA	3.0 E-2	NA	3.1 E-2	NA	NA	7.1 E-9	NA	NA	NA	NA	7 E-9
29B-SB04	11						92		NA	NA	NA	NA	NA	6.1 E-2	NA	6.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	0.5			0.31			67		NA	NA	1.2 E-3	NA	NA	4.5 E-2	NA	4.6 E-2	NA	NA	6.5 E-9	NA	NA	NA	NA	6 E-9
29B-SB05	1						75		NA	NA	NA	NA	NA	5.0 E-2	NA	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	5			0.43			97		NA	NA	1.6 E-3	NA	NA	6.5 E-2	NA	6.6 E-2	NA	NA	9.0 E-9	NA	NA	NA	NA	9 E-9
29B-SB05	11			0.44			99		NA	NA	1.6 E-3	NA	NA	6.6 E-2	NA	6.8 E-2	NA	NA	9.2 E-9	NA	NA	NA	NA	9 E-9
29B-SB06	1.5			0.3			76		NA	NA	1.1 E-3	NA	NA	5.1 E-2	NA	5.2 E-2	NA	NA	6.3 E-9	NA	NA	NA	NA	6 E-9
29B-SB06	5			0.74			110		NA	NA	2.7 E-3	NA	NA	7.3 E-2	NA	7.6 E-2	NA	NA	1.6 E-8	NA	NA	NA	NA	2 E-8
29B-SB06	11						99		NA	NA	NA	NA	NA	6.6 E-2	NA	6.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB07	1			0.29			75		NA	NA	1.1 E-3	NA	NA	5.0 E-2	NA	5.1 E-2	NA	NA	6.1 E-9	NA	NA	NA	NA	6 E-9
29B-SB07	4.5			0.38		0.077	41		NA	NA	1.4 E-3	NA	3.6 E-4	2.7 E-2	NA	2.9 E-2	NA	NA	8.0 E-9	NA	NA	NA	NA	8 E-9
29B-SB08	1.5			0.23			38		NA	NA	8.5 E-4	NA	NA	2.5 E-2	NA	2.6 E-2	NA	NA	4.8 E-9	NA	NA	NA	NA	5 E-9
29B-SB08	5			0.52			84		NA	NA	1.9 E-3	NA	NA	5.6 E-2	NA	5.8 E-2	NA	NA	1.1 E-8	NA	NA	NA	NA	1 E-8
29B-SB08	11.5						82		NA	NA	NA	NA	NA	5.5 E-2	NA	5.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB09	1.5			0.45			88		NA	NA	1.7 E-3	NA	NA	5.9 E-2	NA	6.0 E-2	NA	NA	9.4 E-9	NA	NA	NA	NA	9 E-9
29B-SB09	5			1.5			280		NA	NA	5.6 E-3	NA	NA	1.9 E-1	NA	1.9 E-1	NA	NA	3.1 E-8	NA	NA	NA	NA	3 E-8
29B-SB09	11.5						60		NA	NA	NA	NA	NA	4.0 E-2	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB10	1.5			0.24			44		NA	NA	8.9 E-4	NA	NA	2.9 E-2	NA	3.0 E-2	NA	NA	5.0 E-9	NA	NA	NA	NA	5 E-9
29B-SB10	5			0.55			83		NA	NA	2.0 E-3	NA	NA	5.5 E-2	NA	5.7 E-2	NA	NA	1.2 E-8	NA	NA	NA	NA	1 E-8
29B-SB10	11.5						100		NA	NA	NA	NA	NA	6.7 E-2	NA	6.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB11	1.5			0.66			120		NA	NA	2.5 E-3	NA	NA	8.0 E-2	NA	8.2 E-2	NA	NA	1.4 E-8	NA	NA	NA	NA	1 E-8
29B-SB11	5			0.58			94		NA	NA	2.2 E-3	NA	NA	6.3 E-2	NA	6.5 E-2	NA	NA	1.2 E-8	NA	NA	NA	NA	1 E-8
29B-SB11	11.5			0.57			63		NA	NA	2.1 E-3	NA	NA	4.2 E-2	NA	4.4 E-2	NA	NA	1.2 E-8	NA	NA	NA	NA	1 E-8
30B-SB01	0				2.0			0.0000042	NA	NA	NA	8.7 E-5	NA	NA	NA	8.7 E-5	NA	NA	NA	NA	NA	NA	3.2 E-8	3 E-8
30B-SB01	0.01				2.0			0.00000054	NA	NA	NA	8.6 E-5	NA	NA	NA	8.6 E-5	NA	NA	NA	NA	NA	NA	4.2 E-9	4 E-9
30B-SB01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	5				2.5				NA	NA	NA	1.1 E-4	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	10					6.0			NA	NA	NA	NA	2.8 E-2	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	0		2.4		2.4	7.0		0.00030	NA	5.1 E-4	NA	1.0 E-4	3.2 E-2	NA	NA	3.3 E-2	NA	2.1 E-9	NA	NA	NA	NA	2.3 E-6	2 E-6
30B-SB02	0.01		2.4		2.4			0.00012	NA	5.1 E-4	NA	1.0 E-4	NA	NA	NA	6.2 E-4	NA	2.1 E-9	NA	NA	NA	NA	9.4 E-7	9 E-7
30B-SB02	3					5.0			NA	NA	NA	NA	2.3 E-2	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	5				1.5				NA	NA	NA	6.4 E-5	NA	NA	NA	6.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	10				0.702				NA	NA	NA	3.0 E-5	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	0							0.000000053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-10	4 E-10
30B-SB03	0.01								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	5				2.5				NA	NA	NA	1.1 E-4	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	10				0.691				NA	NA	NA	3.0 E-5	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB04	1			0.53		0.49	73		NA	NA	2.0 E-3	NA	2.3 E-3	4.9 E-2	NA	5.3 E-2	NA	NA	1.1 E-8	NA	NA	NA	NA	1 E-8
30B-SB04	5			0.42		0.23	90		NA	NA	1.6 E-3	NA	1.1 E-3	6.0 E-2	NA	6.3 E-2	NA	NA	8.8 E-9	NA	NA	NA	NA	9 E-9
30B-SB04	11			0.44		0.11	200		NA	NA	1.6 E-3	NA	5.1 E-4	1.3 E-1	NA	1.4 E-1	NA	NA	9.2 E-9	NA	NA	NA	NA	9 E-9
30B-SB05	1			0.58			94		NA	NA	2.2 E-3	NA	NA	6.3 E-2	NA	6.5 E-2	NA	NA	1.2 E-8	NA	NA	NA	NA	1 E-8
30B-SB05	5			0.75			170		NA	NA	2.8 E-3	NA	NA	1.1 E-1	NA	1.2 E-1	NA	NA	1.6 E-8	NA	NA	NA	NA	2 E-8
30B-SB06	1			0.34			49		NA	NA	1.3 E-3	NA	NA	3.3 E-2	NA	3.4 E-2	NA	NA	7.1 E-9	NA	NA	NA	NA	7 E-9
30B-SB06	5			0.84			79		NA	NA	3.1 E-3	NA	NA	5.3 E-2	NA	5.6 E-2	NA	NA	1.8 E-8	NA	NA	NA	NA	2 E-8
30B-SB06	11			0.68			75		NA	NA	2.5 E-3	NA	NA	5.0 E-2	NA	5.2 E-2	NA	NA	1.4 E-8	NA	NA	NA	NA	1 E-8
30B-SB07	1			0.54			45		NA	NA	2.0 E-3	NA	NA	3.0 E-2	NA	3.2 E-2	NA	NA	1.1 E-8	NA	NA	NA	NA	1 E-8
30B-SB07	5			0.53			73		NA	NA	2.0 E-3	NA	NA	4.9 E-2	NA	5.1 E-2	NA	NA	1.1 E-8	NA	NA	NA	NA	1 E-8
30B-SB07	11			0.41			61		NA	NA	1.5 E-3	NA	NA	4.1 E-2	NA	4.2 E-2	NA	NA	8.6 E-9	NA	NA	NA	NA	9 E-9
30B-SB08	1			0.4			80		NA	NA	1.5 E-3	NA	NA	5.3 E-2	NA	5.5 E-2	NA	NA	8.4 E-9	NA	NA	NA	NA	8 E-9
30B-SB08	5			0.46			250		NA	NA	1.7 E-3	NA	NA	1.7 E-1	NA	1.7 E-1	NA	NA	9.6 E-9	NA	NA	NA	NA	1 E-8
30B-SB08	11			0.38			230		NA	NA	1.4 E-3	NA	NA	1.5 E-1	NA	1.5 E-1	NA	NA	8.0 E-9	NA	NA	NA	NA	8 E-9
31B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-26
Location-Specific Soil Risk Assessment Results - Construction Workers
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	Depth	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
31B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB02	1.5			0.54			77		NA	NA	2.0 E-3	NA	NA	5.1 E-2	NA	5.3 E-2	NA	NA	1.1 E-8	NA	NA	NA	NA	1 E-8
31B-SB02	5			0.67			190		NA	NA	2.5 E-3	NA	NA	1.3 E-1	NA	1.3 E-1	NA	NA	1.4 E-8	NA	NA	NA	NA	1 E-8
31B-SB02	11			0.76		0.035	120		NA	NA	2.8 E-3	NA	1.6 E-4	8.0 E-2	NA	8.3 E-2	NA	NA	1.6 E-8	NA	NA	NA	NA	2 E-8
31B-SD01	0.25						58		NA	NA	NA	NA	NA	3.9 E-2	NA	3.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD01	1.5						79		NA	NA	NA	NA	NA	5.3 E-2	NA	5.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	0.25						70		NA	NA	NA	NA	NA	4.7 E-2	NA	4.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	1.5						75		NA	NA	NA	NA	NA	5.0 E-2	NA	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB02	2			0.37			57		NA	NA	1.4 E-3	NA	NA	3.8 E-2	NA	3.9 E-2	NA	NA	7.8 E-9	NA	NA	NA	NA	8 E-9
32B-SB02	5			0.18			30		NA	NA	6.7 E-4	NA	NA	2.0 E-2	NA	2.1 E-2	NA	NA	3.8 E-9	NA	NA	NA	NA	4 E-9
32B-SB02	11			0.5			56		NA	NA	1.9 E-3	NA	NA	3.7 E-2	NA	3.9 E-2	NA	NA	1.0 E-8	NA	NA	NA	NA	1 E-8
32B-SB03	1.5			0.39			48		NA	NA	1.4 E-3	NA	NA	3.2 E-2	NA	3.3 E-2	NA	NA	8.2 E-9	NA	NA	NA	NA	8 E-9
32B-SB03	5			0.69			95		NA	NA	2.6 E-3	NA	NA	6.3 E-2	NA	6.6 E-2	NA	NA	1.4 E-8	NA	NA	NA	NA	1 E-8
32B-SB03	11.5			0.5			90		NA	NA	1.9 E-3	NA	NA	6.0 E-2	NA	6.2 E-2	NA	NA	1.0 E-8	NA	NA	NA	NA	1 E-8
32B-SB04	1.5			0.35			48		NA	NA	1.3 E-3	NA	NA	3.2 E-2	NA	3.3 E-2	NA	NA	7.3 E-9	NA	NA	NA	NA	7 E-9
32B-SB04	5	69000		0.81			140		1.8 E+0	NA	3.0 E-3	NA	NA	9.3 E-2	NA	1.9 E+0	NA	NA	1.7 E-8	NA	NA	NA	NA	2 E-8
32B-SB04	11.5			0.77			130		NA	NA	2.9 E-3	NA	NA	8.6 E-2	NA	8.9 E-2	NA	NA	1.6 E-8	NA	NA	NA	NA	2 E-8
32B-SB05	1.5			0.31			60		NA	NA	1.2 E-3	NA	NA	4.0 E-2	NA	4.1 E-2	NA	NA	6.5 E-9	NA	NA	NA	NA	6 E-9
32B-SB05	5			0.46			97		NA	NA	1.7 E-3	NA	NA	6.5 E-2	NA	6.6 E-2	NA	NA	9.6 E-9	NA	NA	NA	NA	1 E-8
33B-SB01	1				0.91				NA	NA	NA	3.9 E-5	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	5				4.5				NA	NA	NA	2.0 E-4	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	10				2.9				NA	NA	NA	1.3 E-4	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	1				2.8				NA	NA	NA	1.2 E-4	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	5				6.1				NA	NA	NA	2.6 E-4	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	10				0.705				NA	NA	NA	3.0 E-5	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB03	1.5			3.9			78		NA	NA	1.4 E-2	NA	NA	5.2 E-2	NA	6.6 E-2	NA	NA	8.2 E-8	NA	NA	NA	NA	8 E-8
33B-SB03	5			0.61		0.75	81		NA	NA	2.3 E-3	NA	3.5 E-3	5.4 E-2	NA	6.0 E-2	NA	NA	1.3 E-8	NA	NA	NA	NA	1 E-8
33B-SB03	11			0.41		1.6	75		NA	NA	1.5 E-3	NA	7.4 E-3	5.0 E-2	NA	5.9 E-2	NA	NA	8.6 E-9	NA	NA	NA	NA	9 E-9
33B-WS	1			0.63		0.27	99		NA	NA	2.3 E-3	NA	1.2 E-3	6.6 E-2	NA	6.9 E-2	NA	NA	1.3 E-8	NA	NA	NA	NA	1 E-8
34B-SB01	1				8.7				NA	NA	NA	3.7 E-4	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	10				4.1				NA	NA	NA	1.8 E-4	NA	NA	NA	1.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB02	1.5			0.44			52		NA	NA	1.6 E-3	NA	NA	3.5 E-2	NA	3.6 E-2	NA	NA	9.2 E-9	NA	NA	NA	NA	9 E-9
34B-SB02	11			0.6		0.023	100		NA	NA	2.2 E-3	NA	1.1 E-4	6.7 E-2	NA	6.9 E-2	NA	NA	1.3 E-8	NA	NA	NA	NA	1 E-8
29B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	0.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	0.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS05	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH11	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0.01								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	0							0.00011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-7	9 E-7
31B-AH01	0.01							0.000080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	6 E-7
31B-AH11	0							0.000080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E-7	6 E-7
30B-AH02	0.01							0.000063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	5 E-7
30B-AH02	0							0.000063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	5 E-7
29B-AH01	1							0.000060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-7	5 E-7
30B-AH01	0.01							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	4 E-7
30B-AH01	0							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	4 E-7
34B-AH01	3							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	4 E-7
34B-AH01	0.01							0.000012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	1 E-7

Table 5.10-26
Location-Specific Soil Risk Assessment Results - Construction Workers
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	Depth	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
30B-SNS05	0.5							0.0000026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	2 E-8
30B-SNS02	0.5							0.0000022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	2 E-8
30B-SNS03	0.5							0.00000033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	3 E-9
34B-SNS02	0.5							0.00000030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	2 E-9
30B-SNS03	2.5							0.00000029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	2 E-9
34B-SNS01	0.5							0.00000026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	2 E-9
34B-SNS03	0.5							0.00000025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	2 E-9
34B-SNS03	2.5							0.00000024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	2 E-9
32B-HP05	0.01							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-11	9 E-11
32B-SB01	0							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-11	9 E-11
32B-HP05	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	1 E-11
32B-SB01	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	1 E-11

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.10-27
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																																	
Sample N:	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride
Unit Hazard		4.9 E+1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1	1.1 E-1	9.8 E+0	3.9 E-1	6.8 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		1.6 E-4	NA	NA	2.5 E-4	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	2.8 E-4	3.6 E-4	NA	4.2 E-4	2.3 E-4	NA	NA	2.6 E-4	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	5.9 E-5	1.9 E-5	NA	2.0 E-5	7.5 E-4
30B-SP10	10			7.6				17					75	6.6		7.8	33							27	6.0	7.7	10			13		4.2	12	91	
30B-SP10	20																																		
30B-SP11	10							16	39				240	9.4											7.8	12							11		
30B-SP11	20							26	110				1000	28		11				10		31			34	77	9.0			14		23	28		
30B-SP12	10							18	24				210			7.5						18					7.6			15			6.6		
30B-SP13	10		44	40		13		7.0	110		62		240	28		3.9	20	19		11		24	92	380	38	30	340	88	14	12	18	9.4	510	830	
30B-SP13	20		180	19		7.0		18	190		32	7.0	180	52	13		66	78		30		68	82	1500	68	78	260	71	8.0	10	38	14	610	2500	
30B-SP14	10								32				180	21								15			14	31	11				31	9.4	36		
30B-SP14	20		820	42					50		54			23		25	1700	800		11			68	1800	28	23	250	76			530		330	24000	
30B-SP15	10		69	30		8.0		5.6	110		48		57	33		4.7	4400	22				13	72	910	42	42	270	56	10				480	920	
30B-SP15	16		36	36		13		94	1700	40	64		1600	320		70	280	96				410	220	110	360	1200	650	160	16				1900	96	
30B-SP17	10								32	19			250	4.5																					
30B-SP17	20		11						30				210	48		39							6.8	990	24	72		6.4					50	64	
30B-SP18	10												240	32		6.9								12	9.2	30									4.9
30B-SP19	10								33				200	18		8.4								53	9.1	23		6.5							
30B-SP20	10							21	57	27			1300	26		18				30		190		330	35	98									
30B-SP20	20								29				400	12		6.7							12	1300	11	10		14						63	
30B-SP21	10												130			16						27				4.8							8.4		
30B-SP21	20								49	13			250	5.2		7.5						73				8.8							10		
30B-SP22	10												590	17		5.4	190					22	6.2	980	16	20	13						27	18	
30B-SP22	20								33				500	10			160					33		920	8.7	10	14						17	20	
30B-SP23	10								47				460	5.1		3.8	59					64	5.7	53	7.2	4.8	17	6.0					25	8.6	
30B-SP23	20								34			6.0	220	9.1		8.7	360					41		330	10	14	12						25	39	
32B-SP07	10								56				150	100		26				4.6			8.9	95	24	83	10						90		
32B-SP07	20												77	19		37								1200	200	260						19	34	10	
32B-SP08	10								35				100	25		28									19	69							25		
32B-SP08	17																																5.2		
32B-SP08	20				13				95			9.4	280	90		63						35	6.6	560	460	890	6.8					27	450	13	
32B-SP08	40						27		26	13			160	13		28						19		850	94	280						49	36	14	
32B-SP09	10													16		9.9		16							78	240	5.3						36	8.6	
32B-SP09	20												59	6.4		4.5		12							20	35	6.9					8.4	68		
32B-SP10	10												61	9.7	36	10		30	9.2		12	12			50	130						9.5	23	440	
32B-SP10	20								18	12			130	31		21			5.2	5.4		22			120	280	5.2					20	79	230	
32B-SP11	10		280															94													77			88000	
32B-SP11	20		560															100																130000	
33B-SP09	10		200						20				120	11		7.3		26				19			37	79						26	28	270	
33B-SP09	20		1500		5.3		17						110	11		12		130	5.4			18			48	87						33	27	1300	
33B-SP10	10															8.2									18	13							8.5	7.4	
33B-SP11	10		9.0		15								87	5.0		13		100	160	5.0		41			61	79						13	14	1200	
33B-SP11	20	18	640		34				30	12			130	8.3		25	7.2	640	1000	7.2		36			70	120						11	20	15000	
33B-SP12	10		11										80		30	6.4		26			13			13	12	21					21	12	14	140	
33B-SP12	20		12				20						150	5.9	33	10		22				11			31	72					8.8	23	25	89	
33B-SP13	7.5			55		24		12	160	18	94		380	49		5.7				16		140	130		60	97	500	150	22				590		
33B-SP13	20			54		19		15	220	13	82		310	57		4.9				23		51	130		80	66	500	120	18			13	870		
33B-SP14	10		27000							15000						1600		1600		810						520	550						460	1000000	
33B-SP14	20		28000							11000						1400		1700		530							510							1100000	
33B-SP15	10		440	14					19		11		150	4.7		31		10				12			27	40						6.5	180	920	
33B-SP15	20		17000	12				10	30		10	7.2	420	8.2		22	20			120		16		12	25	130						98	240	4100	
33B-SP16	10													3.7												5.1						7.1			
33B-SP16	20								73				330	12		4.4						12			7.2	15	8.8					12	57		
33B-SP16	32								23				230	34		6.5						18			28	62	6.6					13	35	10	
33B-SP17	6																									6.4						3.8	8.4		
33B-SP17	20		55						32				500									19				5.3							8.8	150	
33B-SP18	7								200	21		6.4	990	18								33	11		20	32	12	7.7				8.1	41		
33B-SP18	20								110	24		29	510	9.4		23						86			16	16	9.1						24		
33B-SP19	10							46			10		88	31	12	12		18		83			22		38	110	80	19					180	360	
33B-SP19	20							34			11									51			41		30	63	140	38					270	45	
33B-SP20	10		1000	68		21			47		85		340	48		23		17	33	16		370	110		38	57	460	120	18				630	16000	
33B-SP20	20		110	98		26		16			110		86	62		5.8				16		13	140		69	57	560	150	22				970	3700	
33B-SP21	10		43000															2100															12000	1700000	
33B-SP21	20		60000															2300															13000	1700000	
35B-SP04	10								51				170	15		14									13	42	5.7						21		
35B-SP04	20								62				200	30		46		190		9.3		16			20	130	7.3					16	23		

Table 5.10-27
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																																			
Sample Na	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																																					
Unit Risk																																					
30B-SP10	10	NA	NA	3.6 E-6	NA	NA	NA	8.1 E-7	NA	NA	NA	NA	1.6 E-7	1.1 E-6	NA	6.3 E-8	3.5 E-6	NA	NA	NA	NA	NA	NA	3.8 E-9	3.2 E-8	1.2 E-7	4.2 E-7	NA	NA	5.6 E-8	NA	8.0 E-8	1.9 E-7	6.6 E-7	NA	1.1 E-5
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	NA	7.6 E-7	3.4 E-8	NA	NA	NA	5.2 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	1.9 E-7	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	3.2 E-6
30B-SP11	20	NA	NA	NA	NA	NA	NA	6.2 E-7	4.9 E-8	NA	NA	NA	1.1 E-6	2.2 E-6	NA	4.5 E-8	NA	NA	NA	3.6 E-9	NA	7.6 E-8	NA	NA	9.1 E-8	6.0 E-7	1.9 E-7	NA	NA	3.0 E-8	NA	2.2 E-7	2.2 E-7	NA	NA	5.5 E-6
30B-SP12	10	NA	NA	NA	NA	NA	NA	8.6 E-7	2.1 E-8	NA	NA	NA	4.5 E-7	NA	NA	6.1 E-8	NA	NA	NA	NA	NA	8.8 E-8	NA	NA	NA	NA	3.2 E-7	NA	NA	6.5 E-8	NA	NA	1.0 E-7	NA	NA	2.0 E-6
30B-SP13	10	NA	3.1 E-6	1.9 E-5	NA	7.2 E-6	NA	3.3 E-7	9.7 E-8	NA	3.0 E-6	NA	5.2 E-7	4.5 E-6	NA	3.2 E-8	2.1 E-6	2.4 E-6	NA	8.0 E-9	NA	1.2 E-7	3.8 E-7	5.4 E-8	2.0 E-7	4.7 E-7	1.4 E-5	4.2 E-6	1.3 E-6	5.2 E-8	2.0 E-6	1.8 E-7	8.1 E-6	6.0 E-6	NA	8.0 E-5
30B-SP13	20	NA	6.3 E-6	4.5 E-6	NA	1.9 E-6	NA	4.3 E-7	8.4 E-8	NA	7.6 E-7	4.8 E-9	1.9 E-7	4.2 E-6	1.5 E-7	NA	3.5 E-6	4.9 E-6	NA	1.1 E-8	NA	1.7 E-7	1.7 E-7	1.1 E-7	1.8 E-7	6.1 E-7	5.5 E-6	1.7 E-6	3.8 E-7	2.2 E-8	2.1 E-6	1.3 E-7	4.8 E-6	9.1 E-6	NA	5.2 E-5
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	3.9 E-7	3.4 E-6	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA	7.5 E-8	4.8 E-7	4.6 E-7	NA	NA	NA	3.5 E-6	1.8 E-7	5.7 E-7	NA	NA	9.1 E-6
30B-SP14	20	NA	2.9 E-5	9.9 E-6	NA	NA	NA	NA	2.2 E-8	NA	1.3 E-6	NA	NA	1.8 E-6	NA	1.0 E-7	9.1 E-5	5.0 E-5	NA	4.0 E-9	NA	NA	1.4 E-7	1.3 E-7	7.5 E-8	1.8 E-7	5.3 E-6	1.8 E-6	NA	NA	3.0 E-5	NA	2.6 E-6	8.7 E-5	NA	3.1 E-4
30B-SP15	10	NA	4.9 E-6	1.4 E-5	NA	4.4 E-6	NA	2.7 E-7	9.7 E-8	NA	2.3 E-6	NA	1.2 E-7	5.3 E-6	NA	3.8 E-8	4.7 E-4	2.8 E-6	NA	NA	NA	6.4 E-8	3.0 E-7	1.3 E-7	2.2 E-7	6.6 E-7	1.1 E-5	2.7 E-6	9.4 E-7	NA	NA	NA	7.6 E-6	6.7 E-6	NA	5.3 E-4
30B-SP15	16	NA	1.6 E-6	1.1 E-5	NA	4.5 E-6	NA	2.8 E-6	9.4 E-7	1.3 E-5	1.9 E-6	NA	2.2 E-6	3.2 E-5	NA	3.6 E-7	1.9 E-5	7.5 E-6	NA	NA	NA	1.3 E-6	5.6 E-7	9.7 E-9	1.2 E-6	1.2 E-5	1.7 E-5	4.8 E-6	9.4 E-7	NA	NA	NA	1.9 E-5	4.4 E-7	NA	1.5 E-4
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	9.8 E-6	NA	NA	5.4 E-7	7.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5
30B-SP17	20	NA	3.9 E-7	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	2.3 E-7	3.8 E-6	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	1.4 E-8	7.0 E-8	6.4 E-8	5.6 E-7	NA	1.5 E-7	NA	NA	NA	NA	4.0 E-7	2.3 E-7	NA	6.1 E-6
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	5.1 E-6	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	4.9 E-8	4.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	6.4 E-6
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	4.3 E-7	2.9 E-6	NA	6.8 E-8	NA	NA	NA	NA	NA	NA	NA	7.5 E-9	4.9 E-8	3.6 E-7	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	4.1 E-6
30B-SP20	10	NA	NA	NA	NA	NA	NA	1.0 E-6	5.0 E-8	1.4 E-5	NA	NA	2.8 E-6	4.2 E-6	NA	1.5 E-7	NA	NA	NA	2.2 E-8	NA	9.3 E-7	NA	4.7 E-8	1.9 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	4.3 E-7	9.6 E-7	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	2.5 E-8	9.2 E-8	2.9 E-8	7.8 E-8	NA	3.3 E-7	NA	NA	NA	NA	NA	2.3 E-7	NA	2.2 E-6
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	7.5 E-7
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	3.4 E-6	NA	NA	2.7 E-7	4.2 E-7	NA	3.0 E-8	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	7.9 E-8	NA	NA	4.4 E-6
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	2.7 E-6	NA	4.4 E-8	2.0 E-5	NA	NA	NA	NA	1.1 E-7	2.5 E-8	1.4 E-7	8.6 E-8	3.1 E-7	5.5 E-7	NA	NA	NA	NA	NA	4.3 E-7	1.3 E-7	NA	2.6 E-5
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	5.4 E-7	8.0 E-7	NA	NA	8.5 E-6	NA	NA	NA	NA	8.1 E-8	NA	6.5 E-8	2.3 E-8	7.8 E-8	2.9 E-7	NA	NA	NA	NA	NA	1.3 E-7	7.3 E-8	NA	1.1 E-5
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	9.9 E-7	8.2 E-7	NA	3.1 E-8	6.3 E-6	NA	NA	NA	NA	3.1 E-7	2.3 E-8	7.5 E-9	3.8 E-8	7.5 E-8	7.2 E-7	2.9 E-7	NA	NA	NA	NA	4.0 E-7	6.2 E-8	NA	1.0 E-5
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	4.1 E-9	2.4 E-7	7.3 E-7	NA	3.5 E-8	1.9 E-5	NA	NA	NA	NA	1.0 E-7	NA	2.3 E-8	2.7 E-8	1.1 E-7	2.5 E-7	NA	NA	NA	NA	NA	2.0 E-7	1.4 E-7	NA	2.1 E-5
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	3.2 E-7	1.6 E-5	NA	2.1 E-7	NA	NA	NA	3.4 E-9	NA	NA	3.7 E-8	1.3 E-8	1.3 E-7	1.3 E-6	4.2 E-7	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	2.0 E-5
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	1.5 E-6	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	5.3 E-7	2.0 E-6	NA	NA	NA	NA	NA	1.8 E-7	2.7 E-7	3.6 E-8	NA	4.9 E-6
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	2.2 E-7	4.0 E-6	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	1.1 E-6	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	6.0 E-6
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	4.9 E-8
32B-SP08	20	NA	NA	NA	7.5 E-6	NA	NA	NA	4.2 E-8	NA	NA	6.4 E-9	3.0 E-7	7.2 E-6	NA	2.6 E-7	NA	NA	NA	NA	NA	8.6 E-8	1.4 E-8	4.0 E-8	1.2 E-6	7.0 E-6	1.4 E-7	NA	NA	NA	NA	2.6 E-7	3.6 E-6	4.7 E-8	NA	2.8 E-5
32B-SP08	40	NA	NA	NA	NA	NA	1.2 E-8	NA	5.7 E-9	1.7 E-6	NA	NA	8.6 E-8	5.2 E-7	NA	5.7 E-8	NA	NA	NA	NA	NA	2.3 E-8	NA	3.0 E-8	1.3 E-7	1.1 E-6	NA	NA	NA	NA	NA	2.3 E-7	1.4 E-7	2.5 E-8	NA	4.0 E-6
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	8.0 E-8	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	4.2 E-7	3.8 E-6	2.2 E-7	NA	NA	NA	NA	NA	5.7 E-7	6.2 E-8	NA	9.7 E-6
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	5.1 E-7	NA	1.8 E-8	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	5.3 E-8	2.7 E-7	1.5 E-7	NA	NA	NA	NA	8.0 E-8	5.4 E-7	NA	NA	2.4 E-6
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.6 E-6	8.4 E-7	8.1 E-8	NA	3.8 E-6	1.1 E-6	NA	1.8 E-7	5.9 E-8	NA	NA	2.7 E-7	2.0 E-6	NA	NA	NA	NA	NA	1.8 E-7	3.6 E-7	3.2 E-6	NA	1.4 E-5
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	3.1 E-6	NA	NA	1.4 E-7	2.5 E-6	NA	8.5 E-8	NA	NA	3.0 E-7	2.0 E-9	NA	5.4 E-8	NA	NA	3.2 E-7	2.2 E-6	1.1 E-7	NA	NA	NA	NA	1.9 E-7	6.3 E-7	8.4 E-7	NA	1.0 E-5
32B-SP11	10	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-6	NA	NA	6.4 E-4	NA	6.8 E-4
32B-SP11	20	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	5.0 E-4
33B-SP09	10	NA	1.4 E-5	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	2.6 E-7	1.8 E-6	NA	5.9 E-8	NA	3.3 E-6	NA	NA	NA	9.3 E-8	NA	NA	2.0 E-7	1.2 E-6	NA	NA	NA	NA	NA	5.0 E-7	4.4 E-7	2.0 E-6	NA	2.4 E-5
33B-SP09	20	NA	5.3 E-5	NA	3.1 E-6	NA	1.5 E-8	NA	NA	NA	NA	NA	1.2 E-7	8.8 E-7	NA	4.9 E-8	NA	8.1 E-6	3.1 E-7	NA	NA	4.4 E-8	NA	NA	1.3 E-7	6.8 E-7	NA	NA	NA	NA	NA	3.1 E-7	2.1 E-7	4.7 E-6	NA	7.1 E-5
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	2.0 E-7	NA	NA	NA	NA	NA	NA	1.3 E-7	5.4 E-8	NA	5.5 E-7
33B-SP11	10	NA	6.3 E-7	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	8.0 E-7	NA	1.1 E-7	NA	1.3 E-5	1.8 E-5	3.6 E-9	NA	2.0 E-7	NA	NA	3.3 E-7	1.2 E-6	NA	NA	NA	NA	NA	2.5 E-7	2.2 E-7	8.7 E-6	NA	6.1 E-5
33B-SP11	20	2.7 E-6	2.3 E-5	NA	2.0 E-5	NA	NA	NA	1.3 E-8	3.1 E-6	NA	NA	1.4 E-7	6.6 E-7	NA	1.0 E-7	3.8 E-7	4.0 E-5	5.8 E-5	2.6 E-9	NA	8.8 E-8	NA	NA	1.9 E-7	9.4 E-7	NA	NA	NA	NA	NA	1.0 E-7	1.6 E-7	5.4 E-5	NA	2.0 E-4
33B-SP12	10	NA	7.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	7.0 E-7	5.2 E-8	NA	3.3 E-6	NA	NA	2.0 E-7	NA	NA	1.8 E-9	6.4 E-8	3.3 E-7	NA	NA	NA	NA	2.4 E-6	2.3 E-7	2.2 E-7	1.0 E-6	NA	9.4 E-6
33B-SP12	20	NA	4.2 E-7	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	1.6 E-7	4.7 E-7	3.8 E-7	4.1 E-8	NA	1.4 E-6	NA	NA	NA	2.7 E-8	NA	NA	8.3 E-8	5.6 E-7	NA	NA	NA	NA	5.0 E-7	2.2 E-7	2.0 E-7	3.2 E-7	NA	4.8 E-6
33B-SP13	7.5	NA	NA	3.5 E-5	NA	1.8 E-5	NA	7.6 E-7	1.9 E-7	1.2 E-5	6.0 E-6	NA	1.1 E-6	1.0 E-5	NA	6.2 E-8	NA	NA	NA	1.6 E-8	NA	9.2 E-7	7.1 E-7	NA	4.3 E-7	2.0 E-6	2.8 E-5	9.5 E-6	2.8 E-6	NA	NA	NA	1.2 E-5	NA	NA	1.4 E-4
33B-SP13	20	NA	NA	1.3 E-5	NA	5.3 E-6	NA	3.6 E-7	9.7 E-8	3.4 E-6	2.0 E-6	NA	3.3 E-7	4.6 E-6	NA	2.0 E-8	NA	NA	NA	8.4 E-9	NA	1.3 E-7	2.7 E-7	NA	2.1 E-7	5.2 E-7	1.1 E-5	2.9 E-6	8.5 E-7	NA	NA	1.2 E-7	6.9 E-6	NA	NA	5.1 E-5
33B-SP14	10	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.8 E-3	NA	NA	NA	NA	NA	1.3 E-5	NA	2.0 E-4	NA	5.9 E-7	NA	NA	NA	NA	NA	8.1 E-6	2.3 E-5	NA	NA	NA	NA	NA	7.3 E-6	7.3 E-3	NA	1.7 E-2
33B-SP14	20	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	5.7 E-6	NA	1.1 E-4	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	7.9 E-3
33B-SP15	10	NA	3.1 E-5	6.6 E-6	NA	NA	NA	NA	1.7 E-8	NA	5.2 E-7	NA	3.2 E-7	7.5 E-7	NA	2.5 E-7	NA	1.3 E-6	NA	NA	NA	5.9 E-8	NA	NA	1.4 E-7	6.3 E-7	NA	NA	NA	NA	NA	1.2 E-7	2.9 E-6	6.7 E-6	NA	5.1 E-5
33B-SP15	20	NA	6.0 E-4	2.8 E-6	NA	NA	NA	2.4 E-7	1.3 E-8	NA	2.4 E-7	4.9 E-9	4.5 E-7	6.6 E-7	NA	8.9 E-8	1.1 E-6	NA	NA	4.4 E-8	NA	3.9 E-8	NA	8.5 E-10	6.7 E-8	1.0 E-6	NA	NA	NA	NA	NA	9.3 E-7	1.9 E-6	1.5 E-5	NA	6.2 E-4
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	8.1 E-7
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	3.6 E-7	9.6 E-7	NA	1.8 E-8	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	1.9 E-8	1.2 E-7	1.9 E-7	NA	NA	NA	NA	1.1 E-7	4.5 E-7	NA	NA	2.3 E-6
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	6.4 E-9	NA	NA	NA	1.5 E-7	1.7 E-6	NA	1.7 E-8	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	4.7 E-8	3.0 E-7	8.7 E-8	NA	NA	NA	NA	7.8 E-8	1.7 E-7	2.3 E-8	NA	2.6 E-6
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	1.2 E-7	2.2 E-7	NA	NA	5.1 E-7
33B-SP17	20	NA	1.9 E-6	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	4.1 E-8	NA	NA	NA	NA	NA	7.0 E-8	5.4 E-7	NA	NA	3.2 E-6
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	1.6 E-5	NA	1.3 E-8	3.0 E-6	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	6.4 E-8	NA	1.5 E-7	7.1 E-7	7.2 E-7	5.2 E-7	NA	NA	NA	2.2 E-7	9.3 E-7	NA	NA	2.6 E-5
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	6.2 E-6	NA	2.0 E-8	5.5 E-7	7.5 E-7	NA	9.3 E-8	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	4.3 E-8	1.3 E-7	1.9 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	8.4 E-6
33B-SP19	10	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	4.8 E-7	NA	1.9 E-7	5.0 E-6	2.8 E-7	9.8 E-8	NA	2.3 E-6	NA	6.1 E-8	NA	NA	9.0 E-8	NA	2.0 E-7	1.7 E-6	3.4 E-6	9.0 E-7	NA	NA	NA	NA	2.9 E-6	2.6 E-6	NA	2.2 E-5
33B-SP19	20	NA	NA	NA	NA	NA	NA	8.1 E-7	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	8.4 E-8	NA	8.0 E-8	4.9 E-7	2.9 E-6	9.0 E-7	NA	NA	NA	NA	2.1 E-6	1.6 E-7	NA	7.9 E-6
33B-SP20	10	NA	7.0 E-5	3.2 E-5	NA	1.2 E-5	NA	NA	4.2 E-8	NA	4.0 E-6	NA	7.3 E-7	7.7 E-6	NA	1.9 E-7	NA	2.1 E-6	3.8 E-6	1.2 E-8	NA	1.8 E-6	4.5 E-7	NA	2.0 E-7	8.9 E-7	1.9 E-5	5.7 E-6	1.7 E-6	NA	NA	NA	1.0 E-5	1.2 E-4	NA	2.9 E-4
33B-SP20	20	NA	3.9 E-6	2.3 E-5	NA	7.2 E-6	NA	3.8 E-7	NA	NA	2.6 E-6	NA	9.3 E-8	5.0 E-6	NA	2.4 E-8	NA	NA	NA	5.8 E-9	NA	3.2 E-8	2.9 E-7	NA	1.8 E-7	4.5 E-7	1.2 E-5	3.6 E-6	1.0 E-6	NA	NA	NA	7.7 E-6	1.3 E-5	NA	8.1 E-5
33B-SP21	10	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	1.2 E-2	NA	1.6 E-2
33B-SP21	20	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	6.2 E-3	NA	8.5 E-3
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	3.7 E-7	2.4 E-6	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	6.6 E-7	2.4 E-7	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	4.2 E-6
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	2.2 E-7	2.4 E-6	NA	1.9 E-7	NA	1.2 E-5	NA	3.4 E-9	NA	3.9 E-8	NA	NA	5.3 E-8	1.0 E-6	1.5 E-7	NA	NA	NA	NA	1.5 E-7	1.8 E-7	NA	NA	1.6 E-5

Table 5.10-27
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Construction Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																																	
Sample Na	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroe thylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride	ILCR
Unit Hazard																																					
Unit Risk																																					
30B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-11	NA	NA	8.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-13	NA	1.1 E-11	NA	1 E-10
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11
30B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-12	NA	NA	NA	3 E-11
30B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	NA	NA	5.2 E-11	3.6 E-11	NA	NA	NA	NA	1.3 E-11	NA	NA	NA	NA	NA	NA	NA	6.1 E-12	1.5 E-12	NA	1.0 E-10	NA	3 E-10
30B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	5.6 E-12	NA	8.6 E-11	7.3 E-11	NA	NA	NA	NA	6.0 E-12	NA	NA	NA	NA	NA	NA	NA	6.4 E-12	1.1 E-12	NA	1.5 E-10	NA	4 E-10
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	1.5 E-12	NA	NA	NA	5 E-11
30B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	2.2 E-9	7.5 E-10	NA	NA	NA	NA	5.0 E-12	NA	NA	NA	NA	NA	NA	NA	8.9 E-11	NA	NA	1.5 E-9	NA	5 E-9
30B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-11	NA	NA	1.1 E-8	4.1 E-11	NA	NA	NA	NA	1.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	1 E-8
30B-SP15	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	4.6 E-10	1.1 E-10	NA	NA	NA	NA	2.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-12	NA	1 E-9
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-12
30B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-12	NA	5 E-11
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	9 E-11
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-11
30B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-12	NA	2 E-11
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-12
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-11	NA	NA	5.0 E-10	NA	NA	NA	NA	NA	9.0 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	5 E-10
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-12	NA	NA	2.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-12	NA	2 E-10
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	8.3 E-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-12	NA	2 E-10
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-12	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-12	NA	5 E-10
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-12	NA	6.2 E-13	NA	2 E-11
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-11
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
32B-SP08	20	NA	NA	NA	1.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-13	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-12	NA	8.0 E-13	NA	1 E-10
32B-SP08	40	NA	NA	NA	NA	NA	4.0 E-12	NA	NA	NA	NA	NA	NA	6.4 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-12	NA	4.3 E-13	NA	1 E-11
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-12	NA	6 E-11
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-12	NA	NA	NA	1.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-13	NA	NA	NA	2 E-11
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-11	3.1 E-11	NA	NA	5.6 E-11	NA	NA	4.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-12	NA	5.4 E-11	NA	2 E-10
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-12	NA	1.4 E-11	NA	5 E-11
32B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	1.1 E-8	NA	1 E-8
32B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	NA	8 E-9
33B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	4.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-12	NA	3.3 E-11	NA	1 E-10
33B-SP09	20	NA	NA	NA	5.6 E-12	NA	5.1 E-12	NA	NA	NA	NA	NA	NA	1.1 E-11	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-12	NA	8.0 E-11	NA	2 E-10
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-13	NA	9 E-13
33B-SP11	10	NA	NA	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-12	NA	NA	NA	1.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-12	NA	1.5 E-10	NA	4 E-10
33B-SP11	20	8.9 E-12	NA	NA	3.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-12	NA	NA	9.4 E-12	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-13	NA	9.3 E-10	NA	2 E-9
33B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	4.9 E-11	NA	NA	5.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-12	1.9 E-12	NA	1.7 E-11	NA	1 E-10
33B-SP12	20	NA	NA	NA	NA	NA	6.0 E-12	NA	NA	NA	NA	NA	NA	5.8 E-12	1.4 E-11	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-12	1.8 E-12	NA	5.5 E-12	NA	6 E-11
33B-SP13	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
33B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-12	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	7 E-11
33B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	1 E-7
33B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-8	NA	7 E-8
33B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-12	NA	NA	NA	1.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-12	NA	1.1 E-10	NA	1 E-10
33B-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-12	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-12	NA	2.5 E-10	NA	3 E-10
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-12	NA	NA	NA	8 E-12
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-13	NA	NA	NA	1 E-11
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-13	NA	3.9 E-13	NA	2 E-11
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-12	NA	NA	NA	1 E-12
33B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-12	NA	9 E-12
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-12	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-12	NA	NA	NA	5 E-11
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-12
33B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-11	1.0 E-11	NA	NA	3.4 E-11	NA	NA	NA	NA	3.2 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-11	NA	2 E-10
33B-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-12	NA	6 E-12
33B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-11	NA	NA	NA	3.2 E-11	NA	NA	NA	NA	1.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	2 E-9
33B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	3 E-10
33B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	2 E-7
33B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	1 E-7
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-11
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-11	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10

Notes and Key:

All concentrations reported in micrograms per cubic meter.

HI = Hazard index

ILCR = Incremental lifetime cancer risk

NA = Not applicable

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.10-9) x the unit hazard or unit risk for the chemical).

Table 5.10-28 ***Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker***
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Aluminum	1.0 E+0	9.8 E-7	0.0 E+0	1 E-7	1.1 E-6	NA	NA	NA	NA
Cadmium	1.0 E+0	9.8 E-4	2.6 E-4	1 E-7	1.2 E-3	NA	NA	7.7 E-10	7.7 E-10
Perchlorate	1.0 E+0	1.4 E-3	0.0 E+0	NA	1.4 E-3	NA	NA	NA	NA
Vanadium	1.0 E+0	2.0 E-4	0.0 E+0	3 E-8	2.0 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds									
2,3,7,8-TCDD TEQ	1.0 E+0	NA	NA	NA	NA	5.2 E-2	1.0 E-2	7.7 E-6	6.3 E-2
Bis(2-ethylhexyl)phthalate	1.0 E+0	4.9 E-5	3.2 E-5	7 E-9	8.1 E-5	4.9 E-9	3.2 E-9	7.2 E-13	8.1 E-9
Di-n-butyl phthalate	1.0 E+0	9.8 E-6	6.5 E-6	1 E-9	1.6 E-5	NA	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.10-29 *Inhalation Unit Hazard and Unit Cancer Risk Results - Commercial Worker*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,1,2-Trichloroethane	1.0 E+0	4.9 E+1	4.0 E-3
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
2-Propanol	1.0 E+0	7.5 E+1	NA
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Bromodichloromethane	1.0 E+0	9.8 E+0	9.1 E-3
Carbon Tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Dibromochloromethane	1.0 E+0	9.8 E+0	6.6 E-3
EthylBenzene	1.0 E+0	6.8 E-1	6.1 E-4
Freon 113	1.0 E+0	2.3 E-2	NA
Heptane	1.0 E+0	9.8 E-1	NA
Hexane	1.0 E+0	9.8 E-1	NA
Tetrachloroethylene	1.0 E+0	2.0 E+1	1.5 E-3
Tetrahydrofuran	1.0 E+0	2.3 E+0	4.8 E-4
Trichloroethylene	1.0 E+0	1.2 E+0	4.9 E-4
Vinyl Chloride	1.0 E+0	6.8 E+0	1.9 E-2
1,2,4-Trimethylbenzene	1.0 E+0	9.8 E+1	NA
1,3,5-Trimethylbenzene	1.0 E+0	1.2 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	6.8 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.4 E-1	NA
4-Ethyltoluene	1.0 E+0	6.8 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	2.3 E-1	NA
Acetone	1.0 E+0	2.2 E-1	NA
Carbon Disulfide	1.0 E+0	9.8 E-1	NA
Cyclohexane	1.0 E+0	1.1 E-1	NA
Ethanol	1.0 E+0	3.9 E-1	NA
m,p-Xylene	1.0 E+0	6.8 E+0	NA
o-Xylene	1.0 E+0	6.8 E+0	NA
Propylbenzene	1.0 E+0	2.0 E+1	NA
Styrene	1.0 E+0	7.6 E-1	NA
Toluene	1.0 E+0	2.3 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.10-30
Location-Specific Soil Risk Assessment Results - Commercial Workers
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Nam	Depth	Aluminum	Bis(2-ethylhexyl)phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
Unit Hazard		1.1 E-6	8.1 E-5	1.2 E-3	1.6 E-5	1.4 E-3	2.0 E-4	NA																
Unit Risk		NA	8.1 E-9	7.7 E-10	NA	NA	NA	6.3 E-2																
29B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB04	1.5			0.44			56		NA	NA	5.4 E-4	NA	NA	1.1 E-2	NA	1.2 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
29B-SB04	5			0.34			45		NA	NA	4.2 E-4	NA	NA	8.8 E-3	NA	9.2 E-3	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
29B-SB04	11						92		NA	NA	NA	NA	NA	1.8 E-2	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	0.5			0.31			67		NA	NA	3.8 E-4	NA	NA	1.3 E-2	NA	1.3 E-2	NA	NA	2 E-10	NA	NA	NA	NA	2 E-10
29B-SB05	1						75		NA	NA	NA	NA	NA	1.5 E-2	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	5			0.43			97		NA	NA	5.3 E-4	NA	NA	1.9 E-2	NA	2.0 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
29B-SB05	11			0.44			99		NA	NA	5.4 E-4	NA	NA	1.9 E-2	NA	2.0 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
29B-SB06	1.5			0.3			76		NA	NA	3.7 E-4	NA	NA	1.5 E-2	NA	1.5 E-2	NA	NA	2 E-10	NA	NA	NA	NA	2 E-10
29B-SB06	5			0.74			110		NA	NA	9.2 E-4	NA	NA	2.2 E-2	NA	2.2 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
29B-SB06	11						99		NA	NA	NA	NA	NA	1.9 E-2	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB07	1			0.29			75		NA	NA	3.6 E-4	NA	NA	1.5 E-2	NA	1.5 E-2	NA	NA	2 E-10	NA	NA	NA	NA	2 E-10
29B-SB07	4.5			0.38		0.077	41		NA	NA	4.7 E-4	NA	1.1 E-4	8.0 E-3	NA	8.6 E-3	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
29B-SB08	1.5			0.23			38		NA	NA	2.8 E-4	NA	NA	7.4 E-3	NA	7.7 E-3	NA	NA	2 E-10	NA	NA	NA	NA	2 E-10
29B-SB08	5			0.52			84		NA	NA	6.4 E-4	NA	NA	1.6 E-2	NA	1.7 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
29B-SB08	11.5						82		NA	NA	NA	NA	NA	1.6 E-2	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB09	1.5			0.45			88		NA	NA	5.6 E-4	NA	NA	1.7 E-2	NA	1.8 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
29B-SB09	5			1.5			280		NA	NA	1.9 E-3	NA	NA	5.5 E-2	NA	5.7 E-2	NA	NA	1 E-9	NA	NA	NA	NA	1 E-9
29B-SB09	11.5						60		NA	NA	NA	NA	NA	1.2 E-2	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB10	1.5			0.24			44		NA	NA	3.0 E-4	NA	NA	8.6 E-3	NA	8.9 E-3	NA	NA	2 E-10	NA	NA	NA	NA	2 E-10
29B-SB10	5			0.55			83		NA	NA	6.8 E-4	NA	NA	1.6 E-2	NA	1.7 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
29B-SB10	11.5						100		NA	NA	NA	NA	NA	2.0 E-2	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB11	1.5			0.66			120		NA	NA	8.2 E-4	NA	NA	2.3 E-2	NA	2.4 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
29B-SB11	5			0.58			94		NA	NA	7.2 E-4	NA	NA	1.8 E-2	NA	1.9 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
29B-SB11	11.5			0.57			63		NA	NA	7.1 E-4	NA	NA	1.2 E-2	NA	1.3 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
30B-SB01	0				2.0			0.0000042	NA	NA	NA	3.3 E-5	NA	NA	NA	3.3 E-5	NA	NA	NA	NA	NA	NA	3 E-7	3 E-7
30B-SB01	0.01				2			0.00000054	NA	NA	NA	3.2 E-5	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	NA	3 E-8	3 E-8
30B-SB01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	5				2.5				NA	NA	NA	4.1 E-5	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	10					6.0			NA	NA	NA	NA	8.4 E-3	NA	NA	8.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	0		2.4		2.4	7.0		0.00030	NA	1.9 E-4	NA	3.9 E-5	9.8 E-3	NA	NA	1.0 E-2	NA	2 E-8	NA	NA	NA	NA	2 E-5	2 E-5
30B-SB02	0.01		2.4		2.4			0.00012	NA	1.9 E-4	NA	3.9 E-5	NA	NA	NA	2.3 E-4	NA	2 E-8	NA	NA	NA	NA	8 E-6	8 E-6
30B-SB02	3					5.0			NA	NA	NA	NA	7.0 E-3	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	5				1.5				NA	NA	NA	2.4 E-5	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	10				0.70				NA	NA	NA	1.1 E-5	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	0							0.000000053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3 E-9
30B-SB03	0.01								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	5				2.5				NA	NA	NA	4.0 E-5	NA	NA	NA	4.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	10				0.69				NA	NA	NA	1.1 E-5	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB04	1			0.53		0.49	73		NA	NA	6.6 E-4	NA	6.8 E-4	1.4 E-2	NA	1.6 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
30B-SB04	5			0.42		0.23	90		NA	NA	5.2 E-4	NA	3.2 E-4	1.8 E-2	NA	1.8 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
30B-SB04	11			0.44		0.11	200		NA	NA	5.4 E-4	NA	1.5 E-4	3.9 E-2	NA	4.0 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
30B-SB05	1			0.58			94		NA	NA	7.2 E-4	NA	NA	1.8 E-2	NA	1.9 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
30B-SB05	5			0.75			170		NA	NA	9.3 E-4	NA	NA	3.3 E-2	NA	3.4 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
30B-SB06	1			0.34			49		NA	NA	4.2 E-4	NA	NA	9.6 E-3	NA	1.0 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
30B-SB06	5			0.84			79		NA	NA	1.0 E-3	NA	NA	1.5 E-2	NA	1.7 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
30B-SB06	11			0.68			75		NA	NA	8.4 E-4	NA	NA	1.5 E-2	NA	1.6 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
30B-SB07	1			0.54			45		NA	NA	6.7 E-4	NA	NA	8.8 E-3	NA	9.5 E-3	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
30B-SB07	5			0.53			73		NA	NA	6.6 E-4	NA	NA	1.4 E-2	NA	1.5 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
30B-SB07	11			0.41			61		NA	NA	5.1 E-4	NA	NA	1.2 E-2	NA	1.2 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
30B-SB08	1			0.4			80		NA	NA	4.9 E-4	NA	NA	1.6 E-2	NA	1.6 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
30B-SB08	5			0.46			250		NA	NA	5.7 E-4	NA	NA	4.9 E-2	NA	4.9 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
30B-SB08	11			0.38			230		NA	NA	4.7 E-4	NA	NA	4.5 E-2	NA	4.5 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
31B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB02	1.5			0.54			77		NA	NA	6.7 E-4	NA	NA	1.5 E-2	NA	1.6 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
31B-SB02	5			0.67			190		NA	NA	8.3 E-4	NA	NA	3.7 E-2	NA	3.8 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
31B-SB02	11			0.76		0.035	120		NA	NA	9.4 E-4	NA	4.9 E-5	2.3 E-2	NA	2.4 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
31B-SD01	0.25						58		NA	NA	NA	NA	NA	1.1 E-2	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD01	1.5						79		NA	NA	NA	NA	NA	1.5 E-2	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	0.25						70		NA	NA	NA	NA	NA	1.4 E-2	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	1.5						75		NA	NA	NA	NA	NA	1.5 E-2	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB02	2			0.37			57		NA	NA	4.6 E-4	NA	NA	1.1 E-2	NA	1.2 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10

		Concentrations (mg/kg)							Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Nam	Depth	Aluminum	Bis(2-ethylhexyl)phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
Unit Hazard		1.1 E-6	8.1 E-5	1.2 E-3	1.6 E-5	1.4 E-3	2.0 E-4	NA																
Unit Risk		NA	8.1 E-9	7.7 E-10	NA	NA	NA	6.3 E-2																
32B-SB02	5			0.18			30		NA	NA	2.2 E-4	NA	NA	5.9 E-3	NA	6.1 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
32B-SB02	11			0.5			56		NA	NA	6.2 E-4	NA	NA	1.1 E-2	NA	1.2 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
32B-SB03	1.5			0.39			48		NA	NA	4.8 E-4	NA	NA	9.4 E-3	NA	9.9 E-3	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
32B-SB03	5			0.69			95		NA	NA	8.5 E-4	NA	NA	1.9 E-2	NA	1.9 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
32B-SB03	11.5			0.5			90		NA	NA	6.2 E-4	NA	NA	1.8 E-2	NA	1.8 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
32B-SB04	1.5			0.35			48		NA	NA	4.3 E-4	NA	NA	9.4 E-3	NA	9.8 E-3	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
32B-SB04	5	69000		0.81			140		7.5 E-2	NA	1.0 E-3	NA	NA	2.7 E-2	NA	1.0 E-1	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
32B-SB04	11.5			0.77			130		NA	NA	9.5 E-4	NA	NA	2.5 E-2	NA	2.6 E-2	NA	NA	6 E-10	NA	NA	NA	NA	6 E-10
32B-SB05	1.5			0.31			60		NA	NA	3.8 E-4	NA	NA	1.2 E-2	NA	1.2 E-2	NA	NA	2 E-10	NA	NA	NA	NA	2 E-10
32B-SB05	5			0.46			97		NA	NA	5.7 E-4	NA	NA	1.9 E-2	NA	2.0 E-2	NA	NA	4 E-10	NA	NA	NA	NA	4 E-10
33B-SB01	1				0.91				NA	NA	NA	1.5 E-5	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	5				4.5				NA	NA	NA	7.4 E-5	NA	NA	NA	7.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	10				2.9				NA	NA	NA	4.8 E-5	NA	NA	NA	4.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	1				2.8				NA	NA	NA	4.6 E-5	NA	NA	NA	4.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	5				6.1				NA	NA	NA	9.9 E-5	NA	NA	NA	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	10				0.71				NA	NA	NA	1.1 E-5	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB03	1.5			3.9			78		NA	NA	4.8 E-3	NA	NA	1.5 E-2	NA	2.0 E-2	NA	NA	3 E-9	NA	NA	NA	NA	3 E-9
33B-SB03	5			0.61		0.75	81		NA	NA	7.5 E-4	NA	1.0 E-3	1.6 E-2	NA	1.8 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
33B-SB03	11			0.41		1.6	75		NA	NA	5.1 E-4	NA	2.2 E-3	1.5 E-2	NA	1.7 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
33B-WS	1			0.63		0.27	99		NA	NA	7.8 E-4	NA	3.8 E-4	1.9 E-2	NA	2.1 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
34B-SB01	1				8.7				NA	NA	NA	1.4 E-4	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	10				4.1				NA	NA	NA	6.7 E-5	NA	NA	NA	6.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB02	1.5			0.44			52		NA	NA	5.4 E-4	NA	NA	1.0 E-2	NA	1.1 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
34B-SB02	11			0.6		0.023	100		NA	NA	7.4 E-4	NA	3.2 E-5	2.0 E-2	NA	2.0 E-2	NA	NA	5 E-10	NA	NA	NA	NA	5 E-10
29B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	0.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	0.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS05	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH11	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0.01								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	0							0.00011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-6	7 E-6
31B-AH01	0.01							0.000080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	5 E-6
31B-AH11	0							0.000080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-6	5 E-6
30B-AH02	0.01							0.000063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	4 E-6
30B-AH02	0							0.000063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	4 E-6
29B-AH01	1							0.000060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-6	4 E-6
30B-AH01	0.01							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	3 E-6
30B-AH01	0							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	3 E-6
34B-AH01	3							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	3 E-6
34B-AH01	0.01							0.000012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	8 E-7
30B-SNS05	0.5							0.0000026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	2 E-7
30B-SNS02	0.5							0.0000022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7	1 E-7
30B-SNS03	0.5							0.00000033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	2 E-8
34B-SNS02	0.5							0.00000030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	2 E-8
30B-SNS03	2.5							0.00000029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	2 E-8
34B-SNS01	0.5							0.00000026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	2 E-8
34B-SNS03	0.5							0.00000025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-8	2 E-8
34B-SNS03	2.5							0.00000024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8	1 E-8
32B-HP05	0.01							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	7 E-10
32B-SB01	0							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	7 E-10
32B-HP05	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	1 E-10
32B-SB01	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10	1 E-10

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.10-31
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																																		
Sample Nam	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride
Unit Hazard		4.9 E+1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1	1.1 E-1	9.8 E+0	3.9 E-1	6.8 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		4.0 E-3	NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA	NA	6.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
30B-SP10	10			7.6				17					75	6.6		7.8	33							27	6.0	7.7	10			13		4.2	12	91	
30B-SP10	20																																			
30B-SP11	10							16	39				240	9.4											7.8	12							11		
30B-SP11	20							26	110				1000	28		11				10		31			34	77	9.0			14		23	28		
30B-SP12	10							18	24				210			7.5						18					7.6			15			6.6		
30B-SP13	10		44	40		13		7.0	110		62		240	28		3.9	20	19		11		24	92	380	38	30	340	88	14	12	18	9.4	510	830	
30B-SP13	20		180	19		7.0		18	190		32	7.0	180	52	13		66	78		30		68	82	1500	68	78	260	71	8.0	10	38	14	610	2500	
30B-SP14	10								32				180	21								15			14	31	11				31	9.4	36		
30B-SP14	20		820	42					50		54			23		25	1700	800		11			68	1800	28	23	250	76			530		330	24000	
30B-SP15	10		69	30		8.0		5.6	110		48		57	33		4.7	4400	22				13	72	910	42	42	270	56	10				480	920	
30B-SP15	16		36	36		13		94	1700	40	64		1600	320		70	280	96				410	220	110	360	1200	650	160	16				1900	96	
30B-SP17	10								32	19			250	4.5																					
30B-SP17	20		11						30				210	48		39							6.8	990	24	72		6.4					50	64	
30B-SP18	10												240	32		6.9								12	9.2	30									4.9
30B-SP19	10								33				200	18		8.4								53	9.1	23		6.5							
30B-SP20	10							21	57	27			1300	26		18				30		190		330	35	98									
30B-SP20	20								29				400	12		6.7							12	1300	11	10		14						63	
30B-SP21	10												130			16						27				4.8							8.4		
30B-SP21	20								49	13			250	5.2		7.5						73				8.8							10		
30B-SP22	10												590	17		5.4	190					22	6.2	980	16	20	13						27	18	
30B-SP22	20								33				500	10			160					33		920	8.7	10	14						17	20	
30B-SP23	10								47				460	5.1		3.8	59					64	5.7	53	7.2	4.8	17	6.0					25	8.6	
30B-SP23	20								34			6.0	220	9.1		8.7	360					41		330	10	14	12						25	39	
32B-SP07	10								56				150	100		26				4.6			8.9	95	24	83	10						90		
32B-SP07	20												77	19		37								1200	200	260						19	34	10	
32B-SP08	10								35				100	25		28									19	69							25		
32B-SP08	17																																5.2		
32B-SP08	20				13				95			9.4	280	90		63						35	6.6	560	460	890	6.8					27	450	13	
32B-SP08	40						27		26	13			160	13		28						19		850	94	280						49	36	14	
32B-SP09	10													16		9.9		16							78	240	5.3						36	8.6	
32B-SP09	20												59	6.4		4.5		12							20	35	6.9					8.4	68		
32B-SP10	10												61	9.7	36	10		30	9.2		12	12			50	130						9.5	23	440	
32B-SP10	20								18	12			130	31		21			5.2	5.4		22			120	280	5.2					20	79	230	
32B-SP11	10		280															94													77			88000	
32B-SP11	20		560															100																130000	
33B-SP09	10		200						20				120	11		7.3		26				19			37	79						26	28	270	
33B-SP09	20		1500		5.3		17						110	11		12		130	5.4			18			48	87						33	27	1300	
33B-SP10	10															8.2									18	13							8.5	7.4	
33B-SP11	10		9.0		15								87	5.0		13		100	160	5.0		41			61	79						13	14	1200	
33B-SP11	20	18	640		34				30	12			130	8.3		25	7.2	640	1000	7.2		36			70	120						11	20	15000	
33B-SP12	10		11										80		30	6.4		26			13			13	12	21					21	12	14	140	
33B-SP12	20		12				20						150	5.9	33	10		22				11			31	72					8.8	23	25	89	
33B-SP13	7.5			55		24		12	160	18	94		380	49		5.7				16		140	130		60	97	500	150	22				590		
33B-SP13	20			54		19		15	220	13	82		310	57		4.9				23		51	130		80	66	500	120	18			13	870		
33B-SP14	10		27000							15000						1600		1600		810						520	550						460	1000000	
33B-SP14	20		28000							11000						1400		1700		530							510							1100000	
33B-SP15	10		440	14					19		11		150	4.7		31		10				12			27	40						6.5	180	920	
33B-SP15	20		17000	12				10	30		10	7.2	420	8.2		22	20			120		16		12	25	130						98	240	4100	
33B-SP16	10													3.7												5.1						7.1			
33B-SP16	20								73				330	12		4.4						12			7.2	15	8.8					12	57		
33B-SP16	32								23				230	34		6.5						18			28	62	6.6					13	35	10	
33B-SP17	6																									6.4						3.8	8.4		
33B-SP17	20		55						32				500									19				5.3							8.8	150	
33B-SP18	7								200	21		6.4	990	18								33	11		20	32	12	7.7				8.1	41		
33B-SP18	20								110	24		29	510	9.4		23						86			16	16	9.1						24		
33B-SP19	10							46			10		88	31	12	12		18		83			22		38	110	80	19					180	360	
33B-SP19	20							34			11									51			41		30	63	140	38					270	45	
33B-SP20	10		1000	68		21			47		85		340	48		23		17	33	16		370	110		38	57	460	120	18				630	16000	
33B-SP20	20		110	98		26		16			110		86	62		5.8				16		13	140		69	57	560	150	22				970	3700	
33B-SP21	10		43000															2100															12000	1700000	
33B-SP21	20		60000															2300															13000	1700000	
35B-SP04	10								51				170	15		14									13	42	5.7						21		
35B-SP04	20								62				200	30		46		190		9.3		16			20	130	7.3					16	23		

Table 5.10-31
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																																		
Sample Nam	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride	HI
Unit Hazard																																				
Unit Risk																																				
30B-SP10	10	NA	NA	1.4 E-4	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	5.5 E-6	3.9 E-5	NA	2.2 E-6	1.3 E-4	NA	NA	NA	NA	NA	NA	1.4 E-7	2.7 E-6	3.5 E-6	1.6 E-5	NA	NA	2.2 E-6	NA	2.9 E-6	7.0 E-6	2.5 E-5	NA	4.1 E-4
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	NA	2.8 E-5	1.3 E-6	NA	NA	NA	1.8 E-5	5.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	5.4 E-6	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	1.2 E-4
30B-SP11	20	NA	NA	NA	NA	NA	NA	2.6 E-5	2.1 E-6	NA	NA	NA	4.4 E-5	9.0 E-5	NA	1.8 E-6	NA	NA	NA	1.6 E-7	NA	3.1 E-6	NA	NA	9.7 E-6	2.1 E-5	8.1 E-6	NA	NA	1.3 E-6	NA	9.1 E-6	9.4 E-6	NA	NA	2.3 E-4
30B-SP12	10	NA	NA	NA	NA	NA	NA	3.2 E-5	8.0 E-7	NA	NA	NA	1.5 E-5	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	1.2 E-5	NA	NA	2.5 E-6	NA	NA	3.9 E-6	NA	NA	7.1 E-5
30B-SP13	10	NA	1.1 E-4	7.5 E-4	NA	2.8 E-4	NA	1.2 E-5	3.7 E-6	NA	1.1 E-4	NA	1.8 E-5	1.7 E-4	NA	1.1 E-6	8.1 E-5	8.4 E-5	NA	3.0 E-7	NA	4.0 E-6	1.4 E-5	2.0 E-6	1.7 E-5	1.4 E-5	5.4 E-4	1.5 E-4	5.2 E-5	2.0 E-6	7.8 E-5	6.4 E-6	3.0 E-4	2.3 E-4	NA	3.0 E-3
30B-SP13	20	NA	2.5 E-4	2.0 E-4	NA	8.5 E-5	NA	1.8 E-5	3.6 E-6	NA	3.2 E-5	2.1 E-7	7.9 E-6	1.7 E-4	6.6 E-6	NA	1.4 E-4	1.9 E-4	NA	4.7 E-7	NA	6.9 E-6	6.9 E-6	4.3 E-6	1.9 E-5	2.1 E-5	2.3 E-4	7.1 E-5	1.6 E-5	9.3 E-7	8.8 E-5	5.5 E-6	2.0 E-4	3.9 E-4	NA	2.2 E-3
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	1.3 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	6.4 E-6	1.4 E-5	1.8 E-5	NA	NA	NA	1.3 E-4	6.4 E-6	2.1 E-5	NA	NA	3.4 E-4
30B-SP14	20	NA	1.2 E-3	4.4 E-4	NA	NA	NA	NA	9.5 E-7	NA	5.4 E-5	NA	NA	7.4 E-5	NA	4.2 E-6	3.7 E-3	2.0 E-3	NA	1.7 E-7	NA	NA	5.7 E-6	5.2 E-6	8.0 E-6	6.3 E-6	2.3 E-4	7.6 E-5	NA	NA	1.2 E-3	NA	1.1 E-4	3.7 E-3	NA	1.3 E-2
30B-SP15	10	NA	1.8 E-4	5.6 E-4	NA	1.7 E-4	NA	9.8 E-6	3.7 E-6	NA	8.4 E-5	NA	4.2 E-6	1.9 E-4	NA	1.4 E-6	1.8 E-2	9.8 E-5	NA	NA	NA	2.1 E-6	1.1 E-5	4.9 E-6	1.9 E-5	1.9 E-5	4.3 E-4	9.8 E-5	3.7 E-5	NA	NA	NA	2.8 E-4	2.5 E-4	NA	2.0 E-2
30B-SP15	16	NA	6.2 E-5	4.4 E-4	NA	1.9 E-4	NA	1.1 E-4	3.8 E-5	5.3 E-4	7.5 E-5	NA	8.1 E-5	1.3 E-3	NA	1.4 E-5	7.5 E-4	2.9 E-4	NA	NA	NA	4.8 E-5	2.3 E-5	3.9 E-7	1.2 E-4	3.9 E-4	6.8 E-4	1.9 E-4	3.9 E-5	NA	NA	NA	7.4 E-4	1.7 E-5	NA	6.1 E-3
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	3.7 E-4	NA	NA	1.8 E-5	2.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4
30B-SP17	20	NA	1.6 E-5	NA	NA	NA	NA	NA	5.7 E-7	NA	NA	NA	9.2 E-6	1.5 E-4	NA	6.5 E-6	NA	NA	NA	NA	NA	NA	5.7 E-7	2.9 E-6	6.9 E-6	2.0 E-5	NA	6.4 E-6	NA	NA	NA	NA	1.7 E-5	9.9 E-6	NA	2.5 E-4
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	1.9 E-4	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	4.2 E-6	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	2.4 E-4
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	1.5 E-5	1.1 E-4	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	4.1 E-6	1.0 E-5	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-4
30B-SP20	10	NA	NA	NA	NA	NA	NA	3.7 E-5	1.9 E-6	5.3 E-4	NA	NA	9.6 E-5	1.5 E-4	NA	5.2 E-6	NA	NA	NA	8.2 E-7	NA	3.1 E-5	NA	1.8 E-6	1.6 E-5	4.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-4
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	5.5 E-7	NA	NA	NA	1.7 E-5	3.9 E-5	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	1.0 E-6	3.8 E-6	3.1 E-6	2.7 E-6	NA	1.4 E-5	NA	NA	NA	NA	NA	9.8 E-6	NA	9.2 E-5
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-6	NA	NA	4.6 E-6	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	4.9 E-6	NA	NA	2.6 E-5
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	9.3 E-7	1.5 E-4	NA	NA	1.1 E-5	1.7 E-5	NA	1.3 E-6	NA	NA	NA	NA	NA	7.4 E-6	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	3.4 E-6	NA	NA	1.9 E-4
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	1.0 E-4	NA	1.6 E-6	7.7 E-4	NA	NA	NA	NA	3.6 E-6	9.7 E-7	5.2 E-6	7.3 E-6	9.1 E-6	2.1 E-5	NA	NA	NA	NA	NA	1.6 E-5	4.9 E-6	NA	9.8 E-4
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	6.3 E-7	NA	NA	NA	2.2 E-5	3.2 E-5	NA	NA	3.5 E-4	NA	NA	NA	NA	3.3 E-6	NA	2.7 E-6	2.5 E-6	2.7 E-6	1.3 E-5	NA	NA	NA	NA	NA	5.7 E-6	3.1 E-6	NA	4.4 E-4
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	3.4 E-5	3.0 E-5	NA	1.1 E-6	2.4 E-4	NA	NA	NA	NA	1.1 E-5	8.9 E-7	2.8 E-7	3.3 E-6	2.2 E-6	2.7 E-5	1.1 E-5	NA	NA	NA	NA	1.5 E-5	2.4 E-6	NA	3.8 E-4
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	6.5 E-7	NA	NA	1.8 E-7	9.6 E-6	2.9 E-5	NA	1.5 E-6	7.8 E-4	NA	NA	NA	NA	4.2 E-6	NA	9.5 E-7	2.9 E-6	3.8 E-6	1.1 E-5	NA	NA	NA	NA	NA	8.4 E-6	6.0 E-6	NA	8.6 E-4
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	1.1 E-5	5.9 E-4	NA	7.5 E-6	NA	NA	NA	1.3 E-7	NA	NA	1.4 E-6	5.1 E-7	1.1 E-5	3.8 E-5	1.6 E-5	NA	NA	NA	NA	NA	5.3 E-5	NA	NA	7.3 E-4
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-6	6.1 E-5	NA	6.2 E-6	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	5.7 E-5	7.1 E-5	NA	NA	NA	NA	NA	7.5 E-6	1.1 E-5	1.6 E-6	NA	2.2 E-4
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	7.4 E-6	1.5 E-4	NA	8.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-6	3.1 E-5	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	2.2 E-4
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	1.9 E-6
32B-SP08	20	NA	NA	NA	3.0 E-4	NA	NA	NA	1.8 E-6	NA	NA	2.8 E-7	1.2 E-5	2.9 E-4	NA	1.1 E-5	NA	NA	NA	NA	NA	3.6 E-6	5.5 E-7	1.6 E-6	1.3 E-4	2.4 E-4	6.1 E-6	NA	NA	NA	NA	1.1 E-5	1.5 E-4	2.0 E-6	NA	1.2 E-3
32B-SP08	40	NA	NA	NA	NA	NA	5.4 E-7	NA	2.5 E-7	7.4 E-5	NA	NA	3.6 E-6	2.2 E-5	NA	2.4 E-6	NA	NA	NA	NA	NA	1.0 E-6	NA	1.3 E-6	1.4 E-5	4.3 E-5	NA	NA	NA	NA	NA	9.8 E-6	6.0 E-6	1.1 E-6	NA	1.8 E-4
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-5	NA	2.9 E-6	NA	7.1 E-5	NA	NA	NA	NA	NA	NA	3.5 E-5	1.1 E-4	8.4 E-6	NA	NA	NA	NA	NA	2.1 E-5	2.4 E-6	NA	3.4 E-4
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	2.1 E-5	NA	7.5 E-7	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	5.7 E-6	9.6 E-6	6.2 E-6	NA	NA	NA	NA	3.3 E-6	2.3 E-5	NA	NA	1.0 E-4
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	5.7 E-5	3.6 E-5	2.9 E-6	NA	1.3 E-4	4.0 E-5	NA	8.1 E-6	2.0 E-6	NA	NA	2.3 E-5	5.9 E-5	NA	NA	NA	NA	NA	6.4 E-6	1.3 E-5	1.2 E-4	NA	5.1 E-4
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	1.4 E-4	NA	NA	5.7 E-6	1.0 E-4	NA	3.5 E-6	NA	NA	1.2 E-5	8.4 E-8	NA	2.2 E-6	NA	NA	3.4 E-5	7.7 E-5	4.7 E-6	NA	NA	NA	NA	7.9 E-6	2.6 E-5	3.6 E-5	NA	4.5 E-4
32B-SP11	10	NA	7.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-4	NA	NA	2.4 E-2	NA	2.6 E-2
32B-SP11	20	NA	7.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	2.1 E-2
33B-SP09	10	NA	5.2 E-4	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	NA	8.8 E-6	6.5 E-5	NA	2.1 E-6	NA	1.2 E-4	NA	NA	NA	3.1 E-6	NA	NA	1.7 E-5	3.6 E-5	NA	NA	NA	NA	NA	1.8 E-5	1.6 E-5	7.4 E-5	NA	8.7 E-4
33B-SP09	20	NA	2.1 E-3	NA	1.2 E-4	NA	6.7 E-7	NA	NA	NA	NA	NA	4.8 E-6	3.5 E-5	NA	2.0 E-6	NA	3.2 E-4	1.3 E-5	NA	NA	1.8 E-6	NA	NA	1.4 E-5	2.4 E-5	NA	NA	NA	NA	NA	1.3 E-5	9.0 E-6	2.0 E-4	NA	2.9 E-3
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-6	5.9 E-6	NA	NA	NA	NA	NA	NA	5.0 E-6	2.0 E-6	NA	2.3 E-5
33B-SP11	10	NA	2.3 E-5	NA	6.2 E-4	NA	NA	NA	NA	NA	NA	NA	6.4 E-6	2.9 E-5	NA	3.7 E-6	NA	4.4 E-4	7.0 E-4	1.4 E-7	NA	6.8 E-6	NA	NA	2.8 E-5	3.6 E-5	NA	NA	NA	NA	NA	8.8 E-6	8.2 E-6	3.3 E-4	NA	2.2 E-3
33B-SP11	20	1.2 E-4	9.0 E-4	NA	7.8 E-4	NA	NA	NA	5.7 E-7	1.4 E-4	NA	NA	5.7 E-6	2.7 E-5	NA	4.2 E-6	1.6 E-5	1.6 E-3	2.4 E-3	1.1 E-7	NA	3.7 E-6	NA	NA	2.0 E-5	3.3 E-5	NA	NA	NA	NA	NA	4.3 E-6	6.7 E-6	2.3 E-3	NA	8.3 E-3
33B-SP12	10	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-6	NA	3.0 E-5	1.8 E-6	NA	1.2 E-4	NA	NA	8.8 E-6	NA	NA	7.0 E-8	5.4 E-6	9.5 E-6	NA	NA	NA	NA	9.1 E-5	8.1 E-6	8.2 E-6	3.8 E-5	NA	3.5 E-4
33B-SP12	20	NA	1.7 E-5	NA	NA	NA	7.9 E-7	NA	NA	NA	NA	NA	6.5 E-6	1.9 E-5	1.7 E-5	1.7 E-6	NA	5.4 E-5	NA	NA	NA	1.1 E-6	NA	NA	8.9 E-6	2.0 E-5	NA	NA	NA	NA	2.0 E-5	9.1 E-6	8.4 E-6	1.4 E-5	NA	2.0 E-4
33B-SP13	7.5	NA	NA	1.3 E-3	NA	6.7 E-4	NA	2.7 E-5	6.8 E-6	4.5 E-4	2.1 E-4	NA	3.5 E-5	3.6 E-4	NA	2.1 E-6	NA	NA	NA	5.6 E-7	NA	2.8 E-5	2.6 E-5	NA	3.3 E-5	5.3 E-5	1.0 E-3	3.3 E-4	1.0 E-4	NA	NA	NA	4.4 E-4	NA	NA	5.1 E-3
33B-SP13	20	NA	NA	5.6 E-4	NA	2.3 E-4	NA	1.5 E-5	4.2 E-6	1.5 E-4	8.2 E-5	NA	1.4 E-5	1.8 E-4	NA	8.2 E-7	NA	NA	NA	3.6 E-7	NA	5.2 E-6	1.1 E-5	NA	2.3 E-5	1.8 E-5	4.5 E-4	1.2 E-4	3.7 E-5	NA	NA	5.1 E-6	2.9 E-4	NA	NA	2.2 E-3
33B-SP14	10	NA	7.0 E-2	NA	NA	NA	NA	NA	NA	3.0 E-1	NA	NA	NA	NA	NA	4.6 E-4	NA	7.1 E-3	NA	2.2 E-5	NA	NA	NA	NA	NA	2.4 E-4	8.8 E-4	NA	NA	NA	NA	NA	2.7 E-4	2.7 E-1	NA	6.5 E-1
33B-SP14	20	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	2.3 E-4	NA	4.2 E-3	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	4.6 E-4	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	3.4 E-1
33B-SP15	10	NA	1.1 E-3	2.6 E-4	NA	NA	NA	NA	6.3 E-7	NA	1.9 E-5	NA	1.1 E-5	2.8 E-5	NA	8.9 E-6	NA	4.4 E-5	NA	NA	NA	2.0 E-6	NA	NA	1.2 E-5	1.8 E-5	NA	NA	NA	NA	NA	4.4 E-6	1.1 E-4	2.5 E-4	NA	1.9 E-3
33B-SP15	20	NA	2.4 E-2	1.2 E-4	NA	NA	NA	1.0 E-5	5.7 E-7	NA	1.0 E-5	2.1 E-7	1.8 E-5	2.6 E-5	NA	3.7 E-6	4.4 E-5	NA	NA	1.9 E-6	NA	1.6 E-6	NA	3.5 E-8	7.1 E-6	3.6 E-5	NA	NA	NA	NA	NA	3.9 E-5	8.0 E-5	6.4 E-4	NA	2.5 E-2
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	NA	4.8 E-6	NA	NA	NA	2.9 E-5
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	1.4 E-5	3.9 E-5	NA	7.4 E-7	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	2.1 E-6	4.1 E-6	7.9 E-6	NA	NA	NA	NA	4.7 E-6	1.9 E-5	NA	NA	9.4 E-5
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	NA	6.3 E-6	7.1 E-5	NA	6.8 E-7	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	5.2 E-6	1.2 E-5	3.7 E-6	NA	NA	NA	NA	3.2 E-6	7.2 E-6	9.5 E-7	NA	1.1 E-4
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	3.8 E-6	7.4 E-6	NA	NA	1.5 E-5
33B-SP17	20	NA	7.8 E-5	NA	NA	NA	NA	NA	6.1 E-7	NA	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	1.5 E-6	NA	NA	NA	NA	NA	NA	2.9 E-6	2.3 E-5	NA	1.3 E-4
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	8.9 E-6	5.5 E-4	NA	4.5 E-7	9.4 E-5	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	2.3 E-6	NA	1.1 E-5	1.8 E-5	2.6 E-5	1.8 E-5	NA	NA	NA	7.2 E-6	3.2 E-5	NA	NA	9.2 E-4
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	2.7 E-4	NA	8.5 E-7	2.2 E-5	3.0 E-5	NA	3.9 E-6	NA	NA	NA	NA	NA	8.7 E-6	NA	NA	4.6 E-6	4.4 E-6	8.2 E-6	NA	NA	NA	NA	NA	8.0 E-6	NA	NA	3.6 E-4
33B-SP19	10	NA	NA	NA	NA	NA	NA	8.1 E-5	NA	NA	1.8 E-5	NA	6.5 E-6	1.8 E-4	1.2 E-5	3.5 E-6	NA	8.0 E-5	NA	2.3 E-6	NA	NA	3.4 E-6	NA	1.7 E-5	5.0 E-5	1.3 E-4	3.3 E-5	NA	NA	NA	NA	1.1 E-4	9.8 E-5	NA	8.2 E-4
33B-SP19	20	NA	NA	NA	NA	NA	NA	3.4 E-5	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-7	NA	NA	3.4 E-6	NA	8.6 E-6	1.7 E-5	1.3 E-4	3.8 E-5	NA	NA	NA	NA	9.0 E-5	7.0 E-6	NA	3.4 E-4
33B-SP20	10	NA	2.6 E-3	1.3 E-3	NA	4.6 E-4	NA	NA	1.6 E-6	NA	1.5 E-4	NA	2.5 E-5	2.8 E-4	NA	6.6 E-6	NA	7.5 E-5	1.4 E-4	4.4 E-7	NA	6.1 E-5	1.7 E-5	NA	1.7 E-5	2.6 E-5	7.3 E-4	2.1 E-4	6.7 E-5	NA	NA	NA	3.7 E-4	4.4 E-3	NA	1.1 E-2
33B-SP20	20	NA	1.6 E-4	1.0 E-3	NA	3.2 E-4	NA	1.6 E-5	NA	NA	1.1 E-4	NA	3.8 E-6	2.0 E-4	NA	9.7 E-7	NA	NA	NA	2.5 E-7	NA	1.3 E-6	1.2 E-5	NA	2.0 E-5	1.6 E-5	5.0 E-4	1.5 E-4	4.5 E-5	NA	NA	NA	3.2 E-4	5.7 E-4	NA	3.5 E-3
33B-SP21	10	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	4.6 E-1	NA	5.9 E-1
33B-SP21	20	NA	8.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-3	2.6 E-1	NA	3.6 E-1
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	1.3 E-5	8.8 E-5	NA	4.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-6	1.9 E-5	9.1 E-6	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	1.5 E-4
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	8.7 E-6	9.7 E-5	NA	7.7 E-6	NA	4.7 E-4	NA	1.4 E-7	NA	1.6 E-6	NA	NA	5.7 E-6	3.6 E-5	6.6 E-6	NA	NA	NA	NA	6.3 E-6	7.7 E-6	NA	NA	6.5 E-4

Table 5.10-31
Location-Specific Soil Vapor to Indoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																																	
Sample Nam	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	ILCR
Unit Hazard																																					
Unit Risk																																					
30B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	8.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-10	NA	1.1 E-8	NA	1E-7
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+0
30B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-8
30B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	3E-8
30B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+0
30B-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	NA	NA	4.9 E-8	3.2 E-8	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	NA	NA	NA	NA	5.8 E-9	1.3 E-9	NA	9.6 E-8	NA	2E-7
30B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-8	6.1 E-9	NA	8.8 E-8	7.2 E-8	NA	NA	NA	NA	6.1 E-9	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	1.2 E-9	NA	1.6 E-7	NA	4E-7
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	1.3 E-9	NA	NA	NA	5E-8
30B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	2.3 E-6	7.4 E-7	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	1.6 E-6	NA	5E-6
30B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-8	NA	NA	1.1 E-5	3.6 E-8	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	1E-5
30B-SP15	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	4.6 E-7	1.1 E-7	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-9	NA	1E-6
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8E-9
30B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	5E-8
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	9E-8
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-8
30B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5E-8
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-9	NA	2E-8
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+0
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5E-9
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	4.7 E-7	NA	NA	NA	NA	NA	8.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	5E-7
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	2E-7
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-9	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	2E-7
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-9	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	5E-7
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2E-7
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	6.6 E-10	NA	2E-8
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5E-8
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0E+0
32B-SP08	20	NA	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	8.6 E-10	NA	1E-7
32B-SP08	40	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	4.6 E-10	NA	1E-8
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	6E-8
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-9	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	2E-8
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-8	3.3 E-8	NA	NA	5.0 E-8	NA	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	5.1 E-8	NA	2E-7
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	1.5 E-8	NA	5E-8
32B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	1.0 E-5	NA	1E-5
32B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-6	NA	9E-6
33B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-9	NA	3.1 E-8	NA	1E-7
33B-SP09	20	NA	NA	NA	5.5 E-9	NA	5.5 E-9	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	8.6 E-8	NA	2E-7
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-10	NA	9E-10
33B-SP11	10	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-9	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	1.4 E-7	NA	3E-7
33B-SP11	20	9.6 E-9	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-9	NA	NA	9.6 E-9	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-10	NA	9.9 E-7	NA	2E-6
33B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	4.3 E-8	NA	NA	5.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	1.7 E-9	NA	1.6 E-8	NA	1E-7
33B-SP12	20	NA	NA	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	5.8 E-9	1.6 E-8	NA	NA	2.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	1.9 E-9	NA	5.9 E-9	NA	6E-8
33B-SP13	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-7
33B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	7E-8
33B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	1E-4
33B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-5	NA	7E-5
33B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-9	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-10	NA	1.1 E-7	NA	1E-7
33B-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-9	NA	2.7 E-7	NA	3E-7
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	8E-9
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	NA	1E-8
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-10	NA	4.1 E-10	NA	2E-8
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	8E-10
33B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-9	NA	1E-8
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	5E-8
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9E-9
33B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-8	1.1 E-8	NA	NA	3.0 E-8	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	1E-7
33B-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	6E-9
33B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	2E-6
33B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	3E-7
33B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	2E-4
33B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	1E-4
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3E-8
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	2E-7

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to indoor air attenuation factor (from Table 5.10-8) x the unit hazard or unit risk for the chemical).

Table 5.10-32
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																																	
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride
Unit Hazard		4.9 E+1	9.8 E+0	9.8 E+1	1.4 E+2	1.2 E+2	2.3 E-1	6.8 E+0	1.4 E-1	7.5 E+1	6.8 E+0	2.3 E-1	2.2 E-1	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1	1.1 E-1	9.8 E+0	3.9 E-1	6.8 E-1	2.3 E-2	9.8 E-1	9.8 E-1	6.8 E+0	6.8 E+0	2.0 E+1	7.6 E-1	2.0 E+1	2.3 E+0	2.3 E+0	1.2 E+0	6.8 E+0
Unit Risk		4.0 E-3	NA	NA	6.4 E-3	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA	NA	6.6 E-3	NA	6.1 E-4	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	4.8 E-4	NA	4.9 E-4	1.9 E-2
30B-SP10	10			7.6				17					75	6.6		7.8	33							27	6.0	7.7	10			13		4.2	12	91	
30B-SP10	20																																		
30B-SP11	10							16	39				240	9.4											7.8	12							11		
30B-SP11	20							26	110				1000	28		11				10		31			34	77	9.0			14		23	28		
30B-SP12	10							18	24				210			7.5						18					7.6			15			6.6		
30B-SP13	10		44	40		13		7.0	110		62		240	28		3.9	20	19		11		24	92	380	38	30	340	88	14	12	18	9.4	510	830	
30B-SP13	20		180	19		7.0		18	190		32	7.0	180	52	13		66	78		30		68	82	1500	68	78	260	71	8.0	10	38	14	610	2500	
30B-SP14	10								32				180	21								15			14	31	11				31	9.4	36		
30B-SP14	20		820	42					50		54			23		25	1700	800		11			68	1800	28	23	250	76			530		330	24000	
30B-SP15	10		69	30		8.0		5.6	110		48		57	33		4.7	4400	22				13	72	910	42	42	270	56	10				480	920	
30B-SP15	16		36	36		13		94	1700	40	64		1600	320		70	280	96				410	220	110	360	1200	650	160	16				1900	96	
30B-SP17	10								32	19			250	4.5																					
30B-SP17	20		11						30				210	48		39							6.8	990	24	72		6.4					50	64	
30B-SP18	10												240	32		6.9								12	9.2	30									4.9
30B-SP19	10								33				200	18		8.4								53	9.1	23		6.5							
30B-SP20	10							21	57	27			1300	26		18				30		190		330	35	98									
30B-SP20	20								29				400	12		6.7							12	1300	11	10		14						63	
30B-SP21	10												130			16						27				4.8							8.4		
30B-SP21	20								49	13			250	5.2		7.5						73				8.8							10		
30B-SP22	10												590	17		5.4	190					22	6.2	980	16	20	13						27	18	
30B-SP22	20								33				500	10			160					33		920	8.7	10	14						17	20	
30B-SP23	10								47				460	5.1		3.8	59					64	5.7	53	7.2	4.8	17	6.0					25	8.6	
30B-SP23	20								34			6.0	220	9.1		8.7	360					41		330	10	14	12						25	39	
32B-SP07	10								56				150	100		26				4.6			8.9	95	24	83	10						90		
32B-SP07	20												77	19		37								1200	200	260						19	34	10	
32B-SP08	10								35				100	25		28									19	69							25		
32B-SP08	17																																5.2		
32B-SP08	20				13				95			9.4	280	90		63						35	6.6	560	460	890	6.8					27	450	13	
32B-SP08	40						27		26	13			160	13		28						19		850	94	280						49	36	14	
32B-SP09	10													16		9.9		16							78	240	5.3						36	8.6	
32B-SP09	20												59	6.4		4.5		12							20	35	6.9					8.4	68		
32B-SP10	10												61	9.7	36	10		30	9.2		12	12			50	130						9.5	23	440	
32B-SP10	20								18	12			130	31		21			5.2	5.4		22			120	280	5.2					20	79	230	
32B-SP11	10		280															94													77			88000	
32B-SP11	20		560															100																130000	
33B-SP09	10		200						20				120	11		7.3		26				19			37	79						26	28	270	
33B-SP09	20		1500		5.3		17						110	11		12		130	5.4			18			48	87						33	27	1300	
33B-SP10	10															8.2									18	13							8.5	7.4	
33B-SP11	10		9.0		15								87	5.0		13		100	160	5.0		41			61	79						13	14	1200	
33B-SP11	20	18	640		34				30	12			130	8.3		25	7.2	640	1000	7.2		36			70	120						11	20	15000	
33B-SP12	10		11										80		30	6.4		26			13			13	12	21					21	12	14	140	
33B-SP12	20		12				20						150	5.9	33	10		22				11			31	72					8.8	23	25	89	
33B-SP13	7.5			55		24		12	160	18	94		380	49		5.7				16		140	130		60	97	500	150	22				590		
33B-SP13	20			54		19		15	220	13	82		310	57		4.9				23		51	130		80	66	500	120	18			13	870		
33B-SP14	10		27000							15000						1600		1600		810						520	550						460	1000000	
33B-SP14	20		28000							11000						1400		1700		530							510							1100000	
33B-SP15	10		440	14					19		11		150	4.7		31		10				12			27	40						6.5	180	920	
33B-SP15	20		17000	12				10	30		10	7.2	420	8.2		22	20			120		16		12	25	130						98	240	4100	
33B-SP16	10													3.7												5.1						7.1			
33B-SP16	20								73				330	12		4.4						12			7.2	15	8.8					12	57		
33B-SP16	32								23				230	34		6.5						18			28	62	6.6					13	35	10	
33B-SP17	6																									6.4						3.8	8.4		
33B-SP17	20		55						32				500									19				5.3							8.8	150	
33B-SP18	7								200	21		6.4	990	18								33	11		20	32	12	7.7				8.1	41		
33B-SP18	20								110	24		29	510	9.4		23						86			16	16	9.1						24		
33B-SP19	10							46			10		88	31	12	12		18		83			22		38	110	80	19					180	360	
33B-SP19	20							34			11									51			41		30	63	140	38					270	45	
33B-SP20	10		1000	68		21			47		85		340	48		23		17	33	16		370	110		38	57	460	120	18				630	16000	
33B-SP20	20		110	98		26		16			110		86	62		5.8				16		13	140		69	57	560	150	22				970	3700	
33B-SP21	10		43000															2100															12000	1700000	
33B-SP21	20		60000															2300															13000	1700000	
35B-SP04	10								51				170	15		14									13	42	5.7						21		
35B-SP04	20								62				200	30		46		190		9.3		16			20	130	7.3					16	23		

Table 5.10-32
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																																		
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard																																				
Unit Risk																																				
30B-SP10	10	NA	NA	3.6 E-6	NA	NA	NA	8.1 E-7	NA	NA	NA	NA	1.6 E-7	1.1 E-6	NA	6.3 E-8	3.5 E-6	NA	NA	NA	NA	NA	NA	3.8 E-9	3.2 E-8	1.2 E-7	4.2 E-7	NA	NA	5.6 E-8	NA	8.0 E-8	1.9 E-7	6.6 E-7	NA	1.1 E-5
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	NA	7.6 E-7	3.4 E-8	NA	NA	NA	5.2 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	1.9 E-7	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	3.2 E-6
30B-SP11	20	NA	NA	NA	NA	NA	NA	6.2 E-7	4.9 E-8	NA	NA	NA	1.1 E-6	2.2 E-6	NA	4.5 E-8	NA	NA	NA	3.6 E-9	NA	7.6 E-8	NA	NA	9.1 E-8	6.0 E-7	1.9 E-7	NA	NA	3.0 E-8	NA	2.2 E-7	2.2 E-7	NA	NA	5.5 E-6
30B-SP12	10	NA	NA	NA	NA	NA	NA	8.6 E-7	2.1 E-8	NA	NA	NA	4.5 E-7	NA	NA	6.1 E-8	NA	NA	NA	NA	NA	8.8 E-8	NA	NA	NA	NA	3.2 E-7	NA	NA	6.5 E-8	NA	NA	1.0 E-7	NA	NA	2.0 E-6
30B-SP13	10	NA	3.1 E-6	1.9 E-5	NA	7.2 E-6	NA	3.3 E-7	9.7 E-8	NA	3.0 E-6	NA	5.2 E-7	4.5 E-6	NA	3.2 E-8	2.1 E-6	2.4 E-6	NA	8.0 E-9	NA	1.2 E-7	3.8 E-7	5.4 E-8	2.0 E-7	4.7 E-7	1.4 E-5	4.2 E-6	1.3 E-6	5.2 E-8	2.0 E-6	1.8 E-7	8.1 E-6	6.0 E-6	NA	8.0 E-5
30B-SP13	20	NA	6.3 E-6	4.5 E-6	NA	1.9 E-6	NA	4.3 E-7	8.4 E-8	NA	7.6 E-7	4.8 E-9	1.9 E-7	4.2 E-6	1.5 E-7	NA	3.5 E-6	4.9 E-6	NA	1.1 E-8	NA	1.7 E-7	1.7 E-7	1.1 E-7	1.8 E-7	6.1 E-7	5.5 E-6	1.7 E-6	3.8 E-7	2.2 E-8	2.1 E-6	1.3 E-7	4.8 E-6	9.1 E-6	NA	5.2 E-5
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	NA	3.9 E-7	3.4 E-6	NA	NA	NA	NA	NA	NA	NA	7.4 E-8	NA	NA	7.5 E-8	4.8 E-7	4.6 E-7	NA	NA	NA	3.5 E-6	1.8 E-7	5.7 E-7	NA	NA	9.1 E-6
30B-SP14	20	NA	2.9 E-5	9.9 E-6	NA	NA	NA	NA	2.2 E-8	NA	1.3 E-6	NA	NA	1.8 E-6	NA	1.0 E-7	9.1 E-5	5.0 E-5	NA	4.0 E-9	NA	NA	1.4 E-7	1.3 E-7	7.5 E-8	1.8 E-7	5.3 E-6	1.8 E-6	NA	NA	3.0 E-5	NA	2.6 E-6	8.7 E-5	NA	3.1 E-4
30B-SP15	10	NA	4.9 E-6	1.4 E-5	NA	4.4 E-6	NA	2.7 E-7	9.7 E-8	NA	2.3 E-6	NA	1.2 E-7	5.3 E-6	NA	3.8 E-8	4.7 E-4	2.8 E-6	NA	NA	NA	6.4 E-8	3.0 E-7	1.3 E-7	2.2 E-7	6.6 E-7	1.1 E-5	2.7 E-6	9.4 E-7	NA	NA	NA	7.6 E-6	6.7 E-6	NA	5.3 E-4
30B-SP15	16	NA	1.6 E-6	1.1 E-5	NA	4.5 E-6	NA	2.8 E-6	9.4 E-7	1.3 E-5	1.9 E-6	NA	2.2 E-6	3.2 E-5	NA	3.6 E-7	1.9 E-5	7.5 E-6	NA	NA	NA	1.3 E-6	5.6 E-7	9.7 E-9	1.2 E-6	1.2 E-5	1.7 E-5	4.8 E-6	9.4 E-7	NA	NA	NA	1.9 E-5	4.4 E-7	NA	1.5 E-4
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	2.8 E-8	9.8 E-6	NA	NA	5.4 E-7	7.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5
30B-SP17	20	NA	3.9 E-7	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	2.3 E-7	3.8 E-6	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	1.4 E-8	7.0 E-8	6.4 E-8	5.6 E-7	NA	1.5 E-7	NA	NA	NA	NA	4.0 E-7	2.3 E-7	NA	6.1 E-6
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	5.1 E-6	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	4.9 E-8	4.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	6.4 E-6
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	NA	4.3 E-7	2.9 E-6	NA	6.8 E-8	NA	NA	NA	NA	NA	NA	NA	7.5 E-9	4.9 E-8	3.6 E-7	NA	3.1 E-7	NA	NA	NA	NA	NA	NA	NA	4.1 E-6
30B-SP20	10	NA	NA	NA	NA	NA	NA	1.0 E-6	5.0 E-8	1.4 E-5	NA	NA	2.8 E-6	4.2 E-6	NA	1.5 E-7	NA	NA	NA	2.2 E-8	NA	9.3 E-7	NA	4.7 E-8	1.9 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	1.3 E-8	NA	NA	NA	4.3 E-7	9.6 E-7	NA	2.7 E-8	NA	NA	NA	NA	NA	NA	2.5 E-8	9.2 E-8	2.9 E-8	7.8 E-8	NA	3.3 E-7	NA	NA	NA	NA	NA	2.3 E-7	NA	2.2 E-6
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-7	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	NA	7.5 E-7
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	2.2 E-8	3.4 E-6	NA	NA	2.7 E-7	4.2 E-7	NA	3.0 E-8	NA	NA	NA	NA	NA	1.8 E-7	NA	NA	NA	6.9 E-8	NA	NA	NA	NA	NA	NA	7.9 E-8	NA	NA	4.4 E-6
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	2.7 E-6	NA	4.4 E-8	2.0 E-5	NA	NA	NA	NA	1.1 E-7	2.5 E-8	1.4 E-7	8.6 E-8	3.1 E-7	5.5 E-7	NA	NA	NA	NA	NA	4.3 E-7	1.3 E-7	NA	2.6 E-5
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	NA	5.4 E-7	8.0 E-7	NA	NA	8.5 E-6	NA	NA	NA	NA	8.1 E-8	NA	6.5 E-8	2.3 E-8	7.8 E-8	2.9 E-7	NA	NA	NA	NA	NA	1.3 E-7	7.3 E-8	NA	1.1 E-5
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	4.2 E-8	NA	NA	NA	9.9 E-7	8.2 E-7	NA	3.1 E-8	6.3 E-6	NA	NA	NA	NA	3.1 E-7	2.3 E-8	7.5 E-9	3.8 E-8	7.5 E-8	7.2 E-7	2.9 E-7	NA	NA	NA	NA	4.0 E-7	6.2 E-8	NA	1.0 E-5
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	1.5 E-8	NA	NA	4.1 E-9	2.4 E-7	7.3 E-7	NA	3.5 E-8	1.9 E-5	NA	NA	NA	NA	1.0 E-7	NA	2.3 E-8	2.7 E-8	1.1 E-7	2.5 E-7	NA	NA	NA	NA	NA	2.0 E-7	1.4 E-7	NA	2.1 E-5
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	3.2 E-7	1.6 E-5	NA	2.1 E-7	NA	NA	NA	3.4 E-9	NA	NA	3.7 E-8	1.3 E-8	1.3 E-7	1.3 E-6	4.2 E-7	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	2.0 E-5
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	1.5 E-6	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	5.3 E-7	2.0 E-6	NA	NA	NA	NA	NA	1.8 E-7	2.7 E-7	3.6 E-8	NA	4.9 E-6
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	2.2 E-7	4.0 E-6	NA	2.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	1.1 E-6	NA	NA	NA	NA	NA	NA	4.0 E-7	NA	NA	6.0 E-6
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	NA	4.9 E-8
32B-SP08	20	NA	NA	NA	7.5 E-6	NA	NA	NA	4.2 E-8	NA	NA	6.4 E-9	3.0 E-7	7.2 E-6	NA	2.6 E-7	NA	NA	NA	NA	NA	8.6 E-8	1.4 E-8	4.0 E-8	1.2 E-6	7.0 E-6	1.4 E-7	NA	NA	NA	NA	2.6 E-7	3.6 E-6	4.7 E-8	NA	2.8 E-5
32B-SP08	40	NA	NA	NA	NA	NA	1.2 E-8	NA	5.7 E-9	1.7 E-6	NA	NA	8.6 E-8	5.2 E-7	NA	5.7 E-8	NA	NA	NA	NA	NA	2.3 E-8	NA	3.0 E-8	1.3 E-7	1.1 E-6	NA	NA	NA	NA	NA	2.3 E-7	1.4 E-7	2.5 E-8	NA	4.0 E-6
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	8.0 E-8	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	4.2 E-7	3.8 E-6	2.2 E-7	NA	NA	NA	NA	NA	5.7 E-7	6.2 E-8	NA	9.7 E-6
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	5.1 E-7	NA	1.8 E-8	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	5.3 E-8	2.7 E-7	1.5 E-7	NA	NA	NA	NA	8.0 E-8	5.4 E-7	NA	NA	2.4 E-6
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	1.6 E-6	8.4 E-7	8.1 E-8	NA	3.8 E-6	1.1 E-6	NA	1.8 E-7	5.9 E-8	NA	NA	2.7 E-7	2.0 E-6	NA	NA	NA	NA	NA	1.8 E-7	3.6 E-7	3.2 E-6	NA	1.4 E-5
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	8.0 E-9	3.1 E-6	NA	NA	1.4 E-7	2.5 E-6	NA	8.5 E-8	NA	NA	3.0 E-7	2.0 E-9	NA	5.4 E-8	NA	NA	3.2 E-7	2.2 E-6	1.1 E-7	NA	NA	NA	NA	1.9 E-7	6.3 E-7	8.4 E-7	NA	1.0 E-5
32B-SP11	10	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-6	NA	NA	6.4 E-4	NA	6.8 E-4
32B-SP11	20	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-4	NA	5.0 E-4
33B-SP09	10	NA	1.4 E-5	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	2.6 E-7	1.8 E-6	NA	5.9 E-8	NA	3.3 E-6	NA	NA	NA	9.3 E-8	NA	NA	2.0 E-7	1.2 E-6	NA	NA	NA	NA	NA	5.0 E-7	4.4 E-7	2.0 E-6	NA	2.4 E-5
33B-SP09	20	NA	5.3 E-5	NA	3.1 E-6	NA	1.5 E-8	NA	NA	NA	NA	NA	1.2 E-7	8.8 E-7	NA	4.9 E-8	NA	8.1 E-6	3.1 E-7	NA	NA	4.4 E-8	NA	NA	1.3 E-7	6.8 E-7	NA	NA	NA	NA	NA	3.1 E-7	2.1 E-7	4.7 E-6	NA	7.1 E-5
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	2.0 E-7	NA	NA	NA	NA	NA	NA	1.3 E-7	5.4 E-8	NA	5.5 E-7
33B-SP11	10	NA	6.3 E-7	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	8.0 E-7	NA	1.1 E-7	NA	1.3 E-5	1.8 E-5	3.6 E-9	NA	2.0 E-7	NA	NA	3.3 E-7	1.2 E-6	NA	NA	NA	NA	NA	2.5 E-7	2.2 E-7	8.7 E-6	NA	6.1 E-5
33B-SP11	20	2.7 E-6	2.3 E-5	NA	2.0 E-5	NA	NA	NA	1.3 E-8	3.1 E-6	NA	NA	1.4 E-7	6.6 E-7	NA	1.0 E-7	3.8 E-7	4.0 E-5	5.8 E-5	2.6 E-9	NA	8.8 E-8	NA	NA	1.9 E-7	9.4 E-7	NA	NA	NA	NA	NA	1.0 E-7	1.6 E-7	5.4 E-5	NA	2.0 E-4
33B-SP12	10	NA	7.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	7.0 E-7	5.2 E-8	NA	3.3 E-6	NA	NA	2.0 E-7	NA	NA	1.8 E-9	6.4 E-8	3.3 E-7	NA	NA	NA	NA	2.4 E-6	2.3 E-7	2.2 E-7	1.0 E-6	NA	9.4 E-6
33B-SP12	20	NA	4.2 E-7	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	1.6 E-7	4.7 E-7	3.8 E-7	4.1 E-8	NA	1.4 E-6	NA	NA	NA	2.7 E-8	NA	NA	8.3 E-8	5.6 E-7	NA	NA	NA	NA	5.0 E-7	2.2 E-7	2.0 E-7	3.2 E-7	NA	4.8 E-6
33B-SP13	7.5	NA	NA	3.5 E-5	NA	1.8 E-5	NA	7.6 E-7	1.9 E-7	1.2 E-5	6.0 E-6	NA	1.1 E-6	1.0 E-5	NA	6.2 E-8	NA	NA	NA	1.6 E-8	NA	9.2 E-7	7.1 E-7	NA	4.3 E-7	2.0 E-6	2.8 E-5	9.5 E-6	2.8 E-6	NA	NA	NA	1.2 E-5	NA	NA	1.4 E-4
33B-SP13	20	NA	NA	1.3 E-5	NA	5.3 E-6	NA	3.6 E-7	9.7 E-8	3.4 E-6	2.0 E-6	NA	3.3 E-7	4.6 E-6	NA	2.0 E-8	NA	NA	NA	8.4 E-9	NA	1.3 E-7	2.7 E-7	NA	2.1 E-7	5.2 E-7	1.1 E-5	2.9 E-6	8.5 E-7	NA	NA	1.2 E-7	6.9 E-6	NA	NA	5.1 E-5
33B-SP14	10	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	7.8 E-3	NA	NA	NA	NA	NA	1.3 E-5	NA	2.0 E-4	NA	5.9 E-7	NA	NA	NA	NA	NA	8.1 E-6	2.3 E-5	NA	NA	NA	NA	NA	7.3 E-6	7.3 E-3	NA	1.7 E-2
33B-SP14	20	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	2.8 E-3	NA	NA	NA	NA	NA	5.7 E-6	NA	1.1 E-4	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	7.9 E-3
33B-SP15	10	NA	3.1 E-5	6.6 E-6	NA	NA	NA	1.7 E-8	NA	5.2 E-7	NA	3.2 E-7	3.2 E-7	7.5 E-7	NA	2.5 E-7	NA	1.3 E-6	NA	NA	NA	5.9 E-8	NA	NA	1.4 E-7	6.3 E-7	NA	NA	NA	NA	NA	1.2 E-7	2.9 E-6	6.7 E-6	NA	5.1 E-5
33B-SP15	20	NA	6.0 E-4	2.8 E-6	NA	NA	NA	2.4 E-7	1.3 E-8	NA	2.4 E-7	4.9 E-9	4.5 E-7	6.6 E-7	NA	8.9 E-8	1.1 E-6	NA	NA	4.4 E-8	NA	3.9 E-8	NA	8.5 E-10	6.7 E-8	1.0 E-6	NA	NA	NA	NA	NA	9.3 E-7	1.9 E-6	1.5 E-5	NA	6.2 E-4
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.0 E-8	NA	NA	NA	NA	NA	1.4 E-7	NA	NA	NA	8.1 E-7
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	3.6 E-7	9.6 E-7	NA	1.8 E-8	NA	NA	NA	NA	NA	2.9 E-8	NA	NA	1.9 E-8	1.2 E-7	1.9 E-7	NA	NA	NA	NA	1.1 E-7	4.5 E-7	NA	NA	2.3 E-6
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	6.4 E-9	NA	NA	NA	1.5 E-7	1.7 E-6	NA	1.7 E-8	NA	NA	NA	NA	NA	2.8 E-8	NA	NA	4.7 E-8	3.0 E-7	8.7 E-8	NA	NA	NA	NA	7.8 E-8	1.7 E-7	2.3 E-8	NA	2.6 E-6
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	1.2 E-7	2.2 E-7	NA	NA	5.1 E-7
33B-SP17	20	NA	1.9 E-6	NA	NA	NA	NA	NA	1.4 E-8	NA	NA	NA	5.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-8	NA	NA	NA	4.1 E-8	NA	NA	NA	NA	NA	NA	7.0 E-8	5.4 E-7	NA	3.2 E-6
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	2.5 E-7	1.6 E-5	NA	1.3 E-8	3.0 E-6	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	6.4 E-8	NA	1.5 E-7	7.1 E-7	7.2 E-7	5.2 E-7	NA	NA	NA	2.2 E-7	9.3 E-7	NA	NA	2.6 E-5
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	6.2 E-6	NA	2.0 E-8	5.5 E-7	7.5 E-7	NA	9.3 E-8	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	4.3 E-8	1.3 E-7	1.9 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	8.4 E-6
33B-SP19	10	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	4.8 E-7	NA	1.9 E-7	5.0 E-6	2.8 E-7	9.8 E-8	NA	2.3 E-6	NA	6.1 E-8	NA	NA	9.0 E-8	NA	2.0 E-7	1.7 E-6	3.4 E-6	9.0 E-7	NA	NA	NA	NA	2.9 E-6	2.6 E-6	NA	2.2 E-5
33B-SP19	20	NA	NA	NA	NA	NA	NA	8.1 E-7	NA	NA	2.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	8.4 E-8	NA	8.0 E-8	4.9 E-7	2.9 E-6	9.0 E-7	NA	NA	NA	NA	2.1 E-6	1.6 E-7	NA	7.9 E-6
33B-SP20	10	NA	7.0 E-5	3.2 E-5	NA	1.2 E-5	NA	NA	4.2 E-8	NA	4.0 E-6	NA	7.3 E-7	7.7 E-6	NA	1.9 E-7	NA	2.1 E-6	3.8 E-6	1.2 E-8	NA	1.8 E-6	4.5 E-7	NA	2.0 E-7	8.9 E-7	1.9 E-5	5.7 E-6	1.7 E-6	NA	NA	NA	1.0 E-5	1.2 E-4	NA	2.9 E-4
33B-SP20	20	NA	3.9 E-6	2.3 E-5	NA	7.2 E-6	NA	3.8 E-7	NA	NA	2.6 E-6	NA	9.3 E-8	5.0 E-6	NA	2.4 E-8	NA	NA	NA	5.8 E-9	NA	3.2 E-8	2.9 E-7	NA	1.8 E-7	4.5 E-7	1.2 E-5	3.6 E-6	1.0 E-6	NA	NA	NA	7.7 E-6	1.3 E-5	NA	8.1 E-5
33B-SP21	10	NA	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	1.2 E-2	NA	1.6 E-2
33B-SP21	20	NA	2.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	6.2 E-3	NA	8.5 E-3
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	3.7 E-7	2.4 E-6	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-8	6.6 E-7	2.4 E-7	NA	NA	NA	NA	NA	3.3 E-7	NA	NA	4.2 E-6
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	2.7 E-8	NA	NA	NA	2.2 E-7	2.4 E-6	NA	1.9 E-7	NA	1.2 E-5	NA	3.4 E-9	NA	3.9 E-8	NA	NA	5.3 E-8	1.0 E-6	1.5 E-7	NA	NA	NA	NA	1.5 E-7	1.8 E-7	NA	NA	1.6 E-5

Table 5.10-32
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																																	
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroet hene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride	ILCR
Unit Hazard																																					
Unit Risk																																					
30B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	2.8 E-10	NA	3 E-9
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
30B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	NA	NA	NA	7 E-10
30B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	1.3 E-9	8.9 E-10	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	3.7 E-11	NA	2.6 E-9	NA	7 E-9
30B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	1.4 E-10	NA	2.2 E-9	1.8 E-9	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	2.8 E-11	NA	3.9 E-9	NA	1 E-8
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-10	3.7 E-11	NA	NA	NA	1 E-9
30B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	NA	NA	5.6 E-8	1.9 E-8	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	3.7 E-8	NA	1 E-7
30B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	2.9 E-7	1.0 E-9	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-9	NA	3 E-7
30B-SP15	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-9	NA	NA	1.1 E-8	2.8 E-9	NA	NA	NA	NA	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-10	NA	2 E-8
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
30B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-11	NA	1 E-9
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-10	2 E-9
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-10
30B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-11	NA	4 E-10
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-10
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-10	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	2.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	1 E-8
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	5.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-11	NA	6 E-9
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	3.9 E-9	NA	NA	NA	NA	NA	2.1 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	4 E-9
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	NA	1.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	NA	1 E-8
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-11	NA	1.5 E-11	NA	5 E-10
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
32B-SP08	20	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-11	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-11	NA	2.0 E-11	NA	3 E-9
32B-SP08	40	NA	NA	NA	NA	NA	1.0 E-10	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	NA	1.1 E-11	NA	3 E-10
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-10	NA	NA	NA	7.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-11	NA	2 E-9
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-11	NA	NA	NA	5 E-10
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	7.8 E-10	NA	NA	1.4 E-9	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-11	NA	1.4 E-9	NA	4 E-9
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-11	NA	3.5 E-10	NA	1 E-9
32B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-10	NA	NA	2.7 E-7	NA	3 E-7
32B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	2 E-7
33B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	1.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	8.3 E-10	NA	3 E-9
33B-SP09	20	NA	NA	NA	1.4 E-10	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-11	NA	2.0 E-9	NA	6 E-9
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-11	NA	2 E-11
33B-SP11	10	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-11	NA	3.7 E-9	NA	9 E-9
33B-SP11	20	2.2 E-10	NA	NA	9.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	2.4 E-10	1.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-11	NA	2.3 E-8	NA	4 E-8
33B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-10	NA	NA	1.2 E-9	NA	NA	1.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	4.8 E-11	NA	4.3 E-10	NA	3 E-9
33B-SP12	20	NA	NA	NA	NA	NA	1.5 E-10	NA	NA	NA	NA	NA	NA	1.4 E-10	3.6 E-10	NA	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-11	4.6 E-11	NA	1.4 E-10	NA	1 E-9
33B-SP13	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9
33B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	2 E-9
33B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	3 E-6
33B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	2 E-6
33B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	2.8 E-9	NA	4 E-9
33B-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	NA	6.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-10	NA	6.3 E-9	NA	7 E-9
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-11	NA	NA	NA	2 E-10
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-11	NA	NA	NA	3 E-10
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-11	NA	9.6 E-12	NA	5 E-10
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-11	NA	NA	NA	3 E-11
33B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	2 E-10
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-11	NA	NA	NA	1 E-9
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10
33B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	2.6 E-10	NA	NA	8.4 E-10	NA	NA	NA	NA	8.0 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	4 E-9
33B-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-11	NA	1 E-10
33B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	NA	NA	7.9 E-10	NA	NA	NA	NA	4.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-8	NA	5 E-8
33B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-9	NA	7 E-9
33B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-6	NA	5 E-6
33B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-6	NA	3 E-6
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-10	NA	NA	NA	4.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-11	NA	NA	NA	5 E-9

Notes and Key:
All concentrations reported in micrograms per cubic meter.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.10-9) x the unit hazard or unit risk for the chemical).

Table 5.10-33 *Groundwater Inhalation Hazard and Unit Cancer Risk Results - Commercial Worker Area 39 Management Area Boundary Operable Unit Risk Assessment Aerojet Superfund Site Sacramento County, California*

Chemical	Indoor Vapor Concentration (µg/L)	Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds			
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,2-Dichloroethene (cis/trans)	1.0 E+0	2.0 E+1	NA
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
1,1,2-Trichloroethane	1.0 E+0	4.9 E+1	4.0 E-3
Naphthalene	1.0 E+0	2.3 E+2	8.4 E-3
Freon 113	1.0 E+0	2.3 E-2	NA
Toluene	1.0 E+0	2.3 E+0	NA
Trichloroethene	1.0 E+0	1.1 E+0	4.9 E-4

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.10-34
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)									
Sample Name	**Layer**	**1,1,2-Trichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Naphthalene**	**Toluene**	**Trichloroethene**
Unit Hazard		1.6 E+2	9.8 E+0	1.4 E+2	2.0 E+1	1.5 E+1	2.0 E+1	2.3 E-2	2.3 E+2	2.3 E+0	1.1 E+0
Unit Risk		4.0 E-3	NA	6.4 E-3	NA	5.6 E-3	NA	NA	8.4 E-3	NA	4.9 E-4
795	Y										
796	Y										
1317	S										
1575	Y										
1576	Y	0.68	2.3	1.1	7.3	7.4	30				230
1577	Y							7.6			
1578	Y							1.9			
31006	Y										2.2
31007	S										
31008	Y										
31009	Y										2.0
31010	S										
31011	S					0.50					
31012	S					0.54			0.55		1.8
31017	Y										
31019	Y										
31024	S										
31025	S					2.0					
31026	Y										
31027	S									22	
31028	Y										
31029	Y										
31030	S										

Table 5.10-34
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index										
Sample Name	**Layer**	**1,1,2-Trichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Naphthalene**	**Toluene**	**Trichloroethene**	**HI**
Unit Hazard												
Unit Risk												
795	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
796	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1317	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1575	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1576	Y	5.7 E-4	3.9 E-3	1.1 E-3	3.2 E-3	3.0 E-3	1.3 E-2	NA	NA	NA	1.6 E-2	4.1 E-2
1577	Y	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	NA	NA	4.8 E-4
1578	Y	NA	NA	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	1.2 E-4
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	1.5 E-4
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31008	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31009	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	1.4 E-4
31010	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31011	S	NA	NA	NA	NA	9.0 E-5	NA	NA	NA	NA	NA	9.0 E-5
31012	S	NA	NA	NA	NA	9.7 E-5	NA	NA	1.1 E-4	NA	5.3 E-5	2.6 E-4
31017	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31019	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31024	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31025	S	NA	NA	NA	NA	3.6 E-4	NA	NA	NA	NA	NA	3.6 E-4
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-4	NA	9.0 E-4
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-34
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk										
Sample Name	**Layer**	**1,1,2-Trichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Naphthalene**	**Toluene**	**Trichloroethene**	**ILCR**
Unit Hazard												
Unit Risk												
795	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
796	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
1317	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
1575	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
1576	Y	1.4 E-8	NA	5.1 E-8	NA	1.1 E-6	NA	NA	NA	NA	6.7 E-6	8 E-6
1577	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
1578	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31006	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-8	6 E-8
31007	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31008	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31009	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-8	6 E-8
31010	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31011	S	NA	NA	NA	NA	3.4 E-8	NA	NA	NA	NA	NA	3 E-8
31012	S	NA	NA	NA	NA	3.6 E-8	NA	NA	4.1 E-9	NA	2.3 E-8	6 E-8
31017	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31019	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31024	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31025	S	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	1 E-7
31026	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31027	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31028	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31029	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
31030	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x indoor air attenuation factor (from Table 5.10-11) x the unit hazard or unit risk for the chemical).

Table 5.10-35 *Soil Unit Hazard and Unit Cancer Risk Results - Recreator - Off Road Vehicle Area*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Aluminum	1.0 E+0	2.0 E-7	0.0 E+0	2.1 E-8	2.2 E-7	NA	NA	NA	NA
Cadmium	1.0 E+0	2.0 E-4	3.1 E-5	2.9 E-8	2.3 E-4	NA	NA	1.9 E-10	1.9 E-10
Perchlorate	1.0 E+0	2.8 E-4	0.0 E+0	NA	2.8 E-4	NA	NA	NA	NA
Vanadium	1.0 E+0	3.9 E-5	0.0 E+0	5.8 E-9	3.9 E-5	NA	NA	NA	NA
Semivolatile Organic Compounds									
2,3,7,8-TCDD TEQ	1.0 E+0	NA	NA	NA	NA	1.3 E-2	1.5 E-3	1.9 E-6	1.4 E-2
Bis(2-ethylhexyl)phthalate	1.0 E+0	9.8 E-6	3.9 E-6	1.4 E-9	1.4 E-5	1.2 E-9	4.7 E-10	1.7 E-13	1.6 E-9
Di-n-butyl phthalate	1.0 E+0	2.0 E-6	7.8 E-7	2.9 E-10	2.7 E-6	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram

Table 5.10-36 *Inhalation Unit Hazard and Unit Cancer Risk Results - Recreator - Off Road Vehicle Area*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Concentration (mg/m^3)	Adult Unit Inhal HQ	Unit Inhal ILCR
1,1-Dichloroethene	1.0 E+0	1.4 E+1	NA
1,2-Dichloroethane	1.0 E+0	2.0 E+2	1.4 E-2
1,1,2-Trichloroethane	1.0 E+0	6.8 E+1	8.5 E-3
1,4-Dioxane	1.0 E+0	3.2 E-1	4.0 E-3
2-Propanol	1.0 E+0	1.1 E+2	NA
Benzene	1.0 E+0	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	1.4 E+1	1.9 E-2
Carbon Tetrachloride	1.0 E+0	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	2.7 E+1	NA
Dibromochloromethane	1.0 E+0	1.4 E+1	1.4 E-2
EthylBenzene	1.0 E+0	9.6 E-1	1.3 E-3
Freon 113	1.0 E+0	3.2 E-2	NA
Heptane	1.0 E+0	1.4 E+0	NA
Hexane	1.0 E+0	1.4 E+0	NA
Tetrachloroethylene	1.0 E+0	2.7 E+1	3.1 E-3
Tetrahydrofuran	1.0 E+0	3.2 E+0	1.0 E-3
Trichloroethylene	1.0 E+0	1.6 E+0	1.0 E-3
Vinyl Chloride	1.0 E+0	9.6 E+0	4.0 E-2
1,2,4-Trimethylbenzene	1.0 E+0	1.4 E+2	NA
1,3,5-Trimethylbenzene	1.0 E+0	1.6 E+2	NA
2,2,4-Trimethylpentane	1.0 E+0	9.6 E+0	NA
2-Butanone (Methyl Ethyl Ketone)	1.0 E+0	1.9 E-1	NA
4-Ethyltoluene	1.0 E+0	9.6 E+0	NA
4-Methyl-2-pentanone	1.0 E+0	3.2 E-1	NA
Acetone	1.0 E+0	3.0 E-1	NA
Carbon Disulfide	1.0 E+0	1.4 E+0	NA
Cyclohexane	1.0 E+0	1.6 E-1	NA
Ethanol	1.0 E+0	5.5 E-1	NA
m,p-Xylene	1.0 E+0	9.6 E+0	NA
o-Xylene	1.0 E+0	9.6 E+0	NA
Propylbenzene	1.0 E+0	2.7 E+1	NA
Styrene	1.0 E+0	1.1 E+0	NA
Toluene	1.0 E+0	3.2 E+0	NA

Key:
HQ = Hazard quotient
ILCR = incremental lifetime cancer risk
mg/m^3 = Milligrams per cubic meter
NA = Not applicable

Table 5.10-37
Location-Specific Soil Risk Assessment Results - Recreator - Off Road Vehicle Area
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Adult Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	Depth	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
Unit Hazard Adult		2.2 E-7	1.4 E-5	2.3 E-4	2.7 E-6	2.8 E-4	3.9 E-5	NA																
Unit Risk		NA	1.6 E-9	1.9 E-10	NA	NA	NA	1.4 E-2																
29B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB04	1.5			0.44			56		NA	NA	1.0 E-4	NA	NA	2.2 E-3	NA	2.3 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
29B-SB04	5			0.34			45		NA	NA	7.7 E-5	NA	NA	1.8 E-3	NA	1.8 E-3	NA	NA	6 E-11	NA	NA	NA	NA	6 E-11
29B-SB04	11						92		NA	NA	NA	NA	NA	3.6 E-3	NA	3.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	0.5			0.31			67		NA	NA	7.0 E-5	NA	NA	2.6 E-3	NA	2.7 E-3	NA	NA	6 E-11	NA	NA	NA	NA	6 E-11
29B-SB05	1						75		NA	NA	NA	NA	NA	2.9 E-3	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB05	5			0.43			97		NA	NA	9.8 E-5	NA	NA	3.8 E-3	NA	3.9 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
29B-SB05	11			0.44			99		NA	NA	1.0 E-4	NA	NA	3.9 E-3	NA	4.0 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
29B-SB06	1.5			0.3			76		NA	NA	6.8 E-5	NA	NA	3.0 E-3	NA	3.0 E-3	NA	NA	6 E-11	NA	NA	NA	NA	6 E-11
29B-SB06	5			0.74			110		NA	NA	1.7 E-4	NA	NA	4.3 E-3	NA	4.5 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
29B-SB06	11						99		NA	NA	NA	NA	NA	3.9 E-3	NA	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB07	1			0.29			75		NA	NA	6.6 E-5	NA	NA	2.9 E-3	NA	3.0 E-3	NA	NA	5 E-11	NA	NA	NA	NA	5 E-11
29B-SB07	4.5			0.38		0.077	41		NA	NA	8.6 E-5	NA	2.2 E-5	1.6 E-3	NA	1.7 E-3	NA	NA	7 E-11	NA	NA	NA	NA	7 E-11
29B-SB08	1.5			0.23			38		NA	NA	5.2 E-5	NA	NA	1.5 E-3	NA	1.5 E-3	NA	NA	4 E-11	NA	NA	NA	NA	4 E-11
29B-SB08	5			0.52			84		NA	NA	1.2 E-4	NA	NA	3.3 E-3	NA	3.4 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
29B-SB08	11.5						82		NA	NA	NA	NA	NA	3.2 E-3	NA	3.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB09	1.5			0.45			88		NA	NA	1.0 E-4	NA	NA	3.4 E-3	NA	3.5 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
29B-SB09	5			1.5			280		NA	NA	3.4 E-4	NA	NA	1.1 E-2	NA	1.1 E-2	NA	NA	3 E-10	NA	NA	NA	NA	3 E-10
29B-SB09	11.5						60		NA	NA	NA	NA	NA	2.3 E-3	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB10	1.5			0.24			44		NA	NA	5.4 E-5	NA	NA	1.7 E-3	NA	1.8 E-3	NA	NA	4 E-11	NA	NA	NA	NA	4 E-11
29B-SB10	5			0.55			83		NA	NA	1.2 E-4	NA	NA	3.2 E-3	NA	3.4 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
29B-SB10	11.5						100		NA	NA	NA	NA	NA	3.9 E-3	NA	3.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA
29B-SB11	1.5			0.66			120		NA	NA	1.5 E-4	NA	NA	4.7 E-3	NA	4.8 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
29B-SB11	5			0.58			94		NA	NA	1.3 E-4	NA	NA	3.7 E-3	NA	3.8 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
29B-SB11	11.5			0.57			63		NA	NA	1.3 E-4	NA	NA	2.5 E-3	NA	2.6 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
30B-SB01	0				2.02			0.0000042	NA	NA	NA	5.5 E-6	NA	NA	NA	5.5 E-6	NA	NA	NA	NA	NA	NA	6 E-8	6 E-8
30B-SB01	0.01				2.0			0.00000054	NA	NA	NA	5.5 E-6	NA	NA	NA	5.5 E-6	NA	NA	NA	NA	NA	NA	8 E-9	8 E-9
30B-SB01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	5				2.5				NA	NA	NA	6.8 E-6	NA	NA	NA	6.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB01	10					6.0			NA	NA	NA	NA	1.7 E-3	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	0		2.4		2.38	7.0		0.00030	NA	3.3 E-5	NA	6.5 E-6	2.0 E-3	NA	NA	2.0 E-3	NA	4 E-9	NA	NA	NA	NA	4 E-6	4 E-6
30B-SB02	0.01		2.4		2.4			0.00012	NA	3.3 E-5	NA	6.6 E-6	NA	NA	NA	3.9 E-5	NA	4 E-9	NA	NA	NA	NA	2 E-6	2 E-6
30B-SB02	3					5.0			NA	NA	NA	NA	1.4 E-3	NA	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	5				1.5				NA	NA	NA	4.1 E-6	NA	NA	NA	4.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB02	10				0.702				NA	NA	NA	1.9 E-6	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	0							0.000000053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-10	7 E-10
30B-SB03	0.01								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	5				2.45				NA	NA	NA	6.7 E-6	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB03	10				0.691				NA	NA	NA	1.9 E-6	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA
30B-SB04	1			0.53		0.49	73		NA	NA	1.2 E-4	NA	1.4 E-4	2.9 E-3	NA	3.1 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
30B-SB04	5			0.42		0.23	90		NA	NA	9.5 E-5	NA	6.4 E-5	3.5 E-3	NA	3.7 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
30B-SB04	11			0.44		0.11	200		NA	NA	1.0 E-4	NA	3.1 E-5	7.8 E-3	NA	8.0 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
30B-SB05	1			0.58			94		NA	NA	1.3 E-4	NA	NA	3.7 E-3	NA	3.8 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
30B-SB05	5			0.75			170		NA	NA	1.7 E-4	NA	NA	6.7 E-3	NA	6.8 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
30B-SB06	1			0.34			49		NA	NA	7.7 E-5	NA	NA	1.9 E-3	NA	2.0 E-3	NA	NA	6 E-11	NA	NA	NA	NA	6 E-11
30B-SB06	5			0.84			79		NA	NA	1.9 E-4	NA	NA	3.1 E-3	NA	3.3 E-3	NA	NA	2 E-10	NA	NA	NA	NA	2 E-10
30B-SB06	11			0.68			75		NA	NA	1.5 E-4	NA	NA	2.9 E-3	NA	3.1 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
30B-SB07	1			0.54			45		NA	NA	1.2 E-4	NA	NA	1.8 E-3	NA	1.9 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
30B-SB07	5			0.53			73		NA	NA	1.2 E-4	NA	NA	2.9 E-3	NA	3.0 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
30B-SB07	11			0.41			61		NA	NA	9.3 E-5	NA	NA	2.4 E-3	NA	2.5 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
30B-SB08	1			0.4			80		NA	NA	9.1 E-5	NA	NA	3.1 E-3	NA	3.2 E-3	NA	NA	7 E-11	NA	NA	NA	NA	7 E-11
30B-SB08	5			0.46			250		NA	NA	1.0 E-4	NA	NA	9.8 E-3	NA	9.9 E-3	NA	NA	9 E-11	NA	NA	NA	NA	9 E-11
30B-SB08	11			0.38			230		NA	NA	8.6 E-5	NA	NA	9.0 E-3	NA	9.1 E-3	NA	NA	7 E-11	NA	NA	NA	NA	7 E-11
31B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 5.10-37
Location-Specific Soil Risk Assessment Results - Recreator - Off Road Vehicle Area
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Adult Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	Depth	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	HI	Aluminum	Bis(2-ethylhexyl) phthalate	Cadmium	Di-n-butyl phthalate	Perchlorate	Vanadium	2,3,7,8-TCDD TEQ	ILCR
Unit Hazard Adult		2.2 E-7	1.4 E-5	2.3 E-4	2.7 E-6	2.8 E-4	3.9 E-5	NA																
Unit Risk		NA	1.6 E-9	1.9 E-10	NA	NA	NA	1.4 E-2																
31B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-SB02	1.5			0.54			77		NA	NA	1.2 E-4	NA	NA	3.0 E-3	NA	3.1 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
31B-SB02	5			0.67			190		NA	NA	1.5 E-4	NA	NA	7.4 E-3	NA	7.6 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
31B-SB02	11			0.76		0.035	120		NA	NA	1.7 E-4	NA	9.8 E-6	4.7 E-3	NA	4.9 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
31B-SD01	0.25						58		NA	NA	NA	NA	NA	2.3 E-3	NA	2.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD01	1.5						79		NA	NA	NA	NA	NA	3.1 E-3	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	0.25						70		NA	NA	NA	NA	NA	2.7 E-3	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA
31B-SD02	1.5						75		NA	NA	NA	NA	NA	2.9 E-3	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	1								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB01	10								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32B-SB02	2			0.37			57		NA	NA	8.4 E-5	NA	NA	2.2 E-3	NA	2.3 E-3	NA	NA	7 E-11	NA	NA	NA	NA	7 E-11
32B-SB02	5			0.18			30		NA	NA	4.1 E-5	NA	NA	1.2 E-3	NA	1.2 E-3	NA	NA	3 E-11	NA	NA	NA	NA	3 E-11
32B-SB02	11			0.5			56		NA	NA	1.1 E-4	NA	NA	2.2 E-3	NA	2.3 E-3	NA	NA	9 E-11	NA	NA	NA	NA	9 E-11
32B-SB03	1.5			0.39			48		NA	NA	8.9 E-5	NA	NA	1.9 E-3	NA	2.0 E-3	NA	NA	7 E-11	NA	NA	NA	NA	7 E-11
32B-SB03	5			0.69			95		NA	NA	1.6 E-4	NA	NA	3.7 E-3	NA	3.9 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
32B-SB03	11.5			0.5			90		NA	NA	1.1 E-4	NA	NA	3.5 E-3	NA	3.6 E-3	NA	NA	9 E-11	NA	NA	NA	NA	9 E-11
32B-SB04	1.5			0.35			48		NA	NA	7.9 E-5	NA	NA	1.9 E-3	NA	2.0 E-3	NA	NA	6 E-11	NA	NA	NA	NA	6 E-11
32B-SB04	5	69000		0.81			140		1.5 E-2	NA	1.8 E-4	NA	NA	5.5 E-3	NA	2.1 E-2	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
32B-SB04	11.5			0.77			130		NA	NA	1.7 E-4	NA	NA	5.1 E-3	NA	5.3 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
32B-SB05	1.5			0.31			60		NA	NA	7.0 E-5	NA	NA	2.3 E-3	NA	2.4 E-3	NA	NA	6 E-11	NA	NA	NA	NA	6 E-11
32B-SB05	5			0.46			97		NA	NA	1.0 E-4	NA	NA	3.8 E-3	NA	3.9 E-3	NA	NA	9 E-11	NA	NA	NA	NA	9 E-11
33B-SB01	1				0.91				NA	NA	NA	2.5 E-6	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	5				4.5				NA	NA	NA	1.2 E-5	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB01	10				2.9				NA	NA	NA	8.0 E-6	NA	NA	NA	8.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	1				2.8				NA	NA	NA	7.7 E-6	NA	NA	NA	7.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	5				6.1				NA	NA	NA	1.7 E-5	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB02	10				0.705				NA	NA	NA	1.9 E-6	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA
33B-SB03	1.5			3.9			78		NA	NA	8.9 E-4	NA	NA	3.1 E-3	NA	3.9 E-3	NA	NA	7 E-10	NA	NA	NA	NA	7 E-10
33B-SB03	5			0.61		0.75	81		NA	NA	1.4 E-4	NA	2.1 E-4	3.2 E-3	NA	3.5 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
33B-SB03	11			0.41		1.6	75		NA	NA	9.3 E-5	NA	4.5 E-4	2.9 E-3	NA	3.5 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
33B-WS	1			0.63		0.27	99		NA	NA	1.4 E-4	NA	7.5 E-5	3.9 E-3	NA	4.1 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
34B-SB01	1				8.7				NA	NA	NA	2.4 E-5	NA	NA	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB01	10				4.1				NA	NA	NA	1.1 E-5	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA
34B-SB02	1.5			0.44			52		NA	NA	1.0 E-4	NA	NA	2.0 E-3	NA	2.1 E-3	NA	NA	8 E-11	NA	NA	NA	NA	8 E-11
34B-SB02	11			0.60		0.023	100		NA	NA	1.4 E-4	NA	6.4 E-6	3.9 E-3	NA	4.1 E-3	NA	NA	1 E-10	NA	NA	NA	NA	1 E-10
29B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	0.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	0.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS05	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH11	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0.01								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	3								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS01	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS02	2.5								NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	0							0.00011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	2 E-6
31B-AH01	0.01							0.000080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	1 E-6
31B-AH11	0							0.000080	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	1 E-6
30B-AH02	0.01							0.000063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7	9 E-7
30B-AH02	0							0.000063	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-7	9 E-7

Table 5.10-37
Location-Specific Soil Risk Assessment Results - Recreator - Off Road Vehicle Area
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)							Adult Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk							
Sample Name	**Depth**	**Aluminum**	**Bis(2-ethylhexyl) phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**Aluminum**	**Bis(2-ethylhexyl) phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**HI**	**Aluminum**	**Bis(2-ethylhexyl) phthalate**	**Cadmium**	**Di-n-butyl phthalate**	**Perchlorate**	**Vanadium**	**2,3,7,8-TCDD TEQ**	**ILCR**
Unit Hazard Adult		2.2 E-7	1.4 E-5	2.3 E-4	2.7 E-6	2.8 E-4	3.9 E-5	NA																
Unit Risk		NA	1.6 E-9	1.9 E-10	NA	NA	NA	1.4 E-2																
29B-AH01	1							0.000060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	8 E-7
30B-AH01	0.01							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	8 E-7
30B-AH01	0							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	8 E-7
34B-AH01	3							0.000055	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-7	8 E-7
34B-AH01	0.01							0.000012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	2 E-7
30B-SNS05	0.5							0.0000026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-8	4 E-8
30B-SNS02	0.5							0.0000022	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8	3 E-8
30B-SNS03	0.5							0.00000033	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-9	5 E-9
34B-SNS02	0.5							0.00000030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	4 E-9
30B-SNS03	2.5							0.00000029	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	4 E-9
34B-SNS01	0.5							0.00000026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	4 E-9
34B-SNS03	0.5							0.00000025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-9	4 E-9
34B-SNS03	2.5							0.00000024	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9	3 E-9
32B-HP05	0.01							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	2 E-10
32B-SB01	0							0.000000011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-10	2 E-10
32B-HP05	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11	2 E-11
32B-SB01	3							0.0000000017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-11	2 E-11

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.10-38
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Recreator - Off Road Vehicle Area
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/m^3)																															
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene
Unit Hazard Adult		6.8 E+1	1.4 E+1	1.4 E+2	2.0 E+2	1.6 E+2	3.2 E-1	9.6 E+0	1.9 E-1	1.1 E+2	9.6 E+0	3.2 E-1	3.0 E-1	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1	2.7 E+1	1.6 E-1	1.4 E+1	5.5 E-1	9.6 E-1	3.2 E-2	1.4 E+0	1.4 E+0	9.6 E+0	9.6 E+0	2.7 E+1	1.1 E+0	2.7 E+1	3.2 E+0	3.2 E+0	1.6 E+0
Unit Risk		0.01	NA	NA	0.013534247	NA	0.00401566	NA	NA	NA	NA	NA	NA	0.014873	0.019334638	NA	0.022309198	0.011972603	NA	NA	0.013980431	NA	0.001293933	NA	NA	NA	NA	NA	NA	NA	0.00312329	0.00101135	NA	0.0010411
30B-SP10	10			7.6				17					75	6.6		7.8	33							27	6.0	7.7	10			13		4.2	12	91
30B-SP10	20																																	
30B-SP11	10							16	39				240	9.4											7.8	12							11	
30B-SP11	20							26	110				1000	28		11				10		31			34	77	9.0			14		23	28	
30B-SP12	10							18	24				210			7.5						18					7.6			15			6.6	
30B-SP13	10		44	40		13		7.0	110		62		240	28		3.9	20	19		11		24	92	380	38	30	340	88	14	12	18	9.4	510	830
30B-SP13	20		180	19		7.0		18	190		32	7.0	180	52	13		66	78		30		68	82	1500	68	78	260	71	8.0	10	38	14	610	2500
30B-SP14	10								32				180	21								15			14	31	11				31	9.4	36	
30B-SP14	20		820	42					50		54			23		25	1700	800		11			68	1800	28	23	250	76			530		330	24000
30B-SP15	10		69	30		8.0		5.6	110		48		57	33		4.7	4400	22				13	72	910	42	42	270	56	10				480	920
30B-SP15	16		36	36		13		94	1700	40	64		1600	320		70	280	96				410	220	110	360	1200	650	160	16				1900	96
30B-SP17	10								32	19			250	4.5																				
30B-SP17	20		11						30				210	48		39							6.8	990	24	72		6.4					50	64
30B-SP18	10												240	32		6.9								12	9.2	30								
30B-SP19	10								33				200	18		8.4								53	9.1	23		6.5						
30B-SP20	10							21	57	27			1300	26		18				30		190		330	35	98								
30B-SP20	20								29				400	12		6.7							12	1300	11	10		14						63
30B-SP21	10												130			16						27				4.8							8.4	
30B-SP21	20								49	13			250	5.2		7.5						73				8.8							10	
30B-SP22	10												590	17		5.4	190					22	6.2	980	16	20	13						27	18
30B-SP22	20								33				500	10			160					33		920	8.7	10	14						17	20
30B-SP23	10								47				460	5.1		3.8	59					64	5.7	53	7.2	4.8	17	6.0					25	8.6
30B-SP23	20								34			6.0	220	9.1		8.7	360					41		330	10	14	12						25	39
32B-SP07	10								56				150	100		26				4.6			8.9	95	24	83	10						90	
32B-SP07	20												77	19		37								1200	200	260						19	34	10
32B-SP08	10								35				100	25		28									19	69							25	
32B-SP08	17																																5.2	
32B-SP08	20				13				95			9.4	280	90		63						35	6.6	560	460	890	6.8					27	450	13
32B-SP08	40						27		26	13			160	13		28						19		850	94	280						49	36	14
32B-SP09	10													16		9.9		16							78	240	5.3						36	8.6
32B-SP09	20												59	6.4		4.5		12							20	35	6.9					8.4	68	
32B-SP10	10												61	9.7	36	10		30	9.2		12	12			50	130						9.5	23	440
32B-SP10	20								18	12			130	31		21			5.2	5.4		22			120	280	5.2					20	79	230
32B-SP11	10		280															94													77			88000
32B-SP11	20		560															100																130000
33B-SP09	10		200						20				120	11		7.3		26				19			37	79						26	28	270
33B-SP09	20		1500		5.3		17						110	11		12		130	5.4			18			48	87						33	27	1300
33B-SP10	10															8.2									18	13							8.5	7.4
33B-SP11	10		9.0		15								87	5.0		13		100	160	5.0		41			61	79						13	14	1200
33B-SP11	20	18	640		34				30	12			130	8.3		25	7.2	640	1000	7.2		36			70	120						11	20	15000
33B-SP12	10		11										80		30	6.4		26			13			13	12	21					21	12	14	140
33B-SP12	20		12				20						150	5.9	33	10		22				11			31	72					8.8	23	25	89
33B-SP13	7.5			55		24		12	160	18	94		380	49		5.7				16		140	130		60	97	500	150	22				590	
33B-SP13	20			54		19		15	220	13	82		310	57		4.9				23		51	130		80	66	500	120	18			13	870	
33B-SP14	10		27000							15000						1600		1600		810						520	550						460	1000000
33B-SP14	20		28000							11000						1400		1700		530							510							1100000
33B-SP15	10		440	14					19		11		150	4.7		31		10				12			27	40						6.5	180	920
33B-SP15	20		17000	12				10	30		10	7.2	420	8.2		22	20			120		16		12	25	130						98	240	4100
33B-SP16	10													3.7												5.1						7.1		
33B-SP16	20								73				330	12		4.4						12			7.2	15	8.8					12	57	
33B-SP16	32								23				230	34		6.5						18			28	62	6.6					13	35	10
33B-SP17	6																									6.4						3.8	8.4	
33B-SP17	20		55						32				500									19				5.3							8.8	150
33B-SP18	7								200	21		6.4	990	18								33	11		20	32	12	7.7				8.1	41	
33B-SP18	20								110	24		29	510	9.4		23						86			16	16	9.1						24	
33B-SP19	10							46			10		88	31	12	12		18		83			22		38	110	80	19					180	360
33B-SP19	20							34			11									51			41		30	63	140	38					270	45
33B-SP20	10		1000	68		21			47		85		340	48		23		17	33	16		370	110		38	57	460	120	18				630	16000
33B-SP20	20		110	98		26		16			110		86	62		5.8				16		13	140		69	57	560	150	22				970	3700
33B-SP21	10		43000															2100															12000	1700000
33B-SP21	20		60000															2300															13000	1700000
35B-SP04	10								51				170	15		14									13	42	5.7						21	
35B-SP04	20								62				200	30		46		190		9.3		16			20	130	7.3					16	23	

Table 5.10-38
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Recreator - Off Road Vehicle Area
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																																	
Sample Name	Depth	1,1-Dichloroethene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,4-Dioxane	2,2,4-Trimethylpentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloromethane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloroethylene	Tetrahydrofuran	Toluene	Trichloroethylene	Vinyl Chloride	HI
Unit Hazard Adult																																			
Unit Risk																																			
30B-SP10	10	NA	5.0 E-6	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	2.3 E-7	1.5 E-6	NA	8.9 E-8	4.9 E-6	NA	NA	NA	NA	NA	NA	5.4 E-9	4.5 E-8	1.7 E-7	5.9 E-7	NA	NA	7.9 E-8	NA	1.1 E-7	2.7 E-7	9.3 E-7	NA	1.5 E-5
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SP11	10	NA	NA	NA	NA	NA	1.1 E-6	4.8 E-8	NA	NA	NA	7.2 E-7	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-8	2.6 E-7	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	4.5 E-6
30B-SP11	20	NA	NA	NA	NA	NA	8.7 E-7	6.8 E-8	NA	NA	NA	1.5 E-6	3.1 E-6	NA	6.3 E-8	NA	NA	NA	5.1 E-9	NA	1.1 E-7	NA	NA	1.3 E-7	8.4 E-7	2.7 E-7	NA	NA	4.2 E-8	NA	3.1 E-7	3.1 E-7	NA	NA	7.6 E-6
30B-SP12	10	NA	NA	NA	NA	NA	1.2 E-6	3.0 E-8	NA	NA	NA	6.3 E-7	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	4.5 E-7	NA	NA	9.1 E-8	NA	NA	1.5 E-7	NA	NA	2.8 E-6
30B-SP13	10	4.3 E-6	2.7 E-5	NA	1.0 E-5	NA	4.7 E-7	1.4 E-7	NA	4.1 E-6	NA	7.2 E-7	6.3 E-6	NA	4.4 E-8	3.0 E-6	3.3 E-6	NA	1.1 E-8	NA	1.6 E-7	5.3 E-7	7.5 E-8	2.8 E-7	6.6 E-7	2.0 E-5	5.9 E-6	1.8 E-6	7.2 E-8	2.8 E-6	2.5 E-7	1.1 E-5	8.4 E-6	NA	1.1 E-4
30B-SP13	20	8.9 E-6	6.3 E-6	NA	2.7 E-6	NA	6.0 E-7	1.2 E-7	NA	1.1 E-6	6.7 E-9	2.7 E-7	5.8 E-6	2.1 E-7	NA	4.9 E-6	6.8 E-6	NA	1.5 E-8	NA	2.3 E-7	2.4 E-7	1.5 E-7	2.5 E-7	8.5 E-7	7.7 E-6	2.4 E-6	5.3 E-7	3.0 E-8	3.0 E-6	1.9 E-7	6.8 E-6	1.3 E-5	NA	7.3 E-5
30B-SP14	10	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	5.4 E-7	4.7 E-6	NA	NA	NA	NA	NA	NA	NA	1.0 E-7	NA	NA	1.0 E-7	6.8 E-7	6.5 E-7	NA	NA	NA	4.9 E-6	2.5 E-7	8.0 E-7	NA	NA	1.3 E-5
30B-SP14	20	4.0 E-5	1.4 E-5	NA	NA	NA	NA	3.1 E-8	NA	1.8 E-6	NA	NA	2.6 E-6	NA	1.4 E-7	1.3 E-4	7.0 E-5	NA	5.6 E-9	NA	NA	2.0 E-7	1.8 E-7	1.0 E-7	2.5 E-7	7.4 E-6	2.5 E-6	NA	NA	4.2 E-5	NA	3.7 E-6	1.2 E-4	NA	4.3 E-4
30B-SP15	10	6.8 E-6	2.0 E-5	NA	6.2 E-6	NA	3.7 E-7	1.4 E-7	NA	3.2 E-6	NA	1.7 E-7	7.4 E-6	NA	5.3 E-8	6.6 E-4	3.9 E-6	NA	NA	NA	8.9 E-8	4.1 E-7	1.8 E-7	3.1 E-7	9.2 E-7	1.6 E-5	3.7 E-6	1.3 E-6	NA	NA	NA	1.1 E-5	9.4 E-6	NA	7.5 E-4
30B-SP15	16	2.2 E-6	1.5 E-5	NA	6.3 E-6	NA	3.9 E-6	1.3 E-6	1.8 E-5	2.7 E-6	NA	3.0 E-6	4.5 E-5	NA	5.0 E-7	2.6 E-5	1.1 E-5	NA	NA	NA	1.8 E-6	7.9 E-7	1.4 E-8	1.7 E-6	1.6 E-5	2.4 E-5	6.7 E-6	1.3 E-6	NA	NA	NA	2.6 E-5	6.1 E-7	NA	2.1 E-4
30B-SP17	10	NA	NA	NA	NA	NA	NA	4.0 E-8	1.4 E-5	NA	NA	7.5 E-7	1.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5
30B-SP17	20	5.4 E-7	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	3.2 E-7	5.4 E-6	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	2.0 E-8	9.8 E-8	9.0 E-8	7.9 E-7	NA	2.1 E-7	NA	NA	NA	NA	5.6 E-7	3.3 E-7	NA	8.6 E-6
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-7	7.2 E-6	NA	7.9 E-8	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	6.9 E-8	6.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-7	9.0 E-6
30B-SP19	10	NA	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	NA	6.0 E-7	4.0 E-6	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	NA	1.1 E-8	6.8 E-8	5.0 E-7	NA	4.3 E-7	NA	NA	NA	NA	NA	NA	NA	5.8 E-6
30B-SP20	10	NA	NA	NA	NA	NA	1.4 E-6	7.1 E-8	2.0 E-5	NA	NA	3.9 E-6	5.8 E-6	NA	2.0 E-7	NA	NA	NA	3.1 E-8	NA	1.3 E-6	NA	6.5 E-8	2.6 E-7	2.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5
30B-SP20	20	NA	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	6.0 E-7	1.3 E-6	NA	3.8 E-8	NA	NA	NA	NA	NA	NA	3.4 E-8	1.3 E-7	4.1 E-8	1.1 E-7	NA	4.7 E-7	NA	NA	NA	NA	NA	3.2 E-7	NA	3.1 E-6
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-7	NA	NA	1.8 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	1.1 E-6
30B-SP21	20	NA	NA	NA	NA	NA	NA	3.0 E-8	4.7 E-6	NA	NA	3.8 E-7	5.8 E-7	NA	4.3 E-8	NA	NA	NA	NA	NA	2.5 E-7	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	6.2 E-6
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	3.8 E-6	NA	6.1 E-8	2.8 E-5	NA	NA	NA	NA	1.5 E-7	3.6 E-8	1.9 E-7	1.2 E-7	4.4 E-7	7.7 E-7	NA	NA	NA	NA	NA	6.0 E-7	1.8 E-7	NA	3.7 E-5
30B-SP22	20	NA	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	7.5 E-7	1.1 E-6	NA	NA	1.2 E-5	NA	NA	NA	NA	1.1 E-7	NA	9.1 E-8	3.3 E-8	1.1 E-7	4.1 E-7	NA	NA	NA	NA	NA	1.9 E-7	1.0 E-7	NA	1.5 E-5
30B-SP23	10	NA	NA	NA	NA	NA	NA	5.8 E-8	NA	NA	NA	1.4 E-6	1.1 E-6	NA	4.3 E-8	8.8 E-6	NA	NA	NA	NA	4.4 E-7	3.3 E-8	1.1 E-8	5.4 E-8	1.1 E-7	1.0 E-6	4.0 E-7	NA	NA	NA	NA	5.6 E-7	8.7 E-8	NA	1.4 E-5
30B-SP23	20	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	5.7 E-9	3.3 E-7	1.0 E-6	NA	4.9 E-8	2.7 E-5	NA	NA	NA	NA	1.4 E-7	NA	3.3 E-8	3.7 E-8	1.5 E-7	3.5 E-7	NA	NA	NA	NA	NA	2.8 E-7	2.0 E-7	NA	2.9 E-5
32B-SP07	10	NA	NA	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	4.5 E-7	2.2 E-5	NA	3.0 E-7	NA	NA	NA	4.7 E-9	NA	NA	5.1 E-8	1.9 E-8	1.8 E-7	1.8 E-6	5.9 E-7	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	2.8 E-5
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	2.1 E-6	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	7.5 E-7	2.8 E-6	NA	NA	NA	NA	NA	2.5 E-7	3.8 E-7	5.1 E-8	NA	6.8 E-6
32B-SP08	10	NA	NA	NA	NA	NA	NA	4.3 E-8	NA	NA	NA	3.0 E-7	5.6 E-6	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-7	1.5 E-6	NA	NA	NA	NA	NA	NA	5.6 E-7	NA	NA	8.5 E-6
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-8	NA	NA	6.8 E-8
32B-SP08	20	NA	NA	1.1 E-5	NA	NA	NA	5.9 E-8	NA	NA	9.0 E-9	4.2 E-7	1.0 E-5	NA	3.6 E-7	NA	NA	NA	NA	NA	1.2 E-7	1.9 E-8	5.6 E-8	1.7 E-6	9.7 E-6	2.0 E-7	NA	NA	NA	NA	3.6 E-7	5.0 E-6	6.6 E-8	NA	3.9 E-5
32B-SP08	40	NA	NA	NA	NA	1.7 E-8	NA	8.0 E-9	2.4 E-6	NA	NA	1.2 E-7	7.3 E-7	NA	8.0 E-8	NA	NA	NA	NA	NA	3.3 E-8	NA	4.2 E-8	1.8 E-7	1.5 E-6	NA	NA	NA	NA	NA	3.3 E-7	2.0 E-7	3.6 E-8	NA	5.6 E-6
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	1.1 E-7	NA	2.8 E-6	NA	NA	NA	NA	NA	NA	5.8 E-7	5.3 E-6	3.1 E-7	NA	NA	NA	NA	NA	8.0 E-7	8.7 E-8	NA	1.4 E-5
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-8	7.2 E-7	NA	2.6 E-8	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	7.5 E-8	3.8 E-7	2.0 E-7	NA	NA	NA	NA	1.1 E-7	7.6 E-7	NA	NA	3.4 E-6
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-7	2.2 E-6	1.2 E-6	1.1 E-7	NA	5.3 E-6	1.5 E-6	NA	2.6 E-7	8.2 E-8	NA	NA	3.7 E-7	2.8 E-6	NA	NA	NA	NA	NA	2.5 E-7	5.1 E-7	4.5 E-6	NA	1.9 E-5
32B-SP10	20	NA	NA	NA	NA	NA	NA	1.1 E-8	4.3 E-6	NA	NA	2.0 E-7	3.5 E-6	NA	1.2 E-7	NA	NA	4.2 E-7	2.8 E-9	NA	7.6 E-8	NA	NA	4.5 E-7	3.1 E-6	1.5 E-7	NA	NA	NA	NA	2.7 E-7	8.8 E-7	1.2 E-6	NA	1.5 E-5
32B-SP11	10	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	8.9 E-4	NA	9.5 E-4
32B-SP11	20	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-4	NA	7.0 E-4
33B-SP09	10	2.0 E-5	NA	NA	NA	NA	NA	2.5 E-8	NA	NA	NA	3.6 E-7	2.5 E-6	NA	8.3 E-8	NA	4.6 E-6	NA	NA	NA	1.3 E-7	NA	NA	2.8 E-7	1.7 E-6	NA	NA	NA	NA	NA	6.9 E-7	6.2 E-7	2.7 E-6	NA	3.3 E-5
33B-SP09	20	7.4 E-5	NA	4.3 E-6	NA	2.1 E-8	NA	NA	NA	NA	NA	1.7 E-7	1.2 E-6	NA	6.8 E-8	NA	1.1 E-5	4.3 E-7	NA	NA	6.2 E-8	NA	NA	1.8 E-7	9.5 E-7	NA	NA	NA	NA	NA	4.4 E-7	3.0 E-7	6.6 E-6	NA	1.0 E-4
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	2.8 E-7	NA	NA	NA	NA	NA	NA	1.9 E-7	7.5 E-8	NA	7.8 E-7
33B-SP11	10	8.9 E-7	NA	2.4 E-5	NA	NA	NA	NA	NA	NA	NA	2.6 E-7	1.1 E-6	NA	1.5 E-7	NA	1.8 E-5	2.6 E-5	5.1 E-9	NA	2.8 E-7	NA	NA	4.6 E-7	1.7 E-6	NA	NA	NA	NA	NA	3.5 E-7	3.1 E-7	1.2 E-5	NA	8.5 E-5
33B-SP11	20	3.2 E-5	NA	2.8 E-5	NA	NA	NA	1.9 E-8	4.3 E-6	NA	NA	2.0 E-7	9.3 E-7	NA	1.4 E-7	5.4 E-7	5.6 E-5	8.1 E-5	3.7 E-9	NA	1.2 E-7	NA	NA	2.6 E-7	1.3 E-6	NA	NA	NA	NA	NA	1.5 E-7	2.2 E-7	7.6 E-5	NA	2.8 E-4
33B-SP12	10	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	9.8 E-7	7.3 E-8	NA	4.6 E-6	NA	NA	2.8 E-7	NA	NA	2.6 E-9	9.0 E-8	4.6 E-7	NA	NA	NA	NA	3.3 E-6	3.2 E-7	3.1 E-7	1.4 E-6	NA	1.3 E-5
33B-SP12	20	5.9 E-7	NA	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	2.3 E-7	6.6 E-7	5.4 E-7	5.7 E-8	NA	1.9 E-6	NA	NA	NA	3.8 E-8	NA	NA	1.2 E-7	7.9 E-7	NA	NA	NA	NA	6.9 E-7	3.1 E-7	2.8 E-7	4.5 E-7	NA	6.7 E-6
33B-SP13	7.5	NA	4.9 E-5	NA	2.5 E-5	NA	1.1 E-6	2.6 E-7	1.7 E-5	8.4 E-6	NA	1.5 E-6	1.5 E-5	NA	8.6 E-8	NA	NA	NA	2.2 E-8	NA	1.3 E-6	1.0 E-6	NA	6.0 E-7	2.8 E-6	3.9 E-5	1.3 E-5	3.9 E-6	NA	NA	NA	1.7 E-5	NA	NA	2.0 E-4
33B-SP13	20	NA	1.8 E-5	NA	7.4 E-6	NA	5.0 E-7	1.4 E-7	4.7 E-6	2.7 E-6	NA	4.7 E-7	6.4 E-6	NA	2.8 E-8	NA	NA	NA	1.2 E-8	NA	1.8 E-7	3.7 E-7	NA	3.0 E-7	7.2 E-7	1.5 E-5	4.0 E-6	1.2 E-6	NA	NA	1.7 E-7	9.7 E-6	NA	NA	7.2 E-5
33B-SP14	10	2.7 E-3	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	1.8 E-5	NA	2.8 E-4	NA	8.3 E-7	NA	NA	NA	NA	NA	1.1 E-5	3.2 E-5	NA	NA	NA	NA	NA	1.0 E-5	1.0 E-2	NA	2.4 E-2
33B-SP14	20	1.4 E-3	NA	NA	NA	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	8.0 E-6	NA	1.5 E-4	NA	2.7 E-7	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	5.6 E-3	NA	1.1 E-2
33B-SP15	10	4.3 E-5	9.3 E-6	NA	NA	NA	NA	2.4 E-8	NA	7.3 E-7	NA	4.5 E-7	1.1 E-6	NA	3.5 E-7	NA	1.8 E-6	NA	NA	NA	8.2 E-8	NA	NA	2.0 E-7	8.8 E-7	NA	NA	NA	NA	NA	1.7 E-7	4.0 E-6	9.4 E-6	NA	7.2 E-5
33B-SP15	20	8.4 E-4	4.0 E-6	NA	NA	NA	3.3 E-7	1.9 E-8	NA	3.3 E-7	6.9 E-9	6.3 E-7	9.2 E-7	NA	1.3 E-7	1.5 E-6	NA	NA	6.1 E-8	NA	5.5 E-8	NA	1.2 E-9	9.4 E-8	1.4 E-6	NA	NA	NA	NA	NA	1.3 E-6	2.7 E-6	2.1 E-5	NA	8.7 E-4
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	1.1 E-6
33B-SP16	20	NA	NA	NA	NA	NA	NA	4.5 E-8	NA	NA	NA	5.0 E-7	1.3 E-6	NA	2.5 E-8	NA	NA	NA	NA	NA	4.1 E-8	NA	NA	2.7 E-8	1.6 E-7	2.6 E-7	NA	NA	NA	NA	1.6 E-7	6.3 E-7	NA	NA	3.2 E-6
33B-SP16	32	NA	NA	NA	NA	NA	NA	8.9 E-9	NA	NA	NA	2.2 E-7	2.4 E-6	NA	2.3 E-8	NA	NA	NA	NA	NA	3.9 E-8	NA	NA	6.5 E-8	4.2 E-7	1.2 E-7	NA	NA	NA	NA	1.1 E-7	2.4 E-7	3.2 E-8	NA	3.7 E-6
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	NA	1.7 E-7	3.1 E-7	NA	NA	7.1 E-7
33B-SP17	20	2.7 E-6	NA	NA	NA	NA	NA	2.0 E-8	NA	NA	NA	7.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-8	NA	NA	NA	5.8 E-8	NA	NA	NA	NA	NA	NA	9.8 E-8	7.6 E-7	NA	4.5 E-6
33B-SP18	7	NA	NA	NA	NA	NA	NA	3.5 E-7	2.2 E-5	NA	1.8 E-8	4.3 E-6	5.8 E-6	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	9.0 E-8	NA	2.1 E-7	1.0 E-6	1.0 E-6	7.3 E-7	NA	NA	NA	3.1 E-7	1.3 E-6	NA	NA	3.7 E-5
33B-SP18	20	NA	NA	NA	NA	NA	NA	6.8 E-8	8.7 E-6	NA	2.8 E-8	7.7 E-7	1.1 E-6	NA	1.3 E-7	NA	NA	NA	NA	NA	3.0 E-7	NA	NA	6.0 E-8	1.8 E-7	2.7 E-7	NA	NA	NA	NA	NA	2.7 E-7	NA	NA	1.2 E-5
33B-SP19	10	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	6.7 E-7	NA	2.7 E-7	6.9 E-6	3.9 E-7	1.4 E-7	NA	3.2 E-6	NA	8.5 E-8	NA	NA	1.3 E-7	NA	2.8 E-7	2.4 E-6	4.7 E-6	1.3 E-6	NA	NA	NA	NA	4.0 E-6	3.7 E-6	NA	3.1 E-5
33B-SP19	20	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	3.7 E-7	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-8	NA	NA	1.2 E-7	NA	1.1 E-7	6.9 E-7	4.1 E-6	1.3 E-6	NA	NA	NA	NA	3.0 E-6	2.3 E-7	NA	1.1 E-5
33B-SP20	10	9.8 E-5	4.5 E-5	NA	1.6 E-5	NA	NA	5.8 E-8	NA	5.7 E-6	NA	1.0 E-6	1.1 E-5	NA	2.6 E-7	NA	3.0 E-6	5.3 E-6	1.6 E-8	NA	2.5 E-6	6.3 E-7	NA	2.8 E-7	1.2 E-6	2.7 E-5	8.0 E-6	2.4 E-6	NA	NA	NA	1.4 E-5	1.6 E-4	NA	4.0 E-4
33B-SP20	20	5.4 E-6	3.2 E-5	NA	1.0 E-5	NA	5.3 E-7	NA	NA	3.7 E-6	NA	1.3 E-7	6.9 E-6	NA	3.3 E-8	NA	NA	NA	8.2 E-9	NA	4.5 E-8	4.0 E-7	NA	2.6 E-7	6.2 E-7	1.6 E-5	5.0 E-6	1.4 E-6	NA	NA	NA	1.1 E-5	1.9 E-5	NA	1.1 E-4
33B-SP21	10	4.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-4	1.7 E-2	NA	2.2 E-2
33B-SP21	20	3.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	8.6 E-3	NA	1.2 E-2
35B-SP04	10	NA	NA	NA	NA	NA	NA	6.3 E-8	NA	NA	NA	5.1 E-7	3.4 E-6	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-8	9.2 E-7	3.4 E-7	NA	NA	NA	NA	NA	4.7 E-7	NA	NA	5.9 E-6
35B-SP04	20	NA	NA	NA	NA	NA	NA	3.8 E-8	NA	NA	NA	3.0 E-7	3.4 E-6	NA	2.6 E-7	NA	1.7 E-5	NA	4.7 E-9	NA	5.5 E-8	NA	NA	7.5 E-8	1.4 E-6	2.1 E-7	NA	NA	NA	NA	2.1 E-7	2.6 E-7	NA	NA	2.3 E-5

Table 5.10-38
Location-Specific Soil Vapor to Outdoor Air Risk Assessment Results - Recreator - Off Road Vehicle Area
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																																	
Sample Name	Depth	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trimethyl benzene	1,2-Dichloroethane	1,3,5-Trimethyl benzene	1,4-Dioxane	2,2,4-Trimethyl pentane	2-Butanone (Methyl Ethyl Ketone)	2-Propanol	4-Ethyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromodichloro methane	Carbon Disulfide	Carbon Tetrachloride	Chloroform	cis-1,2-Dichloroethene	Cyclohexane	Dibromochloro methane	Ethanol	EthylBenzene	Freon 113	Heptane	Hexane	m,p-Xylene	o-Xylene	Propylbenzene	Styrene	Tetrachloro ethylene	Tetrahydro furan	Toluene	Trichloro ethylene	Vinyl Chloride	ILCR
Unit Hazard Adult																																					
Unit Risk																																					
30B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-10	NA	NA	4.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	6.0 E-10	NA	6 E-9
30B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-9
30B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-11	NA	NA	NA	2 E-9
30B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP13	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-9	NA	NA	2.8 E-9	1.9 E-9	NA	NA	NA	NA	7.1 E-10	NA	NA	NA	NA	NA	NA	NA	3.2 E-10	8.0 E-11	NA	5.5 E-9	NA	1 E-8
30B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	3.0 E-10	NA	4.6 E-9	3.9 E-9	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	NA	3.4 E-10	5.9 E-11	NA	8.2 E-9	NA	2 E-8
30B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-10	8.0 E-11	NA	NA	NA	3 E-9
30B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-9	NA	NA	1.2 E-7	4.0 E-8	NA	NA	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	7.9 E-8	NA	2 E-7
30B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-9	NA	NA	6.1 E-7	2.2 E-9	NA	NA	NA	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-9	NA	6 E-7
30B-SP15	16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-8	NA	NA	2.4 E-8	6.0 E-9	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	5 E-8
30B-SP17	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
30B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	3 E-9
30B-SP18	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1E-09	5 E-9
30B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
30B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
30B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-10	NA	9 E-10
30B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
30B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10
30B-SP22	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	2.6 E-8	NA	NA	NA	NA	NA	4.8 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	3 E-8
30B-SP22	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	1.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-11	NA	1 E-8
30B-SP23	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-10	NA	NA	8.2 E-9	NA	NA	NA	NA	NA	4.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	9 E-9
30B-SP23	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-10	NA	NA	2.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-10	NA	3 E-8
32B-SP07	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-8	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-8
32B-SP07	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-11	NA	3.3 E-11	NA	1 E-9
32B-SP08	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-9
32B-SP08	17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
32B-SP08	20	NA	NA	NA	7.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-11	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	4.3 E-11	NA	6 E-9
32B-SP08	40	NA	NA	NA	NA	NA	2.1 E-10	NA	NA	NA	NA	NA	NA	3.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-10	NA	2.3 E-11	NA	7 E-10
32B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-9	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-11	NA	3 E-9
32B-SP09	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-10	NA	NA	NA	6.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-11	NA	NA	NA	1 E-9
32B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-9	1.7 E-9	NA	NA	3.0 E-9	NA	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-11	NA	2.9 E-9	NA	9 E-9
32B-SP10	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-11	NA	7.6 E-10	NA	2 E-9
32B-SP11	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	5.8 E-7	NA	6 E-7
32B-SP11	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	4 E-7
33B-SP09	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-10	NA	1.8 E-9	NA	6 E-9
33B-SP09	20	NA	NA	NA	3.0 E-10	NA	2.7 E-10	NA	NA	NA	NA	NA	NA	5.7 E-10	NA	NA	NA	6.5 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-10	NA	4.3 E-9	NA	1 E-8
33B-SP10	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-11	NA	5 E-11
33B-SP11	10	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	9.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-10	NA	7.9 E-9	NA	2 E-8
33B-SP11	20	4.8 E-10	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	5.0 E-10	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-11	NA	4.9 E-8	NA	8 E-8
33B-SP12	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-9	NA	NA	2.6 E-9	NA	NA	2.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-10	1.0 E-10	NA	9.2 E-10	NA	6 E-9
33B-SP12	20	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	NA	NA	3.1 E-10	7.6 E-10	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-11	9.8 E-11	NA	2.9 E-10	NA	3 E-9
33B-SP13	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-9
33B-SP13	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	NA	NA	NA	4 E-9
33B-SP14	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-6	NA	7 E-6
33B-SP14	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-6	NA	4 E-6
33B-SP15	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	9.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-11	NA	6.0 E-9	NA	8 E-9
33B-SP15	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-10	NA	NA	1.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-10	NA	1.3 E-8	NA	2 E-8
33B-SP16	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-11	NA	NA	NA	4 E-10
33B-SP16	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-11	NA	NA	NA	7 E-10
33B-SP16	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-11	NA	2.1 E-11	NA	1 E-9
33B-SP17	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-11	NA	NA	NA	5 E-11
33B-SP17	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	5 E-10
33B-SP18	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-11	NA	NA	NA	3 E-9
33B-SP18	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10
33B-SP19	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	5.5 E-10	NA	NA	1.8 E-9	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-9	NA	8 E-9
33B-SP19	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-10	NA	3 E-10
33B-SP20	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	1.7 E-9	NA	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	1 E-7
33B-SP20	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-9	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-8	NA	2 E-8
33B-SP21	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	1 E-5
33B-SP21	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-6	NA	6 E-6
35B-SP04	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9
35B-SP04	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	9.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-11	NA	NA	NA	1 E-8

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x soil vapor to air attenuation factor (from Table 5.10-9) x the unit hazard or unit risk for the chemical).

Table 5.10-39 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil					Incremental Lifetime Cancer Risk - Soil			
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Recreator	Resident	Construction Worker	Commercial Worker	Recreator
29B-SB01	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
29B-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
29B-SB01	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
29B-SB04	1.5	1.5 E-1	1.6 E-2	3.9 E-2	1.2 E-2	2.3 E-3	7 E-10	9 E-9	3 E-10	8 E-11
29B-SB04	5	1.2 E-1	1.3 E-2	3.1 E-2	9.2 E-3	1.8 E-3	6 E-10	7 E-9	3 E-10	6 E-11
29B-SB04	11	2.4 E-1	2.5 E-2	6.1 E-2	1.8 E-2	3.6 E-3	**NA**	**NA**	**NA**	**NA**
29B-SB05	0.5	1.8 E-1	1.9 E-2	4.6 E-2	1.3 E-2	2.7 E-3	5 E-10	6 E-9	2 E-10	6 E-11
29B-SB05	1	1.9 E-1	2.1 E-2	5.0 E-2	1.5 E-2	2.9 E-3	**NA**	**NA**	**NA**	**NA**
29B-SB05	5	2.5 E-1	2.7 E-2	6.6 E-2	2.0 E-2	3.9 E-3	7 E-10	9 E-9	3 E-10	8 E-11
29B-SB05	11	2.6 E-1	2.8 E-2	6.8 E-2	2.0 E-2	4.0 E-3	7 E-10	9 E-9	3 E-10	8 E-11
29B-SB06	1.5	2.0 E-1	2.1 E-2	5.2 E-2	1.5 E-2	3.0 E-3	5 E-10	6 E-9	2 E-10	6 E-11
29B-SB06	5	2.9 E-1	3.1 E-2	7.6 E-2	2.2 E-2	4.5 E-3	1 E-9	2 E-8	6 E-10	1 E-10
29B-SB06	11	2.5 E-1	2.7 E-2	6.6 E-2	1.9 E-2	3.9 E-3	**NA**	**NA**	**NA**	**NA**
29B-SB07	1	2.0 E-1	2.1 E-2	5.1 E-2	1.5 E-2	3.0 E-3	5 E-10	6 E-9	2 E-10	5 E-11
29B-SB07	4.5	1.1 E-1	1.2 E-2	2.9 E-2	8.6 E-3	1.7 E-3	6 E-10	8 E-9	3 E-10	7 E-11
29B-SB08	1.5	1.0 E-1	1.1 E-2	2.6 E-2	7.7 E-3	1.5 E-3	4 E-10	5 E-9	2 E-10	4 E-11
29B-SB08	5	2.2 E-1	2.4 E-2	5.8 E-2	1.7 E-2	3.4 E-3	9 E-10	1 E-8	4 E-10	1 E-10
29B-SB08	11.5	2.1 E-1	2.2 E-2	5.5 E-2	1.6 E-2	3.2 E-3	**NA**	**NA**	**NA**	**NA**
29B-SB09	1.5	2.3 E-1	2.5 E-2	6.0 E-2	1.8 E-2	3.5 E-3	7 E-10	9 E-9	3 E-10	8 E-11
29B-SB09	5	7.4 E-1	7.9 E-2	1.9 E-1	5.7 E-2	1.1 E-2	2 E-9	3 E-8	1 E-9	3 E-10
29B-SB09	11.5	1.5 E-1	1.6 E-2	4.0 E-2	1.2 E-2	2.3 E-3	**NA**	**NA**	**NA**	**NA**
29B-SB10	1.5	1.2 E-1	1.2 E-2	3.0 E-2	8.9 E-3	1.8 E-3	4 E-10	5 E-9	2 E-10	4 E-11
29B-SB10	5	2.2 E-1	2.4 E-2	5.7 E-2	1.7 E-2	3.4 E-3	9 E-10	1 E-8	4 E-10	1 E-10
29B-SB10	11.5	2.6 E-1	2.7 E-2	6.7 E-2	2.0 E-2	3.9 E-3	**NA**	**NA**	**NA**	**NA**
29B-SB11	1.5	3.2 E-1	3.4 E-2	8.2 E-2	2.4 E-2	4.8 E-3	1 E-9	1 E-8	5 E-10	1 E-10
29B-SB11	5	2.5 E-1	2.7 E-2	6.5 E-2	1.9 E-2	3.8 E-3	1 E-9	1 E-8	4 E-10	1 E-10
29B-SB11	11.5	1.7 E-1	1.8 E-2	4.4 E-2	1.3 E-2	2.6 E-3	9 E-10	1 E-8	4 E-10	1 E-10
30B-SB01	0	3.3 E-4	3.9 E-5	8.7 E-5	3.3 E-5	5.5 E-6	1 E-6	3 E-8	3 E-7	6 E-8
30B-SB01	0.01	3.3 E-4	3.8 E-5	8.6 E-5	3.2 E-5	5.5 E-6	1 E-7	4 E-9	3 E-8	8 E-9
30B-SB01	3	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
30B-SB01	5	4.1 E-4	4.8 E-5	1.1 E-4	4.1 E-5	6.8 E-6	**NA**	**NA**	**NA**	**NA**
30B-SB01	10	1.1 E-1	1.2 E-2	2.8 E-2	8.4 E-3	1.7 E-3	**NA**	**NA**	**NA**	**NA**
30B-SB02	0	1.3 E-1	1.4 E-2	3.3 E-2	1.0 E-2	2.0 E-3	**8 E-5**	**2 E-6**	**2 E-5**	**4 E-6**
30B-SB02	0.01	2.3 E-3	2.8 E-4	6.2 E-4	2.3 E-4	3.9 E-5	**3 E-5**	9 E-7	**8 E-6**	**2 E-6**
30B-SB02	3	9.1 E-2	9.8 E-3	2.3 E-2	7.0 E-3	1.4 E-3	**NA**	**NA**	**NA**	**NA**
30B-SB02	5	2.5 E-4	2.9 E-5	6.4 E-5	2.4 E-5	4.1 E-6	**NA**	**NA**	**NA**	**NA**
30B-SB02	10	1.1 E-4	1.3 E-5	3.0 E-5	1.1 E-5	1.9 E-6	**NA**	**NA**	**NA**	**NA**
30B-SB03	0	**NA**	**NA**	**NA**	**NA**	**NA**	1 E-8	4 E-10	3 E-9	7 E-10
30B-SB03	0.01	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
30B-SB03	3	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
30B-SB03	5	4.0 E-4	4.7 E-5	1.1 E-4	4.0 E-5	6.7 E-6	**NA**	**NA**	**NA**	**NA**
30B-SB03	10	1.1 E-4	1.3 E-5	3.0 E-5	1.1 E-5	1.9 E-6	**NA**	**NA**	**NA**	**NA**
30B-SB04	1	2.0 E-1	2.2 E-2	5.3 E-2	1.6 E-2	3.1 E-3	9 E-10	1 E-8	4 E-10	1 E-10
30B-SB04	5	2.4 E-1	2.6 E-2	6.3 E-2	1.8 E-2	3.7 E-3	7 E-10	9 E-9	3 E-10	8 E-11
30B-SB04	11	5.2 E-1	5.6 E-2	1.4 E-1	4.0 E-2	8.0 E-3	7 E-10	9 E-9	3 E-10	8 E-11
30B-SB05	1	2.5 E-1	2.7 E-2	6.5 E-2	1.9 E-2	3.8 E-3	1 E-9	1 E-8	4 E-10	1 E-10
30B-SB05	5	4.5 E-1	4.8 E-2	1.2 E-1	3.4 E-2	6.8 E-3	1 E-9	2 E-8	6 E-10	1 E-10

Table 5.10-39 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil					Incremental Lifetime Cancer Risk - Soil			
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Recreator	Resident	Construction Worker	Commercial Worker	Recreator
30B-SB06	1	1.3 E-1	1.4 E-2	3.4 E-2	1.0 E-2	2.0 E-3	6 E-10	7 E-9	3 E-10	6 E-11
30B-SB06	5	2.1 E-1	2.3 E-2	5.6 E-2	1.7 E-2	3.3 E-3	1 E-9	2 E-8	6 E-10	2 E-10
30B-SB06	11	2.0 E-1	2.2 E-2	5.2 E-2	1.6 E-2	3.1 E-3	1 E-9	1 E-8	5 E-10	1 E-10
30B-SB07	1	1.2 E-1	1.3 E-2	3.2 E-2	9.5 E-3	1.9 E-3	9 E-10	1 E-8	4 E-10	1 E-10
30B-SB07	5	1.9 E-1	2.1 E-2	5.1 E-2	1.5 E-2	3.0 E-3	9 E-10	1 E-8	4 E-10	1 E-10
30B-SB07	11	1.6 E-1	1.7 E-2	4.2 E-2	1.2 E-2	2.5 E-3	7 E-10	9 E-9	3 E-10	8 E-11
30B-SB08	1	2.1 E-1	2.3 E-2	5.5 E-2	1.6 E-2	3.2 E-3	7 E-10	8 E-9	3 E-10	7 E-11
30B-SB08	5	6.5 E-1	6.9 E-2	1.7 E-1	4.9 E-2	9.9 E-3	8 E-10	1 E-8	4 E-10	9 E-11
30B-SB08	11	5.9 E-1	6.4 E-2	1.5 E-1	4.5 E-2	9.1 E-3	6 E-10	8 E-9	3 E-10	7 E-11
31B-SB01	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
31B-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
31B-SB01	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
31B-SB02	1.5	2.0 E-1	2.2 E-2	5.3 E-2	1.6 E-2	3.1 E-3	9 E-10	1 E-8	4 E-10	1 E-10
31B-SB02	5	5.0 E-1	5.3 E-2	1.3 E-1	3.8 E-2	7.6 E-3	1 E-9	1 E-8	5 E-10	1 E-10
31B-SB02	11	3.2 E-1	3.4 E-2	8.3 E-2	2.4 E-2	4.9 E-3	1 E-9	2 E-8	6 E-10	1 E-10
31B-SD01	0.25	1.5 E-1	1.6 E-2	3.9 E-2	1.1 E-2	2.3 E-3	**NA**	**NA**	**NA**	**NA**
31B-SD01	1.5	2.0 E-1	2.2 E-2	5.3 E-2	1.5 E-2	3.1 E-3	**NA**	**NA**	**NA**	**NA**
31B-SD02	0.25	1.8 E-1	1.9 E-2	4.7 E-2	1.4 E-2	2.7 E-3	**NA**	**NA**	**NA**	**NA**
31B-SD02	1.5	1.9 E-1	2.1 E-2	5.0 E-2	1.5 E-2	2.9 E-3	**NA**	**NA**	**NA**	**NA**
32B-SB01	1	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
32B-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
32B-SB01	10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
32B-SB02	2	1.5 E-1	1.6 E-2	3.9 E-2	1.2 E-2	2.3 E-3	6 E-10	8 E-9	3 E-10	7 E-11
32B-SB02	5	7.9 E-2	8.5 E-3	2.1 E-2	6.1 E-3	1.2 E-3	3 E-10	4 E-9	1 E-10	3 E-11
32B-SB02	11	1.5 E-1	1.6 E-2	3.9 E-2	1.2 E-2	2.3 E-3	8 E-10	1 E-8	4 E-10	9 E-11
32B-SB03	1.5	1.3 E-1	1.4 E-2	3.3 E-2	9.9 E-3	2.0 E-3	6 E-10	8 E-9	3 E-10	7 E-11
32B-SB03	5	2.5 E-1	2.7 E-2	6.6 E-2	1.9 E-2	3.9 E-3	1 E-9	1 E-8	5 E-10	1 E-10
32B-SB03	11.5	2.4 E-1	2.5 E-2	6.2 E-2	1.8 E-2	3.6 E-3	8 E-10	1 E-8	4 E-10	9 E-11
32B-SB04	1.5	1.3 E-1	1.4 E-2	3.3 E-2	9.8 E-3	2.0 E-3	6 E-10	7 E-9	3 E-10	6 E-11
32B-SB04	5	**1.3 E+0**	1.4 E-1	**1.9 E+0**	1.0 E-1	2.1 E-2	1 E-9	2 E-8	6 E-10	1 E-10
32B-SB04	11.5	3.4 E-1	3.7 E-2	8.9 E-2	2.6 E-2	5.3 E-3	1 E-9	2 E-8	6 E-10	1 E-10
32B-SB05	1.5	1.6 E-1	1.7 E-2	4.1 E-2	1.2 E-2	2.4 E-3	5 E-10	6 E-9	2 E-10	6 E-11
32B-SB05	5	2.5 E-1	2.7 E-2	6.6 E-2	2.0 E-2	3.9 E-3	8 E-10	1 E-8	4 E-10	9 E-11
33B-SB01	1	1.5 E-4	1.7 E-5	3.9 E-5	1.5 E-5	2.5 E-6	**NA**	**NA**	**NA**	**NA**
33B-SB01	5	7.4 E-4	8.7 E-5	2.0 E-4	7.4 E-5	1.2 E-5	**NA**	**NA**	**NA**	**NA**
33B-SB01	10	4.8 E-4	5.6 E-5	1.3 E-4	4.8 E-5	8.0 E-6	**NA**	**NA**	**NA**	**NA**
33B-SB02	1	4.6 E-4	5.4 E-5	1.2 E-4	4.6 E-5	7.7 E-6	**NA**	**NA**	**NA**	**NA**
33B-SB02	5	1.0 E-3	1.2 E-4	2.6 E-4	9.9 E-5	1.7 E-5	**NA**	**NA**	**NA**	**NA**
33B-SB02	10	1.2 E-4	1.4 E-5	3.0 E-5	1.1 E-5	1.9 E-6	**NA**	**NA**	**NA**	**NA**
33B-SB03	1.5	2.5 E-1	2.8 E-2	6.6 E-2	2.0 E-2	3.9 E-3	6 E-9	8 E-8	3 E-9	7 E-10
33B-SB03	5	2.3 E-1	2.5 E-2	6.0 E-2	1.8 E-2	3.5 E-3	1 E-9	1 E-8	5 E-10	1 E-10
33B-SB03	11	2.3 E-1	2.4 E-2	5.9 E-2	1.7 E-2	3.5 E-3	7 E-10	9 E-9	3 E-10	8 E-11
33B-WS	1	2.7 E-1	2.9 E-2	6.9 E-2	2.1 E-2	4.1 E-3	1 E-9	1 E-8	5 E-10	1 E-10
34B-SB01	1	1.4 E-3	1.7 E-4	3.7 E-4	1.4 E-4	2.4 E-5	**NA**	**NA**	**NA**	**NA**
34B-SB01	5	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
34B-SB01	10	6.7 E-4	7.9 E-5	1.8 E-4	6.7 E-5	1.1 E-5	**NA**	**NA**	**NA**	**NA**
34B-SB02	1.5	1.4 E-1	1.5 E-2	3.6 E-2	1.1 E-2	2.1 E-3	7 E-10	9 E-9	3 E-10	8 E-11

Table 5.10-39 *All Receptors Hazard Index and Cancer Risk Results - Soil*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index - Soil					Incremental Lifetime Cancer Risk - Soil			
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Recreator	Resident	Construction Worker	Commercial Worker	Recreator
34B-SB02	11	2.6 E-1	2.8 E-2	6.9 E-2	2.0 E-2	4.1 E-3	1 E-9	1 E-8	5 E-10	1 E-10
29B-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS04	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
30B-SNS05	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
31B-AH11	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA
33B-AH01	3	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-SNS02	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
34B-AH01	0	NA	NA	NA	NA	NA	**3 E-5**	9 E-7	**7 E-6**	**2 E-6**
31B-AH01	0.01	NA	NA	NA	NA	NA	**2 E-5**	6 E-7	**5 E-6**	1 E-6
31B-AH11	0	NA	NA	NA	NA	NA	**2 E-5**	6 E-7	**5 E-6**	1 E-6
30B-AH02	0.01	NA	NA	NA	NA	NA	**2 E-5**	5 E-7	**4 E-6**	9 E-7
30B-AH02	0	NA	NA	NA	NA	NA	**2 E-5**	5 E-7	**4 E-6**	9 E-7
29B-AH01	1	NA	NA	NA	NA	NA	**2 E-5**	5 E-7	**4 E-6**	8 E-7
30B-AH01	0.01	NA	NA	NA	NA	NA	**1 E-5**	4 E-7	**3 E-6**	8 E-7
30B-AH01	0	NA	NA	NA	NA	NA	**1 E-5**	4 E-7	**3 E-6**	8 E-7
34B-AH01	3	NA	NA	NA	NA	NA	**1 E-5**	4 E-7	**3 E-6**	8 E-7
34B-AH01	0.01	NA	NA	NA	NA	NA	**3 E-6**	1 E-7	8 E-7	2 E-7
30B-SNS05	0.5	NA	NA	NA	NA	NA	7 E-7	2 E-8	2 E-7	4 E-8
30B-SNS02	0.5	NA	NA	NA	NA	NA	6 E-7	2 E-8	1 E-7	3 E-8
30B-SNS03	0.5	NA	NA	NA	NA	NA	8 E-8	3 E-9	2 E-8	5 E-9
34B-SNS02	0.5	NA	NA	NA	NA	NA	8 E-8	2 E-9	2 E-8	4 E-9
30B-SNS03	2.5	NA	NA	NA	NA	NA	7 E-8	2 E-9	2 E-8	4 E-9
34B-SNS01	0.5	NA	NA	NA	NA	NA	7 E-8	2 E-9	2 E-8	4 E-9
34B-SNS03	0.5	NA	NA	NA	NA	NA	6 E-8	2 E-9	2 E-8	4 E-9
34B-SNS03	2.5	NA	NA	NA	NA	NA	6 E-8	2 E-9	1 E-8	3 E-9
32B-HP05	0.01	NA	NA	NA	NA	NA	3 E-9	9 E-11	7 E-10	2 E-10
32B-SB01	0	NA	NA	NA	NA	NA	3 E-9	9 E-11	7 E-10	2 E-10
32B-HP05	3	NA	NA	NA	NA	NA	4 E-10	1 E-11	1 E-10	2 E-11
32B-SB01	3	NA	NA	NA	NA	NA	4 E-10	1 E-11	1 E-10	2 E-11
Minimum		1.1 E-4	1.3 E-5	3.0 E-5	1.1 E-5	1.9 E-6	3 E-10	1 E-11	1 E-10	2 E-11
Median		1.9 E-1	2.1 E-2	5.0 E-2	1.5 E-2	2.9 E-3	1 E-9	1 E-8	5 E-10	1 E-10
Maximum		**1.3 E+0**	1.4 E-1	**1.9 E+0**	1.0 E-1	2.1 E-2	**8 E-5**	**2 E-6**	**2 E-5**	**4 E-6**

Key:
NA = Not applicable

Table 5.10-40 All Receptors Hazard Index and Cancer Risk Results - Soil Vapor
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

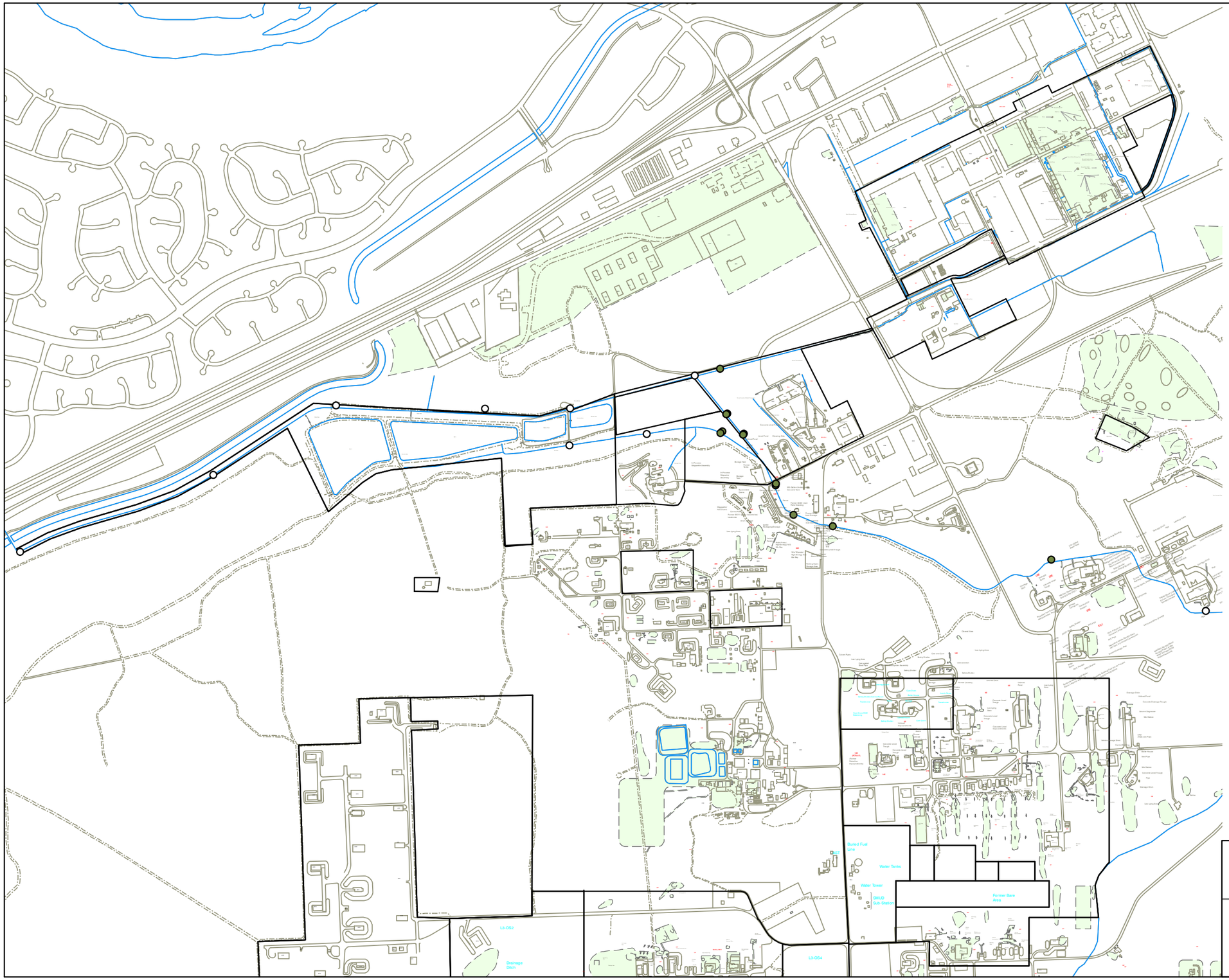
		Non-Cancer Hazard Index - Soil Vapor					Incremental Lifetime Cancer Risk - Soil			
		Resident		Construction	Commercial			Construction	Commercial	
Sample Name	Depth	Child	Adult	Worker	Worker	Recreator	Resident	Worker	Worker	Recreator
30B-SP10	10	2.7 E-3	1.2 E-3	1.1 E-5	4.2 E-4	1.5 E-5	5 E-7	1 E-10	1 E-7	6 E-9
30B-SP10	20	**NA**	**NA**	**NA**	**NA**	**NA**	0 E+0	0 E+0	0 E+0	0 E+0
30B-SP11	10	7.8 E-4	3.3 E-4	3.2 E-6	1.2 E-4	4.5 E-6	7 E-8	2 E-11	2 E-8	1 E-9
30B-SP11	20	1.5 E-3	6.4 E-4	5.5 E-6	2.3 E-4	7.6 E-6	1 E-7	3 E-11	3 E-8	2 E-9
30B-SP12	10	4.7 E-4	2.0 E-4	2.0 E-6	7.3 E-5	2.8 E-6	0 E+0	0 E+0	0 E+0	0 E+0
30B-SP13	10	2.0 E-2	8.6 E-3	8.0 E-5	3.1 E-3	1.1 E-4	1 E-6	3 E-10	3 E-7	1 E-8
30B-SP13	20	1.4 E-2	6.2 E-3	5.2 E-5	2.2 E-3	7.3 E-5	**2 E-6**	4 E-10	4 E-7	2 E-8
30B-SP14	10	2.2 E-3	9.6 E-4	9.1 E-6	3.5 E-4	1.3 E-5	2 E-7	5 E-11	5 E-8	3 E-9
30B-SP14	20	8.5 E-2	3.6 E-2	3.1 E-4	1.3 E-2	4.3 E-4	**2 E-5**	5 E-9	**5 E-6**	2 E-7
30B-SP15	10	1.3 E-1	5.7 E-2	5.3 E-4	2.1 E-2	7.5 E-4	**5 E-5**	1 E-8	**1 E-5**	6 E-7
30B-SP15	16	4.0 E-2	1.7 E-2	1.5 E-4	6.2 E-3	2.1 E-4	**4 E-6**	1 E-9	1 E-6	5 E-8
30B-SP17	10	2.8 E-3	1.2 E-3	1.1 E-5	4.3 E-4	1.6 E-5	4 E-8	9 E-12	8 E-9	5 E-10
30B-SP17	20	1.7 E-3	7.1 E-4	6.1 E-6	2.6 E-4	8.6 E-6	2 E-7	5 E-11	5 E-8	3 E-9
30B-SP18	10	1.6 E-3	6.7 E-4	6.4 E-6	2.4 E-4	9.0 E-6	4 E-7	9 E-11	9 E-8	5 E-9
30B-SP19	10	1.0 E-3	4.3 E-4	4.1 E-6	1.5 E-4	5.8 E-6	1 E-7	4 E-11	3 E-8	2 E-9
30B-SP20	10	6.1 E-3	2.6 E-3	2.5 E-5	9.4 E-4	3.5 E-5	2 E-7	5 E-11	5 E-8	3 E-9
30B-SP20	20	6.1 E-4	2.6 E-4	2.2 E-6	9.4 E-5	3.1 E-6	7 E-8	2 E-11	2 E-8	9 E-10
30B-SP21	10	1.7 E-4	7.3 E-5	7.5 E-7	2.6 E-5	1.1 E-6	0 E+0	0 E+0	0 E+0	0 E+0
30B-SP21	20	1.3 E-3	5.4 E-4	4.4 E-6	1.9 E-4	6.2 E-6	2 E-8	5 E-12	5 E-9	3 E-10
30B-SP22	10	6.5 E-3	2.8 E-3	2.6 E-5	1.0 E-3	3.7 E-5	**2 E-6**	5 E-10	5 E-7	3 E-8
30B-SP22	20	2.9 E-3	1.2 E-3	1.1 E-5	4.5 E-4	1.5 E-5	1 E-6	2 E-10	2 E-7	1 E-8
30B-SP23	10	2.5 E-3	1.1 E-3	1.0 E-5	3.9 E-4	1.4 E-5	7 E-7	2 E-10	2 E-7	9 E-9
30B-SP23	20	5.7 E-3	2.4 E-3	2.1 E-5	8.8 E-4	2.9 E-5	**2 E-6**	5 E-10	5 E-7	3 E-8
32B-SP07	10	4.8 E-3	2.1 E-3	2.0 E-5	7.5 E-4	2.8 E-5	8 E-7	2 E-10	2 E-7	1 E-8
32B-SP07	20	1.5 E-3	6.3 E-4	4.9 E-6	2.3 E-4	6.8 E-6	9 E-8	2 E-11	2 E-8	1 E-9
32B-SP08	10	1.4 E-3	6.2 E-4	6.0 E-6	2.2 E-4	8.5 E-6	2 E-7	5 E-11	5 E-8	3 E-9
32B-SP08	17	1.3 E-5	5.5 E-6	4.9 E-8	2.0 E-6	6.8 E-8	0 E+0	0 E+0	0 E+0	0 E+0
32B-SP08	20	7.7 E-3	3.3 E-3	2.8 E-5	1.2 E-3	3.9 E-5	5 E-7	1 E-10	1 E-7	6 E-9
32B-SP08	40	1.2 E-3	5.1 E-4	4.0 E-6	1.8 E-4	5.6 E-6	6 E-8	1 E-11	1 E-8	7 E-10
32B-SP09	10	2.3 E-3	9.8 E-4	9.7 E-6	3.5 E-4	1.4 E-5	2 E-7	6 E-11	6 E-8	3 E-9
32B-SP09	20	6.7 E-4	2.9 E-4	2.4 E-6	1.0 E-4	3.4 E-6	8 E-8	2 E-11	2 E-8	1 E-9
32B-SP10	10	3.4 E-3	1.4 E-3	1.4 E-5	5.2 E-4	1.9 E-5	7 E-7	2 E-10	2 E-7	9 E-9
32B-SP10	20	2.9 E-3	1.3 E-3	1.0 E-5	4.6 E-4	1.5 E-5	2 E-7	5 E-11	5 E-8	2 E-9
32B-SP11	10	1.7 E-1	7.2 E-2	6.8 E-4	2.6 E-2	9.5 E-4	**4 E-5**	1 E-8	**1 E-5**	6 E-7
32B-SP11	20	1.4 E-1	6.0 E-2	5.0 E-4	2.2 E-2	7.0 E-4	**4 E-5**	8 E-9	**9 E-6**	4 E-7
33B-SP09	10	5.8 E-3	2.5 E-3	2.4 E-5	9.0 E-4	3.3 E-5	4 E-7	1 E-10	1 E-7	6 E-9
33B-SP09	20	1.9 E-2	8.2 E-3	7.1 E-5	3.0 E-3	1.0 E-4	1 E-6	2 E-10	2 E-7	1 E-8
33B-SP10	10	1.6 E-4	6.6 E-5	5.5 E-7	2.4 E-5	7.8 E-7	4 E-9	9 E-13	9 E-10	5 E-11
33B-SP11	10	1.5 E-2	6.4 E-3	6.1 E-5	2.3 E-3	8.5 E-5	1 E-6	4 E-10	4 E-7	2 E-8
33B-SP11	20	5.5 E-2	2.4 E-2	2.0 E-4	8.5 E-3	2.8 E-4	**7 E-6**	2 E-9	**2 E-6**	8 E-8
33B-SP12	10	2.3 E-3	9.9 E-4	9.4 E-6	3.6 E-4	1.3 E-5	4 E-7	1 E-10	1 E-7	6 E-9
33B-SP12	20	1.3 E-3	5.6 E-4	4.8 E-6	2.0 E-4	6.7 E-6	2 E-7	6 E-11	6 E-8	3 E-9
33B-SP13	7.5	3.4 E-2	1.5 E-2	1.4 E-4	5.3 E-3	2.0 E-4	6 E-7	2 E-10	1 E-7	8 E-9
33B-SP13	20	1.5 E-2	6.2 E-3	5.1 E-5	2.3 E-3	7.2 E-5	3 E-7	7 E-11	7 E-8	4 E-9
33B-SP14	10	**4.3 E+0**	**1.8 E+0**	1.7 E-2	6.7 E-1	2.4 E-2	**5 E-4**	1 E-7	**1 E-4**	**7 E-6**
33B-SP14	20	**2.2 E+0**	9.6 E-1	7.9 E-3	3.5 E-1	1.1 E-2	**3 E-4**	7 E-8	**8 E-5**	**4 E-6**
33B-SP15	10	1.3 E-2	5.4 E-3	5.1 E-5	2.0 E-3	7.2 E-5	6 E-7	1 E-10	1 E-7	8 E-9
33B-SP15	20	1.7 E-1	7.1 E-2	6.2 E-4	2.6 E-2	8.7 E-4	1 E-6	3 E-10	3 E-7	2 E-8
33B-SP16	10	1.9 E-4	8.2 E-5	8.1 E-7	3.0 E-5	1.1 E-6	3 E-8	8 E-12	8 E-9	4 E-10
33B-SP16	20	6.2 E-4	2.7 E-4	2.3 E-6	9.7 E-5	3.2 E-6	6 E-8	1 E-11	1 E-8	7 E-10
33B-SP16	32	7.3 E-4	3.1 E-4	2.6 E-6	1.1 E-4	3.7 E-6	1 E-7	2 E-11	2 E-8	1 E-9
33B-SP17	6	1.0 E-4	4.3 E-5	5.1 E-7	1.6 E-5	7.1 E-7	3 E-9	1 E-12	8 E-10	5 E-11
33B-SP17	20	8.6 E-4	3.7 E-4	3.2 E-6	1.3 E-4	4.5 E-6	4 E-8	9 E-12	1 E-8	5 E-10
33B-SP18	7	6.1 E-3	2.6 E-3	2.6 E-5	9.4 E-4	3.7 E-5	2 E-7	5 E-11	5 E-8	3 E-9
33B-SP18	20	2.4 E-3	1.0 E-3	8.4 E-6	3.7 E-4	1.2 E-5	4 E-8	9 E-12	1 E-8	5 E-10
33B-SP19	10	5.4 E-3	2.3 E-3	2.2 E-5	8.4 E-4	3.1 E-5	6 E-7	2 E-10	1 E-7	8 E-9
33B-SP19	20	2.2 E-3	9.5 E-4	7.9 E-6	3.4 E-4	1.1 E-5	3 E-8	6 E-12	6 E-9	3 E-10
33B-SP20	10	7.2 E-2	3.1 E-2	2.9 E-4	1.1 E-2	4.0 E-4	**9 E-6**	2 E-9	**2 E-6**	1 E-7
33B-SP20	20	2.3 E-2	9.8 E-3	8.1 E-5	3.5 E-3	1.1 E-4	1 E-6	3 E-10	3 E-7	2 E-8
33B-SP21	10	**3.9 E+0**	**1.7 E+0**	1.6 E-2	6.1 E-1	2.2 E-2	**9 E-4**	2 E-7	**2 E-4**	**1 E-5**
33B-SP21	20	**2.4 E+0**	**1.0 E+0**	8.5 E-3	3.7 E-1	1.2 E-2	**5 E-4**	1 E-7	**1 E-4**	**6 E-6**
35B-SP04	10	1.0 E-3	4.3 E-4	4.2 E-6	1.6 E-4	5.9 E-6	1 E-7	3 E-11	3 E-8	2 E-9
35B-SP04	20	4.3 E-3	1.8 E-3	1.6 E-5	6.6 E-4	2.3 E-5	9 E-7	2 E-10	2 E-7	1 E-8
Minimum		1.3 E-5	5.5 E-6	4.9 E-8	2.0 E-6	6.8 E-8	0 E+0	0 E+0	0 E+0	0 E+0
Median		2.9 E-3	1.2 E-3	1.1 E-5	4.5 E-4	1.5 E-5	4 E-7	9 E-11	9 E-8	5 E-9
Maximum		**4.3 E+0**	**1.8 E+0**	1.7 E-2	6.7 E-1	2.4 E-2	**9 E-4**	2 E-7	**2 E-4**	**1 E-5**

Key:
NA = Not applicable

Table 5.10-41 All Receptors Hazard Index and Cancer Risk Results for Groundwater
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk					Blood Lead	
		Ingestion and Domestic Use		Vapor Intrusion			Domestic + Vapor Intrusion			Ingestion and Domestic Use	Vapor Intrusion		Domestic + Vapor Intrusion			
		Resident		Resident		Commercial	Resident		Commercial			Commercial		Commercial	Resident	
Sample Name	Layer	Child	Adult	Child	Adult	Worker	Child	Adult	Worker	Resident	Resident	Worker	Resident	Worker	Child	Adult
1317	S	**2.4 E+1**	**1.0 E+1**	NA	NA	NA	**2.4 E+1**	**1.0 E+1**	NA	**1 E-5**	0 E+0	0 E+0	**1 E-5**	0 E+0	**1.1 E+2**	**5.6 E+1**
31007	S	1.2 E-1	5.2 E-2	NA	NA	NA	1.2 E-1	5.2 E-2	NA	**NA**	0 E+0	0 E+0	0 E+0	0 E+0	**NA**	**NA**
31010	S	**3.6 E+0**	**1.5 E+0**	NA	NA	NA	**3.6 E+0**	**1.5 E+0**	NA	**7 E-4**	0 E+0	0 E+0	**7 E-4**	0 E+0	3.6 E+0	1.8 E+0
31011	S	**1.2 E+1**	**5.2 E+0**	6.1 E-4	2.6 E-4	9.0 E-5	**1.2 E+1**	**5.2 E+0**	9.0 E-5	**3 E-4**	0 E+0	3 E-8	**3 E-4**	3 E-8	2.6 E+0	1.3 E+0
31012	S	**1.2 E+1**	**5.1 E+0**	1.1 E-3	4.7 E-4	2.6 E-4	**1.2 E+1**	**5.1 E+0**	2.6 E-4	**1 E-3**	1 E-7	6 E-8	**1 E-3**	6 E-8	4.8 E+0	2.3 E+0
31024	S	**3.3 E+0**	**1.4 E+0**	NA	NA	NA	**3.3 E+0**	**1.4 E+0**	NA	**8 E-4**	0 E+0	0 E+0	**8 E-4**	0 E+0	2.4 E+0	1.2 E+0
31025	S	6.3 E-2	2.7 E-2	2.4 E-3	1.0 E-3	3.6 E-4	6.6 E-2	2.8 E-2	3.6 E-4	**1 E-5**	0 E+0	1 E-7	**1 E-5**	1 E-7	**NA**	**NA**
31027	S	1.1 E-1	4.5 E-2	5.9 E-3	2.5 E-3	9.0 E-4	1.1 E-1	4.8 E-2	9.0 E-4	**NA**	0 E+0	0 E+0	0 E+0	0 E+0	**NA**	**NA**
31030	S	2.8 E-1	1.2 E-1	NA	NA	NA	2.8 E-1	1.2 E-1	NA	**NA**	0 E+0	0 E+0	0 E+0	0 E+0	**NA**	**NA**
795	Y	**2.4 E+1**	**1.0 E+1**	NA	NA	NA	**2.4 E+1**	**1.0 E+1**	NA	**NA**	0 E+0	0 E+0	0 E+0	0 E+0	**NA**	**NA**
796	Y	**2.2 E+1**	**9.2 E+0**	NA	NA	NA	**2.2 E+1**	**9.2 E+0**	NA	**5 E-4**	0 E+0	0 E+0	**5 E-4**	0 E+0	**8.3 E+1**	**4.1 E+1**
1575	Y	**2.8 E+1**	**1.2 E+1**	NA	NA	NA	**2.8 E+1**	**1.2 E+1**	NA	**3 E-4**	0 E+0	0 E+0	**3 E-4**	0 E+0	**1.7 E+1**	8.2 E+0
1576	Y	**5.0 E+2**	**2.1 E+2**	2.2 E-1	9.4 E-2	4.1 E-2	**5.0 E+2**	**2.1 E+2**	4.1 E-2	**9 E-4**	**4 E-5**	**8 E-6**	**1 E-3**	**8 E-6**	**9.7 E+1**	**4.9 E+1**
1577	Y	**3.9 E+1**	**1.6 E+1**	2.4 E-2	1.0 E-2	4.8 E-4	**3.9 E+1**	**1.6 E+1**	4.8 E-4	**1 E-3**	6 E-7	0 E+0	**1 E-3**	0 E+0	9.0 E+0	4.4 E+0
1578	Y	**2.5 E+1**	**1.1 E+1**	6.0 E-3	2.6 E-3	1.2 E-4	**2.5 E+1**	**1.1 E+1**	1.2 E-4	**8 E-4**	1 E-7	0 E+0	**8 E-4**	0 E+0	7.0 E+0	3.5 E+0
31006	Y	8.4 E-1	3.6 E-1	9.8 E-4	4.2 E-4	1.5 E-4	8.5 E-1	3.6 E-1	1.5 E-4	**2 E-6**	3 E-7	6 E-8	**2 E-6**	6 E-8	**NA**	**NA**
31008	Y	**1.2 E+1**	**5.3 E+0**	NA	NA	NA	**1.2 E+1**	**5.3 E+0**	NA	**2 E-4**	0 E+0	0 E+0	**2 E-4**	0 E+0	2.7 E+0	1.3 E+0
31009	Y	**2.7 E+1**	**1.2 E+1**	8.9 E-4	3.8 E-4	1.4 E-4	**2.7 E+1**	**1.2 E+1**	1.4 E-4	**1 E-3**	2 E-7	6 E-8	**1 E-3**	6 E-8	2.9 E+0	1.4 E+0
31017	Y	**2.2 E+0**	9.2 E-1	NA	NA	NA	**2.2 E+0**	9.2 E-1	NA	**5 E-4**	0 E+0	0 E+0	**5 E-4**	0 E+0	2.1 E+0	9.9 E-1
31019	Y	**2.5 E+1**	**1.1 E+1**	NA	NA	NA	**2.5 E+1**	**1.1 E+1**	NA	**5 E-4**	0 E+0	0 E+0	**5 E-4**	0 E+0	2.0 E+0	9.7 E-1
31026	Y	**NA**	**NA**	NA	NA	NA	0.0 E+0	0.0 E+0	NA	**NA**	0 E+0	0 E+0	0 E+0	0 E+0	**NA**	**NA**
31028	Y	**1.4 E+1**	**5.9 E+0**	NA	NA	NA	**1.4 E+1**	**5.9 E+0**	NA	**NA**	0 E+0	0 E+0	0 E+0	0 E+0	**NA**	**NA**
31029	Y	**5.8 E+1**	**2.5 E+1**	NA	NA	NA	**5.8 E+1**	**2.5 E+1**	NA	**NA**	0 E+0	0 E+0	0 E+0	0 E+0	**NA**	**NA**
Layer S																
Minimum		6.3 E-2	2.7 E-2	6.1 E-4	2.6 E-4	9.0 E-5	6.6 E-2	2.8 E-2	9.0 E-5	**1 E-5**	0 E+0	0 E+0	0 E+0	0 E+0	2.4 E+0	1.2 E+0
Median		**3.3 E+0**	**1.4 E+0**	1.8 E-3	7.6 E-4	3.1 E-4	**3.3 E+0**	**1.4 E+0**	3.1 E-4	**5 E-4**	0 E+0	0 E+0	**1 E-5**	0 E+0	3.6 E+0	1.8 E+0
Maximum		**2.4 E+1**	**1.0 E+1**	5.9 E-3	2.5 E-3	9.0 E-4	**2.4 E+1**	**1.0 E+1**	9.0 E-4	**1 E-3**	1 E-7	1 E-7	**1 E-3**	1 E-7	**1.1 E+2**	**5.6 E+1**
Layer Y																
Minimum		8.4 E-1	3.6 E-1	8.9 E-4	3.8 E-4	1.2 E-4	0.0 E+0	0.0 E+0	1.2 E-4	**2 E-6**	0 E+0	0 E+0	0 E+0	0 E+0	2.0 E+0	9.7 E-1
Median		**2.5 E+1**	**1.1 E+1**	6.0 E-3	2.6 E-3	1.5 E-4	**2.4 E+1**	**1.0 E+1**	1.5 E-4	**5 E-4**	0 E+0	0 E+0	**4 E-4**	0 E+0	7.0 E+0	3.5 E+0
Maximum		**5.0 E+2**	**2.1 E+2**	2.2 E-1	9.4 E-2	4.1 E-2	**5.0 E+2**	**2.1 E+2**	4.1 E-2	**1 E-3**	**4 E-5**	**8 E-6**	**1 E-3**	**8 E-6**	**9.7 E+1**	**4.9 E+1**

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Surface Water Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

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Environmental Remediation

Figure 5.11-1

Residential
Non-Cancer Effects – All Media
Buffalo Creek

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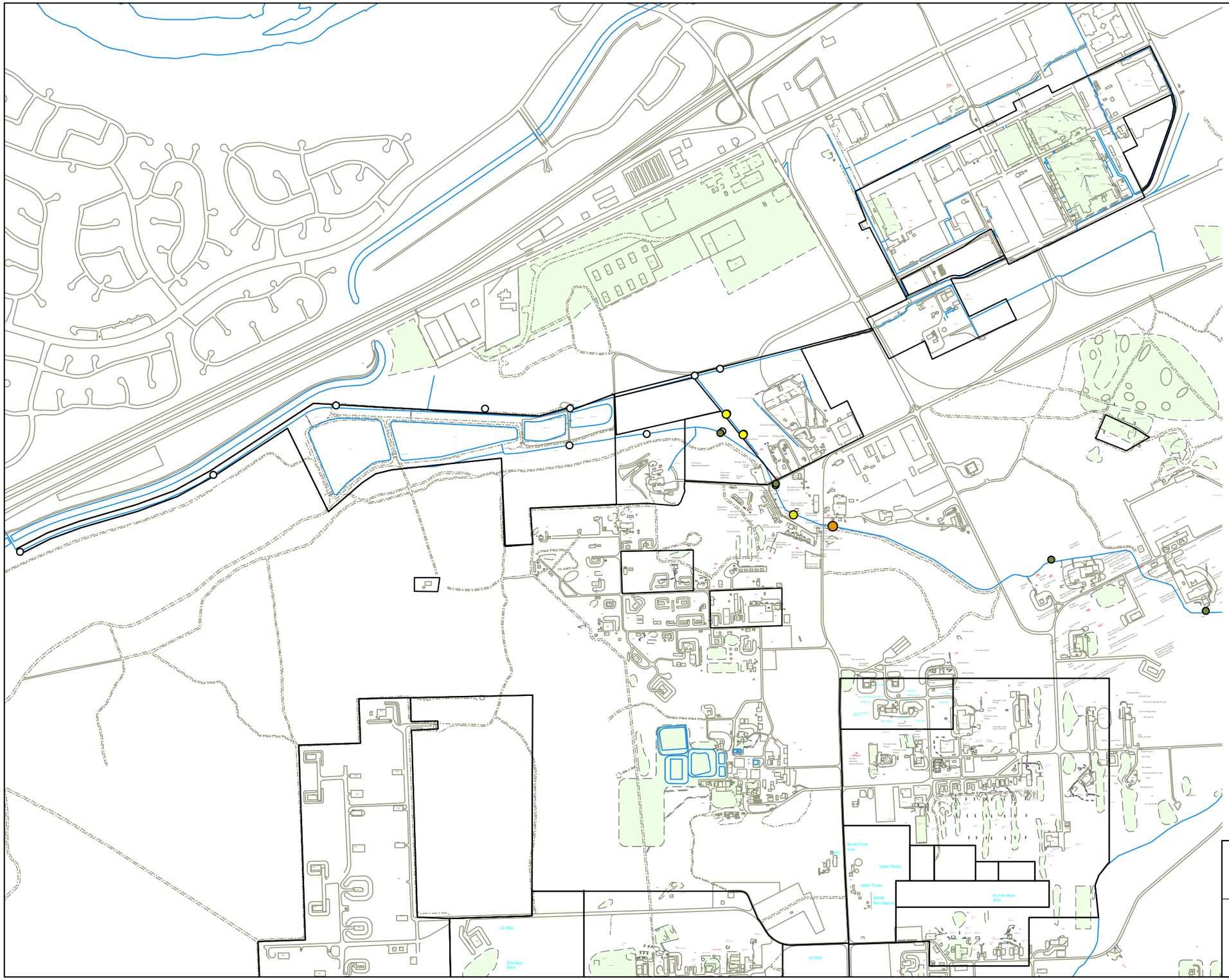


Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4
- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

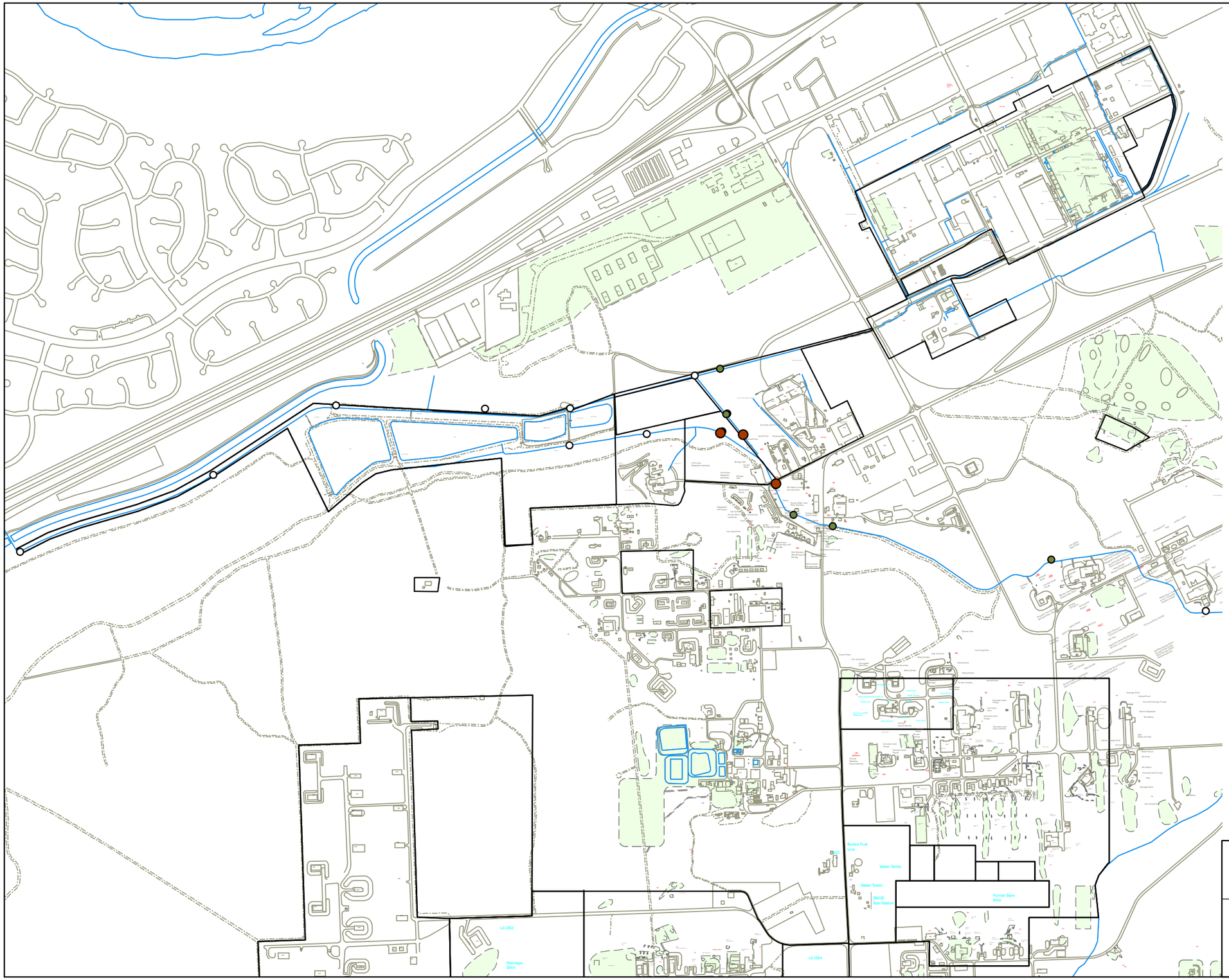
AEROJET

Environmental Remediation

Figure 5.11-2

Residential
Cancer Risks – All Media
Buffalo Creek

DRAFT



Legend

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0
- Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

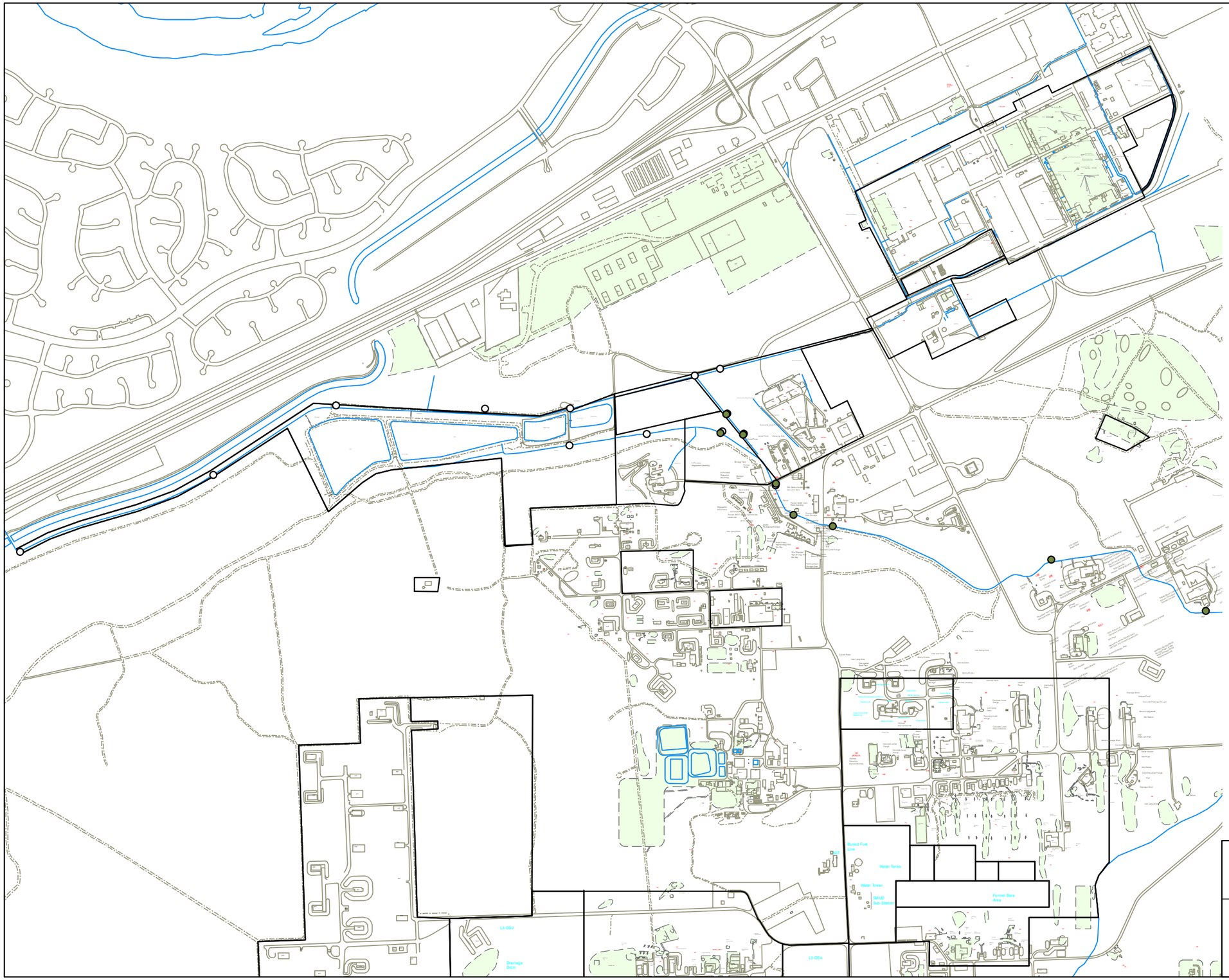
AEROJET

Environmental Remediation

Figure 5.11-3

Construction Worker
Non-Cancer Effects – All Media
Buffalo Creek

DRAFT



Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4
- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

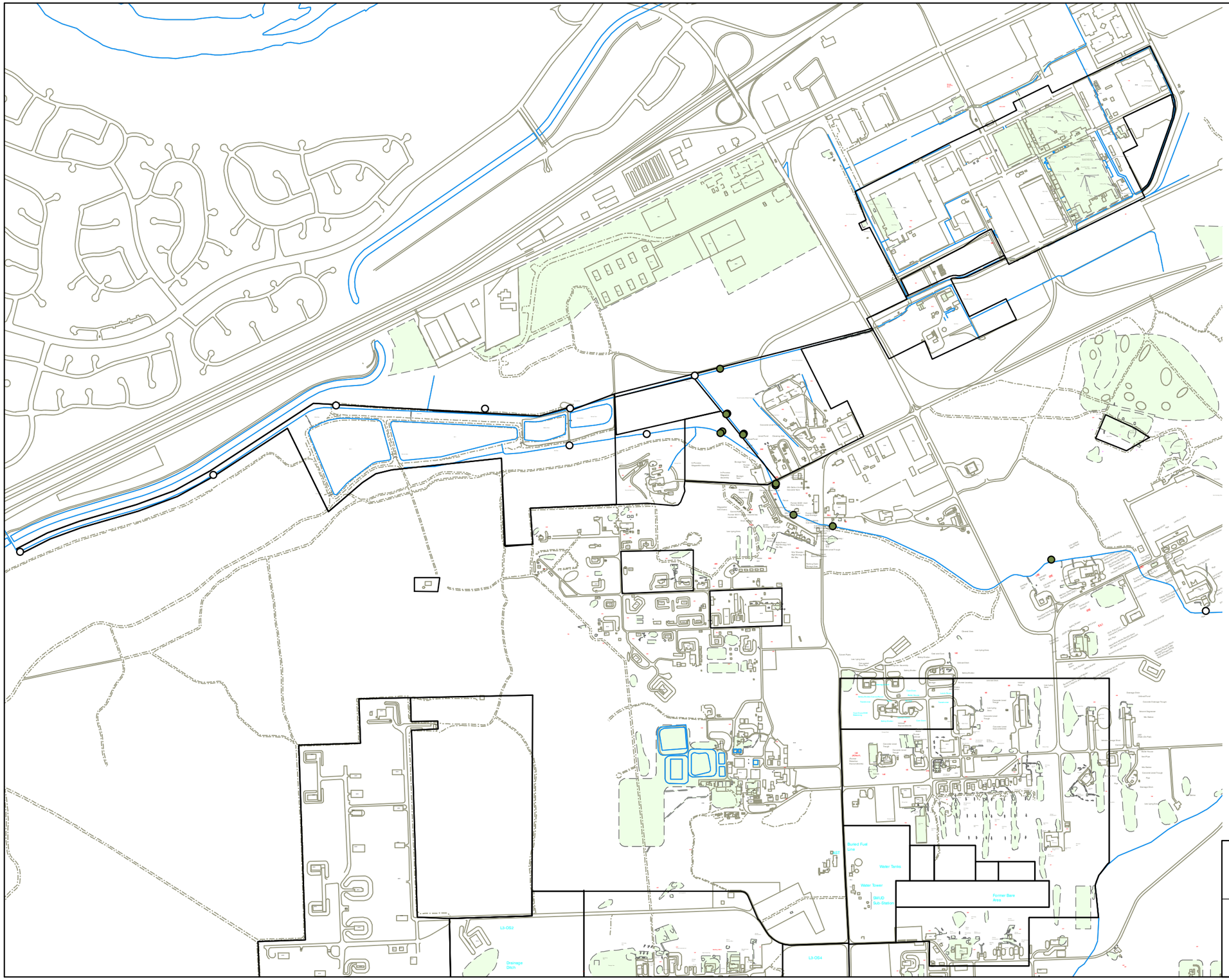
AEROJET

Environmental Remediation

Figure 5.11-4

Construction Worker
Cancer Risks – All Media
Buffalo Creek

DRAFT



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

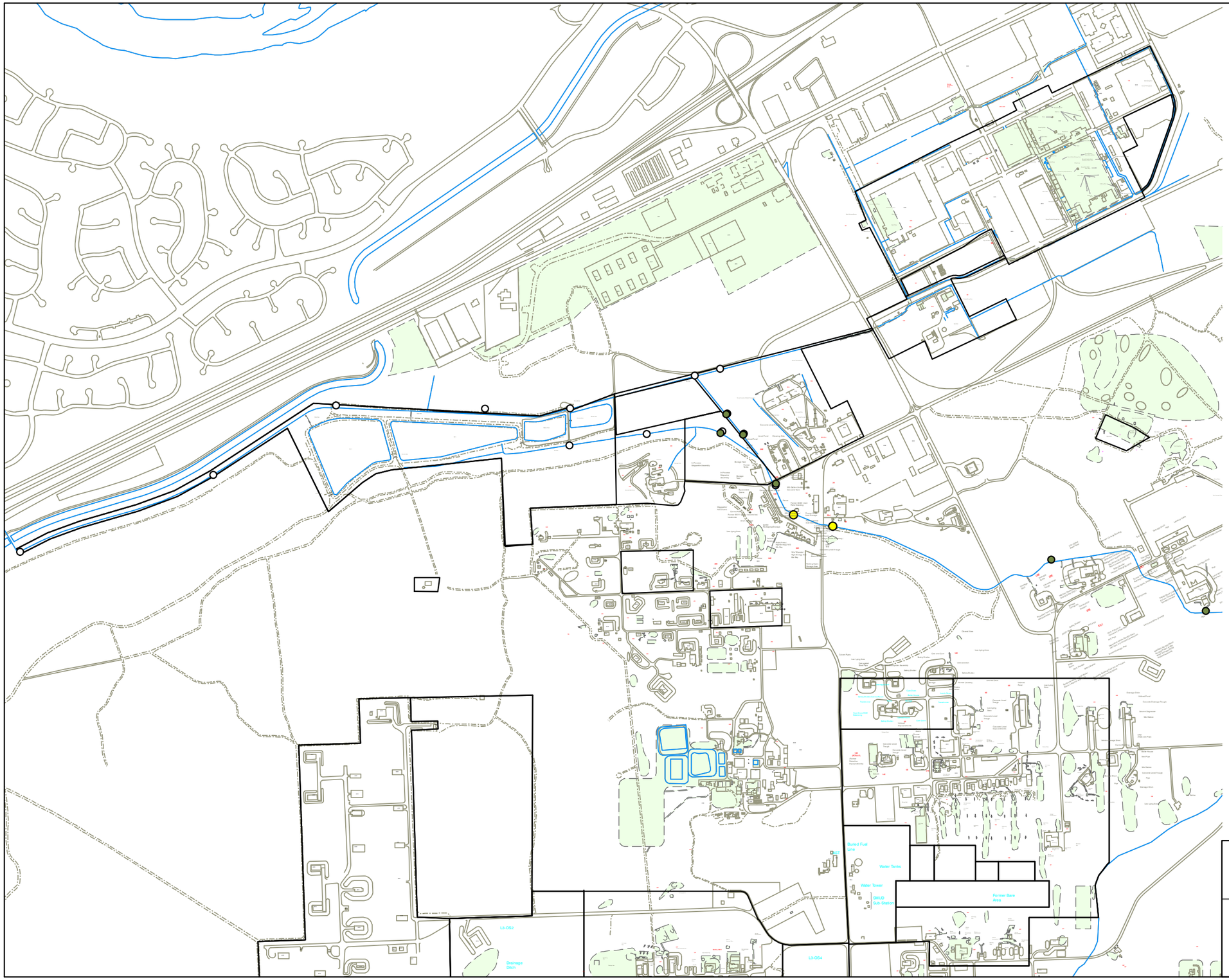
AEROJET

Environmental Remediation

Figure 5.11-5

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Buffalo Creek

DRAFT



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

AEROJET

Environmental Remediation

Figure 5.11-6

Commercial/Industrial Worker Cancer Risks – All Media Buffalo Creek

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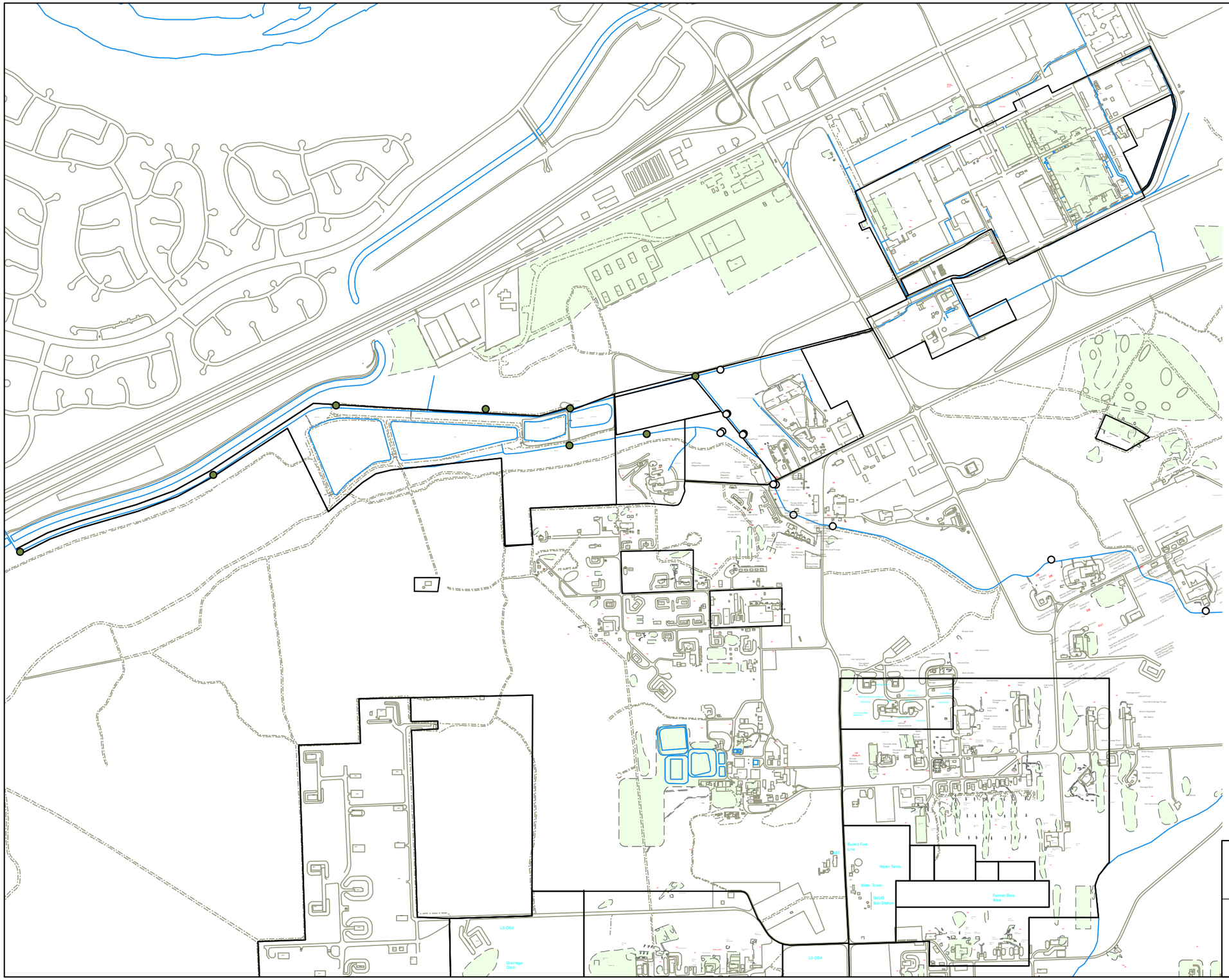

Legend

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

AEROJET

Environmental Remediation

Figure 5.11-7

Recreator/Scenario
Non-Cancer Effects – All Media
Buffalo Creek

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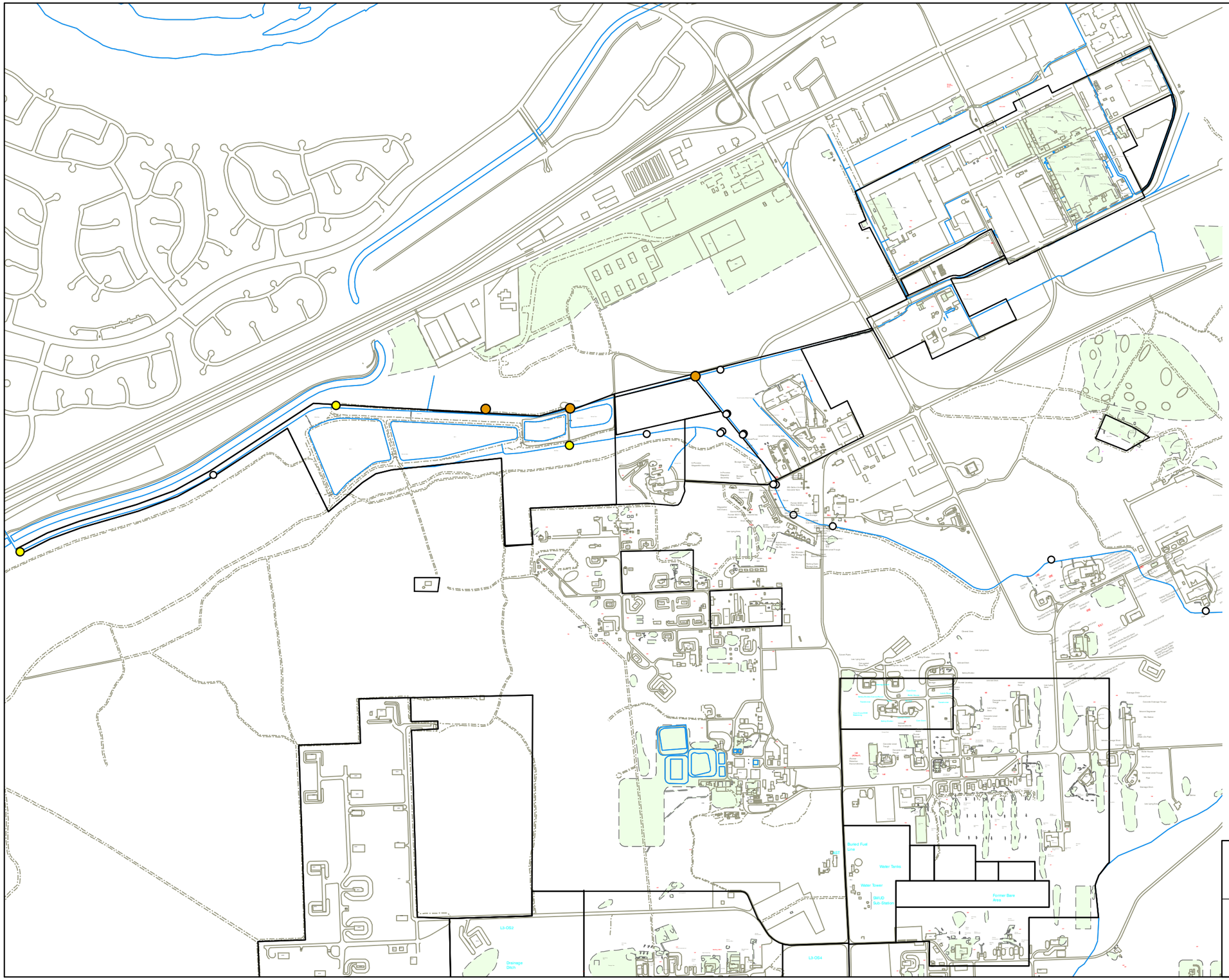

Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,100 '

0 1,100 2,200

AEROJET

Environmental Remediation

Figure 5.11-8

Recreator/Scenario
Cancer Risks – All Media
Buffalo Creek

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Table 5.11-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Buffalo Creek	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	6.2	nc	N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	60	sat	N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.061	ca	N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	53	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.35	ca	N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	610	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.61	nc	N	ND	NA
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	18	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	120	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	12	nc	N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	12	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	6.1	nc	N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	490	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	6.3	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.17	nc	N	ND	NA
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	310	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	18	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	nc	N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	0.11	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	1.8	nc	N	ND	NA
	72-54-8	4,4'-DDD	0.0042	0.0042	mg/kg	59E-SD01	5	11	1	9%	0.0068-0.098	0.23	ca	Y		NA
	72-55-9	4,4'-DDE	0.00045	0.0036	mg/kg	BC-SD04	0.25	11	4	36%	0.0023-0.098	0.16	ca	Y		NA
	50-29-3	4,4'-DDT	0.0029	0.0068	mg/kg	59E-SD02	0.25	11	3	27%	0.0068-0.098	0.16	ca	Y		NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.61	nc	N	ND	NA
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	24	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	31	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	2.3	ca	N	ND	NA
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	370	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	230	nc	N	ND	NA
	309-00-2	Aldrin	0.0004	0.00098	mg/kg	59E-SD02	0.25	11	3	27%	0.0011-0.049	0.0029	ca	Y		NA
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	11	0	0%	0.0011-0.049	0.009	ca	N	ND*	36%
	5103-71-9	alpha-Chlordane	0.0018	0.016	mg/kg	BC-SD02	0.25	6	3	50%	0.0059-0.049	0.043	ca	Y		NA
	7429-90-5	Aluminum	8510	66000	mg/kg	59E-SD01	5	18	18	100%	NA	7600	nc	N	BG	NA
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	8.5	ca	N	ND	NA
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	2200	nc	N	ND	NA
	7440-36-0	Antimony	0.26	0.3	mg/kg	59E-SD02	0.25	6	2	33%	1-1.7	3	nc	N	BSL	NA
	7440-38-2	Arsenic	2.4	4.5	mg/kg	59E-SD02	0.25	6	6	100%	NA	0.0062	ca	N	BG	NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.44	ca	N	ND	NA
	7440-39-3	Barium	86	390	mg/kg	59E-SD01	5	6	6	100%	NA	520	nc	N	BSL	NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	6	0	0%	0.36-0.59	0.00021	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	0.062	ca	N	ND	NA

Table 5.11-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Buffalo Creek	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	0.0038	ca	N	ND*	100%
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	6	0	0%	0.013-0.022	0.038	ca	N	ND	NA
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	230	nc	N	ND	NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	10000	max	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	1800	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	1200	nc	N	ND	NA
	7440-41-7	Beryllium	0.36	1.4	mg/kg	59E-SD01	5	6	6	100%	NA	15	nc	N	BSL	NA
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	11	0	0%	0.0011-0.049	0.032	ca	N	ND	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.022	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-0.34	0.29	ca	N	ND	NA
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	3.5	ca	N	ND	NA
	7440-42-8	Boron	3.9	9.4	mg/kg	59E-SD01	5	6	5	83%	4.1-13	1600	nc	N	BSL	NA
	7440-43-9	Cadmium	0.096	27.9	mg/kg	BC-SD01	0.25	18	17	94%	0.11-0.85	0.17	nc	N	BG	NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	2.4	ca	N	ND	NA
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	5	0	0%	0.023-0.034	0.043	ca	N	ND	NA
	7440-47-3	Chromium	19.2	118	mg/kg	BC-SD01	0.25	18	18	100%	NA	10000	max	N	BSL	NA
	18540-29-9	Chromium VI	0.063	0.66	mg/kg	29E-SD01	0.25	6	6	100%	NA	1.7	ca	N	BSL	NA
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	0.38	ca	N	ND	NA
	7440-48-4	Cobalt	8.6	33	mg/kg	59E-SD01	5	6	6	100%	NA	66	ca	N	BSL	NA
	7440-50-8	Copper	16.2	59.5	mg/kg	BC-SD01	0.25	18	18	100%	NA	300	nc	N	BSL	NA
	319-86-8	delta-BHC	0.00032	0.00032	mg/kg	59E-SD01	0.25	11	1	9%	0.0011-0.049	NA	ca	Y		NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	0.0062	ca	N	ND	NA
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	15	nc	N	ND	NA
	60-57-1	Dieldrin	0.00094	0.00094	mg/kg	59E-SD01	0.25	11	1	9%	0.0023-0.098	0.003	ca	Y		NA
	68334-30-5	Diesel Range Organics (C10-C28)	0.84	5.9	mg/kg	28E-SNS01	0.5	6	6	100%	NA	NA		Y	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	4900	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	10000	max	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.41-0.67	610	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	240	nc	N	ND	NA
	959-98-8	Endosulfan I	0.00053	0.00053	mg/kg	59E-SD01	0.25	11	1	9%	0.0023-0.049	37	nc	Y		NA
	33213-65-9	Endosulfan II	0.00062	0.00075	mg/kg	59E-SD01	5	11	3	27%	0.0023-0.098	37	nc	Y		NA
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	11	0	0%	0.0068-0.098	37	nc	N	ND	NA
	72-20-8	Endrin	0.00046	0.00046	mg/kg	59E-SD01	0.25	11	1	9%	0.0023-0.098	1.8	nc	Y		NA
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	9	0	0%	0.0068-0.098	1.8	nc	N	ND	NA
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	11	0	0%	0.0068-0.098	1.8	nc	N	ND	NA
	206-44-0	Fluoranthene	0.0045	0.0045	mg/kg	28E-SNS01	0.5	6	1	17%	0.0068-0.011	230	nc	Y		NA
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	270	nc	N	ND	NA
	58-89-9	gamma-BHC (Lindane)	ND	ND	mg/kg	ND	ND	11	0	0%	0.0011-0.049	0.044	ca	N	ND	NA
	5103-74-2	gamma-Chlordane	0.0046	0.013	mg/kg	BC-SD02	0.25	6	2	33%	0.0059-0.049	0.043	ca	Y		NA
	76-44-8	Heptachlor	0.00031	0.00041	mg/kg	59E-SD01	5	11	2	18%	0.0011-0.049	0.011	ca	Y		NA
	1024-57-3	Heptachlor epoxide	0.00079	0.0012	mg/kg	BC-SD03	0.25	11	2	18%	0.0011-0.049	0.0053	ca	Y		NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.62	ca	N	ND	NA

Table 5.11-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Soil
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Buffalo Creek	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	6	0	0%	0.72-1.2	37	nc	N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	3.5	ca	N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	0.062	ca	N	ND	NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	51	ca	N	ND	NA
	7439-92-1	Lead	5.6	72.1	mg/kg	BC-SD01	0.25	18	18	100%	NA	15	nc	Y		NA
	7439-93-2	Lithium	6	16	mg/kg	59E-SD02	0.25	6	6	100%	NA	160	nc	N	BSL	NA
	7439-96-5	Manganese	120	1600	mg/kg	59E-SD01	5	6	6	100%	NA	180	nc	Y		NA
	7439-97-6	Mercury	0.014	0.34	mg/kg	59E-SD01	0.25	6	6	100%	NA	1.8	nc	N	BSL	NA
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	11	0	0%	0.0045-0.49	31	nc	N	ND	NA
	7439-98-7	Molybdenum	0.34	0.6	mg/kg	59E-SD01	1.5	6	6	100%	NA	38	nc	N	BSL	NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.5	23	mg/kg	28E-SNS01	0.5	6	4	67%	4.1-6.7	NA		Y	ITC	NA
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	0.17	ca	N	ND	NA
	7440-02-0	Nickel	14.7	51.1	mg/kg	59E-SD04	0.25	18	18	100%	NA	160	nc	N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	2	nc	N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	6	0	0%	0.0031-0.34	0.00095	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.007	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	150	ca	N	ND	NA
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.39	ca	N	ND	NA
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0089	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0089	ca	N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0089	ca	N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0089	ca	N	ND*	100%
	11097-69-1	PCB-1254	0.02	1.1	mg/kg	BC-SD02	0.25	11	7	64%	0.023-0.42	0.022	ca	Y		NA
	11096-82-5	PCB-1260	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0089	ca	N	ND*	100%
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.72-1.2	0.3	ca	N	ND*	100%
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	6	0	0%	0.02-0.068	0.78	ca/nc	N	ND	NA
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	230	nc	N	ND	NA
	108-95-2	Phenol	0.37	0.37	mg/kg	59E-SD01	1.5	6	1	17%	0.2-0.34	1800	nc	Y		NA
	129-00-0	Pyrene	0.0069	0.0069	mg/kg	28E-SNS01	0.5	6	1	17%	0.0068-0.011	230	nc	Y		NA
	7782-49-2	Selenium	0.46	0.46	mg/kg	59E-SD02	0.25	6	1	17%	1-1.7	38	nc	N	BSL	NA
	7440-22-4	Silver	0.14	77.2	mg/kg	BC-SD01	0.25	18	17	94%	0.53-1.3	38	nc	Y		NA
	7440-24-6	Strontium	14	63	mg/kg	59E-SD01	5	6	6	100%	NA	4700	nc	N	BSL	NA
	7440-28-0	Thallium	0.12	0.82	mg/kg	28E-SNS01	0.5	6	5	83%	0.57-4.2	0.5	nc	N	BG	NA
	7440-32-6	Titanium	470	2200	mg/kg	59E-SD01	5	6	6	100%	NA	10000	nc	N	BSL	NA
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	11	0	0%	0.091-1.9	0.044	ca	N	ND*	100%
	7440-62-2	Vanadium	48	110	mg/kg	59E-SD01	5	6	6	100%	NA	0.53	nc	N	BG	NA
	7440-66-6	Zinc	25	239	mg/kg	29E-SD01	0.25	18	18	100%	NA	2300	nc	N	BSL	NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
mg/kg = Milligrams per kilogram
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Buffalo Creek	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND		16	0	0%	0.011 - 0.4	6.2		N	ND	NA
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND		16	0	0%	0.011 - 0.4	60		N	ND	NA
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.061		N	ND*	100%
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND		16	0	0%	0.011 - 0.4	53		N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND		16	0	0%	0.011 - 0.4	0.35		N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	610		N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.61		N	ND	NA
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	18		N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	120		N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND		12	0	0%	0.52 - 1	12		N	ND	NA
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	12		N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	6.1		N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	490		N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	6.3		N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.17		N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	310		N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	18		N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND		12	0	0%	0.52 - 1	0.11		N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	1.8		N	ND	NA
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND		10	0	0%	0.0064 - 0.012	0.23		N	ND	NA
	72-55-9	4,4'-DDE	0.0043	0.0043	mg/kg	WL-SD12-0.5	0.5	10	1	10%	0.0022 - 0.0042	0.16		Y		NA
	50-29-3	4,4'-DDT	ND	ND	mg/kg	ND		10	0	0%	0.0064 - 0.012	0.16		N	ND	NA
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.61		N	ND	NA
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	24		N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	31		N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND		12	0	0%	0.52 - 1	2.3		N	ND	NA
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND		12	0	0%	0.0068 - 0.013	370		N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND		12	0	0%	0.0068 - 0.013	230		N	ND	NA
	309-00-2	Aldrin	ND	ND	mg/kg	ND		10	0	0%	0.0011 - 0.0021	0.0029		N	ND	NA
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND		10	0	0%	0.0011 - 0.0021	0.009		N	ND	NA
	5103-71-9	alpha-Chlordane	NA	NA	mg/kg	NA		NA	NA	NA	NA	0.043		N	NA	NA
	7429-90-5	Aluminum	12000	38000	mg/kg	WL-SD13-0.25	0.25	14	14	100%	NA	7600		Y		NA
	62-53-3	Aniline	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	8.5		N	ND	NA
	120-12-7	Anthracene	ND	ND	mg/kg	ND		12	0	0%	0.0068 - 0.013	2200		N	ND	NA
	7440-36-0	Antimony	0.16	0.52	mg/kg	WL-SD12-0.5	0.5	12	7	58%	1 - 16	3		N	BSL	NA
	7440-38-2	Arsenic	2.7	10	mg/kg	WL-SD13-0.25	0.25	12	12	100%	NA	0.0062		Y		NA
	103-33-3	Azobenzene	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.44		N	ND	NA

Table 5.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Buffalo Creek	7440-39-3	Barium	87	240	mg/kg	WL-SD12-0.5	0.5	12	12	100%	NA	520		N	BSL	NA
	92-87-5	Benzidine	ND	ND	mg/kg	ND		12	0	0%	0.36 - 0.7	0.00021		N	ND*	100%
	56-55-3	Benzo (a) anthracene	0.0045	0.023	mg/kg	WL-SD11-0.5	0.5	12	3	25%	0.0069 - 0.013	0.062		Y		NA
	50-32-8	Benzo (a) pyrene	0.0069	0.045	mg/kg	WL-SD11-0.5	0.5	12	3	25%	0.0069 - 0.013	0.0038		Y		NA
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.014	0.11	mg/kg	WL-SD11-0.5	0.5	12	5	42%	0.015 - 0.026	0.038		Y		NA
	191-24-2	Benzo (ghi) perylene	0.0093	0.043	mg/kg	WL-SD11-0.5	0.5	12	3	25%	0.0069 - 0.013	230		Y		NA
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND		12	0	0%	0.52 - 1	10000		N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	1800		N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	1200		N	ND	NA
	7440-41-7	Beryllium	0.24	0.94	mg/kg	WL-SD12-0.5	0.5	12	12	100%	NA	15		N	BSL	NA
	319-85-7	beta-BHC	ND	ND	mg/kg	ND		10	0	0%	0.0011 - 0.0021	0.032		N	ND	NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.022		N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.29		N	ND	NA
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND		12	0	0%	0.52 - 1	3.5		N	ND	NA
	7440-42-8	Boron	2.3	12	mg/kg	WL-SD02-0.25	0.25	12	5	42%	2.6 - 8.8	1600		N	BSL	NA
	7440-43-9	Cadmium	0.13	1.2	mg/kg	WL-SD02-0.25	0.25	14	13	93%	0.43 - 0.43	0.17		Y		NA
	86-74-8	Carbazole	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	2.4		N	ND	NA
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND		10	0	0%	0.021 - 0.042	0.043		N	ND	NA
	7440-47-3	Chromium	32	1200	mg/kg	WL-SD13-0.25	0.25	14	14	100%	NA	10000		N	BSL	NA
	18540-29-9	Chromium VI	0.022	2.2	mg/kg	WL-SD13-0.25	0.25	12	7	58%	0.42 - 4	1.7		Y		NA
	218-01-9	Chrysene	0.0066	0.054	mg/kg	WL-SD11-0.5	0.5	12	6	50%	0.0079 - 0.013	0.38		Y		NA
	7440-48-4	Cobalt	6.4	34	mg/kg	WL-SD12-1.5	1.5	12	12	100%	NA	66		N	BSL	NA
	7440-50-8	Copper	29	110	mg/kg	WL-SD13-0.25	0.25	14	14	100%	NA	300		N	BSL	NA
	319-86-8	delta-BHC	0.0013	0.0013	mg/kg	WL-SD09-0.5	0.5	10	1	10%	0.0011 - 0.0021	NA		Y		NA
	53-70-3	Dibenz (a,h) anthracene	0.0082	0.0082	mg/kg	WL-SD11-0.5	0.5	12	1	8%	0.0068 - 0.013	0.0062		Y		NA
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	15		N	ND	NA
	60-57-1	Dieldrin	ND	ND	mg/kg	ND		10	0	0%	0.0021 - 0.0042	0.003		N	ND	NA
	68334-30-5	Diesel Range Organics (C10-C28)	12	35	mg/kg	WL-SD13-0.25	0.25	8	7	88%	2.4 - 2.4	NA		Y	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	4900		N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	10000		N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND		12	0	0%	0.41 - 0.8	610		N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	240		N	ND	NA
	959-98-8	Endosulfan I	ND	ND	mg/kg	ND		10	0	0%	0.0021 - 0.0042	37		N	ND	NA
	33213-65-9	Endosulfan II	ND	ND	mg/kg	ND		10	0	0%	0.0021 - 0.0042	37		N	ND	NA
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND		10	0	0%	0.0064 - 0.012	37		N	ND	NA
	72-20-8	Endrin	ND	ND	mg/kg	ND		10	0	0%	0.0021 - 0.0042	1.8		N	ND	NA
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND		10	0	0%	0.0064 - 0.012	1.8		N	ND	NA
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND		10	0	0%	0.0064 - 0.012	1.8		N	ND	NA
	206-44-0	Fluoranthene	0.0035	0.11	mg/kg	WL-SD11-0.5	0.5	12	7	58%	0.0079 - 0.013	230		Y		NA

Table 5.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Buffalo Creek	86-73-7	Fluorene	ND	ND	mg/kg	ND		12	0	0%	0.0068 - 0.013	270		N	ND	NA
	58-89-9	gamma-BHC (Lindane)	0.00053	0.0016	mg/kg	WL-SD09-0.5	0.5	10	3	30%	0.0011 - 0.0021	0.044		Y		NA
	5103-74-2	gamma-Chlordane	NA	NA	mg/kg	NA		NA	NA	NA	NA	0.043		N		NA
	76-44-8	Heptachlor	ND	ND	mg/kg	ND		10	0	0%	0.0011 - 0.0021	0.011		N	ND	NA
	1024-57-3	Heptachlor epoxide	0.00075	0.0014	mg/kg	WL-SD11-0.5	0.5	10	2	20%	0.0011 - 0.0021	0.0053		Y		NA
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.03		N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND		16	0	0%	0.011 - 0.4	0.62		N	ND	NA
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND		12	0	0%	0.73 - 1.4	37		N	ND	NA
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	3.5		N	ND	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.017	0.033	mg/kg	WL-SD11-0.5	0.5	12	2	17%	0.0068 - 0.013	0.062		Y		NA
	78-59-1	Isophorone	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	51		N	ND	NA
	7439-92-1	Lead	6	38	mg/kg	WL-SD02-0.25	0.25	14	14	100%	NA	15		Y		NA
	7439-93-2	Lithium	8.4	16	mg/kg	WL-SD12-0.5	0.5	12	12	100%	NA	160		N	BSL	NA
	7439-96-5	Manganese	160	1300	mg/kg	WL-SD12-0.5	0.5	12	12	100%	NA	180		Y		NA
	7439-97-6	Mercury	0.011	0.55	mg/kg	WL-SD02-0.25	0.25	12	12	100%	NA	1.8		N	BSL	NA
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND		10	0	0%	0.021 - 0.042	31		N	ND	NA
	7439-98-7	Molybdenum	0.11	0.71	mg/kg	WL-SD13-0.25	0.25	12	12	100%	NA	38		N	BSL	NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	40	170	mg/kg	WL-SD13-0.25	0.25	8	7	88%	4.8 - 4.8	NA		Y	ITC	NA
	91-20-3	Naphthalene	ND	ND	mg/kg	ND		16	0	0%	0.0068 - 0.048	0.17		N	ND	NA
	7440-02-0	Nickel	26	60	mg/kg	WL-SD12-1.5	1.5	14	14	100%	NA	160		N	BSL	NA
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	2		N	ND	NA
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND		16	0	0%	0.012 - 0.4	0.00095		N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	0.007		N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	150		N	ND	NA
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND		12	0	0%	0.021 - 0.04	0.39		N	ND	NA
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND		12	0	0%	0.021 - 0.04	0.0089		N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND		12	0	0%	0.021 - 0.04	0.0089		N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND		12	0	0%	0.021 - 0.04	0.0089		N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND		12	0	0%	0.021 - 0.04	0.0089		N	ND*	100%
	11097-69-1	PCB-1254	0.024	0.43	mg/kg	WL-SD11-0.5	0.5	12	9	75%	0.024 - 0.027	0.022		Y		NA
	11096-82-5	PCB-1260	0.031	0.031	mg/kg	WL-SD01-0.5	0.5	12	1	8%	0.021 - 0.04	0.0089		Y		NA
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND		12	0	0%	0.73 - 1.4	0.3		N	ND*	100%
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND		8	0	0%	0.02 - 0.053	0.78		N	ND	NA
	85-01-8	Phenanthrene	0.0029	0.028	mg/kg	WL-SD11-0.5	0.5	12	6	50%	0.0079 - 0.013	230		Y		NA
	108-95-2	Phenol	ND	ND	mg/kg	ND		12	0	0%	0.21 - 0.4	1800		N	ND	NA
	129-00-0	Pyrene	0.0066	0.098	mg/kg	WL-SD11-0.5	0.5	12	6	50%	0.0079 - 0.013	230		Y		NA
	7782-49-2	Selenium	2.5	2.5	mg/kg	WL-SD02-1.5	1.5	12	1	8%	1 - 3.1	38		N	BSL	NA
	7440-22-4	Silver	0.1	90	mg/kg	WL-SD02-0.25	0.25	14	14	100%	NA	38		Y		NA
	7440-24-6	Strontium	24	65	mg/kg	WL-SD01-0.5	0.5	12	12	100%	NA	4700		N	BSL	NA
	109-99-9	Tetrahydrofuran	0.0059	0.0059	mg/kg	WL-SD02-1.5	1.5	1	1	100%	NA	0.94		Y		NA
	7440-28-0	Thallium	0.18	2.2	mg/kg	WL-SD09-0.5	0.5	12	10	83%	7.8 - 8	0.5		N	PEBG	NA
	7440-32-6	Titanium	450	940	mg/kg	WL-SD13-1.5	1.5	12	12	100%	NA	10000		N	BSL	NA
	108-88-3	Toluene	0.00076	0.0065	mg/kg	WL-SD01-0.25	1.5	4	3	75%	0.019 - 0.019	52		Y		NA

Table 5.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Buffalo Creek	8001-35-2	Toxaphene	ND	ND	mg/kg	ND		10	0	0%	0.085 - 0.17	0.044		N	ND*	100%
	7440-62-2	Vanadium	32	110	mg/kg	WL-SD12-0.5	0.5	12	12	100%	NA	0.53		Y		NA
	7440-66-6	Zinc	48	263	mg/kg	WL-SD16-.25	0.25	14	14	100%	NA	2300		N	BSL	NA

Footnotes:

(1) See Table 2

(2) FOD = Frequency of detection screening
BSL = Below screening level
BG = Consistent with background concentrations
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PEBG - Evidence from previous investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Key:

bgs = Below ground surface
ca = Cancer
COPC = Chemical of potential concern
µg/kg = Micrograms per kilogram
mg/kg = Milligrams per kilogram
nc = Noncancer
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.11-3 Chemical of Potential Concern Summary
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Soil		Sediment	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA
1,1,1-Trichloroethane	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA
1,1-Dichloropropene	NA	NA	NA	NA
1,2,3-Trichlorobenzene	NA	NA	NA	NA
1,2,3-Trichloropropane	NA	NA	NA	NA
1,2,4-Trichlorobenzene	N	ND	N	ND
1,2,4-Trimethylbenzene	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	NA	NA	NA	NA
1,2-Dichlorobenzene	N	ND	N	ND
1,2-Dichloroethane	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	NA
trans-1,2-Dichloroethene	NA	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA	NA
1,2-Diphenylhydrazine	NA	NA	NA	NA
1,3,5-Trimethylbenzene	NA	NA	NA	NA
1,3-Butadiene	NA	NA	NA	NA
1,3-Dichlorobenzene	N	ND	N	ND
1,3-Dichloropropane	NA	NA	NA	NA
1,4-Dichlorobenzene	N	ND	N	ND
1,4-Dioxane	NA	NA	NA	NA
2,2,4-Trimethylpentane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
2,4,5-Trichlorophenol	N	ND	N	ND
2,4,6-Trichlorophenol	N	ND	N	ND
2,4-Dichlorophenol	N	ND	N	ND
2,4-Dimethylphenol	N	ND	N	ND
2,4-Dinitrophenol	N	ND	N	ND
2,4-Dinitrotoluene	N	ND	N	ND
2,6-Dinitrotoluene	N	ND	N	ND
2-Butanone (Methyl Ethyl Ketone)	NA	NA	NA	NA
2-Chloronaphthalene	N	ND	N	ND
2-Chlorophenol	N	ND	N	ND
2-Chlorotoluene	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA
2-Methylnaphthalene	N	ND*	N	ND*
2-Methylphenol	N	ND	N	ND
2-Nitroaniline	N	ND	N	ND
2-Nitrophenol	N	ND	N	ND
2-Propanol	NA	NA	NA	NA
3,3'-Dichlorobenzidine	N	ND*	N	ND*
3-Chloropropene	NA	NA	NA	NA
3-Nitroaniline	N	ND	N	ND
4,4'-DDD	N		N	ND
4,4'-DDE	Y		Y	
4,4'-DDT	N		N	ND
4,6-Dinitro-2-methylphenol	N	ND	N	ND
4-Bromophenyl phenyl ether	N	ND	N	ND
4-Chloro-3-methylphenol	N	ND	N	ND
4-Chloroaniline	N	ND	N	ND
4-Chlorophenyl phenyl ether	N	ND	N	ND
4-Chlorotoluene	NA	NA	NA	NA
4-Ethyltoluene	NA	NA	NA	NA
4-Methyl-2-pentanone	NA	NA	NA	NA
4-Methylphenol	N	ND	N	ND

Table 5.11-3 Chemical of Potential Concern Summary
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil		Sediment	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
4-Nitroaniline	N	ND	N	ND
4-Nitrophenol	N	ND	N	ND
Acenaphthene	N	ND	N	ND
Acenaphthylene	N	ND	N	ND
Acetone	NA	NA	NA	NA
alpha-Chlorotoluene	NA	NA	NA	NA
Aldrin	N		N	ND
alpha-BHC	N	ND	N	ND
alpha-Chlordane	N		N	NA
Aluminum	Y	0	Y	
Aniline	N	ND	N	ND
Anthracene	N	ND	N	ND
Antimony	N	BSL	N	BSL
PCB-1016	N	ND	N	ND
PCB-1221	N	ND*	N	ND*
PCB-1232	N	ND*	N	ND*
PCB-1242	N	ND*	N	ND*
PCB-1248	N	ND*	N	ND*
PCB-1254	Y		Y	
PCB-1260	Y		Y	
Arsenic	Y	0	Y	
Azinphos methyl	NA	NA	NA	NA
Azobenzene	N	ND	N	ND
Barium	N	BSL	N	BSL
Benzene	NA	NA	NA	NA
Benzidine	N	ND*	N	ND*
Benzo (a) anthracene	Y	0	Y	
Benzo (a) pyrene	Y	0	Y	
Benzo (b & k) fluoranthene (total)	Y	0	Y	
Benzo (ghi) perylene	Y	0	Y	
Benzo (b) fluoranthene	NA	NA	NA	NA
Benzo (k) fluoranthene	NA	NA	NA	NA
Benzoic acid	N	ND	N	ND
Benzyl alcohol	N	ND	N	ND
Benzyl butyl phthalate	N	ND	N	ND
beta-BHC	N	ND	N	ND
Beryllium	N	BSL	N	BSL
Bis(2-Chloroethoxy)methane	N	ND	N	ND
Bis(2-Chloroethyl)ether	N	ND*	N	ND*
Bis(2-Chloroisopropyl)ether	N	ND	N	ND
Bis(2-Ethylhexyl)phthalate	N	ND	N	ND
Boron	N	BSL	N	BSL
Bromobenzene	NA	NA	NA	NA
Bromochloromethane	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA
Bromoform	NA	NA	NA	NA
Bromomethane	NA	NA	NA	NA
Butylbenzene	NA	NA	NA	NA
Cadmium	Y	0	Y	
Calcium	NA	NA	NA	NA
Carbazole	N	ND	N	ND
Carbon Disulfide	NA	NA	NA	NA
Carbon Tetrachloride	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	NA
Chlordane (tech)	N	ND	N	ND
Chloroethane	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA
Chloromethane	NA	NA	NA	NA

Table 5.11-3 Chemical of Potential Concern Summary
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil		Sediment	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Chromium	N	BSL	N	BSL
Chrysene	Y	0	Y	0
cis-1,2-Dichloroethene	NA	NA	NA	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA
Cobalt	N	BSL	N	BSL
Copper	N	BSL	N	BSL
Cyclohexane	NA	NA	NA	NA
delta-BHC	Y		Y	
Dibenz (a,h) anthracene	Y	0	Y	
Dibenzofuran	N	ND	N	ND
Dibromochloromethane	NA	NA	NA	NA
Dibromomethane	NA	NA	NA	NA
Freon 12	NA	NA	NA	NA
Diesel Range Organics (C10-C28)	Y	ITC	Y	ITC
Diethyl phthalate	N	ND	N	ND
Dimethyl phthalate	N	ND	N	ND
Di-n-butyl phthalate	N	ND	N	ND
Di-n-octyl phthalate	N	ND	N	ND
Endosulfan I	N		N	ND
Endosulfan II	N		N	ND
Endosulfan sulfate	N	ND	N	ND
Endrin	N		N	ND
Endrin aldehyde	N	ND	N	ND
Endrin ketone	N	ND	N	ND
Ethanol	NA	NA	NA	NA
Ethyl benzene	NA	NA	NA	NA
Fluoranthene	Y		Y	
Fluorene	N	ND	N	ND
Freon 113	NA	NA	NA	NA
Freon 114	NA	NA	NA	NA
gamma-BHC (Lindane)	Y	0	Y	
gamma-Chlordane	N		N	
Heptachlor	N		N	ND
Heptachlor epoxide	Y		Y	
Heptane	NA	NA	NA	NA
Hexachlorobenzene	N	ND*	N	ND*
Hexachlorobutadiene	N	ND	N	ND
Hexachlorocyclopentadiene	N	ND	N	ND
Hexachloroethane	N	ND	N	ND
Hexane	NA	NA	NA	NA
Chromium VI	Y	0	Y	
Indeno (1,2,3-cd) pyrene	Y	0	Y	
Iron	NA	NA	NA	NA
Isophorone	N	ND	N	ND
Cumene	NA	NA	NA	NA
Lead	Y		Y	
Lithium	N	BSL	N	BSL
m,p-Xylene	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA
Manganese	Y		Y	
Mercury	N	BSL	N	BSL
Methyl tert-butyl ether	NA	NA	NA	NA
Methylene Chloride	NA	NA	NA	NA
Methoxychlor	N	ND	N	ND
Molybdenum	N	BSL	N	BSL
Motor Oil Range Organics (C16-C36)	Y	ITC	Y	ITC
Naphthalene	N	ND	N	ND
Butylbenzene	NA	NA	NA	NA

Table 5.11-3 Chemical of Potential Concern Summary
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil		Sediment	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Nickel	N	BSL	N	BSL
Nitrate as NO_3	NA	NA	NA	NA
Nitrite as NO_2	NA	NA	NA	NA
Nitrobenzene	N	ND	N	ND
N-Nitrosodimethylamine	N	ND*	N	ND*
N-Nitrosodi-n-propylamine	N	ND*	N	ND*
N-Nitrosodiphenylamine	NA	NA	NA	NA
Pendimethalin (Prowl)	NA	NA	NA	NA
Propylbenzene	NA	NA	NA	NA
o-Xylene	NA	NA	NA	NA
Pentachlorophenol	N	ND*	N	ND*
Perchlorate	N	ND	N	ND
Phenanthrene	Y	0	Y	
Phenol	N		N	ND
p-Cymene	NA	NA	NA	NA
Polychlorinated biphenyl	NA	NA	NA	NA
Potassium	NA	NA	NA	NA
Pyrene	Y		Y	
sec-Butylbenzene	NA	NA	NA	NA
Selenium	N	BSL	N	BSL
Silver	Y		Y	
Sodium	NA	NA	NA	NA
Strontium	N	BSL	N	BSL
Styrene	NA	NA	NA	NA
tert-Butylbenzene	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA
Tetrahydrofuran	NA	NA	Y	
Thallium	N	PEBG	N	PEBG
Tin	NA	NA	NA	NA
Titanium	N	BSL	N	BSL
Toluene	NA	NA	Y	
Total Cyanide	NA	NA	NA	NA
trans-1,2-Dichloroethene	NA	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	NA
Freon 11	NA	NA	NA	NA
Vanadium	#N/A	#N/A	Y	
Vinyl Chloride	NA	NA	NA	NA
Xylenes (total)	NA	NA	NA	NA
Zinc	#N/A	#N/A	N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of potential concern

Rational for Deletion Key

FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential nutrient
ND = Not detected above the reporting limit.
NR = Research has shown that 1,3-butadiene is not reproducible.
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level).
PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individual
PEBG - Evidence from previous investigations (Borch, 1994) indicates that measured thallium concentrations cannot be interpreted as site-related.

Table 5.11-4 *Outdoor Air Exposure Point Concentration Results*
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Resident Air			Construction Worker Outdoor Air			Commercial Worker Outdoor Air			Commercial Worker Indoor Air		
Chemical	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)	Soil Conc. (mg/kg)	PEF/VF[1] (kg/m^3)	Air Conc.[2] (mg/m^3)
Inorganics												
Lead	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Manganese	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Silver	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Semivolatile Organic Compounds												
Aldrin	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Alpha-Chlordane	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (a) pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Benzo (b & k) fluoranthene (total)	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDD	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDE	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
4,4'-DDT	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
delta-BHC	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Dieldrin	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Endosulfan I	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Endosulfan II	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Endrin	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
gamma-chlordane	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Heptachlor	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Heptachlor epoxide	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Fluoranthene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
PCB-1254	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Phenol	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10
Pyrene	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	5.0 E-7	5.0 E-7	1.0 E+0	7.4 E-10	7.4 E-10	1.0 E+0	7.4 E-10	7.4 E-10

Notes and Key:

(1) Consistent with Region 9 guidance and ERM White Paper (2007); Residential/Commercial PEF = 1360000000 m^3/kg,
Construction worker PEF = 2000000 m^3/kg, VF (m^3/kg) is chemical specific based on Region 9 guidance and equations.

(2) Soil concentration × PEF (or VF).

kg/m^3 = Kilograms per cubic meter
mg/kg = Milligrams per kilogram
mg/m^3 = Milligrams per cubic meter
PEF = Particulate emission factor
VF = Volatilization factor

Table 5.11-5 ***Soil Unit Hazard and Unit Cancer Risk Results - Resident***
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Soil	Child				Adult							
Chemical	Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Manganese	1.0 E+0	5.3 E-4	0.0 E+0	3.4 E-5	5.7 E-4	5.7 E-5	0.0 E+0	1.4 E-5	7.1 E-5	NA	NA	NA	NA
Silver	1.0 E+0	2.6 E-3	0.0 E+0	9.4 E-8	2.6 E-3	2.7 E-4	0.0 E+0	4.0 E-8	2.7 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds													
Aldrin	1.0 E+0	4.3 E-1	4.8 E-2	1.6 E-5	4.7 E-1	4.6 E-2	7.3 E-3	6.7 E-6	5.3 E-2	2.7 E-5	3.4 E-6	1.9 E-9	3.0 E-5
Alpha-chlordane	1.0 E+0	2.6 E-2	2.9 E-3	2.4 E-6	2.8 E-2	2.7 E-3	4.4 E-4	1.0 E-6	3.2 E-3	2.0 E-6	2.6 E-7	1.3 E-10	2.3 E-6
4,4'-DDD	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
4,4'-DDT	1.0 E+0	2.6 E-2	2.1 E-3	9.4 E-7	2.8 E-2	2.7 E-3	3.3 E-4	4.0 E-7	3.1 E-3	5.3 E-7	5.0 E-8	3.7 E-11	5.8 E-7
delta-BHC	1.0 E+0	4.3 E-2	4.8 E-3	1.6 E-6	4.7 E-2	4.6 E-3	7.3 E-4	6.7 E-7	5.3 E-3	2.0 E-6	2.6 E-7	1.4 E-10	2.3 E-6
Dieldrin	1.0 E+0	2.6 E-1	2.9 E-2	9.4 E-6	2.8 E-1	2.7 E-2	4.4 E-3	4.0 E-6	3.2 E-2	2.5 E-5	3.2 E-6	1.7 E-9	2.8 E-5
Endosulfan I	1.0 E+0	2.1 E-3	6.0 E-4	7.8 E-8	2.7 E-3	2.3 E-4	9.1 E-5	3.4 E-8	3.2 E-4	NA	NA	NA	NA
Endosulfan II	1.0 E+0	2.1 E-3	6.0 E-4	7.8 E-8	2.7 E-3	2.3 E-4	9.1 E-5	3.4 E-8	3.2 E-4	NA	NA	NA	NA
Endrin	1.0 E+0	4.3 E-2	4.8 E-3	1.6 E-6	4.7 E-2	4.6 E-3	7.3 E-4	6.7 E-7	5.3 E-3	NA	NA	NA	NA
Fluoranthene	1.0 E+0	3.2 E-4	1.2 E-4	1.2 E-8	4.4 E-4	3.4 E-5	1.8 E-5	5.0 E-9	5.2 E-5	NA	NA	NA	NA
gamma-chlordane	1.0 E+0	2.6 E-2	2.9 E-3	2.4 E-6	2.8 E-2	2.7 E-3	4.4 E-4	1.0 E-6	3.2 E-3	2.0 E-6	2.6 E-7	1.3 E-10	2.3 E-6
Heptachlor	1.0 E+0	2.6 E-2	2.9 E-3	9.4 E-7	2.8 E-2	2.7 E-3	4.4 E-4	4.0 E-7	3.2 E-3	7.0 E-6	8.9 E-7	5.0 E-10	7.9 E-6
Heptachlor epoxide	1.0 E+0	9.8 E-1	1.1 E-1	3.6 E-5	1.1 E+0	1.1 E-1	1.7 E-2	1.5 E-5	1.2 E-1	1.4 E-5	1.8 E-6	1.0 E-9	1.6 E-5
PCB-1254	1.0 E+0	6.4 E-1	2.5 E-1	2.4 E-5	8.9 E-1	6.8 E-2	3.8 E-2	1.0 E-5	1.1 E-1	7.8 E-6	3.5 E-6	2.2 E-10	1.1 E-5
Phenol	1.0 E+0	4.3 E-5	1.2 E-5	8.2 E-9	5.5 E-5	4.6 E-6	1.8 E-6	3.5 E-9	6.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	4.3 E-4	1.6 E-4	1.6 E-8	5.8 E-4	4.6 E-5	2.4 E-5	6.7 E-9	6.9 E-5	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.11-6
Location-Specific Risk Assessment Results - Resident
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																			
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**
Unit Hazard Child		NA	NA	2.8 E-2	4.7 E-1	2.8 E-2	4.7 E-2	2.8 E-1	2.7 E-3	2.7 E-3	4.7 E-2	4.4 E-4	2.8 E-2	2.8 E-2	1.1 E+0	NA	5.7 E-4	8.9 E-1	5.5 E-5	5.8 E-4	2.6 E-3
Unit Hazard Adult		NA	NA	3.1 E-3	5.3 E-2	3.2 E-3	5.3 E-3	3.2 E-2	3.2 E-4	3.2 E-4	5.3 E-3	5.2 E-5	3.2 E-3	3.2 E-3	1.2 E-1	NA	7.1 E-5	1.1 E-1	6.4 E-6	6.9 E-5	2.7 E-4
Unit Risk		5.8 E-7	5.8 E-7	5.8 E-7	3.0 E-5	2.3 E-6	2.3 E-6	2.8 E-5	NA	NA	NA	NA	2.3 E-6	7.9 E-6	1.6 E-5	NA	NA	1.1 E-5	NA	NA	NA
28E-SNS01	0.5											0.0045				10	280			0.0069	17
29E-SD01	0.25															38					2.5
59E-SB05	1															57					0.25
59E-SB06	1															16					0.18
59E-SB07	1															8.6					0.27
59E-SB08	1															7.7					0.44
59E-SD01	0.25		0.0012	0.0029	0.00040		0.00032	0.00094	0.00053	0.00065	0.00046			0.00031	0.00079	10	120	0.073			5.7
59E-SD01	1.5		0.00045							0.00062						5.6	200		0.37		0.43
59E-SD01	5	0.0042		0.0039						0.00075				0.00041		13	1600				0.15
59E-SD02	0.25			0.0068	0.00098											25	560	0.091			22
59E-SD02	1.5				0.00094											6.8	520	0.020			0.46
59E-SD03	0.25					0.0037							0.0046			46		0.21			6.1
59E-SD04	0.25					0.0018										9.8		0.20			14
BC-SD01	0.25															72		0.74			77
BC-SD02	0.25					0.016							0.013			30		1.1			8.1
BC-SD03	0.25		0.0027												0.0012	8.1					27
BC-SD04	0.25		0.0036													11					
WL-SD15	0.25															17					0.14

Table 5.11-6
Location-Specific Risk Assessment Results - Resident
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																				
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
28E-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	1.6 E-1	NA	NA	4.0 E-6	4.3 E-2	2.0 E-1
29E-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-3	6.4 E-3
59E-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-4	6.4 E-4
59E-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-4	4.6 E-4
59E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4	6.9 E-4
59E-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	1.1 E-3
59E-SD01	0.25	NA	NA	8.0 E-5	1.9 E-4	NA	1.5 E-5	2.7 E-4	1.4 E-6	1.8 E-6	2.2 E-5	NA	NA	8.8 E-6	8.6 E-4	NA	6.8 E-2	6.5 E-2	NA	NA	1.5 E-2	1.5 E-1
59E-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	2.0 E-5	NA	1.1 E-3	1.1 E-1
59E-SD01	5	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	1.2 E-5	NA	NA	9.1 E-1	NA	NA	NA	3.8 E-4	9.1 E-1
59E-SD02	0.25	NA	NA	1.9 E-4	4.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-1	8.1 E-2	NA	NA	5.6 E-2	4.6 E-1
59E-SD02	1.5	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-1	1.8 E-2	NA	NA	1.2 E-3	3.1 E-1
59E-SD03	0.25	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	1.9 E-1	NA	NA	1.6 E-2	2.0 E-1
59E-SD04	0.25	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	3.5 E-2	2.1 E-1
BC-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-1	NA	NA	2.0 E-1	8.6 E-1
BC-SD02	0.25	NA	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	NA	9.8 E-1	NA	NA	2.1 E-2	1.0 E+0
BC-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	7.0 E-2	7.1 E-2
BC-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD15	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-4	3.6 E-4

Table 5.11-6
Location-Specific Risk Assessment Results - Resident
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																				
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
28E-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	NA	2.0 E-2	NA	NA	4.8 E-7	4.7 E-3	2.5 E-2
29E-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4	6.9 E-4
59E-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-5	6.9 E-5
59E-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	4.9 E-5
59E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-5	7.4 E-5
59E-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.2 E-4
59E-SD01	0.25	NA	NA	8.9 E-6	2.1 E-5	NA	1.7 E-6	3.0 E-5	1.7 E-7	2.1 E-7	2.4 E-6	NA	NA	9.8 E-7	9.7 E-5	NA	8.6 E-3	7.8 E-3	NA	NA	1.6 E-3	1.8 E-2
59E-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-7	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	2.4 E-6	NA	1.2 E-4	1.4 E-2
59E-SD01	5	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	1.3 E-6	NA	NA	1.1 E-1	NA	NA	NA	4.1 E-5	1.1 E-1
59E-SD02	0.25	NA	NA	2.1 E-5	5.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	9.7 E-3	NA	NA	6.0 E-3	5.6 E-2
59E-SD02	1.5	NA	NA	NA	5.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	2.1 E-3	NA	NA	1.3 E-4	3.9 E-2
59E-SD03	0.25	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	2.2 E-2	NA	NA	1.7 E-3	2.4 E-2
59E-SD04	0.25	NA	NA	NA	NA	5.7 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	3.8 E-3	2.5 E-2
BC-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-2	NA	NA	2.1 E-2	1.0 E-1
BC-SD02	0.25	NA	NA	NA	NA	5.1 E-5	NA	NA	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	1.2 E-1	NA	NA	2.2 E-3	1.2 E-1
BC-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	7.5 E-3	7.6 E-3
BC-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD15	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	3.8 E-5

Table 5.11-6
Location-Specific Risk Assessment Results - Resident
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																					Blood Lead	
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**	**ILCR**	**Child**	**Adult**
Unit Hazard Child																								
Unit Hazard Adult																								
Unit Risk																								
28E-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.4
29E-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2	3.6
59E-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1	3.7
59E-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3	3.4
59E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
59E-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0	3.4
59E-SD01	0.25	NA	7.0 E-10	1.7 E-9	1.2 E-8	NA	7.3 E-10	2.7 E-8	NA	NA	NA	NA	NA	2.5 E-9	1.3 E-8	NA	NA	8.2 E-7	NA	NA	NA	9 E-7	5.1	3.4
59E-SD01	1.5	NA	2.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-10	4.9	3.4
59E-SD01	5	2.4 E-9	NA	2.3 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-9	NA	NA	NA	NA	NA	NA	NA	8 E-9	5.2	3.4
59E-SD02	0.25	NA	NA	4.0 E-9	2.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	1 E-6	5.7	3.5
59E-SD02	1.5	NA	NA	NA	2.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-7	NA	NA	NA	3 E-7	4.9	3.4
59E-SD03	0.25	NA	NA	NA	NA	8.5 E-9	NA	NA	NA	NA	NA	NA	1.1 E-8	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	2 E-6	6.6	3.6
59E-SD04	0.25	NA	NA	NA	NA	4.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	2 E-6	5.1	3.4
BC-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	8 E-6	7.7	3.7
BC-SD02	0.25	NA	NA	NA	NA	3.7 E-8	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	1 E-5	5.9	3.5
BC-SD03	0.25	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	2 E-8	5.0	3.4
BC-SD04	0.25	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-9	5.1	3.4
WL-SD15	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3	3.4

Notes and Key:

All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.11-7 ***Unit Hazard and Unit Cancer Risk Results - Construction Worker***
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Manganese	1.0 E+0	1.3 E-4	0.0 E+0	7.0 E-3	7.1 E-3	NA	NA	NA	NA
Silver	1.0 E+0	6.5 E-4	0.0 E+0	2.0 E-5	6.7 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds									
Aldrin	1.0 E+0	1.1 E-1	1.3 E-2	3.3 E-3	1.2 E-1	7.8 E-7	9.4 E-8	2.4 E-8	9.0 E-7
Alpha-chlordane	1.0 E+0	6.5 E-3	7.7 E-4	4.9 E-4	7.7 E-3	6.0 E-8	7.2 E-9	1.7 E-9	6.9 E-8
4,4'-DDD	1.0 E+0	NA	NA	NA	NA	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
4,4'-DDT	1.0 E+0	6.5 E-3	5.8 E-4	2.0 E-4	7.2 E-3	1.6 E-8	1.4 E-9	4.8 E-10	1.8 E-8
delta-BHC	1.0 E+0	1.1 E-2	1.3 E-3	3.3 E-4	1.2 E-2	6.0 E-8	7.2 E-9	1.8 E-9	6.9 E-8
Dieldrin	1.0 E+0	6.5 E-2	7.7 E-3	2.0 E-3	7.4 E-2	7.4 E-7	8.9 E-8	2.2 E-8	8.5 E-7
Endosulfan I	1.0 E+0	5.4 E-4	1.6 E-4	1.6 E-5	7.2 E-4	NA	NA	NA	NA
Endosulfan II	1.0 E+0	5.4 E-4	1.6 E-4	1.6 E-5	7.2 E-4	NA	NA	NA	NA
Endrin	1.0 E+0	1.1 E-2	1.3 E-3	3.3 E-4	1.2 E-2	NA	NA	NA	NA
Fluoranthene	1.0 E+0	8.1 E-5	3.1 E-5	2.4 E-6	1.1 E-4	NA	NA	NA	NA
gamma-chlordane	1.0 E+0	6.5 E-3	7.7 E-4	4.9 E-4	7.7 E-3	6.0 E-8	7.2 E-9	1.7 E-9	6.9 E-8
Heptachlor	1.0 E+0	6.5 E-3	7.7 E-4	2.0 E-4	7.4 E-3	2.1 E-7	2.5 E-8	6.4 E-9	2.4 E-7
Heptachlor epoxide	1.0 E+0	2.5 E-1	3.0 E-2	7.5 E-3	2.9 E-1	4.2 E-7	5.0 E-8	1.3 E-8	4.8 E-7
PCB-1254	1.0 E+0	1.6 E-1	6.8 E-2	4.9 E-3	2.3 E-1	2.3 E-7	9.7 E-8	2.8 E-9	3.3 E-7
Phenol	1.0 E+0	1.1 E-5	3.2 E-6	1.7 E-6	1.6 E-5	NA	NA	NA	NA
Pyrene	1.0 E+0	1.1 E-4	4.2 E-5	3.3 E-6	1.5 E-4	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.11-8
Location-Specific Risk Assessment Results - Construction Workers
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site

		Concentrations (mg/kg)																			
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**
Unit Hazard		NA	NA	7.2 E-3	1.2 E-1	7.7 E-3	1.2 E-2	7.4 E-2	7.2 E-4	7.2 E-4	1.2 E-2	1.1 E-4	7.7 E-3	7.4 E-3	2.9 E-1	NA	7.1 E-3	2.3 E-1	1.6 E-5	1.5 E-4	6.7 E-4
Unit Risk		1.8 E-8	1.8 E-8	1.8 E-8	9.0 E-7	6.9 E-8	6.9 E-8	8.5 E-7	NA	NA	NA	NA	6.9 E-8	2.4 E-7	4.8 E-7	NA	NA	3.3 E-7	NA	NA	NA
28E-SNS01	0.5											0.0045				10	280			0.0069	17
29E-SD01	0.25															38					2.5
59E-SB05	1															57					0.25
59E-SB06	1															16					0.18
59E-SB07	1															8.6					0.27
59E-SB08	1															7.7					0.44
59E-SD01	0.25		0.0012	0.0029	0.0004		0.00032	0.00094	0.00053	0.00065	0.00046			0.00031	0.00079	10	120	0.073			5.7
59E-SD01	1.5		0.00045							0.00062						5.6	200		0.37		0.43
59E-SD01	5	0.0042		0.0039						0.00075				0.00041		13	1600				0.15
59E-SD02	0.25			0.0068	0.00098											25	560	0.091			22
59E-SD02	1.5				0.00094											6.8	520	0.020			0.46
59E-SD03	0.25					0.0037							0.0046			46		0.21			6.1
59E-SD04	0.25					0.0018										9.8		0.20			14
BC-SD01	0.25															72		0.74			77
BC-SD02	0.25					0.016							0.013			30		1.1			8.1
BC-SD03	0.25		0.0027												0.0012	8.1					27
BC-SD04	0.25		0.0036													11					
WL-SD15	0.25															17					0.14

Table 5.11-8
Location-Specific Risk Assessment Results - Construction Workers
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site

		Non-Cancer Hazard Index																				
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**	**HI**
Unit Hazard																						
Unit Risk																						
28E-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-7	NA	NA	NA	NA	2.0 E+0	NA	NA	1.1 E-6	1.1 E-2	2.0 E+0
29E-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	1.7 E-3
59E-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	1.7 E-4
59E-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-4	1.2 E-4
59E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-4	1.8 E-4
59E-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-4	2.9 E-4
59E-SD01	0.25	NA	NA	2.1 E-5	5.0 E-5	NA	4.0 E-6	7.0 E-5	3.8 E-7	4.7 E-7	5.7 E-6	NA	NA	2.3 E-6	2.3 E-4	NA	8.5 E-1	1.7 E-2	NA	NA	3.8 E-3	8.8 E-1
59E-SD01	1.5	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	1.4 E+0	NA	5.8 E-6	NA	2.9 E-4	1.4 E+0
59E-SD01	5	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	5.4 E-7	NA	NA	NA	3.0 E-6	NA	NA	1.1 E+1	NA	NA	NA	1.0 E-4	1.1 E+1
59E-SD02	0.25	NA	NA	4.9 E-5	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E+0	2.1 E-2	NA	NA	1.5 E-2	4.0 E+0
59E-SD02	1.5	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E+0	4.7 E-3	NA	NA	3.1 E-4	3.7 E+0
59E-SD03	0.25	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	NA	4.9 E-2	NA	NA	4.1 E-3	5.3 E-2
59E-SD04	0.25	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2	NA	NA	9.2 E-3	5.6 E-2
BC-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	5.1 E-2	2.2 E-1
BC-SD02	0.25	NA	NA	NA	NA	1.2 E-4	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	2.6 E-1	NA	NA	5.4 E-3	2.6 E-1
BC-SD03	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	1.8 E-2	1.9 E-2
BC-SD04	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SD15	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-5	9.3 E-5

Table 5.11-8
Location-Specific Risk Assessment Results - Construction Workers
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site

		Incremental Lifetime Cancer Risk																					
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**	**ILCR**	**Blood Lead**
Unit Hazard																							
Unit Risk																							
28E-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
29E-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8
59E-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0
59E-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59E-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59E-SD01	0.25	NA	2.1 E-11	5.1 E-11	3.6 E-10	NA	2.2 E-11	8.0 E-10	NA	NA	NA	NA	NA	7.4 E-11	3.8 E-10	NA	NA	2.4 E-8	NA	NA	NA	3 E-8	3.4
59E-SD01	1.5	NA	7.9 E-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-12	3.4
59E-SD01	5	7.4 E-11	NA	6.9 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.8 E-11	NA	NA	NA	NA	NA	NA	NA	2 E-10	3.5
59E-SD02	0.25	NA	NA	1.2 E-10	8.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-8	NA	NA	NA	3 E-8	3.6
59E-SD02	1.5	NA	NA	NA	8.5 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-9	NA	NA	NA	7 E-9	3.4
59E-SD03	0.25	NA	NA	NA	NA	2.5 E-10	NA	NA	NA	NA	NA	NA	3.2 E-10	NA	NA	NA	NA	6.9 E-8	NA	NA	NA	7 E-8	3.9
59E-SD04	0.25	NA	NA	NA	NA	1.2 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-8	NA	NA	NA	7 E-8	3.4
BC-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	2 E-7	4.2
BC-SD02	0.25	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	8.9 E-10	NA	NA	NA	NA	3.6 E-7	NA	NA	NA	4 E-7	3.7
BC-SD03	0.25	NA	4.7 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-10	NA	NA	NA	NA	NA	NA	6 E-10	3.4
BC-SD04	0.25	NA	6.3 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11	3.4
WL-SD15	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.11-9 ***Unit Hazard and Unit Cancer Risk Results - Outdoor Commercial Worker***
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Oral HQ	Dermal HQ	Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Manganese	1.0 E+0	4.1 E-5	0.0 E+0	1 E-5	5.1 E-5	NA	NA	NA	NA
Silver	1.0 E+0	2.0 E-4	0.0 E+0	3 E-8	2.0 E-4	NA	NA	NA	NA
Semivolatile Organic Compounds									
Aldrin	1.0 E+0	3.3 E-2	8.6 E-3	5 E-6	4.1 E-2	5.9 E-6	1.6 E-6	8.7 E-10	7.5 E-6
Alpha-chlordane	1.0 E+0	2.0 E-3	5.2 E-4	7 E-7	2.5 E-3	4.5 E-7	1.2 E-7	6.2 E-11	5.7 E-7
4,4'-DDD	1.0 E+0	NA	NA	NA	NA	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
4,4'-DDT	1.0 E+0	2.0 E-3	3.9 E-4	3 E-7	2.3 E-3	1.2 E-7	2.4 E-8	1.7 E-11	1.4 E-7
delta-BHC	1.0 E+0	3.3 E-3	8.6 E-4	5 E-7	4.1 E-3	4.5 E-7	1.2 E-7	6.7 E-11	5.7 E-7
Dieldrin	1.0 E+0	2.0 E-2	5.2 E-3	3 E-6	2.5 E-2	5.6 E-6	1.5 E-6	8.2 E-10	7.1 E-6
Endosulfan I	1.0 E+0	1.6 E-4	1.1 E-4	2 E-8	2.7 E-4	NA	NA	NA	NA
Endosulfan II	1.0 E+0	1.6 E-4	1.1 E-4	2 E-8	2.7 E-4	NA	NA	NA	NA
Endrin	1.0 E+0	3.3 E-3	8.6 E-4	5 E-7	4.1 E-3	NA	NA	NA	NA
Fluoranthene	1.0 E+0	2.4 E-5	2.1 E-5	4 E-9	4.5 E-5	NA	NA	NA	NA
gamma-chlordane	1.0 E+0	2.0 E-3	5.2 E-4	7 E-7	2.5 E-3	4.5 E-7	1.2 E-7	6.2 E-11	5.7 E-7
Heptachlor	1.0 E+0	2.0 E-3	5.2 E-4	3 E-7	2.5 E-3	1.6 E-6	4.2 E-7	2.4 E-10	2.0 E-6
Heptachlor epoxide	1.0 E+0	7.5 E-2	2.0 E-2	1 E-5	9.5 E-2	3.2 E-6	8.4 E-7	4.7 E-10	4.0 E-6
PCB-1254	1.0 E+0	4.9 E-2	4.5 E-2	7 E-6	9.4 E-2	1.7 E-6	1.6 E-6	1.0 E-10	3.4 E-6
Phenol	1.0 E+0	3.3 E-6	2.2 E-6	3 E-9	5.4 E-6	NA	NA	NA	NA
Pyrene	1.0 E+0	3.3 E-5	2.8 E-5	5 E-9	6.1 E-5	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.11-10
Location-Specific Risk Assessment Results - Commercial Worker
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																					
Sample Name	**Depth**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-Chlordane**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endrin**	**Fluoranthene**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Lead**	**Manganese**	**PCB-1254**	**Phenol**	**Pyrene**	**Silver**	**ILCR**	**Blood Lead**
Unit Hazard																							
Unit Risk																							
28E-SNS01	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
29E-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59E-SB05	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5
59E-SB06	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4
59E-SB07	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59E-SB08	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3
59E-SD01	0.25	NA	1.7 E-10	4.1 E-10	3.0 E-9	NA	1.8 E-10	6.6 E-9	NA	NA	NA	NA	NA	6.2 E-10	3.2 E-9	NA	NA	2.5 E-7	NA	NA	NA	3 E-7	3
59E-SD01	1.5	NA	6.4 E-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-11	3
59E-SD01	5	6.0 E-10	NA	5.6 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-10	NA	NA	NA	NA	NA	NA	NA	2 E-9	3
59E-SD02	0.25	NA	NA	9.7 E-10	7.4 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	NA	NA	3 E-7	3
59E-SD02	1.5	NA	NA	NA	7.1 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-8	NA	NA	NA	7 E-8	3
59E-SD03	0.25	NA	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	NA	2.6 E-9	NA	NA	NA	NA	7.1 E-7	NA	NA	NA	7 E-7	3
59E-SD04	0.25	NA	NA	NA	NA	1.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-7	NA	NA	NA	7 E-7	3
BC-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	2 E-6	4
BC-SD02	0.25	NA	NA	NA	NA	9.2 E-9	NA	NA	NA	NA	NA	NA	7.5 E-9	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	4 E-6	3
BC-SD03	0.25	NA	3.8 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-9	NA	NA	NA	NA	NA	NA	5 E-9	3
BC-SD04	0.25	NA	5.1 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-10	3
WL-SD15	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3

Notes and Key:
All concentrations reported in milligrams per kilogram.
HI = Hizard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.11-11 *Sediment Unit Hazard and Unit Cancer Risk Results - Recreator*
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (mg/kg)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics									
Aluminum	1.0 E+0	3.9 E-7	0.0 E+0	NA	3.9 E-7	NA	NA	NA	NA
Arsenic	1.0 E+0	1.3 E-3	3.6 E-3	NA	4.9 E-3	3.2 E-7	1.5 E-6	NA	1.9 E-6
Cadmium	1.0 E+0	3.9 E-4	1.4 E-3	NA	1.8 E-3	NA	NA	NA	NA
Chromium VI	1.0 E+0	1.3 E-4	0.0 E+0	NA	1.3 E-4	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	1.0 E+0	1.6 E-5	0.0 E+0	NA	1.6 E-5	NA	NA	NA	NA
Silver	1.0 E+0	7.8 E-5	0.0 E+0	NA	7.8 E-5	NA	NA	NA	NA
Vanadium	1.0 E+0	7.8 E-5	0.0 E+0	NA	7.8 E-5	NA	NA	NA	NA
Semivolatile Organic Compounds									
4,4'-DDE	1.0 E+0	NA	NA	NA	NA	1.1 E-8	5.6 E-8	NA	6.7 E-8
Benzo (a) anthracene	1.0 E+0	NA	NA	NA	NA	2.4 E-8	5.2 E-7	NA	5.4 E-7
Benzo (a) pyrene	1.0 E+0	NA	NA	NA	NA	4.0 E-7	8.5 E-6	NA	8.9 E-6
Benzo (b & k) fluoranthene (total)	1.0 E+0	NA	NA	NA	NA	4.0 E-8	8.5 E-7	NA	8.9 E-7
Benzo (ghi) perylene	1.0 E+0	1.3 E-5	1.6 E-4	NA	1.7 E-4	NA	NA	NA	NA
Chrysene	1.0 E+0	NA	NA	NA	NA	4.0 E-9	8.5 E-8	NA	8.9 E-8
delta-BHC	1.0 E+0	1.3 E-3	4.8 E-3	NA	6.1 E-3	4.4 E-8	2.8 E-7	NA	3.3 E-7
Dibenz (a,h) anthracene	1.0 E+0	NA	NA	NA	NA	2.4 E-7	5.2 E-6	NA	5.4 E-6
Fluoranthene	1.0 E+0	9.8 E-6	1.2 E-4	NA	1.3 E-4	NA	NA	NA	NA
Tetrahydrofuran	1.0 E+0	2.0 E-6	0.0 E+0	NA	2.0 E-6	2.5 E-10	0.0 E+0	NA	2.5 E-10
gamma-BHC (Lindane)	1.0 E+0	1.3 E-3	4.8 E-3	NA	6.1 E-3	4.4 E-8	2.8 E-7	NA	3.3 E-7
Heptachlor epoxide	1.0 E+0	3.0 E-2	1.1 E-1	NA	1.4 E-1	3.1 E-7	2.0 E-6	NA	2.3 E-6
Indeno (1,2,3-cd) pyrene	1.0 E+0	NA	NA	NA	NA	4.0 E-8	8.5 E-7	NA	8.9 E-7
PCB-1254	1.0 E+0	2.0 E-2	2.5 E-1	NA	2.7 E-1	1.7 E-7	3.8 E-6	NA	4.0 E-6
PCB-1260	1.0 E+0	2.0 E-2	2.5 E-1	NA	2.7 E-1	1.7 E-7	3.8 E-6	NA	4.0 E-6
Phenanthrene	1.0 E+0	1.3 E-5	1.6 E-4	NA	1.7 E-4	NA	NA	NA	NA
Pyrene	1.0 E+0	1.3 E-5	1.6 E-4	NA	1.7 E-4	NA	NA	NA	NA
Toluene	1.0 E+0	4.9 E-6	0.0 E+0	NA	4.9 E-6	NA	NA	NA	NA

Key:
HI = Hazard index
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
mg/kg = Milligrams per kilogram
NA = Not applicable

Table 5.11-12
Location-Specific Risk Assessment Results - Recreator
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (mg/kg)																									
Sample Name	**Depth**	**4,4'-DDE**	**Aluminum**	**Arsenic**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium VI**	**Chrysene**	**delta-BHC**	**Dibenz (a,h) anthracene**	**Fluoranthene**	**Tetrahydrofuran**	**gamma-BHC (Lindane)**	**Heptachlor epoxide**	**Indeno (1,2,3-cd) pyrene**	**Lead**	**Manganese**	**PCB-1254**	**PCB-1260**	**Phenanthrene**	**Pyrene**	**Silver**	**Toluene**	**Vanadium**
Unit Hazard Child		NA	3.9 E-7	4.9 E-3	NA	NA	NA	1.7 E-4	1.8 E-3	1.3 E-4	NA	6.1 E-3	NA	1.3 E-4	2.0 E-6	6.1 E-3	1.4 E-1	NA	NA	1.6 E-5	2.7 E-1	2.7 E-1	1.7 E-4	1.7 E-4	7.8 E-5	4.9 E-6	7.8 E-5
Unit Risk		6.7 E-8	NA	1.9 E-6	5.4 E-7	8.9 E-6	8.9 E-7	NA	NA	NA	8.9 E-8	3.3 E-7	5.4 E-6	NA	2.5 E-10	3.3 E-7	2.3 E-6	8.9 E-7	NA	NA	4.0 E-6	4.0 E-6	NA	NA	NA	NA	NA
WL-SD01	0.25																									0.0065	
WL-SD01	0.5		16000	4.4					0.66					0.0035					19	420		0.031			2.5		45
WL-SD01	1.5		12000	3.0					0.42	0.30									6.0	230					2.6	0.0014	32
WL-SD02	0.25		26000	4.2					1.2										38	160	0.24				90		73
WL-SD02	1.5		22000	4.6					0.36						0.0059				21	190	0.25				24	0.00076	79
WL-SD09	0.5		26000	6.5	0.0045	0.0069	0.027	0.0093	0.38	0.022	0.014	0.0013		0.016		0.0016			22	630	0.079		0.0062	0.024	35		84
WL-SD09	1.5		18000	4.6			0.017		0.45		0.0094			0.01					22	430	0.36		0.0035	0.014	31		63
WL-SD11	0.5		16000	2.7	0.023	0.045	0.11	0.043	0.48		0.054		0.0082	0.11			0.0014	0.033	10	170	0.43		0.028	0.098	10		48
WL-SD11	1.5		19000	2.8	0.012	0.021	0.046	0.017		0.028	0.024			0.042			0.00075	0.017	7.6	270	0.16		0.012	0.043	10		53
WL-SD12	0.5	0.0043	35000	7.7			0.014		1.0	0.21	0.0078			0.0099		0.00055			21	1300	0.098		0.0050	0.011	17		110
WL-SD12	1.5		33000	8.1					1.2	0.10	0.0066			0.010		0.00053			21	1300	0.11		0.0029	0.0066	18		110
WL-SD13	0.25		38000	10					0.66	2.2									33	530	0.024				5.9		91
WL-SD13	1.5		24000	5.0					0.13	0.39									7.8	450					0.10		73
WL-SD14	0.25		23400						0.43										20						22		
WL-SD16	0.25		19200						0.87										26						43		

Table 5.11-12
Location-Specific Risk Assessment Results - Recreator
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																										
Sample Name	**Depth**	**4,4'-DDE**	**Aluminum**	**Arsenic**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium VI**	**Chrysene**	**delta-BHC**	**Dibenz (a,h) anthracene**	**Fluoranthene**	**Tetrahydrofuran**	**gamma-BHC (Lindane)**	**Heptachlor epoxide**	**Indeno (1,2,3-cd) pyrene**	**Lead**	**Manganese**	**PCB-1254**	**PCB-1260**	**Phenanthrene**	**Pyrene**	**Silver**	**Toluene**	**Vanadium**	**HI**
Unit Hazard Child																												
Unit Risk																												
WL-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-8	NA	3.2 E-8
WL-SD01	0.5	NA	6.3 E-3	2.1 E-2	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	6.8 E-3	NA	8.4 E-3	NA	NA	2.0 E-4	NA	3.5 E-3	4.8 E-2
WL-SD01	1.5	NA	4.7 E-3	1.5 E-2	NA	NA	NA	NA	7.7 E-4	3.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	NA	NA	NA	NA	2.0 E-4	6.8 E-9	2.5 E-3	2.7 E-2
WL-SD02	0.25	NA	1.0 E-2	2.1 E-2	NA	NA	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	6.5 E-2	NA	NA	NA	7.0 E-3	NA	5.7 E-3	1.1 E-1
WL-SD02	1.5	NA	8.6 E-3	2.2 E-2	NA	NA	NA	NA	6.6 E-4	NA	NA	NA	NA	NA	1.2 E-8	NA	NA	NA	NA	3.1 E-3	6.8 E-2	NA	NA	NA	1.9 E-3	3.7 E-9	6.2 E-3	1.1 E-1
WL-SD09	0.5	NA	1.0 E-2	3.2 E-2	NA	NA	NA	1.6 E-6	6.9 E-4	2.9 E-6	NA	7.9 E-6	NA	2.0 E-6	NA	9.7 E-6	NA	NA	NA	1.0 E-2	2.1 E-2	NA	1.0 E-6	4.0 E-6	2.7 E-3	NA	6.6 E-3	8.4 E-2
WL-SD09	1.5	NA	7.0 E-3	2.2 E-2	NA	NA	NA	NA	8.2 E-4	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	NA	NA	7.0 E-3	9.7 E-2	NA	5.9 E-7	2.4 E-6	2.4 E-3	NA	4.9 E-3	1.4 E-1
WL-SD11	0.5	NA	6.3 E-3	1.3 E-2	NA	NA	NA	7.2 E-6	8.8 E-4	NA	NA	NA	NA	1.4 E-5	NA	NA	2.0 E-4	NA	NA	2.8 E-3	1.2 E-1	NA	4.7 E-6	1.6 E-5	7.8 E-4	NA	3.8 E-3	1.4 E-1
WL-SD11	1.5	NA	7.4 E-3	1.4 E-2	NA	NA	NA	2.9 E-6	NA	3.7 E-6	NA	NA	NA	5.3 E-6	NA	NA	1.1 E-4	NA	NA	4.4 E-3	4.3 E-2	NA	2.0 E-6	7.2 E-6	7.8 E-4	NA	4.1 E-3	7.4 E-2
WL-SD12	0.5	NA	1.4 E-2	3.8 E-2	NA	NA	NA	NA	1.8 E-3	2.7 E-5	NA	NA	NA	1.2 E-6	NA	3.3 E-6	NA	NA	NA	2.1 E-2	2.6 E-2	NA	8.4 E-7	1.8 E-6	1.3 E-3	NA	8.6 E-3	1.1 E-1
WL-SD12	1.5	NA	1.3 E-2	4.0 E-2	NA	NA	NA	NA	2.2 E-3	1.3 E-5	NA	NA	NA	1.3 E-6	NA	3.2 E-6	NA	NA	NA	2.1 E-2	3.0 E-2	NA	4.9 E-7	1.1 E-6	1.4 E-3	NA	8.6 E-3	1.2 E-1
WL-SD13	0.25	NA	1.5 E-2	4.9 E-2	NA	NA	NA	NA	1.2 E-3	2.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.6 E-3	6.5 E-3	NA	NA	NA	4.6 E-4	NA	7.1 E-3	8.8 E-2
WL-SD13	1.5	NA	9.4 E-3	2.4 E-2	NA	NA	NA	NA	2.4 E-4	5.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	7.8 E-6	NA	5.7 E-3	4.7 E-2
WL-SD14	0.25	NA	9.2 E-3	NA	NA	NA	NA	NA	7.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	1.2 E-2
WL-SD16	0.25	NA	7.5 E-3	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	1.2 E-2

Table 5.11-12
Location-Specific Risk Assessment Results - Recreator
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																											
Sample Name	**Depth**	**4,4'-DDE**	**Aluminum**	**Arsenic**	**Benzo (a) anthracene**	**Benzo (a) pyrene**	**Benzo (b & k) fluoranthene (total)**	**Benzo (ghi) perylene**	**Cadmium**	**Chromium VI**	**Chrysene**	**delta-BHC**	**Dibenz (a,h) anthracene**	**Fluoranthene**	**Tetrahydrofuran**	**gamma-BHC (Lindane)**	**Heptachlor epoxide**	**Indeno (1,2,3-cd) pyrene**	**Lead**	**Manganese**	**PCB-1254**	**PCB-1260**	**Phenanthrene**	**Pyrene**	**Silver**	**Toluene**	**Vanadium**	**ILCR**	**Blood Lead**
Unit Hazard Child																													
Unit Risk																													
WL-SD01	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5
WL-SD01	0.5	NA	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	8 E-6 *	4.9
WL-SD01	1.5	NA	NA	5.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6 E-6 *	6.3
WL-SD02	0.25	NA	NA	7.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	NA	NA	NA	9 E-6 *	5.5
WL-SD02	1.5	NA	NA	8.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-12	NA	NA	NA	NA	NA	1.0 E-6	NA	NA	NA	NA	NA	NA	1 E-5 *	5.6
WL-SD09	0.5	NA	NA	1.2 E-5	2.4 E-9	6.2 E-8	2.4 E-8	NA	NA	NA	1.3 E-9	4.3 E-10	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	NA	NA	NA	1 E-5 *	5.6
WL-SD09	1.5	NA	NA	8.6 E-6	NA	NA	1.5 E-8	NA	NA	NA	8.4 E-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	1 E-5 *	5.1
WL-SD11	0.5	NA	NA	5.0 E-6	1.2 E-8	4.0 E-7	9.8 E-8	NA	NA	NA	4.8 E-9	NA	4.5 E-8	NA	NA	NA	3.2 E-9	2.9 E-8	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	7 E-6 *	5.0
WL-SD11	1.5	NA	NA	5.2 E-6	6.5 E-9	1.9 E-7	4.1 E-8	NA	NA	NA	2.1 E-9	NA	NA	NA	NA	NA	1.7 E-9	1.5 E-8	NA	NA	6.4 E-7	NA	NA	NA	NA	NA	NA	6 E-6 *	5.5
WL-SD12	0.5	2.9 E-10	NA	1.4 E-5	NA	NA	1.3 E-8	NA	NA	NA	7.0 E-10	NA	NA	NA	NA	1.8 E-10	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	NA	NA	1 E-5 *	5.5
WL-SD12	1.5	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	5.9 E-10	NA	NA	NA	NA	1.7 E-10	NA	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	NA	NA	2 E-5 *	6.0
WL-SD13	0.25	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-8	NA	NA	NA	NA	NA	NA	2 E-5 *	5.0
WL-SD13	1.5	NA	NA	9.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9 E-6 *	5.5
WL-SD14	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7
WL-SD16	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes and Key:

All concentrations reported in milligrams per kilogram.

* These cancer risks result almost entirely from assessment of detected arsenic concentrations in sediment. As no background dataset for metals in sediment is available, screening of detected inorganics concentrations could not be conducted. However, detected arsenic concentrations in site soils (presumably the primary source of arsenic in creek sediments) range from 0.89 mg/kg to 37 mg/kg, which overlaps the range of detected arsenic concentrations in Buffalo Creek sediment. The risks associated with non-arsenic COPCs range from 1E-7 to 2E-6, and are predominantly due to detected PCB concentrations.

HI = Hizard index

ILCR = Incremental lifetime cancer risk

NA = Not applicable

Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.

Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

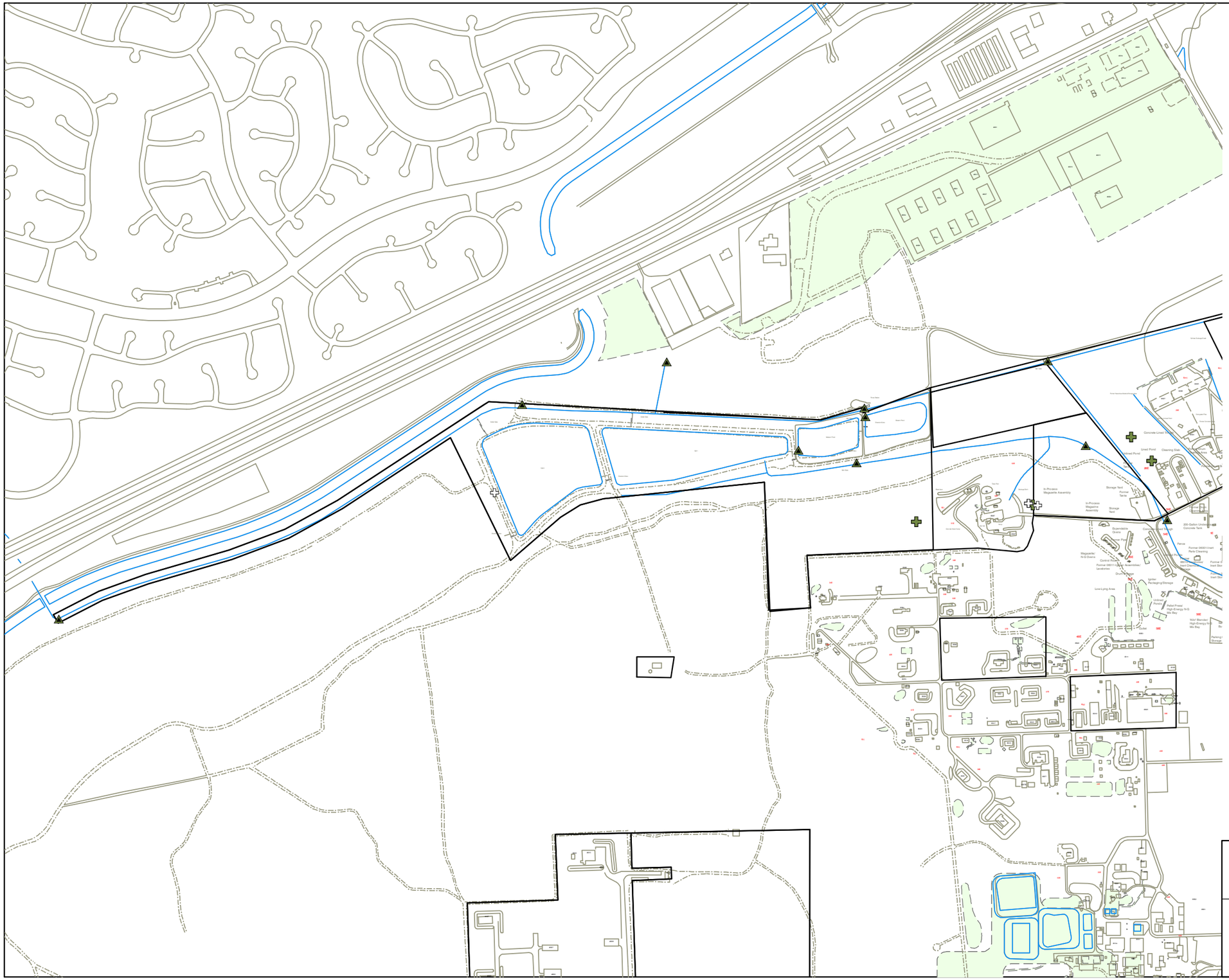
Table 5.11-13 All Receptors Hazard Index and Cancer Risk Results - Soil and Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index					Incremental Lifetime Cancer Risk				Blood Lead				
Sample Name	Depth	Resident Child	Adult	Construction Worker	Commercial Worker	Recreator	Resident	Construction Worker	Commercial Worker	Recreator	Resident Child	Resident Adult	Construction Worker	Commercial Worker	Recreator
28E-SNS01	0.5	2.0 E-1	2.5 E-2	**2.0 E+0**	1.8 E-2	NA	**NA**	**NA**	**NA**	NA	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0	**NA**
29E-SD01	0.25	6.4 E-3	6.9 E-4	1.7 E-3	4.9 E-4	NA	**NA**	**NA**	**NA**	NA	6.2 E+0	3.6 E+0	3.8 E+0	3.5 E+0	**NA**
59E-SB05	1	6.4 E-4	6.9 E-5	1.7 E-4	4.9 E-5	NA	**NA**	**NA**	**NA**	NA	7.1 E+0	3.7 E+0	4.0 E+0	3.5 E+0	**NA**
59E-SB06	1	4.6 E-4	4.9 E-5	1.2 E-4	3.5 E-5	NA	**NA**	**NA**	**NA**	NA	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0	**NA**
59E-SB07	1	6.9 E-4	7.4 E-5	1.8 E-4	5.3 E-5	NA	**NA**	**NA**	**NA**	NA	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0	NA
59E-SB08	1	1.1 E-3	1.2 E-4	2.9 E-4	8.6 E-5	NA	**NA**	**NA**	**NA**	NA	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0	NA
59E-SD01	0.25	1.5 E-1	1.8 E-2	8.8 E-1	1.4 E-2	NA	9 E-7	3 E-8	3 E-7	NA	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0	NA
59E-SD01	1.5	1.1 E-1	1.4 E-2	**1.4 E+0**	1.0 E-2	NA	3 E-10	8 E-12	6 E-11	NA	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0	NA
59E-SD01	5	9.1 E-1	1.1 E-1	**1.1 E+1**	8.2 E-2	NA	8 E-9	2 E-10	2 E-9	NA	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0	NA
59E-SD02	0.25	4.6 E-1	5.6 E-2	**4.0 E+0**	4.2 E-2	NA	1 E-6	3 E-8	3 E-7	NA	5.7 E+0	3.5 E+0	3.6 E+0	3.4 E+0	NA
59E-SD02	1.5	3.1 E-1	3.9 E-2	**3.7 E+0**	2.9 E-2	NA	3 E-7	7 E-9	7 E-8	NA	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0	NA
59E-SD03	0.25	2.0 E-1	2.4 E-2	5.3 E-2	2.1 E-2	NA	**2 E-6**	7 E-8	7 E-7	NA	6.6 E+0	3.6 E+0	3.9 E+0	3.5 E+0	NA
59E-SD04	0.25	2.1 E-1	2.5 E-2	5.6 E-2	2.2 E-2	NA	**2 E-6**	7 E-8	7 E-7	NA	5.1 E+0	3.4 E+0	3.4 E+0	3.3 E+0	NA
BC-SD01	0.25	8.6 E-1	1.0 E-1	2.2 E-1	8.5 E-2	NA	**8 E-6**	2 E-7	**2 E-6**	NA	7.7 E+0	3.7 E+0	4.2 E+0	3.6 E+0	NA
BC-SD02	0.25	**1.0 E+0**	1.2 E-1	2.6 E-1	1.1 E-1	NA	**1 E-5**	4 E-7	**4 E-6**	NA	5.9 E+0	3.5 E+0	3.7 E+0	3.4 E+0	NA
BC-SD03	0.25	7.1 E-2	7.6 E-3	1.9 E-2	5.5 E-3	NA	2 E-8	6 E-10	5 E-9	NA	5.0 E+0	3.4 E+0	3.4 E+0	3.3 E+0	NA
BC-SD04	0.25	**NA**	**NA**	**NA**	**NA**	NA	2 E-9	6 E-11	5 E-10	NA	5.1 E+0	3.4 E+0	3.4 E+0	3.4 E+0	NA
WL-SD15	0.25	3.6 E-4	3.8 E-5	9.3 E-5	2.7 E-5	NA	**NA**	**NA**	**NA**	NA	5.3 E+0	3.4 E+0	3.5 E+0	3.4 E+0	NA
WL-SD01	0.25	NA	NA	NA	NA	3.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E+0
WL-SD01	0.5	NA	NA	NA	NA	4.8 E-2	NA	NA	NA	8 E-6 *	NA	NA	NA	NA	4.9 E+0
WL-SD01	1.5	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	6 E-6 *	NA	NA	NA	NA	6.3 E+0
WL-SD02	0.25	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	9 E-6 *	NA	NA	NA	NA	5.5 E+0
WL-SD02	1.5	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	1 E-5 *	NA	NA	NA	NA	5.6 E+0
WL-SD09	0.5	NA	NA	NA	NA	8.4 E-2	NA	NA	NA	1 E-5 *	NA	NA	NA	NA	5.6 E+0
WL-SD09	1.5	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	1 E-5 *	NA	NA	NA	NA	5.1 E+0
WL-SD11	0.5	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	7 E-6 *	NA	NA	NA	NA	5.0 E+0
WL-SD11	1.5	NA	NA	NA	NA	7.4 E-2	NA	NA	NA	6 E-6 *	NA	NA	NA	NA	5.5 E+0
WL-SD12	0.5	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	1 E-5 *	NA	NA	NA	NA	5.5 E+0
WL-SD12	1.5	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	2 E-5 *	NA	NA	NA	NA	6.0 E+0
WL-SD13	0.25	NA	NA	NA	NA	8.8 E-2	NA	NA	NA	2 E-5 *	NA	NA	NA	NA	5.0 E+0
WL-SD13	1.5	NA	NA	NA	NA	4.7 E-2	NA	NA	NA	9 E-6 *	NA	NA	NA	NA	5.5 E+0
WL-SD14	0.25	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E+0
WL-SD16	0.25	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA
Minimum		3.6 E-4	3.8 E-5	9.3 E-5	2.7 E-5	3.2 E-8	3 E-10	8 E-12	6 E-11	**6 E-6**	4.9 E+0	3.4 E+0	3.4 E+0	3.3 E+0	4.9 E+0
Median		1.5 E-1	1.8 E-2	5.6 E-2	1.4 E-2	8.4 E-2	9 E-7	3 E-8	3 E-7	**9 E-6**	5.2 E+0	3.4 E+0	3.5 E+0	3.4 E+0	5.5 E+0
Maximum		**1.0 E+0**	1.2 E-1	**1.1 E+1**	1.1 E-1	1.4 E-1	**1 E-5**	4 E-7	**4 E-6**	**2 E-5**	7.7 E+0	3.7 E+0	4.2 E+0	3.6 E+0	6.3 E+0

Key:

* These cancer risks result almost entirely from assessment of detected arsenic concentrations in sediment. As no background dataset for metals in sediment is available, screening of detected inorganics concentrations could not be conducted. However, detected arsenic concentrations in site soils (presumably the primary source of arsenic in creek sediments) range from 0.89 mg/kg to 37 mg/kg, which overlaps the range of detected arsenic concentrations in Buffalo Creek sediment. The risks associated with non-arsenic COPCs range from 1E-7 to 2E-6, and are predominantly due to detected PCB concentrations.

NA = Not applicable



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Surface Water Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 750 '

0 750 1,500

AEROJET

Environmental Remediation

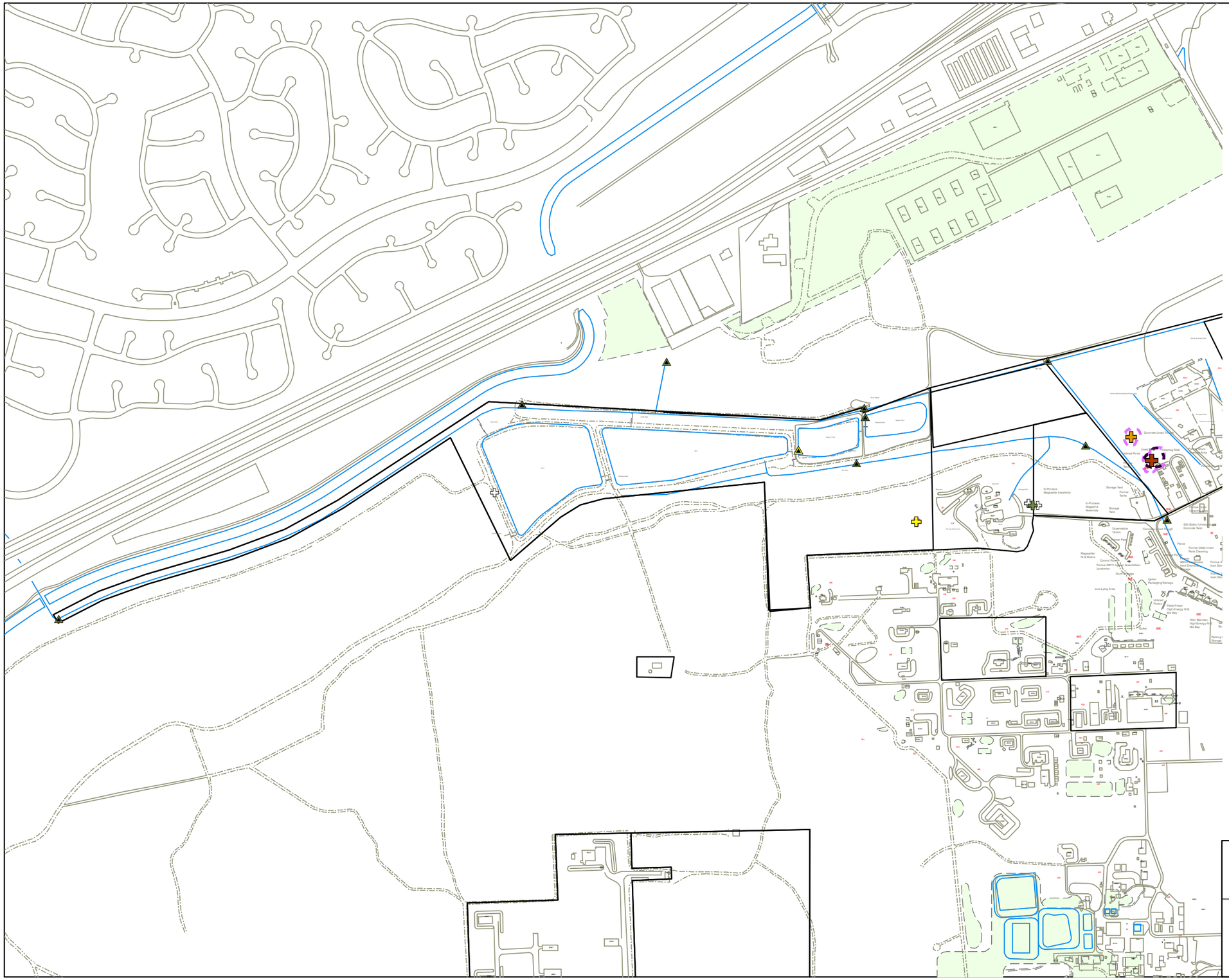
Figure 5.12-1

Residential

Non-Cancer Effects – All Media

WLLO Surface Water and Groundwater

DRAFT



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 750 '

0 750 1,500

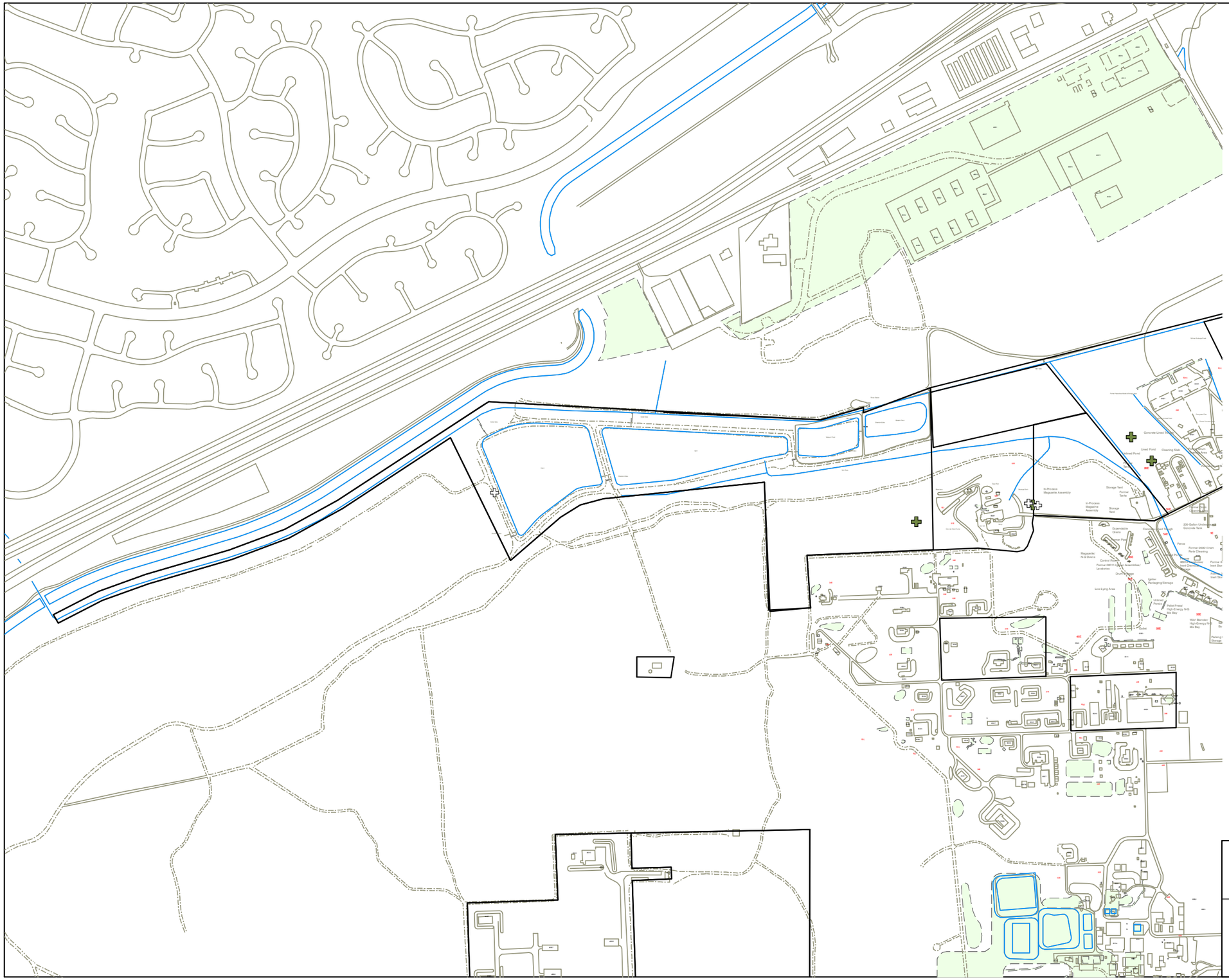
AEROJET

Environmental Remediation

Figure 5.12-2

Residential
Cancer Risks – All Media
WLLO Surface Water and Groundwater

DRAFT



Legend

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 750 '

0 750 1,500

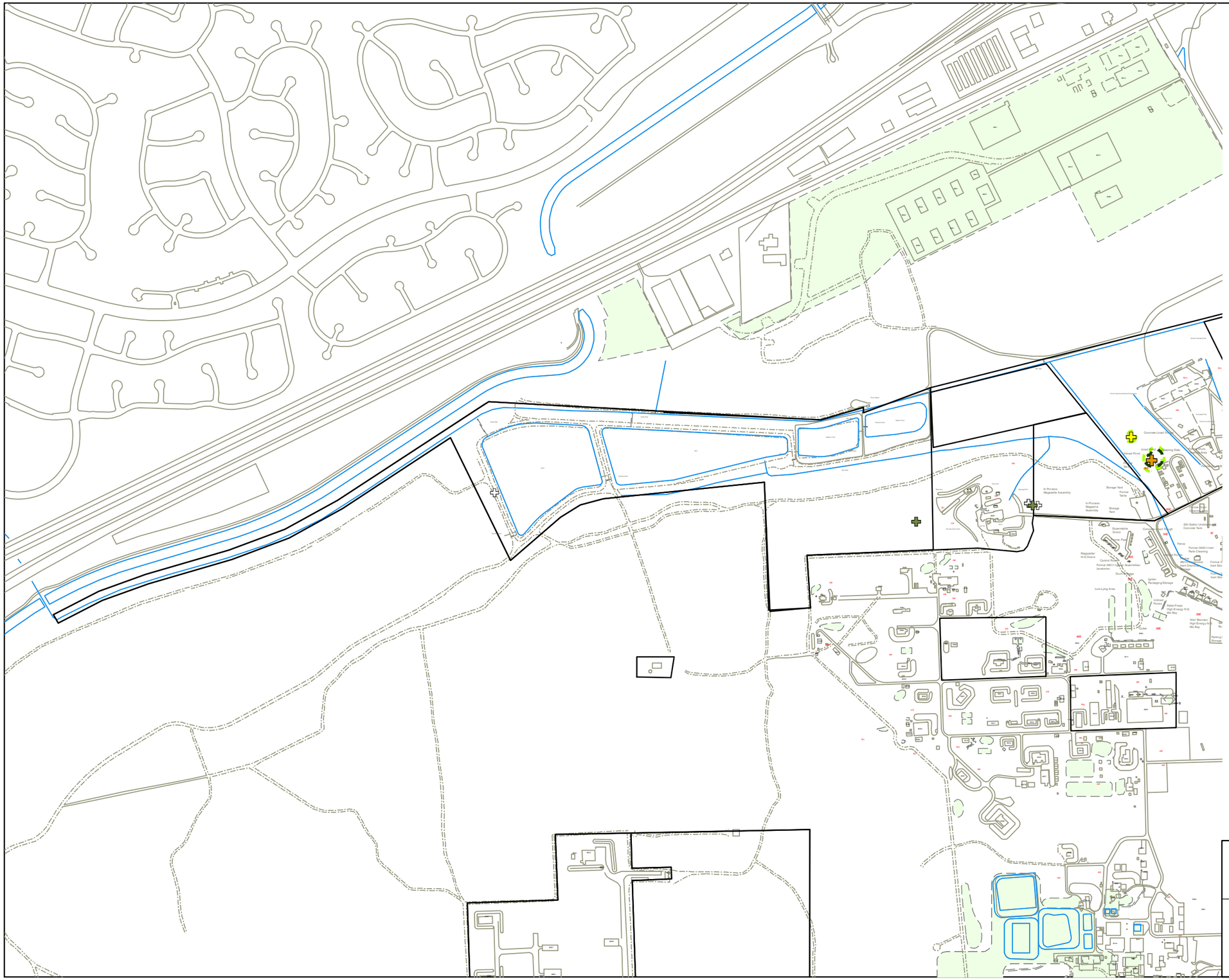
AEROJET

Environmental Remediation

Figure 5.12-3

Commercial/Industrial Worker
Non-Cancer Effects – All Media
WLLO Surface Water and Groundwater

DRAFT



Legend

Soil Cancer Risks (Direct)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)

- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 750 '

0 750 1,500

AEROJET

Environmental Remediation

Figure 5.12-4

Commercial/Industrial Worker
Cancer Risks – All Media
WLLO Surface Water and Groundwater

DRAFT

Table 5.12-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	4	0	0.0%	0.5 - 10	4.3E-02	ca	N	ND*	100%
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	28	0	0.0%	0.5 - 25	1.0E+02	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	28	0	0.0%	1 - 50	5.5E-03	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	28	0	0.0%	0.5 - 50	2.0E-02	ca	N	ND*	100%
	75-34-3	1,1-Dichloroethane	0.65	2.0	µg/L	28	2	7.1%	0.5 - 25	2.0E-01	nc	Y		NA
	75-35-4	1,1-Dichloroethylene	0.34	6.0	µg/L	28	5	17.9%	1 - 25	2.0E-01	nc	Y		NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	NA		N	ND	NA
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	NA		N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	4	0	0.0%	1 - 10	5.6E-04	ca	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	8	0	0.0%	0.5 - 10	5.0E-01	nc	N	ND*	75%
	95-63-6	1,2,4-Trimethylbenzene	NA	NA	µg/L	NA	NA	NA	NA	1.2E+00	nc	N	ND*	NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	4	0	0.0%	1 - 10	1.6E-04	ca	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	6	0	0.0%	0.5 - 10	5.6E-04	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	9	0	0.0%	0.5 - 10	3.7E+01	nc	N	ND	NA
	107-06-2	1,2-Dichloroethane	1.0	5.0	µg/L	28	2	7.1%	0.5 - 25	1.2E-02	ca	Y		NA
	540-59-0	1,2-Dichloroethene (cis/trans)	4.0	9.7	µg/L	28	5	17.9%	1 - 25	6.0E+00	nc	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	28	0	0.0%	0.5 - 25	1.6E-02	ca*	N	ND*	100%
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	5	0	0.0%	10 - 200	8.4E-03	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	NA	NA	µg/L	NA	NA	NA	NA	1.2E+00	nc	N	ND*	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	9	0	0.0%	0.5 - 10	1.8E+01	nc	N	ND	NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	4	0	0.0%	0.5 - 10	1.2E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	9	0	0.0%	0.5 - 10	5.0E-02	ca	N	ND*	100%
	123-91-1	1,4-Dioxane	ND	ND	µg/L	2	0	0.0%	10 - 10	6.1E-01	ca	N	ND*	100%
	872-50-4	1-Methyl-2-Pyrrolidinone	ND	ND	µg/L	2	0	0.0%	20 - 20	NA		N	ND	NA
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	4	0	0.0%	0.5 - 10	NA		N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	5	0	0.0%	10 - 10	3.6E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	5	0	0.0%	10 - 10	9.6E-02	nc**	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	5	0	0.0%	10 - 10	1.1E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	5	0	0.0%	5 - 10	7.3E+01	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	5	0	0.0%	20 - 50	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	5	0	0.0%	10 - 10	7.3E+00	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	5	0	0.0%	10 - 10	3.6E+00	nc	N	ND*	100%
	110-75-8	2-Chloroethyl Vinyl Ether	ND	ND	µg/L	5	0	0.0%	0.65 - 10	NA		N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	5	0	0.0%	5 - 10	4.9E+01	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	µg/L	5	0	0.0%	10 - 10	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	1.2E+01	nc	N	ND	NA
	591-78-6	2-Hexanone	ND	ND	µg/L	6	0	0.0%	20 - 100	NA		N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	5	0	0.0%	5 - 10	9.3E-03	nc	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	µg/L	5	0	0.0%	5 - 10	1.8E+02	nc	N	ND	NA

Table 5.12-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO	88-74-4	2-Nitroaniline	ND	ND	µg/L	5	0	0.0%	10 - 50	1.1E+01	nc	N	ND*	80%
	88-75-5	2-Nitrophenol	ND	ND	µg/L	5	0	0.0%	10 - 20	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	5	0	0.0%	10 - 20	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	5	0	0.0%	10 - 50	3.2E-01	ca**	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	5	0	0.0%	20 - 50	3.6E-01	nc	N	ND*	100%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	8	0	0.0%	5 - 10	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	5	0	0.0%	10 - 20	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	5	0	0.0%	10 - 10	1.5E+01	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	5	0	0.0%	10 - 10	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	µg/L	5	0	0.0%	5 - 10	1.8E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	µg/L	5	0	0.0%	10 - 50	3.2E-01	ca*	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	5	0	0.0%	20 - 50	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	3.7E+01	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	3.7E+01	nc	N	ND	NA
	67-64-1	Acetone	ND	ND	µg/L	6	0	0.0%	20 - 100	5.5E+02	nc	N	ND	NA
	107-02-8	Acrolein	NA	NA	µg/L	NA	NA	NA	NA	4.2E-03	nc	N		NA
	107-13-1	Acrylonitrile	NA	NA	µg/L	NA	NA	NA	NA	1.1E-03	ca*	N		NA
	309-00-2	Aldrin	NA	NA	µg/L	NA	NA	NA	NA	4.0E-04	ca	N		NA
	7429-90-5	Aluminum	1300	610000	µg/L	5	3	60.0%	50 - 50	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	5	0	0.0%	10 - 10	1.2E+00	ca*	N	ND*	100%
	120-12-7	Anthracene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	1.8E+02	nc	N	ND	NA
	7440-36-0	Antimony	0.18	0.18	µg/L	5	1	20.0%	100 - 300	1.5E+00	nc	Y		NA
	7440-38-2	Arsenic	0.76	0.76	µg/L	5	1	20.0%	100 - 100	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	1	0	0.0%	5 - 5	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	18	4500	µg/L	5	5	100.0%	0 - 0	2.0E+02	nc	Y		NA
	71-43-2	Benzene	ND	ND	µg/L	8	0	0.0%	0.5 - 10	1.5E-02	ca	N	ND*	100%
	92-87-5	Benzidine	ND	ND	µg/L	5	0	0.0%	10 - 50	2.9E-05	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	9.2E-03	ca	N	ND*	100%
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	4.0E-04	ca	N	ND*	100%
	AER-001-419	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	1	0	0.0%	0.4 - 0.4	4.0E-04	ca	N	ND*	100%
	205-99-2	Benzo (b) fluoranthene	ND	ND	µg/L	4	0	0.0%	10 - 10	9.2E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	5	0	0.0%	0.4 - 10	NA		N	ND	NA
	207-08-9	Benzo (k) fluoranthene	ND	ND	µg/L	4	0	0.0%	10 - 10	5.6E-03	ca	N	ND*	100%
	65-85-0	Benzoic acid	ND	ND	µg/L	5	0	0.0%	20 - 50	1.5E+04	nc	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	5	0	0.0%	5 - 10	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	5	0	0.0%	10 - 10	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	4.0	10	µg/L	5	2	40.0%	0.5 - 2	1.0E-01	nc	Y		NA

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WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

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WLLO	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	5	0	0.0%	5 - 10	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	5	0	0.0%	5 - 10	1.0E-03	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	5	0	0.0%	10 - 10	2.7E-02	ca	N	ND*	100%
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	µg/L	5	0	0.0%	5 - 50	4.8E-01	ca	N	ND*	100%
	7440-42-8	Boron	18	18	µg/L	5	1	20.0%	50 - 100	7.3E+02	nc	Y		NA
	108-86-1	Bromobenzene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	2.0E+00	nc	N	ND*	50%
	74-97-5	Bromochloromethane	ND	ND	µg/L	4	0	0.0%	0.5 - 10	NA		N	ND	NA
	75-27-4	Bromodichloromethane	ND	ND	µg/L	28	0	0.0%	0.5 - 25	1.8E-02	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	µg/L	28	0	0.0%	0.5 - 50	8.5E-01	ca	N	ND*	93%
	74-83-9	Bromomethane	ND	ND	µg/L	11	0	0.0%	1 - 20	8.7E-01	nc	N	ND*	100%
	AER-001-005	4-Bromophenyl phenyl ether	ND	ND	µg/L	4	0	0.0%	5 - 10	NA	nc	N	ND	NA
	7440-43-9	Cadmium	ND	ND	µg/L	5	0	0.0%	1 - 100	4.0E-03	nc	N	ND*	100%
	7440-70-2	Calcium	7900	92000	µg/L	5	5	100.0%	0 - 0	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	µg/L	1	0	0.0%	10 - 10	3.4E-01	ca	N	ND*	100%
	75-15-0	Carbon disulfide	ND	ND	µg/L	6	0	0.0%	5 - 100	1.0E+02	nc	N	ND	NA
	56-23-5	Carbon tetrachloride	0.47	10	µg/L	28	4	14.3%	1 - 25	1.0E-02	ca*	Y		NA
	57-74-9	Chlordane (tech)	NA	NA	µg/L	NA	NA	NA	NA	3.0E-03	ca	N		NA
	108-90-7	Chlorobenzene	ND	ND	µg/L	28	0	0.0%	0.5 - 25	1.1E+01	nc	N	ND*	4%
	75-00-3	Chloroethane	ND	ND	µg/L	11	0	0.0%	1 - 10	4.6E-01	ca	N	ND*	100%
	67-66-3	Chloroform	0.68	17	µg/L	28	9	32.1%	1 - 25	1.7E-02	ca	Y		NA
	74-87-3	Chloromethane	ND	ND	µg/L	11	0	0.0%	0.4 - 10	1.6E+01	ca	N	ND	NA
	7440-47-3	Chromium	47	170	µg/L	5	3	60.0%	10 - 10	5.5E+03	nc	Y		NA
	218-01-9	Chrysene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	0.3	1.5	µg/L	13	3	23.1%	0.5 - 50	6.1E+00	nc	Y		NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/L	9	0	0.0%	1.7 - 10	NA		N	ND	NA
	7440-48-4	Cobalt	5.8	220	µg/L	5	4	80.0%	10 - 10	7.3E+01	nc	Y		NA
	7440-50-8	Copper	24	440	µg/L	5	3	60.0%	10 - 10	1.7E+01	nc	Y		NA
	96-12-8	DBCP	ND	ND	µg/L	4	0	0.0%	1 - 10	1.6E-04	nc	N	ND*	100%
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	5	0	0.0%	0.4 - 10	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	5	0	0.0%	10 - 10	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	ND	ND	µg/L	28	0	0.0%	0.5 - 50	1.3E-02	ca	N	ND*	100%
	74-95-3	Dibromomethane	ND	ND	µg/L	4	0	0.0%	0.5 - 10	6.1E+00	nc	N	ND	NA
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	28	0	0.0%	0.5 - 50	3.9E+01	nc	N	ND	NA
	60-57-1	Dieldrin	NA	NA	µg/L	NA	NA	NA	NA	4.2E-04	ca	N		NA
	68334-30-5	Diesel Range Organics (C10-C28)	ND	ND	µg/L	1	0	0.0%	300000 - 300000	NA		N	ITC	NA
	60-29-7	Diethyl ether	NA	NA	µg/L	NA	NA	NA	NA	1.2E+02	nc	N		NA
	84-66-2	Diethyl phthalate	ND	ND	µg/L	5	0	0.0%	10 - 10	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	5	0	0.0%	10 - 10	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	5	0	0.0%	10 - 20	3.6E+02	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	5	0	0.0%	5 - 10	1.5E+02	nc	N	ND	NA

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WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

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WLLO	1031-07-8	Endosulfan sulfate	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	72-20-8	Endrin	NA	NA	µg/L	NA	NA	NA	NA	1.8E-01	nc	N		NA
	7421-93-4	Endrin aldehyde	NA	NA	µg/L	NA	NA	NA	NA	1.8E-01	nc	N		NA
	64-17-5	Ethanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	100-41-4	Ethylbenzene	ND	ND	µg/L	8	0	0.0%	0.5 - 10	3.0E+01	nc	N	BSL	NA
	106-93-4	Ethylene Dibromide	ND	ND	µg/L	6	0	0.0%	0.5 - 10	5.6E-04		N	ND*	100%
	206-44-0	Fluoranthene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	1.5E+02	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	2.4E+01	nc	N	ND	NA
	16984-48-8	Fluoride	ND	ND	µg/L	1	0	0.0%	100 - 100	1.0E+02	nc	N	ND	NA
	76-13-1	Freon 113	1.0	400	µg/L	28	8	28.6%	1 - 25	4.0E+02	nc	Y		NA
	1024-57-3	Heptachlor epoxide	NA	NA	µg/L	NA	NA	NA	NA	6.0E-04	ca*	N		NA
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	5	0	0.0%	5 - 10	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	8	0	0.0%	1 - 20	8.6E-02	ca*	N	ND*	100%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	5	0	0.0%	10 - 20	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	5	0	0.0%	5 - 10	4.8E-01	ca**	N	ND*	100%
	18540-29-9	Hexavalent Chromium	ND	ND	µg/L	4	0	0.0%	20 - 40	1.1E+01	nc	N	ND*	100%
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	5	0	0.0%	0.4 - 10	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	4000	580000	µg/L	5	4	80.0%	100 - 100	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	5	0	0.0%	5 - 10	7.1E+00	ca	N	ND	NA
	67-63-0	Isopropanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	98-82-8	Isopropylbenzene	NA	NA	µg/L	NA	NA	NA	NA	6.6E+01	nc	N		NA
	94114-58-6	Jet fuels	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	8008-20-6	Kerosene	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	7439-92-1	Lead	160	400	µg/L	5	2	40.0%	100 - 100	0.0E+00		Y		NA
	7439-93-2	Lithium	ND	ND	µg/L	1	0	0.0%	50 - 50	7.3E+01	nc	N	ND	NA
	7439-95-4	Magnesium	3600	60000	µg/L	5	5	100.0%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	50	14000	µg/L	5	5	100.0%	0 - 0	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	ND	ND	µg/L	5	0	0.0%	0.2 - 1	1.2E-01	nc	N	ND*	100%
	67-56-1	Methanol	NA	NA	µg/L	NA	NA	NA	NA	1.8E+03	nc	N		NA
	72-43-5	Methoxychlor	NA	NA	µg/L	NA	NA	NA	NA	3.0E+00	nc	N		NA
	78-93-3	Methyl ethyl ketone	ND	ND	µg/L	6	0	0.0%	20 - 100	7.0E+02	nc	N	ND	NA
	108-10-1	Methyl isobutyl ketone (MIBK)	ND	ND	µg/L	6	0	0.0%	10 - 100	2.0E+02	nc	N	ND	NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	4	0	0.0%	0.5 - 10	1.1E+00	ca	N	BSL	NA
	75-09-2	Methylene chloride	1.0	2.5	µg/L	28	2	7.1%	1 - 250	4.0E-01	ca	Y		NA
	7439-98-7	Molybdenum	5.6	5.6	µg/L	5	1	20.0%	20 - 40	1.8E+01	nc	Y		NA
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	108-38-3	m-Xylene	NA	NA	µg/L	NA	NA	NA	NA	2.1E+01	nc	N		NA

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Aerojet Superfund Site
Sacramento County, California

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WLLO	91-20-3	Naphthalene	10	10	µg/L	8	1	12.5%	0.2 - 10	9.3E-03	ca	Y		NA
	71-36-3	n-Butyl alcohol	NA	NA	µg/L	NA	NA	NA	NA	3.6E+02	nc	N		NA
	104-51-8	n-Butylbenzene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	2.4E+01	nc	N	ND	NA
	3622-84-2	N-Butylbenzenesulfonamide	ND	ND	µg/L	2	0	0.0%	20 - 20	NA		N	ND	NA
	7440-02-0	Nickel	19	370	µg/L	5	3	60.0%	30 - 40	1.2E+00	nc	Y		NA
	14797-55-8	Nitrate as NO3	500	19000	µg/L	25	20	80.0%	100 - 100	1.0E+03	nc	Y		NA
	GIS-230-001	Nitrate plus Nitrite (as N)	130	200	µg/L	25	2	8.0%	50 - 1000	NA		Y		NA
	S-NINO2	Nitrite as NO2	NA	NA	µg/L	NA	NA	NA	NA	1.0E+02	nc	N		NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	5	0	0.0%	5 - 10	3.4E-01	nc	N	ND*	100%
	62-75-9	N-Nitrosodimethylamine	0.0039	0.041	µg/L	8	3	37.5%	0.0086 - 10	1.3E-04	ca	Y		NA
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	5	0	0.0%	10 - 10	9.6E-04	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	µg/L	4	0	0.0%	10 - 10	1.4E+00	ca*	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	1	0	0.0%	5 - 5	9.1E+01	nc	N	BSL	NA
	71-23-8	n-Propanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	103-65-1	n-Propylbenzene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	2.4E+01	nc	N	ND	NA
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	95-47-6	o-Xylene	ND	ND	µg/L	2	0	0.0%	5 - 10	2.1E+01	nc	N	ND	NA
	12674-11-2	PCB-1016	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N		NA
	11104-28-2	PCB-1221	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N		NA
	11141-16-5	PCB-1232	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N		NA
	53469-21-9	PCB-1242	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca	N		NA
	12672-29-6	PCB-1248	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca	N		NA
	11097-69-1	PCB-1254	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca	N		NA
	11096-82-5	PCB-1260	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca	N		NA
	1336-36-3	PCB's	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	87-86-5	Pentachlorophenol	ND	ND	µg/L	5	0	0.0%	20 - 50	4.0E-02	ca	N	ND*	100%
	14797-73-0	Perchlorate	150	760	µg/L	26	8	30.8%	4 - 500	3.6E-01	ca/nc	Y		NA
	85-01-8	Phenanthrene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	1.8E+01	nc	N	ND	NA
	108-95-2	Phenol	ND	ND	µg/L	5	0	0.0%	5 - 10	1.1E+03	nc	N	ND	NA
	99-87-6	p-Isopropyltoluene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	NA		N	ND	NA
	7440-09-7	Potassium	2200	8700	µg/L	5	5	100.0%	0 - 0	NA		N	EN	NA
	106-42-3	p-Xylene	NA	NA	µg/L	NA	NA	NA	NA	2.1E+01	nc	N		NA
	129-00-0	Pyrene	ND	ND	µg/L	5	0	0.0%	0.2 - 10	1.8E+01	nc	N	ND	NA
	78-92-2	sec-Butyl alcohol	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	2.4E+01	nc	N	ND	NA
	7782-49-2	Selenium	ND	ND	µg/L	5	0	0.0%	10 - 400	1.8E+01	nc	N	ND*	80%
	7440-22-4	Silver	ND	ND	µg/L	5	0	0.0%	10 - 10	1.8E+01	nc	N	ND	NA
	7440-23-5	Sodium	11000	23000	µg/L	5	5	100.0%	0 - 0	NA		N	EN	NA
	8052-41-3	Stoddard solvent	NA	NA	µg/L	NA	NA	NA	NA	NA		N		NA
	7440-24-6	Strontium	280	280	µg/L	1	1	100.0%	0 - 0	2.2E+03	nc	Y		NA
	100-42-5	Styrene	ND	ND	µg/L	7	0	0.0%	0.5 - 10	1.6E+02	nc	N	ND	NA

Table 5.12-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO	98-06-6	tert-Butylbenzene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	2.4E+01	nc	N	ND	NA
	127-18-4	Tetrachloroethene	6.6	130	µg/L	28	6	21.4%	0.5 - 25	6.0E-03	ca	Y		NA
	7440-28-0	Thallium	ND	ND	µg/L	5	0	0.0%	1 - 400	1.0E-02	nc	N	ND*	100%
	7440-32-6	Titanium	39	39	µg/L	1	1	100.0%	0 - 0	1.5E+04	nc	Y		NA
	108-88-3	Toluene	ND	ND	µg/L	8	0	0.0%	0.5 - 10	1.5E+01	nc	N	ND	NA
	57-12-5	Total Cyanide	NA	NA	µg/L	NA	NA	NA	NA	1.5E+01	nc	N		NA
	8001-35-2	Toxaphene	NA	NA	µg/L	NA	NA	NA	NA	3.0E-03	ca	N		NA
	GIS-130-010	TPH	ND	ND	µg/L	4	0	0.0%	200 - 200	NA		N	ITC	NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	4	0	0.0%	0.5 - 10	6.0E+00	nc	N	ND	NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/L	9	0	0.0%	1 - 10	2.0E-02	ca	N	ND*	100%
	79-01-6	Trichloroethene	1.0	2000	µg/L	28	24	85.7%	1 - 50	2.8E-03	ca	Y		NA
	75-69-4	Trichlorofluoromethane	14	26	µg/L	28	4	14.3%	0.5 - 25	7.0E+01	nc	Y		NA
	7440-62-2	Vanadium	11	830	µg/L	5	4	80.0%	10 - 10	3.6E+00	nc	Y		NA
	108-05-4	Vinyl Acetate	ND	ND	µg/L	6	0	0.0%	10 - 200	4.1E+01	nc	N	ND*	33%
	75-01-4	Vinyl chloride	ND	ND	µg/L	28	0	0.0%	0.5 - 25	2.0E-03	ca	N	ND*	100%
	1330-20-7	Xylenes (total)	ND	ND	µg/L	8	0	0.0%	0.5 - 10	2.1E+01	nc	N	ND	NA
	7440-66-6	Zinc	1200	30000	µg/L	5	5	100.0%	0 - 0	1.1E+03	nc	Y		NA

Footnotes:
(1) See Table 3
(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ITC = individual toxic compounds associated with the mixture are assessed separately.

Key:
ca = Cancer
COPC = Chemical of potential concern
µg/L = Micrograms per liter
nc = Noncancer
NA = Not applicable

Table 5.12-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	4.3E-02	ca	N	ND*	100%
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.0E+02	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	11	0	0%	1 - 1	5.5E-03	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.0E-02	ca	N	ND*	100%
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.0E-01	ca	N	ND*	100%
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.0E+00	nc	N	ND	NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.0E-02	nc	N	ND*	100%
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	11	0	0%	1 - 1	5.0E-01	ca	N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	11	0	0%	1 - 1	5.6E-04	nc	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	5.0E-01	ca	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.2E+00	nc	N	ND	NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	11	0	0%	1 - 1	1.6E-04	nc	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	11	0	0%	0.5 - 0.5	5.6E-04	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	3.7E+01	ca	N	ND	NA
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.2E-02	nc	N	ND*	100%
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.6E-02	ca*	N	ND*	100%
	103-33-3	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	10	0	0%	200 - 200	6.1E-02	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.2E+00	nc	N	ND	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.8E+01	nc	N	ND	NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	5.0E-02	ca	N	ND*	100%
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.6E-02	ca*	N	ND*	100%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	10	0	0%	10 - 10	3.6E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	10	0	0%	10 - 10	9.6E-02	nc**	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	10	0	0%	10 - 10	1.1E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	10	0	0%	5 - 5	7.3E+01	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	10	0	0%	20 - 20	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	10	0	0%	10 - 10	7.3E+00	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	10	0	0%	10 - 10	3.6E+00	nc	N	ND*	100%
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	10	0	0%	5 - 5	4.9E+01	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	µg/L	10	0	0%	10 - 10	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	10	0	0%	5 - 5	9.3E-03	ca	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	µg/L	10	0	0%	5 - 5	1.8E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	µg/L	10	0	0%	10 - 10	1.1E+01	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	µg/L	10	0	0%	20 - 20	NA	nc	N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	10	0	0%	10 - 10	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	10	0	0%	10 - 10	3.2E-01	ca**	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	10	0	0%	20 - 20	3.6E-01	nc	N	ND*	100%

Table 5.12-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	10	0	0%	5 - 5	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	10	0	0%	10 - 10	NA	nc	N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	10	0	0%	10 - 10	1.5E+01	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	10	0	0%	10 - 10	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.2E+01	nc	N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	µg/L	10	0	0%	5 - 5	1.8E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	µg/L	10	0	0%	10 - 10	3.2E-01	ca*	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	10	0	0%	20 - 20	NA	nc	N	ND	NA
	83-32-9	Acenaphthene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	3.7E+01	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	3.7E+01	nc	N	ND	NA
	7429-90-5	Aluminum	300	5,200	µg/L	10	10	100%	50 - 50	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	10	0	0%	10 - 10	1.2E+00	ca*	N	ND*	100%
	120-12-7	Anthracene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	1.8E+02	nc	N	ND	NA
	7440-36-0	Antimony	0.071	2	µg/L	10	7	70%	2 - 2	1.5E+00	nc	Y		NA
	7440-38-2	Arsenic	0.55	1	µg/L	10	4	40%	1 - 1	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	10	0	0%	5 - 5	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	21	60	µg/L	10	10	100%	10 - 10	2.0E+02	nc	Y		NA
	71-43-2	Benzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.5E-02	ca	N	ND*	100%
	92-87-5	Benzidine	ND	ND	µg/L	10	0	0%	50 - 50	2.9E-05	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	9.2E-03	ca	N	ND*	100%
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	4.0E-04	ca	N	ND*	100%
	205-99-2	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	10	0	0%	0.4 - 0.4	5.6E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	10	0	0%	0.4 - 0.4	NA	nc	N	ND	NA
	65-85-0	Benzoic acid	ND	ND	µg/L	10	0	0%	20 - 20	1.5E+04	nc	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	10	0	0%	5 - 5	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	10	0	0%	10 - 10	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	0.29	0.29	µg/L	10	1	10%	0.5 - 0.5	1.0E-01	nc	Y		NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	10	0	0%	5 - 5	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	10	0	0%	5 - 5	1.0E-03	ca	N	ND*	100%
	108-61-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	10	0	0%	10 - 10	2.7E-02	ca	N	ND*	100%
	117-81-7	Bis(2-ethylhexyl)phthalate	110	110	µg/L	10	1	10%	5 - 5	4.8E-01	ca	Y		NA
	7440-42-8	Boron	8.6	23	µg/L	10	4	40%	50 - 50	7.3E+02	nc	Y		NA
	106-86-1	Bromobenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.0E+00	nc	N	ND	NA
	74-97-5	Bromochloromethane	ND	ND	µg/L	11	0	0%	1 - 1	NA	nc	N	ND	NA
	75-27-4	Bromodichloromethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.8E-02	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	µg/L	11	0	0%	0.5 - 0.5	8.5E-01	ca*	N	ND	NA
	74-83-9	Bromomethane	ND	ND	µg/L	11	0	0%	1 - 1	8.7E-01	nc	N	ND	NA
	7440-43-9	Cadmium	0.027	0.38	µg/L	10	8	80%	1 - 1	4.0E-03	nc	Y		NA
		Calcium	1700	22,000	µg/L	10	10	100%	0 - 0	NA		N	EN	NA

Table 5.12-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO	86-74-8	Carbazole	ND	ND	µg/L	10	0	0%	10 - 10	3.4E-01	ca	N	ND*	100%
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.0E-02	ca*	N	ND*	100%
	108-90-7	Chlorobenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.1E+01	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	µg/L	11	0	0%	1 - 1	4.6E-01	ca	N	ND*	100%
	67-66-3	Chloroform	ND	ND	µg/L	11	0	0%	0.5 - 3.1	1.7E-02	ca	N	ND*	100%
	74-87-3	Chloromethane	ND	ND	µg/L	11	0	0%	1 - 1	1.6E+01	nc	N	ND	NA
	16065-83-1	Chromium	2.7	6	µg/L	10	9	90%	2 - 2	5.5E+03	nc	Y		NA
	218-01-9	Chrysene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	6.1E+00	nc	N	ND	NA
	7440-48-4	Cobalt	0.23	1	µg/L	10	10	100%	0 - 0	7.3E+01	nc	Y		NA
	7440-50-8	Copper	3.4	4,100	µg/L	10	7	70%	0 - 0	1.7E+01	nc	Y		NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	10	0	0%	0.4 - 0.4	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	10	0	0%	10 - 10	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.3E-02	ca	N	ND*	100%
	74-95-3	Dibromomethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	6.1E+00	nc	N	ND	NA
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	11	0	0%	0.5 - 0.5	3.9E+01	nc	N	ND	NA
		Diesel Range Organics (C10-C28)	300	300	µg/L	1	1	100%	50 - 160	NA		N	ITC	NA
	84-66-2	Diethyl phthalate	ND	ND	µg/L	10	0	0%	10 - 10	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	10	0	0%	10 - 10	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	10	0	0%	10 - 10	3.6E+02	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	10	0	0%	5 - 5	1.5E+02	nc	N	ND	NA
	100-41-4	Ethylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	3.0E+01	nc	N	ND	NA
	206-44-0	Fluoranthene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	1.5E+02	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	2.4E+01	nc	N	ND	NA
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	10	0	0%	5 - 5	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	11	0	0%	1 - 1	8.6E-02	ca*	N	ND*	100%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	10	0	0%	20 - 20	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	10	0	0%	5 - 5	4.8E-01	ca**	N	ND*	100%
	18540-29-9	Hexavalent Chromium	3.4	5	µg/L	7	2	29%	5 - 5	1.1E+01	nc	Y		NA
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	10	0	0%	0.4 - 0.4	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	270	4,200	µg/L	10	10	100%	40 - 40	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	10	0	0%	5 - 5	7.1E+00	ca	N	ND	NA
	98-82-8	Isopropylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	6.6E+01	nc	N	ND	NA
	7439-92-1	Lead	0.49	140	µg/L	10	10	100%	0 - 0	0.0E+00		Y		NA
	7469-93-2	Lithium	ND	ND	µg/L	10	0	0%	50 - 50	7.3E+01	nc	N	ND	NA
	7439-95-4	Magnesium	830	8,300	µg/L	10	10	100%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	14	34	µg/L	10	9	90%	20 - 20	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	0.05	0.05	µg/L	10	1	10%	0.2 - 0.2	1.2E-01	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.1E+00	ca	N	ND	NA

Table 5.12-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO	75-09-2	Methylene chloride	ND	ND	µg/L	11	0	0%	1 - 5.4	4.0E-01		N	ND*	100%
	7439-98-7	Molybdenum	0.21	82.0	µg/L	10	8	80%	2 - 2	1.8E+01	nc	Y		NA
		Motor Oil Range Organics (C16-C36)	580	580	µg/L	1	1	100%	100 - 100	NA		N	ITC	NA
	91-20-3	Naphthalene	ND	ND	µg/L	11	0	0%	0.2 - 0.2	9.3E-03	ca	N	ND*	100%
	104-51-48	n-Butylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	7440-02-0	Nickel	2	12	µg/L	10	7	70%	0 - 0	1.2E+00	nc	Y		NA
		Nitrate as NO3	450	2,400	µg/L	10	8	80%	100 - 100	1.0E+03	nc	Y		NA
		Nitrite as NO2	ND	ND	µg/L	10	0	0%	100 - 5000	1.0E+02	nc	N	ND	NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	10	0	0%	5 - 5	3.4E-01	nc	N	ND*	100%
	62-75-9	N-Nitrosodimethylamine	0.0046	0.11	µg/L	10	2	20%	0.0019 - 5	1.3E-04	ca	Y		NA
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	10	0	0%	10 - 10	9.6E-04	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	10	0	0%	5 - 5	9.1E+01	ca*	N	ND	NA
	103-65-1	n-Propylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	12674-11-2	PCB-1016	NA	NA	µg/L	NA	NA	NA	1 - 1	9.0E-03	ca**	N	NA	NA
	11104-28-2	PCB-1221	NA	NA	µg/L	NA	NA	NA	2 - 2	9.0E-03	ca**	N	NA	NA
	11141-16-5	PCB-1232	NA	NA	µg/L	NA	NA	NA	1 - 1	9.0E-03	ca**	N	NA	NA
	53469-21-9	PCB-1242	NA	NA	µg/L	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	12672-29-6	PCB-1248	NA	NA	µg/L	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	11097-69-1	PCB-1254	NA	NA	µg/L	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	11096-82-5	PCB-1260	NA	NA	µg/L	NA	NA	NA	1 - 1	3.4E-03	ca*	N	NA	NA
	87-86-5	Pentachlorophenol	ND	ND	µg/L	10	0	0%	20 - 20	4.0E-02	ca	N	ND*	100%
		Perchlorate	1.7	3.20	µg/L	9	7	78%	1 - 1	3.6E-01	ca/nc	Y		NA
	85-01-8	Phenanthrene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	NA	nc	N	ND	NA
	108-95-2	Phenol	ND	ND	µg/L	10	0	0%	5 - 5	1.1E+03	nc	N	ND	NA
	25155-15-1	p-Isopropyltoluene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	NA	nc	N	ND	NA
	7440-09-7	Potassium	380	2,800	µg/L	10	10	100%	500 - 500	NA		N	EN	NA
	129-00-0	Pyrene	ND	ND	µg/L	10	0	0%	0.2 - 0.2	1.8E+01	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	7782-49-2	Selenium	ND	ND	µg/L	10	0	0%	2 - 2	1.8E+01	nc	N	ND	NA
	7440-22-4	Silver	0.062	1.30	µg/L	10	7	70%	1 - 1	1.8E+01	nc	Y		NA
	7440-23-5	Sodium	1100	9,300	µg/L	10	10	100%	730 - 730	NA		N	EN	NA
	7440-24-6	Strontium	15	230	µg/L	10	10	100%	0 - 0	2.2E+03	nc	Y		NA
	100-42-5	Styrene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.6E+02	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.4E+01	nc	N	ND	NA
	127-18-4	Tetrachloroethene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	6.0E-03	ca	N	ND*	100%
	7440-28-0	Thallium	0.2	0.20	µg/L	10	1	10%	1 - 1	1.0E-02	nc	Y		NA
	7440-32-6	Titanium	12	170	µg/L	10	10	100%	5 - 8.8	1.5E+04	nc	Y		NA
	108-88-3	Toluene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	1.5E+01	nc	N	ND	NA

Table 5.12-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
WLLO		Total Cyanide	NA	NA	µg/L	NA	NA	NA	5 - 5	1.5E+01	nc	N		NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	6.0E+00	nc	N	ND	NA
	79-01-6	Trichloroethene	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.8E-03	ca	N	ND	NA
	75-69-4	Trichlorofluoromethane	0.24	0.24	µg/L	11	1	9%	0.5 - 0.5	7.0E+01	nc	Y		NA
	7440-62-2	Vanadium	3.6	9	µg/L	10	10	100%	2 - 2	3.6E+00	nc	Y		NA
	75-01-4	Vinyl chloride	ND	ND	µg/L	11	0	0%	0.5 - 0.5	2.0E-03	ca	N	ND	NA
	1330-20-7	Xylenes (total)	ND	ND	µg/L	11	0	0%	1 - 1	2.1E+01	nc	N	ND	NA
	7440-66-6	Zinc	22	480	µg/L	10	6	60%	0 - 0	1.1E+03	nc	Y		NA

Footnotes:

(1) See Table 2.

(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individually

Table 5.12-3 *Chemical of Potential Concern Summary*
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
1,1,1,2-Tetrachloroethane	N	ND*	N	ND*
1,1,1-Trichloroethane	N	ND	N	ND
1,1,2,2-Tetrachloroethane	N	ND*	N	ND*
1,1,2-Trichloroethane	N	ND*	N	ND*
1,1-Dichloroethane	Y		N	ND*
1,1-Dichloroethene	NA	NA	N	ND
1,1-Dichloropropene	N	ND	N	ND*
1,2,3-Trichlorobenzene	N	ND	N	ND
1,2,3-Trichloropropane	N	ND*	N	ND*
1,2,4-Trichlorobenzene	N	ND*	N	ND
1,2,4-Trimethylbenzene	N	ND*	N	ND
1,2-Dibromo-3-chloropropane	N	ND*	N	ND*
1,2-Dibromoethane (EDB)	N	ND*	N	ND*
1,2-Dichlorobenzene	N	ND	N	ND
1,2-Dichloroethane	Y		N	ND*
1,2-Dichloroethene (cis/trans)	Y		NA	NA
1,2-Dichloropropane	N	ND*	N	ND*
1,2-Diphenylhydrazine (as Azobenzene)	N	ND*	N	ND*
1,3,5-Trimethylbenzene	N	ND*	N	ND
1,3-Butadiene	NA	NA	NA	NA
1,3-Dichlorobenzene	N	ND	N	ND
1,3-Dichloropropane	N	ND	N	ND
1,4-Dichlorobenzene	N	ND*	N	ND*
1,4-Dioxane	N	ND*	NA	NA
1-Methyl-2-Pyrrolidinone	N	ND	NA	NA
2,2,4-Trimethylpentane	NA	NA	NA	NA
2,2-Dichloropropane	N	ND	N	ND*
2,4,5-Trichlorophenol	N	ND	N	ND
2,4,6-Trichlorophenol	N	ND*	N	ND*
2,4-Dichlorophenol	N	ND	N	ND
2,4-Dimethylphenol	N	ND	N	ND
2,4-Dinitrophenol	N	ND*	N	ND*
2,4-Dinitrotoluene	N	ND	N	ND
2,6-Dinitrotoluene	N	ND*	N	ND*
2-Butanone (Methyl Ethyl Ketone)	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	N	ND	NA	NA
2-Chloronaphthalene	N	ND	N	ND
2-Chlorophenol	N	ND*	N	ND*
2-Chlorotoluene	N	ND	N	ND
2-Hexanone	N	ND	NA	NA
2-Methylnaphthalene	N	ND*	N	ND*
2-Methylphenol	N	ND	N	ND
2-Nitroaniline	N	ND*	N	ND
2-Nitrophenol	N	ND	N	ND
2-Propanol	NA	NA	NA	NA
3,3'-Dichlorobenzidine	N	ND*	N	ND*
3-Chloropropene	NA	NA	NA	NA
3-Nitroaniline	N	ND*	N	ND*
4,6-Dinitro-2-methylphenol	N	ND*	N	ND*
4-Bromophenyl phenyl ether	N	ND	N	ND
4-Chloro-3-methylphenol	N	ND	N	ND
4-Chloroaniline	N	ND	N	ND
4-Chlorophenyl phenyl ether	N	ND	N	ND
4-Chlorotoluene	N	ND	N	ND
4-Ethyltoluene	NA	NA	NA	NA
4-Methyl-2-pentanone	NA	NA	NA	NA
4-Methylphenol	N	ND	N	ND
4-Nitroaniline	N	ND*	N	ND*
4-Nitrophenol	N	ND	N	ND
Acenaphthene	N	ND	N	ND
Acenaphthylene	N	ND	N	ND
Acetone	N	ND	NA	NA
Acrolein	N		NA	NA
Acrylonitrile	N		NA	NA

Table 5.12-3 *Chemical of Potential Concern Summary*
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Aldrin	N		NA	NA
alpha-Chlorotoluene	NA	NA	NA	NA
Aluminum	Y		Y	
Aniline	N	ND*	N	ND*
Anthracene	N	ND	N	ND
Antimony	Y		Y	
Arsenic	Y		Y	
Azobenzene	N	ND*	N	ND*
Barium	Y		Y	
Benzene	N	ND*	N	ND*
Benzidine	N	ND*	N	ND*
Benzo (a) anthracene	N	ND*	N	ND*
Benzo (a) pyrene	N	ND*	N	ND*
Benzo (b & k) fluoranthene (total)	N	ND*	N	ND*
Benzo (b) fluoranthene	N	ND*	NA	NA
Benzo (ghi) perylene	N	ND	N	ND
Benzo (k) fluoranthene	N	ND*	NA	NA
Benzoic acid	N	ND	N	ND
Benzyl alcohol	N	ND	N	ND
Benzyl butyl phthalate	N	ND	N	ND
Beryllium	Y		Y	
Bis(2-chloroethoxy)methane	N	ND	N	ND
Bis(2-chloroethyl)ether	N	ND*	N	ND*
Bis(2-chloroisopropyl)ether	N	ND*	N	ND*
Bis(2-ethylhexyl)phthalate	N	ND*	Y	
Boron	Y		Y	
Bromobenzene	N	ND*	N	ND
Bromochloromethane	N	ND	N	ND
Bromodichloromethane	N	ND*	N	ND*
Bromoform	N	ND*	N	ND
Bromomethane	N	ND*	N	ND
Butylbenzene	NA	NA	NA	NA
Cadmium	N	ND*	Y	
Calcium	N	EN	N	EN
Carbazole	N	ND*	N	ND*
Carbon Disulfide	N	ND	NA	NA
Carbon Tetrachloride	Y		N	ND*
Chlordane (tech)	N		NA	NA
Chlorobenzene	N	ND*	N	ND
Chloroethane	N	ND*	N	ND*
Chloroform	Y		N	ND*
Chloromethane	N	ND	N	ND
Chromium	Y		Y	
Chromium VI	NA	NA	NA	NA
Chrysene	N	ND*	N	ND*
cis-1,2-Dichloroethene	Y		N	ND
cis-1,3-Dichloropropene	N	ND	NA	NA
Cobalt	Y		Y	
Copper	Y		Y	
Cumene	NA	NA	NA	NA
Cyclohexane	NA	NA	NA	NA
Dibenz (a,h) anthracene	N	ND*	N	ND*
Dibenzofuran	N	ND*	N	ND*
Dibromochloromethane	N	ND*	N	ND*
Dibromomethane	N	ND	N	ND
Dichlorodifluoromethane	N	ND	N	ND
Dieldrin	N		NA	NA

Table 5.12-3 *Chemical of Potential Concern Summary*
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituent	Groundwater		Surface Water	
	COPC Flag	Rationale for Deletion	COPC Flag	Rationale for Deletion
Diesel Range Organics (C10-C28)	N	ITC	N	ITC
Diethyl ether	N		NA	NA
Diethyl phthalate	N	ND	N	ND
Dimethyl phthalate	N	ND	N	ND
Di-n-butyl phthalate	N	ND	N	ND
Di-n-octyl phthalate	N	ND	N	ND
Endosulfan sulfate	N		NA	NA
Endrin	N		NA	NA
Endrin aldehyde	N		NA	NA
Ethanol	N		NA	NA
Ethyl Benzene	NA	NA	NA	NA
Fluoranthene	N	ND	N	ND
Fluorene	N	ND	N	ND
Freon 11	NA	NA	NA	NA
Freon 113	Y		NA	NA
Freon 114	NA	NA	NA	NA
Freon 12	NA	NA	NA	NA
Heptachlor epoxide	N		NA	NA
Heptane	NA	NA	NA	NA
Hexachlorobenzene	N	ND*	N	ND*
Hexachlorobutadiene	N	ND*	N	ND*
Hexachlorocyclopentadiene	N	ND*	N	ND*
Hexachloroethane	N	ND*	N	ND*
Hexane	NA	NA	NA	NA
Hexavalent Chromium	N	ND*	Y	
Indeno (1,2,3-cd) pyrene	N	ND*	N	ND*
Iron	Y		Y	
Isophorone	N	ND	N	ND
Isopropanol	N		NA	NA
Isopropylbenzene	N		N	ND
Jet fuels	N		NA	NA
Kerosene	N		NA	NA
Lead	Y		Y	
Lithium	N	ND	N	ND
m,p-Xylene	NA	NA	NA	NA
Magnesium	N	EN	N	EN
Manganese	Y		Y	
Mercury	N	ND*	Y	
Methanol	N		NA	NA
Methoxychlor	N		NA	NA
Methyl ethyl ketone	N	ND	NA	NA
Methyl isobutyl ketone (MIBK)	N	ND	NA	NA
Methyl tert-butyl ether	N	BSL	N	ND
Methylene Chloride	Y		N	ND*
Molybdenum	Y		Y	
Motor Oil Range Organics (C16-C36)	N		N	ITC
m-Xylene	N		NA	NA
Naphthalene	Y		N	ND*
n-Butyl alcohol	N		NA	NA
n-Butylbenzene	N	ND	N	ND
N-Butylbenzenesulfonamide	N	ND	NA	NA
Nickel	Y		Y	
Nitrate as NO3	Y		Y	
Nitrate plus Nitrite (as N)	Y		NA	NA
Nitrite as NO2	N		N	ND
Nitrobenzene	N	ND*	N	ND*
N-Nitrosodimethylamine	Y		Y	
N-Nitrosodi-n-propylamine	N	ND*	N	ND*
N-Nitrosodiphenylamine	N	ND*	NA	NA
N-Nitrosodiphenylamine (as Diphenylamine)	NA	NA	NA	NA
n-Propanol	N		NA	NA
n-Propylbenzene	N	ND	N	ND
o-Xylene	N	ND	NA	NA
Oil & Grease (E413.2-SM5520C Total)	N		NA	NA

Table 5.12-3 *Chemical of Potential Concern Summary*
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
p-Cymene	NA	NA	NA	NA
PCB-1016	N		N	NA
PCB-1221	N		N	NA
PCB-1232	N		N	NA
PCB-1242	N		N	NA
PCB-1248	N		N	NA
PCB-1254	N		N	NA
PCB-1260	N		N	NA
PCB's	N		NA	NA
Pentachlorophenol	N	ND*	N	ND*
Perchlorate	Y		Y	
Petroleum Hydrocarbons	NA	NA	NA	NA
Phenanthrene	N	ND	N	ND
Phenol	N	ND	N	ND
p-Isopropyltoluene	N	ND	N	ND
POLYCHLORINATED BIPHENYL	NA	NA	NA	NA
Potassium	N	EN	N	EN
Propylbenzene	NA	NA	NA	NA
p-Xylene	N		NA	NA
Pyrene	N	ND	N	ND
sec-Butyl alcohol	N		NA	NA
sec-Butylbenzene	N	ND	N	ND
Selenium	N	ND*	N	ND
Silver	N	ND	Y	
Sodium	N	EN	N	EN
Stoddard solvent	N		NA	NA
Strontium	Y		Y	
Styrene	N	ND	N	ND
tert-Butylbenzene	N	ND	N	ND
Tetrachloroethene	Y		N	ND*
Tetrahydrofuran	NA	NA	NA	NA
Thallium	N	ND*	Y	
Tin	NA	NA	NA	NA
Titanium	Y		Y	
Toluene	N	ND	N	ND
Total Cyanide	N		N	
TOTAL RECOV. PETROLEUM HYDROCARBONS	NA	NA	NA	NA
Toxaphene	N		NA	NA
TPH	N	ITC	NA	NA
trans-1,2-Dichloroethene	N	ND	N	ND
trans-1,3-Dichloropropene	N	ND*	NA	NA
Trichloroethene	Y		N	ND
Trichlorofluoromethane	Y		Y	
Vanadium	Y		Y	
Vinyl Acetate	N	ND*	NA	NA
Vinyl Chloride	N	ND*	N	ND
Xylenes (total)	N	ND	N	ND
Zinc	Y		Y	

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ITC = Individual toxic compounds associated with the mixture are assessed separately.

Table 5.12-4 ***Residential Groundwater to Indoor Air Attenuation Factors WLLO Management Area Boundary Operable Unit Risk Assessment Aerojet Superfund Site Sacramento County, California***

Chemical	AF ($\mu g/m^3$ per $\mu g/L$) Layer S (48 ft bgs)
1,1-Dichloroethane	2.2 E-2
1,1-Dichloroethene	1.3 E-1
1,2-Dichloroethane	5.4 E-3
1,2-Dichloroethene (cis/trans)	1.6 E-2
Carbon tetrachloride	1.3 E-1
Chloroform	2.0 E-2
cis-1,2-Dichloroethene	1.6 E-2
Trichlorofluoromethane	4.5 E-1
Methylene chloride	1.2 E-2
Naphthalene	1.5 E-3
Freon 113	2.0 E+0
Tetrachloroethene	7.1 E-2
Trichloroethene	4.3 E-2

Key:
AF = Attenuation Factor
ft bgs = Feet below ground surface
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter

Table 5.12-5 *Commercial Groundwater to Indoor Air Attenuation Factors WLLO Management Area Boundary Operable Unit Risk Assessment Aerojet Superfund Site Sacramento County, California*

Chemical	AF (µg/m³ per µg/L) Layer S (48 ft bgs)
1,1-Dichloroethane	1.1 E-2
1,1-Dichloroethene	6.3 E-2
1,2-Dichloroethane	2.7 E-3
1,2-Dichloroethene (cis/trans)	8.1 E-3
Carbon tetrachloride	6.4 E-2
Chloroform	1.0 E-2
cis-1,2-Dichloroethene	8.1 E-3
Trichlorofluoromethane	2.3 E-1
Methylene chloride	5.9 E-3
Naphthalene	7.5 E-4
Freon 113	1.0 E+0
Tetrachloroethene	3.5 E-2
Trichloroethene	2.2 E-2

Key:
AF = Attenuation Factor
ft bgs = Feet below ground surface
µg/m³ = Micrograms per cubic meter
µg/L = Micrograms per liter

Table 5.12-6 *Surface Water Unit Hazard and Unit Cancer Risk Results - Resident*
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Unit HI	Oral ILCR	Dermal ILCR	Unit ILCR
Inorganics										
Aluminum	1.0 E+0	1.1 E-7	1.4 E-8	1.2 E-7	2.3 E-8	4.9 E-9	2.8 E-8	NA	NA	NA
Antimony	1.0 E+0	2.7 E-4	2.4 E-4	5.2 E-4	5.9 E-5	8.2 E-5	1.4 E-4	NA	NA	NA
Arsenic	1.0 E+0	3.7 E-4	4.8 E-5	4.1 E-4	7.8 E-5	1.6 E-5	9.5 E-5	1.6 E-7	2.8 E-8	1.9 E-7
Barium	1.0 E+0	5.5 E-7	1.0 E-6	1.6 E-6	1.2 E-7	3.5 E-7	4.7 E-7	NA	NA	NA
Beryllium	1.0 E+0	5.5 E-5	1.0 E-3	1.1 E-3	1.2 E-5	3.5 E-4	3.6 E-4	NA	NA	NA
Boron	1.0 E+0	5.5 E-7	7.2 E-8	6.2 E-7	1.2 E-7	2.5 E-8	1.4 E-7	NA	NA	NA
Cadmium	1.0 E+0	1.1 E-4	2.9 E-4	4.0 E-4	2.3 E-5	9.8 E-5	1.2 E-4	NA	NA	NA
Chromium	1.0 E+0	7.3 E-8	7.4 E-7	8.1 E-7	1.6 E-8	2.5 E-7	2.7 E-7	NA	NA	NA
Cobalt	1.0 E+0	5.5 E-6	2.9 E-7	5.8 E-6	1.2 E-6	9.8 E-8	1.3 E-6	NA	NA	NA
Copper	1.0 E+0	3.0 E-6	3.9 E-7	3.4 E-6	6.3 E-7	1.3 E-7	7.7 E-7	NA	NA	NA
Hexavalent Chromium	1.0 E+0	3.7 E-5	3.9 E-4	4.2 E-4	7.8 E-6	1.3 E-4	1.4 E-4	NA	NA	NA
Iron	1.0 E+0	1.6 E-7	2.1 E-8	1.8 E-7	3.4 E-8	7.0 E-9	4.1 E-8	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	1.0 E+0	4.6 E-6	1.5 E-5	2.0 E-5	9.8 E-7	5.1 E-6	6.1 E-6	NA	NA	NA
Mercury	1.0 E+0	3.7 E-4	6.9 E-4	1.1 E-3	7.8 E-5	2.3 E-4	3.1 E-4	NA	NA	NA
Molybdenum	1.0 E+0	2.2 E-5	2.9 E-6	2.5 E-5	4.7 E-6	9.8 E-7	5.7 E-6	NA	NA	NA
Nickel	1.0 E+0	5.5 E-6	3.6 E-6	9.1 E-6	1.2 E-6	1.2 E-6	2.4 E-6	NA	NA	NA
Nitrate as NO3	1.0 E+0	6.8 E-8	9.0 E-9	7.8 E-8	1.5 E-8	3.1 E-9	1.8 E-8	NA	NA	NA
Perchlorate	1.0 E+0	1.6 E-4	2.1 E-5	1.8 E-4	3.4 E-5	7.0 E-6	4.1 E-5	NA	NA	NA
Silver	1.0 E+0	2.2 E-5	4.3 E-5	6.5 E-5	4.7 E-6	1.5 E-5	1.9 E-5	NA	NA	NA
Strontium	1.0 E+0	1.8 E-7	2.4 E-8	2.1 E-7	3.9 E-8	8.2 E-9	4.7 E-8	NA	NA	NA
Thallium	1.0 E+0	1.7 E-3	2.2 E-4	1.9 E-3	3.6 E-4	7.4 E-5	4.3 E-4	NA	NA	NA
Titanium	1.0 E+0	2.7 E-8	3.6 E-9	3.1 E-8	5.9 E-9	1.2 E-9	7.1 E-9	NA	NA	NA
Vanadium	1.0 E+0	2.2 E-5	1.1 E-4	1.3 E-4	4.7 E-6	3.8 E-5	4.2 E-5	NA	NA	NA
Zinc	1.0 E+0	3.7 E-7	2.9 E-8	3.9 E-7	7.8 E-8	9.8 E-9	8.8 E-8	NA	NA	NA
Semivolatile Organic Compounds										
Bis(2-ethylhexyl)phthalate	1.0 E+0	5.5 E-6	2.0 E-4	2.1 E-4	1.2 E-6	9.1 E-5	9.2 E-5	2.4 E-10	1.4 E-8	1.4 E-8
N-Nitrosodimethylamine	1.0 E+0	1.4 E-2	7.3 E-2	8.6 E-2	2.9 E-3	3.1 E-2	3.3 E-2	8.9 E-7	6.8 E-6	7.7 E-6
Volatile Organic Compounds										
Trichlorofluoromethane	1.0 E+0	5.5 E-7	2.1 E-6	2.6 E-6	1.2 E-7	9.2 E-7	1.0 E-6	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.12-7
Surface Water Location-Specific Risk Assessment Results-Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/L)																										
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Bis(2-ethylhexyl)phthalate**	**Boron**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Hexavalent Chromium**	**Iron**	**Lead**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Nitrate as NO3**	**N-Nitrosodimethylamine**	**Perchlorate**	**Silver**	**Strontium**	**Titanium**	**Trichlorofluoromethane**	**Vanadium**	**Zinc**
Unit Hazard Child		1.2 E-7	5.2 E-4	4.1 E-4	1.6 E-6	1.1 E-3	2.1 E-4	6.2 E-7	4.0 E-4	8.1 E-7	5.8 E-6	3.4 E-6	4.2 E-4	1.8 E-7	NA	2.0 E-5	1.1 E-3	2.5 E-5	9.1 E-6	7.8 E-8	8.6 E-2	1.8 E-4	6.5 E-5	2.1 E-7	3.1 E-8	2.6 E-6	1.3 E-4	3.9 E-7
Unit Hazard Adult		2.8 E-8	1.4 E-4	9.5 E-5	4.7 E-7	3.6 E-4	9.2 E-5	1.4 E-7	1.2 E-4	2.7 E-7	1.3 E-6	7.7 E-7	1.4 E-4	4.1 E-8	NA	6.1 E-6	3.1 E-4	5.7 E-6	2.4 E-6	1.8 E-8	3.3 E-2	4.1 E-5	1.9 E-5	4.7 E-8	7.1 E-9	1.0 E-6	4.2 E-5	8.8 E-8
Unit Risk		NA	NA	1.9 E-7	NA	NA	1.4 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	NA	NA	NA	NA	NA	NA
59E-SW01	4.5	1900	0.071		27					2.9	0.4	3.4		1500	0.49	14		0.27	2.0	1800		2.1	0.46	64	49		7.1	
59E-SW02	2	3100	0.071		35				0.031	4.4	0.82	4.6		2500	1.3	29		0.21	2.9	1700		1.8	1.3	67	91		9.2	
WL-SD02	0.25																											
WL-SW01	1	540			60				0.068	2.7	0.44		3.4	570	1.4	14		2.0		2400		2.5		230	22		4.6	
WL-SW02	1	300			48						0.23		4.5	270	0.58			2.6		1700				190	12		3.6	
WL-SW03	0.5	1100			21				0.064	3.0	0.82			1300	1.6	30		0.34			0.11			15	46		4.0	22
WL-SW04	1	5200	0.24	0.55	36	0.29	110	8.6	0.22	6.0	0.84	4100		4200	140	34		82	12	950	0.0046	2.3	0.57	53	170		8.2	480
WL-SW05	9	2000	0.23	0.75	31			12	0.027	2.8	0.47	3.4		1600	0.63	20		0.3	2.1	1200		1.7	0.52	71	53		6.0	49
WL-SW06	9	2100	0.24		29			13	0.064	4.8	0.35	5.1		1800	1.2	16			2.8	450		3.0	0.23	72	58		4.6	43
WL-SW07	1.5	3100	0.21	0.56	30				0.12	5.3	0.78	5.8		2800	2.5	30			2.8	1500		3.2	0.22	24	91		7.2	66
WL-SW08	1	1700	1.8	0.82	44			23	0.38	5.4	0.58	28		1500	26	24	0.05	2.1	4.5				0.062	44	50	0.24	3.9	110

Table 5.12-7
Surface Water Location-Specific Risk Assessment Results-Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																											
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Bis(2-ethylhexyl)phthalate**	**Boron**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Hexavalent Chromium**	**Iron**	**Lead**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Nitrate as NO3**	**N-Nitrosodimethylamine**	**Perchlorate**	**Silver**	**Strontium**	**Titanium**	**Trichlorofluoromethane**	**Vanadium**	**Zinc**	**HI**
Unit Hazard Child																													
Unit Hazard Adult																													
Unit Risk																													
59E-SW01	4.5	2.4 E-4	3.7 E-5	NA	4.3 E-5	NA	NA	NA	NA	2.4 E-6	2.3 E-6	1.1 E-5	NA	2.7 E-4	NA	2.7 E-4	NA	6.7 E-6	1.8 E-5	1.4 E-4	NA	3.7 E-4	3.0 E-5	1.3 E-5	1.5 E-6	NA	9.5 E-4	NA	2.4 E-3
59E-SW02	2	3.8 E-4	3.7 E-5	NA	5.5 E-5	NA	NA	NA	1.2 E-5	3.6 E-6	4.7 E-6	1.5 E-5	NA	4.4 E-4	NA	5.7 E-4	NA	5.2 E-6	2.6 E-5	1.3 E-4	NA	3.2 E-4	8.5 E-5	1.4 E-5	2.8 E-6	NA	1.2 E-3	NA	3.3 E-3
WL-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0 E+0
WL-SW01	1	6.7 E-5	NA	NA	9.5 E-5	NA	NA	NA	2.7 E-5	2.2 E-6	2.5 E-6	NA	1.4 E-3	1.0 E-4	NA	2.7 E-4	NA	5.0 E-5	NA	1.9 E-4	NA	4.4 E-4	NA	4.8 E-5	6.8 E-7	NA	6.1 E-4	NA	3.3 E-3
WL-SW02	1	3.7 E-5	NA	NA	7.6 E-5	NA	NA	NA	NA	NA	1.3 E-6	NA	1.9 E-3	4.8 E-5	NA	NA	NA	6.5 E-5	NA	1.3 E-4	NA	NA	NA	3.9 E-5	3.7 E-7	NA	4.8 E-4	NA	2.8 E-3
WL-SW03	0.5	1.4 E-4	NA	NA	3.3 E-5	NA	NA	NA	2.6 E-5	2.4 E-6	4.7 E-6	NA	NA	2.3 E-4	NA	5.9 E-4	NA	8.4 E-6	NA	NA	9.5 E-3	NA	NA	3.1 E-6	1.4 E-6	NA	5.3 E-4	8.7 E-6	1.1 E-2
WL-SW04	1	6.5 E-4	1.2 E-4	2.3 E-4	5.7 E-5	3.2 E-4	2.3 E-2	5.3 E-6	8.8 E-5	4.9 E-6	4.8 E-6	1.4 E-2	NA	7.4 E-4	NA	6.7 E-4	NA	2.0 E-3	1.1 E-4	7.4 E-5	4.0 E-4	4.1 E-4	3.7 E-5	1.1 E-5	5.3 E-6	NA	1.1 E-3	1.9 E-4	4.4 E-2
WL-SW05	9	2.5 E-4	1.2 E-4	3.1 E-4	4.9 E-5	NA	NA	7.4 E-6	1.1 E-5	2.3 E-6	2.7 E-6	1.1 E-5	NA	2.8 E-4	NA	3.9 E-4	NA	7.4 E-6	1.9 E-5	9.3 E-5	NA	3.0 E-4	3.4 E-5	1.5 E-5	1.6 E-6	NA	8.0 E-4	1.9 E-5	2.7 E-3
WL-SW06	9	2.6 E-4	1.2 E-4	NA	4.6 E-5	NA	NA	8.1 E-6	2.6 E-5	3.9 E-6	2.0 E-6	1.7 E-5	NA	3.2 E-4	NA	3.1 E-4	NA	NA	2.5 E-5	3.5 E-5	NA	5.3 E-4	1.5 E-5	1.5 E-5	1.8 E-6	NA	6.1 E-4	1.7 E-5	2.4 E-3
WL-SW07	1.5	3.8 E-4	1.1 E-4	2.3 E-4	4.7 E-5	NA	NA	NA	4.8 E-5	4.3 E-6	4.5 E-6	1.9 E-5	NA	5.0 E-4	NA	5.9 E-4	NA	NA	2.5 E-5	1.2 E-4	NA	5.7 E-4	1.4 E-5	5.0 E-6	2.8 E-6	NA	9.6 E-4	2.6 E-5	3.6 E-3
WL-SW08	1	2.1 E-4	9.3 E-4	3.4 E-4	7.0 E-5	NA	NA	1.4 E-5	1.5 E-4	4.4 E-6	3.3 E-6	9.4 E-5	NA	2.7 E-4	NA	4.7 E-4	5.3 E-5	5.2 E-5	4.1 E-5	NA	NA	NA	4.0 E-6	9.1 E-6	1.6 E-6	6.3 E-7	5.2 E-4	4.3 E-5	3.3 E-3

Table 5.12-7
Surface Water Location-Specific Risk Assessment Results-Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																											
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Bis(2-ethylhexyl)phthalate**	**Boron**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Hexavalent Chromium**	**Iron**	**Lead**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Nitrate as NO3**	**N-Nitrosodimethylamine**	**Perchlorate**	**Silver**	**Strontium**	**Titanium**	**Trichlorofluoromethane**	**Vanadium**	**Zinc**	**HI**
Unit Hazard Child																													
Unit Hazard Adult																													
Unit Risk																													
59E-SW01	4.5	5.4 E-5	1.0 E-5	NA	1.3 E-5	NA	NA	NA	NA	7.7 E-7	5.1 E-7	2.6 E-6	NA	6.1 E-5	NA	8.5 E-5	NA	1.5 E-6	4.8 E-6	3.2 E-5	NA	8.5 E-5	8.9 E-6	3.0 E-6	3.5 E-7	NA	3.0 E-4	NA	6.6 E-4
59E-SW02	2	8.8 E-5	1.0 E-5	NA	1.6 E-5	NA	NA	NA	3.8 E-6	1.2 E-6	1.0 E-6	3.5 E-6	NA	1.0 E-4	NA	1.8 E-4	NA	1.2 E-6	7.0 E-6	3.0 E-5	NA	7.3 E-5	2.5 E-5	3.2 E-6	6.5 E-7	NA	3.9 E-4	NA	9.3 E-4
WL-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SW01	1	1.5 E-5	NA	NA	2.8 E-5	NA	NA	NA	8.3 E-6	7.2 E-7	5.6 E-7	NA	4.7 E-4	2.3 E-5	NA	8.5 E-5	NA	1.1 E-5	NA	4.3 E-5	NA	1.0 E-4	NA	1.1 E-5	1.6 E-7	NA	2.0 E-4	NA	9.9 E-4
WL-SW02	1	8.5 E-6	NA	NA	2.2 E-5	NA	NA	NA	NA	NA	2.9 E-7	NA	6.2 E-4	1.1 E-5	NA	NA	NA	1.5 E-5	NA	3.0 E-5	NA	NA	NA	9.0 E-6	8.5 E-8	NA	1.5 E-4	NA	8.7 E-4
WL-SW03	0.5	3.1 E-5	NA	NA	9.8 E-6	NA	NA	NA	7.8 E-6	8.0 E-7	1.0 E-6	NA	NA	5.3 E-5	NA	1.8 E-4	NA	1.9 E-6	NA	NA	3.7 E-3	NA	NA	7.1 E-7	3.3 E-7	NA	1.7 E-4	1.9 E-6	4.1 E-3
WL-SW04	1	1.5 E-4	3.4 E-5	5.2 E-5	1.7 E-5	1.0 E-4	1.0 E-2	1.2 E-6	2.7 E-5	1.6 E-6	1.1 E-6	3.1 E-3	NA	1.7 E-4	NA	2.1 E-4	NA	4.7 E-4	2.9 E-5	1.7 E-5	1.5 E-4	9.3 E-5	1.1 E-5	2.5 E-6	1.2 E-6	NA	3.5 E-4	4.2 E-5	1.5 E-2
WL-SW05	9	5.7 E-5	3.2 E-5	7.1 E-5	1.4 E-5	NA	NA	1.7 E-6	3.3 E-6	7.5 E-7	6.0 E-7	2.6 E-6	NA	6.5 E-5	NA	1.2 E-4	NA	1.7 E-6	5.0 E-6	2.1 E-5	NA	6.9 E-5	1.0 E-5	3.4 E-6	3.8 E-7	NA	2.5 E-4	4.3 E-6	7.4 E-4
WL-SW06	9	6.0 E-5	3.4 E-5	NA	1.4 E-5	NA	NA	1.8 E-6	7.8 E-6	1.3 E-6	4.5 E-7	3.9 E-6	NA	7.3 E-5	NA	9.7 E-5	NA	NA	6.7 E-6	8.0 E-6	NA	1.2 E-4	4.5 E-6	3.4 E-6	4.1 E-7	NA	2.0 E-4	3.8 E-6	6.4 E-4
WL-SW07	1.5	8.8 E-5	2.9 E-5	5.3 E-5	1.4 E-5	NA	NA	NA	1.5 E-5	1.4 E-6	9.9 E-7	4.4 E-6	NA	1.1 E-4	NA	1.8 E-4	NA	NA	6.7 E-6	2.7 E-5	NA	1.3 E-4	4.3 E-6	1.1 E-6	6.5 E-7	NA	3.1 E-4	5.8 E-6	9.8 E-4
WL-SW08	1	4.8 E-5	2.5 E-4	7.8 E-5	2.1 E-5	NA	NA	3.3 E-6	4.6 E-5	1.4 E-6	7.4 E-7	2.1 E-5	NA	6.1 E-5	NA	1.5 E-4	1.6 E-5	1.2 E-5	1.1 E-5	NA	NA	NA	1.2 E-6	2.1 E-6	3.5 E-7	2.5 E-7	1.7 E-4	9.7 E-6	9.0 E-4

Table 5.12-7
Surface Water Location-Specific Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																											
Sample Name	**Depth**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Bis(2-ethylhexyl)phthalate**	**Boron**	**Cadmium**	**Chromium**	**Cobalt**	**Copper**	**Hexavalent Chromium**	**Iron**	**Lead**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Nitrate as NO3**	**N-Nitrosodimethylamine**	**Perchlorate**	**Silver**	**Strontium**	**Titanium**	**Trichlorofluoromethane**	**Vanadium**	**Zinc**	**ILCR**
Unit Hazard Child																													
Unit Hazard Adult																													
Unit Risk																													
59E-SW01	4.5	NA	NA	NA	NA	NA	6.8 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-9	NA	NA	NA	NA	NA	NA	NA	9 E-9
59E-SW02	2	NA	NA	NA	NA	NA	1.8 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	2 E-8
WL-SD02	0.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
WL-SW01	1	NA	NA	NA	NA	NA	1.9 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-10	NA	NA	NA	NA	NA	NA	NA	2 E-8
WL-SW02	1	NA	NA	NA	NA	NA	8.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-10	NA	NA	NA	NA	NA	NA	NA	8 E-9
WL-SW03	0.5	NA	NA	NA	NA	NA	2.2 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-9	NA	NA	NA	NA	NA	NA	NA	2 E-8
WL-SW04	1	NA	NA	1.1 E-7	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-9	NA	NA	NA	NA	NA	NA	NA	2 E-6
WL-SW05	9	NA	NA	1.4 E-7	NA	NA	8.7 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-9	NA	NA	NA	NA	NA	NA	NA	2 E-7
WL-SW06	9	NA	NA	NA	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-9	NA	NA	NA	NA	NA	NA	NA	2 E-8
WL-SW07	1.5	NA	NA	1.1 E-7	NA	NA	3.5 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-9	NA	NA	NA	NA	NA	NA	NA	1 E-7
WL-SW08	1	NA	NA	1.6 E-7	NA	NA	3.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-9	NA	NA	NA	NA	NA	NA	NA	5 E-7

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.12-8 All Receptors Hazard Index and Cancer Risk Results for Surface Water
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	Blood Lead	
		Resident			Resident	
Sample Name	**Depth**	**Child**	**Adult**	**Resident**	**Child**	**Adult**
59E-SW01	4.5	2.4 E-3	6.6 E-4	9 E-9	1.7 E+0	7.7 E-1
59E-SW02	2	3.3 E-3	9.3 E-4	2 E-8	1.7 E+0	7.7 E-1
WL-SD02	0.25	**NA**	**NA**	**NA**	**NA**	**NA**
WL-SW01	1	3.3 E-3	9.9 E-4	2 E-8	1.7 E+0	7.7 E-1
WL-SW02	1	2.8 E-3	8.7 E-4	8 E-9	1.7 E+0	7.7 E-1
WL-SW03	0.5	1.1 E-2	4.1 E-3	2 E-8	1.7 E+0	7.8 E-1
WL-SW04	1	4.4 E-2	1.5 E-2	**2 E-6**	5.0 E+0	1.6 E+0
WL-SW05	9	2.7 E-3	7.4 E-4	2 E-7	1.7 E+0	7.7 E-1
WL-SW06	9	2.4 E-3	6.4 E-4	2 E-8	1.7 E+0	7.7 E-1
WL-SW07	1.5	3.6 E-3	9.8 E-4	1 E-7	1.8 E+0	7.8 E-1
WL-SW08	1	3.3 E-3	9.0 E-4	5 E-7	2.3 E+0	9.2 E-1
Minimum		2.4 E-3	6.4 E-4	8 E-9	1.7 E+0	7.7 E-1
Median		3.3 E-3	9.1 E-4	2 E-8	1.7 E+0	7.7 E-1
Maximum		4.4 E-2	1.5 E-2	**2 E-6**	5.0 E+0	1.6 E+0

Key:
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

Table 5.12-9 *Groundwater Unit Hazard and Unit Cancer Risk Results - Resident*
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Groundwater Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Aluminum	1.0 E+0	6.4 E-5	4.2 E-7	NA	6.4 E-5	2.7 E-5	1.4 E-7	NA	2.8 E-5	NA	NA	NA	NA
Antimony	1.0 E+0	1.6 E-1	7.0 E-3	NA	1.7 E-1	6.8 E-2	2.4 E-3	NA	7.1 E-2	NA	NA	NA	NA
Arsenic	1.0 E+0	2.1 E-1	1.4 E-3	NA	2.1 E-1	9.1 E-2	4.8 E-4	NA	9.2 E-2	1.4 E-4	8.1 E-7	NA	1.4 E-4
Barium	1.0 E+0	3.2 E-4	3.0 E-5	NA	3.5 E-4	1.4 E-4	1.0 E-5	NA	1.5 E-4	NA	NA	NA	NA
Beryllium	1.0 E+0	3.2 E-2	3.0 E-2	NA	6.2 E-2	1.4 E-2	1.0 E-2	NA	2.4 E-2	NA	NA	NA	NA
Boron	1.0 E+0	3.2 E-4	2.1 E-6	NA	3.2 E-4	1.4 E-4	7.2 E-7	NA	1.4 E-4	NA	NA	NA	NA
Chromium	1.0 E+0	4.3 E-5	2.2 E-5	NA	6.4 E-5	1.8 E-5	7.3 E-6	NA	2.6 E-5	NA	NA	NA	NA
Cobalt	1.0 E+0	3.2 E-3	8.4 E-6	NA	3.2 E-3	1.4 E-3	2.9 E-6	NA	1.4 E-3	NA	NA	NA	NA
Copper	1.0 E+0	1.7 E-3	1.1 E-5	NA	1.7 E-3	7.4 E-4	3.9 E-6	NA	7.4 E-4	NA	NA	NA	NA
Iron	1.0 E+0	9.1 E-5	6.0 E-7	NA	9.2 E-5	3.9 E-5	2.0 E-7	NA	3.9 E-5	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	1.0 E+0	2.7 E-3	4.4 E-4	NA	3.1 E-3	1.1 E-3	1.5 E-4	NA	1.3 E-3	NA	NA	NA	NA
Molybdenum	1.0 E+0	1.3 E-2	8.4 E-5	NA	1.3 E-2	5.5 E-3	2.9 E-5	NA	5.5 E-3	NA	NA	NA	NA
Nickel	1.0 E+0	3.2 E-3	1.1 E-4	NA	3.3 E-3	1.4 E-3	3.6 E-5	NA	1.4 E-3	NA	NA	NA	NA
Nitrate as NO3	1.0 E+0	4.0 E-5	2.6 E-7	NA	4.0 E-5	1.7 E-5	8.9 E-8	NA	1.7 E-5	NA	NA	NA	NA
Nitrate plus Nitrite (as N)	1.0 E+0	4.0 E-4	2.6 E-6	NA	4.0 E-4	1.7 E-4	8.9 E-7	NA	1.7 E-4	NA	NA	NA	NA
Perchlorate	1.0 E+0	9.1 E-2	6.0 E-4	NA	9.2 E-2	3.9 E-2	2.0 E-4	NA	3.9 E-2	NA	NA	NA	NA
Strontium	1.0 E+0	1.1 E-4	7.0 E-7	NA	1.1 E-4	4.6 E-5	2.4 E-7	NA	4.6 E-5	NA	NA	NA	NA
Titanium	1.0 E+0	1.6 E-5	1.1 E-7	NA	1.6 E-5	6.8 E-6	3.6 E-8	NA	6.9 E-6	NA	NA	NA	NA
Vanadium	1.0 E+0	1.3 E-2	3.2 E-3	NA	1.6 E-2	5.5 E-3	1.1 E-3	NA	6.6 E-3	NA	NA	NA	NA
Zinc	1.0 E+0	2.1 E-4	8.4 E-7	NA	2.1 E-4	9.1 E-5	2.9 E-7	NA	9.2 E-5	NA	NA	NA	NA
Semivolatile Organic Compounds													
N-Nitrosodimethylamine	1.0 E+0	8.0 E+0	2.1 E+0	NA	1.0 E+1	3.4 E+0	8.9 E-1	NA	4.3 E+0	7.6 E-4	2.0 E-4	NA	9.6 E-4
Volatile Organic Compounds													
1,1-Dichloroethane	1.0 E+0	3.2 E-4	2.5 E-5	1.6 E-3	1.9 E-3	1.4 E-4	1.1 E-5	6.8 E-4	8.3 E-4	8.5 E-8	6.6 E-9	4.2 E-7	5.2 E-7
1,1-Dichloroethene	1.0 E+0	1.3 E-3	1.8 E-4	1.6 E-2	1.7 E-2	5.5 E-4	7.6 E-5	6.8 E-3	7.5 E-3	NA	NA	NA	NA
1,2-Dichloroethane	1.0 E+0	3.2 E-3	1.6 E-4	2.3 E-1	2.3 E-1	1.4 E-3	6.7 E-5	9.8 E-2	9.9 E-2	1.4 E-6	6.6 E-8	6.8 E-6	8.2 E-6
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA
Carbon tetrachloride	1.0 E+0	9.1 E-2	2.4 E-2	2.8 E-2	1.4 E-1	3.9 E-2	1.0 E-2	1.2 E-2	6.2 E-2	2.2 E-6	5.9 E-7	1.1 E-5	1.4 E-5
Chloroform	1.0 E+0	6.4 E-3	5.6 E-4	2.5 E-2	3.2 E-2	2.7 E-3	2.5 E-4	1.1 E-2	1.4 E-2	4.6 E-7	4.1 E-8	6.0 E-6	6.5 E-6
cis-1,2-Dichloroethene	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA
Freon 113	1.0 E+0	2.1 E-6	7.2 E-6	3.7 E-5	4.6 E-5	9.1 E-7	3.9 E-6	1.6 E-5	2.1 E-5	NA	NA	NA	NA
Methylene chloride	1.0 E+0	1.1 E-3	4.0 E-5	3.7 E-4	1.5 E-3	4.6 E-4	1.7 E-5	1.6 E-4	6.3 E-4	2.1 E-7	7.8 E-9	2.6 E-7	4.8 E-7
Naphthalene	1.0 E+0	3.2 E-3	2.1 E-3	3.7 E-1	3.8 E-1	1.4 E-3	9.1 E-4	1.6 E-1	1.6 E-1	NA	NA	8.9 E-6	8.9 E-6
Tetrachloroethene	1.0 E+0	6.4 E-3	3.7 E-3	3.2 E-2	4.2 E-2	2.7 E-3	1.6 E-3	1.4 E-2	1.8 E-2	8.0 E-6	4.7 E-6	1.6 E-6	1.4 E-5
Trichlorofluoromethane	1.0 E+0	3.2 E-4	6.0 E-5	5.6 E-3	6.0 E-3	1.4 E-4	2.7 E-5	2.4 E-3	2.6 E-3	NA	NA	NA	NA
Trichloroethene	1.0 E+0	2.1 E-1	3.6 E-2	1.9 E-3	2.5 E-1	9.1 E-2	1.6 E-2	8.0 E-4	1.1 E-1	1.9 E-7	3.3 E-8	5.2 E-7	7.5 E-7

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.12-10 ***Groundwater Inhalation Hazard and Unit Cancer Risk Results - Resident WLLO Management Area Boundary Operable Unit Risk Assessment Aerojet Superfund Site Sacramento County, California***

Chemical	Indoor Vapor Concentration (µg/L)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds				
1,1-Dichloroethane	1.0 E+0	3.2 E+0	1.4 E+0	8.5 E-4
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E+1	2.7 E+1	NA
Carbon tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Freon 113	1.0 E+0	7.4 E-2	3.2 E-2	NA
Methylene chloride	1.0 E+0	7.5 E-1	3.2 E-1	5.2 E-4
Naphthalene	1.0 E+0	7.5 E+2	3.2 E+2	1.8 E-2
Tetrachloroethene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
Trichloroethene	1.0 E+0	3.7 E+0	1.6 E+0	1.0 E-3
Trichlorofluoromethane	1.0 E+0	1.1 E+1	4.8 E+0	NA

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.12-11
Groundwater Location-Specific Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)																								
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Boron**	**Carbon tetrachloride**	**Chloroform**	**Chromium**	**cis-1,2-Dichloroethene**	**Cobalt**	**Copper**	**Freon 113**	**Iron**	**Lead**	**Manganese**	**Methylene chloride**	**Molybdenum**	**Naphthalene**	**Nickel**	**Nitrate as NO3**
Unit Hazard Child		1.9 E-3	1.7 E-2	2.3 E-1	3.9 E-2	6.4 E-5	1.7 E-1	2.1 E-1	3.5 E-4	6.2 E-2	3.2 E-4	1.4 E-1	3.2 E-2	6.4 E-5	3.9 E-2	3.2 E-3	1.7 E-3	4.6 E-5	9.2 E-5	NA	3.1 E-3	1.5 E-3	1.3 E-2	3.8 E-1	3.3 E-3	4.0 E-5
Unit Hazard Adult		8.3 E-4	7.5 E-3	9.9 E-2	1.7 E-2	2.8 E-5	7.1 E-2	9.2 E-2	1.5 E-4	2.4 E-2	1.4 E-4	6.2 E-2	1.4 E-2	2.6 E-5	1.7 E-2	1.4 E-3	7.4 E-4	2.1 E-5	3.9 E-5	NA	1.3 E-3	6.3 E-4	5.5 E-3	1.6 E-1	1.4 E-3	1.7 E-5
Unit Risk		5.2 E-7	NA	8.2 E-6	NA	NA	NA	1.4 E-4	NA	NA	NA	1.4 E-5	6.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	8.9 E-6	NA	NA
223	C	2.0	1.0		5.0	1300	0.18	0.76	110		18	10	17	47	0.83	5.8	24	49	6900	160	50		5.6	10	19	13000
224	D																									11000
61	D														0.30											7000
225	E																									800
226	E																									
85	F		0.75																							960
32	S																									
3482	S								18			1.4	5.5		1.5			10			64	2.5				1900
434	S		6.0	1.0									1.0													3900
688	S			5.0	9.7	610000			4500	10		1.2	7.0	170		220	440	400	580000	400	14000				370	19000

Table 5.12-11
Groundwater Location-Specific Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)										Child Non-Cancer Hazard Index											
Sample Name	**Layer**	**Nitrate plus Nitrite (as N)**	**N-Nitrosodimethylamine**	**Perchlorate**	**Strontium**	**Tetrachloroethene**	**Titanium**	**Trichloroethene**	**Trichlorofluoromethane**	**Vanadium**	**Zinc**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Boron**	**Carbon tetrachloride**	**Chloroform**
Unit Hazard Child		4.0 E-4	1.0 E+1	9.2 E-2	1.1 E-4	4.2 E-2	1.6 E-5	2.5 E-1	6.0 E-3	1.6 E-2	2.1 E-4												
Unit Hazard Adult		1.7 E-4	4.3 E+0	3.9 E-2	4.6 E-5	1.8 E-2	6.9 E-6	1.1 E-1	2.6 E-3	6.6 E-3	9.2 E-5												
Unit Risk		NA	9.6 E-4	NA	NA	1.4 E-5	NA	7.5 E-7	NA	NA	NA												
223	C			530	280	130	39	210		11	3300	3.9 E-3	1.7 E-2	NA	1.9 E-1	8.4 E-2	3.0 E-2	1.6 E-1	3.8 E-2	NA	5.8 E-3	1.4 E+0	5.4 E-1
224	D							2				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61	D		0.041	150				7				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
225	E							9				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
226	E							2				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
85	F		0.0039					2				NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32	S							12				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3482	S			180				180	14		1200	NA	NA	NA	NA	NA	NA	NA	6.3 E-3	NA	NA	2.0 E-1	1.7 E-1
434	S							37				NA	1.0 E-1	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2
688	S	200		760		39		2000	26	830	30000	NA	NA	1.2 E+0	3.8 E-1	3.9 E+1	NA	NA	1.6 E+0	6.2 E-1	NA	1.7 E-1	2.2 E-1

Table 5.12-11
Groundwater Location-Specific Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																							
Sample Name	**Layer**	**Chromium**	**cis-1,2-Dichloroethene**	**Cobalt**	**Copper**	**Freon 113**	**Iron**	**Lead**	**Manganese**	**Methylene chloride**	**Molybdenum**	**Naphthalene**	**Nickel**	**Nitrate as NO3**	**Nitrate plus Nitrite (as N)**	**N-Nitrosodimethylamine**	**Perchlorate**	**Strontium**	**Tetrachloroethene**	**Titanium**	**Trichloroethene**	**Trichlorofluoromethane**	**Vanadium**	**Zinc**	**HI**
Unit Hazard Child																									
Unit Hazard Adult																									
Unit Risk																									
223	C	3.0 E-3	3.2 E-2	1.9 E-2	4.2 E-2	2.3 E-3	6.3 E-1	NA	1.6 E-1	NA	7.2 E-2	3.8 E+0	6.3 E-2	5.2 E-1	NA	NA	4.9 E+1	3.0 E-2	5.5 E+0	6.3 E-4	5.3 E+1	NA	1.8 E-1	7.1 E-1	1.2 E+2
224	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-1	NA	NA	NA	NA	NA	NA	5.0 E-1	NA	NA	NA	9.4 E-1
61	D	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1	NA	4.1 E-1	1.4 E+1	NA	NA	NA	1.8 E+0	NA	NA	NA	1.6 E+1
225	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA	2.3 E+0	NA	NA	NA	2.3 E+0
226	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-1	NA	NA	NA	5.0 E-1
85	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	3.9 E-2	NA	NA	NA	NA	5.0 E-1	NA	NA	NA	5.9 E-1
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E+0	NA	NA	NA	3.0 E+0
3482	S	NA	5.8 E-2	NA	NA	4.6 E-4	NA	NA	2.0 E-1	3.7 E-3	NA	NA	NA	7.6 E-2	NA	NA	1.7 E+1	NA	NA	NA	4.5 E+1	8.4 E-2	NA	2.6 E-1	6.3 E+1
434	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	NA	NA	NA	NA	NA	NA	9.3 E+0	NA	NA	NA	9.8 E+0
688	S	1.1 E-2	NA	7.1 E-1	7.7 E-1	1.9 E-2	5.3 E+1	NA	4.3 E+1	NA	NA	NA	1.2 E+0	7.6 E-1	8.0 E-2	NA	7.0 E+1	NA	1.6 E+0	NA	5.0 E+2	1.6 E-1	1.3 E+1	6.4 E+0	7.4 E+2

Table 5.12-11
Groundwater Location-Specific Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																									
Sample Name	Layer	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Carbon tetrachloride	Chloroform	Chromium	cis-1,2-Dichloroethene	Cobalt	Copper	Freon 113	Iron	Lead	Manganese	Methylene chloride	Molybdenum	Naphthalene	Nickel	Nitrate as NO3	Nitrate plus Nitrite (as N)
Unit Hazard Child																											
Unit Hazard Adult																											
Unit Risk																											
223	C	1.7 E-3	7.5 E-3	NA	8.3 E-2	3.6 E-2	1.3 E-2	7.0 E-2	1.6 E-2	NA	2.5 E-3	6.2 E-1	2.3 E-1	1.2 E-3	1.4 E-2	8.0 E-3	1.8 E-2	1.0 E-3	2.7 E-1	NA	6.5 E-2	NA	3.1 E-2	1.6 E+0	2.7 E-2	2.2 E-1	NA
224	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA
61	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA
225	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA
226	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
85	F	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3482	S	NA	NA	NA	NA	NA	NA	NA	2.6 E-3	NA	NA	8.6 E-2	7.4 E-2	NA	2.5 E-2	NA	NA	2.1 E-4	NA	NA	8.3 E-2	1.6 E-3	NA	NA	NA	3.3 E-2	NA
434	S	NA	4.5 E-2	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-2	NA
688	S	NA	NA	5.0 E-1	1.6 E-1	1.7 E+1	NA	NA	6.6 E-1	2.4 E-1	NA	7.4 E-2	9.5 E-2	4.4 E-3	NA	3.0 E-1	3.3 E-1	8.3 E-3	2.3 E+1	NA	1.8 E+1	NA	NA	NA	5.2 E-1	3.3 E-1	3.4 E-2

Table 5.12-11
Groundwater Location-Specific Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index										Incremental Lifetime Cancer Risk												
Sample Name	Layer	N-Nitrosodimethylamine	Perchlorate	Strontium	Tetrachloroethene	Titanium	Trichloroethene	Trichlorofluoromethane	Vanadium	Zinc	HI	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Carbon tetrachloride	Chloroform	Chromium
Unit Hazard Child																								
Unit Hazard Adult																								
Unit Risk																								
223	C	NA	2.1 E+1	1.3 E-2	2.3 E+0	2.7 E-4	2.3 E+1	NA	7.2 E-2	3.0 E-1	5.0 E+1	1.0 E-6	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	1.4 E-4	1.1 E-4	NA
224	D	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	NA	4.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
61	D	1.8 E-1	5.9 E+0	NA	NA	NA	7.6 E-1	NA	NA	NA	7.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
225	E	NA	NA	NA	NA	NA	9.7 E-1	NA	NA	NA	9.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
226	E	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	NA	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
85	F	1.7 E-2	NA	NA	NA	NA	2.2 E-1	NA	NA	NA	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32	S	NA	NA	NA	NA	NA	1.3 E+0	NA	NA	NA	1.3 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3482	S	NA	7.1 E+0	NA	NA	NA	1.9 E+1	3.6 E-2	NA	1.1 E-1	2.7 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	3.6 E-5	NA
434	S	NA	NA	NA	NA	NA	4.0 E+0	NA	NA	NA	4.2 E+0	NA	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA
688	S	NA	3.0 E+1	NA	7.0 E-1	NA	2.2 E+2	6.7 E-2	5.5 E+0	2.7 E+0	3.2 E+2	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	4.5 E-5	NA

Table 5.12-11
Groundwater Location-Specific Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																							Blood Lead	
Sample Name	Layer	cis-1,2-Dichloroethene	Cobalt	Copper	Freon 113	Iron	Lead	Manganese	Methylene chloride	Molybdenum	Naphthalene	Nickel	Nitrate as NO3	Nitrate plus Nitrite (as N)	N-Nitrosodimethylamine	Perchlorate	Strontium	Tetrachloroethene	Titanium	Trichloroethene	Trichlorofluoromethane	Vanadium	Zinc	ILCR	Child	Adult
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
223	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-5	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	1.6 E-4	NA	NA	NA	2 E-3	78	39
224	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	1 E-6	NA	NA
61	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	5.2 E-6	NA	NA	NA	4 E-5	NA	NA
225	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	7 E-6	NA	NA
226	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	1 E-6	NA	NA
85	F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-6	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	5 E-6	NA	NA
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	9 E-6	NA	NA
3482	S	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	2 E-4	NA	NA
434	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	4 E-5	NA	NA
688	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-4	NA	1.5 E-3	NA	NA	NA	2 E-3	193	96

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.12-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)												
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Methylene chloride**	**Naphthalene**	**Tetrachloroethene**	**Trichloroethene**	**Trichlorofluoromethane**
Unit Hazard Child		3.2 E+0	3.2 E+1	4.6 E+2	6.4 E+1	5.6 E+1	4.9 E+1	6.4 E+1	7.4 E-2	7.5 E-1	7.5 E+2	6.4 E+1	3.7 E+0	1.1 E+1
Unit Hazard Adult		1.4 E+0	1.4 E+1	2.0 E+2	2.7 E+1	2.4 E+1	2.1 E+1	2.7 E+1	3.2 E-2	3.2 E-1	3.2 E+2	2.7 E+1	1.6 E+0	4.8 E+0
Unit Risk		8.5 E-4	NA	1.4 E-2	NA	2.2 E-2	1.2 E-2	NA	NA	5.2 E-4	1.8 E-2	3.1 E-3	1.0 E-3	NA
32	S												12	
3482	S					1.4	5.5	1.5	10	2.5			180	14
434	S		6.0	1.0			1.0						37	
688	S			5.0	9.7	1.2	7.0		400			39	2000	26

Table 5.12-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index													
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Methylene chloride**	**Naphthalene**	**Tetrachloroethene**	**Trichloroethene**	**Trichlorofluoromethane**	**HI**
Unit Hazard Child															
Unit Hazard Adult															
Unit Risk															
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	1.9 E-3
3482	S	NA	NA	NA	NA	1.0 E-2	5.5 E-3	1.5 E-3	1.5 E-3	2.2 E-5	NA	NA	2.9 E-2	7.1 E-2	1.2 E-1
434	S	NA	2.4 E-2	2.4 E-3	NA	NA	9.9 E-4	NA	NA	NA	NA	NA	6.0 E-3	NA	3.4 E-2
688	S	NA	NA	1.2 E-2	1.0 E-2	8.5 E-3	7.0 E-3	NA	6.0 E-2	NA	NA	1.8 E-1	3.2 E-1	1.3 E-1	7.3 E-1

Table 5.12-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index													
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Methylene chloride**	**Naphthalene**	**Tetrachloroethene**	**Trichloroethene**	**Trichlorofluoromethane**	**HI**
Unit Hazard Child															
Unit Hazard Adult															
Unit Risk															
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.3 E-4	NA	8.3 E-4
3482	S	NA	NA	NA	NA	4.3 E-3	2.3 E-3	6.6 E-4	6.4 E-4	9.4 E-6	NA	NA	1.2 E-2	3.1 E-2	5.1 E-2
434	S	NA	1.0 E-2	1.0 E-3	NA	NA	4.3 E-4	NA	NA	NA	NA	NA	2.6 E-3	NA	1.4 E-2
688	S	NA	NA	5.2 E-3	4.3 E-3	3.7 E-3	3.0 E-3	NA	2.6 E-2	NA	NA	7.5 E-2	1.4 E-1	5.7 E-2	3.1 E-1

Table 5.12-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk													
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Methylene chloride**	**Naphthalene**	**Tetrachloroethene**	**Trichloroethene**	**Trichlorofluoromethane**	**ILCR**
Unit Hazard Child															
Unit Hazard Adult															
Unit Risk															
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-7	NA	5 E-7
3482	S	NA	NA	NA	NA	4.0 E-6	1.3 E-6	NA	NA	1.5 E-8	NA	NA	8.1 E-6	NA	1 E-5
434	S	NA	NA	7.3 E-8	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	1.7 E-6	NA	2 E-6
688	S	NA	NA	3.6 E-7	NA	3.4 E-6	1.7 E-6	NA	NA	NA	NA	8.6 E-6	9.0 E-5	NA	1 E-4

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x groundwater to indoor air attenuation factor (from Table 5.12- 4) x the unit hazard or unit risk for the chemical).

Table 5.12-13 Groundwater Inhalation Hazard and Unit Cancer Risk Results - Commercial Worker WLLO Management Area Boundary Operable Unit Risk Assessment Aerojet Superfund Site Sacramento County, California

Chemical	Indoor Vapor Concentration (µg/L)	Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds			
1,1-Dichloroethane	1.0 E+0	9.8 E-1	4.0 E-4
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,2-Dichloroethene (cis/trans)	1.0 E+0	2.0 E+1	NA
Carbon tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Freon 113	1.0 E+0	2.3 E-2	NA
Methylene chloride	1.0 E+0	2.3 E-1	2.4 E-4
Naphthalene	1.0 E+0	2.3 E+2	8.4 E-3
Tetrachloroethene	1.0 E+0	2.0 E+1	1.5 E-3
Trichlorofluoromethane	1.0 E+0	3.4 E+0	NA
Trichloroethene	1.0 E+0	1.1 E+0	4.9 E-4

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.12-14
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration (ug/L)												
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Methylene chloride**	**Naphthalene**	**Tetrachloroethene**	**Trichloroethene**	**Trichlorofluoromethane**
Unit Hazard		3.2 E+0	9.8 E+0	1.4 E+2	2.0 E+1	1.7 E+1	1.5 E+1	2.0 E+1	2.3 E-2	2.3 E-1	2.3 E+2	2.0 E+1	1.1 E+0	3.4 E+0
Unit Risk		4.0 E-4	NA	6.4 E-3	NA	1.0 E-2	5.6 E-3	NA	NA	2.4 E-4	8.4 E-3	1.5 E-3	4.9 E-4	NA
32	S												12	
3482	S					1.4	5.5	1.5	10	2.5			180	14
434	S		6.0	1.0			1.0						37	
688	S			5.0	9.7	1.2	7.0		400			39	2000	26

Table 5.12-14
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index													
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Methylene chloride**	**Naphthalene**	**Tetrachloroethene**	**Trichloroethene**	**Trichlorofluoromethane**	**HI**
Unit Hazard															
Unit Risk															
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-4	NA	3.0 E-4
3482	S	NA	NA	NA	NA	1.5 E-3	8.4 E-4	2.4 E-4	2.3 E-4	3.4 E-6	NA	NA	4.5 E-3	1.1 E-2	1.8 E-2
434	S	NA	3.7 E-3	3.7 E-4	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	9.2 E-4	NA	5.1 E-3
688	S	NA	NA	1.9 E-3	1.5 E-3	1.3 E-3	1.1 E-3	NA	9.2 E-3	NA	NA	2.7 E-2	5.0 E-2	2.0 E-2	1.1 E-1

Table 5.12-14
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

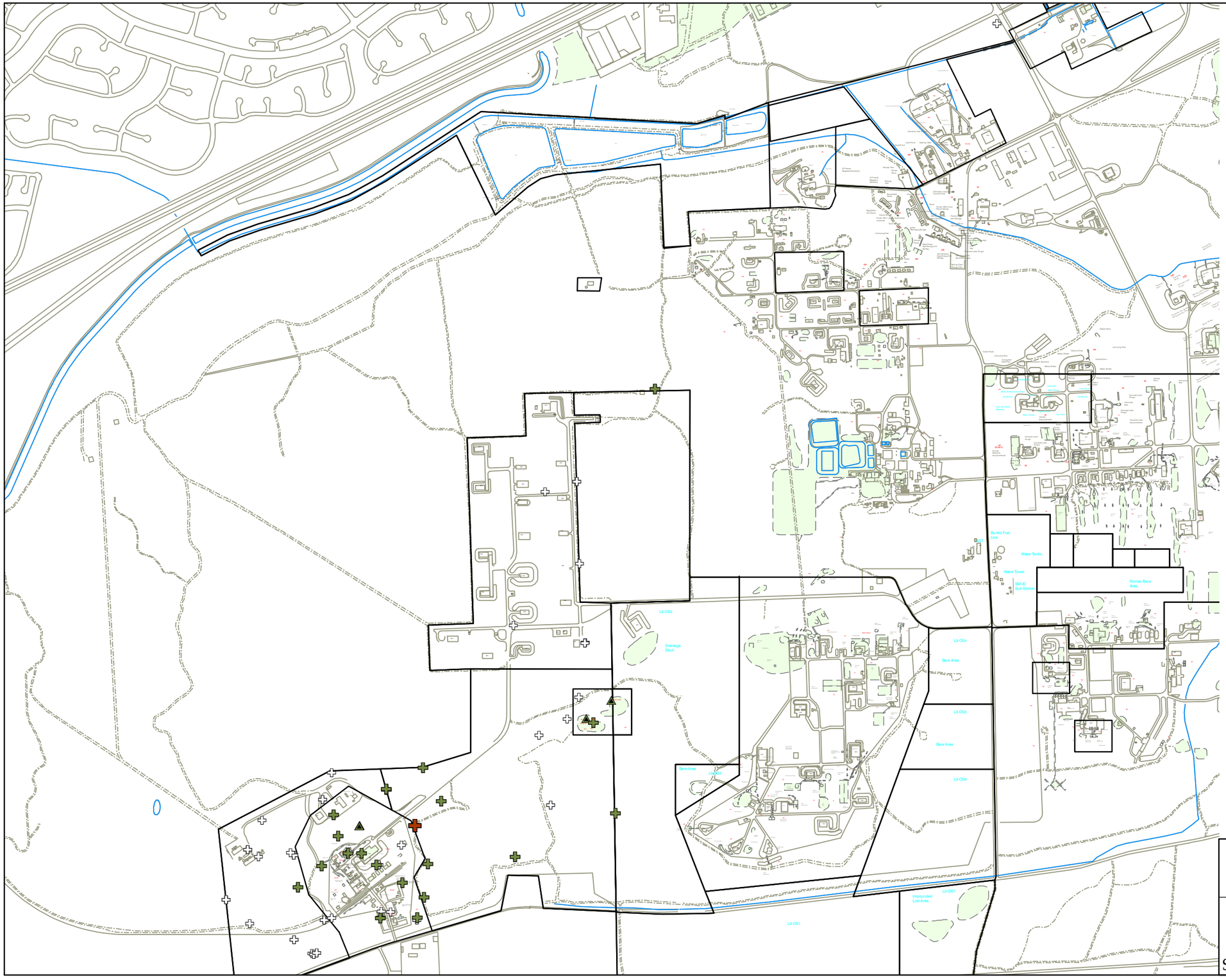
		Incremental Lifetime Cancer Risk													
Sample Name	**Layer**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Freon 113**	**Methylene chloride**	**Naphthalene**	**Tetrachloroethene**	**Trichloroethene**	**Trichlorofluoromethane**	**ILCR**
Unit Hazard															
Unit Risk															
32	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-7	NA	1 E-7
3482	S	NA	NA	NA	NA	9.3 E-7	3.1 E-7	NA	NA	3.6 E-9	NA	NA	1.9 E-6	NA	3 E-6
434	S	NA	NA	1.7 E-8	NA	NA	5.7 E-8	NA	NA	NA	NA	NA	3.9 E-7	NA	5 E-7
688	S	NA	NA	8.5 E-8	NA	8.0 E-7	4.0 E-7	NA	NA	NA	NA	2.0 E-6	2.1 E-5	NA	2 E-5

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x groundwater to indoor air attenuation factor (from Table 5.12- 5) x the unit hazard or unit risk for the chemical).

Table 5.12-15 All Receptors Hazard Index and Cancer Risk Results for Groundwater
WLLO Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk					Blood Lead	
		Ingestion and Domestic Use		Vapor Intrusion			Domestic Use + Vapor Intrusion			Ingestion and Domestic Use	Vapor Intrusion		Domestic Use + Vapor Intrusion			
		Resident		Resident		Commercial	Resident		Commercial			Commercial		Commercial	Resident	
Sample Name	**Layer**	**Child**	**Adult**	**Child**	**Adult**	**Worker**	**Child**	**Adult**	**Worker**	**Resident**	**Resident**	**Worker**	**Resident**	**Worker**	**Child**	**Adult**
223	C	**1.2 E+2**	**5.0 E+1**	**NA**	**NA**	**NA**	**1.2 E+2**	**5.0 E+1**	**NA**	**2 E-3**	**NA**	**NA**	**2 E-3**	**NA**	**7.8 E+1**	**3.9 E+1**
224	D	9.4 E-1	4.1 E-1	**NA**	**NA**	**NA**	9.4 E-1	4.1 E-1	**NA**	**1 E-6**	**NA**	**NA**	**1 E-6**	**NA**	**NA**	**NA**
61	D	**1.6 E+1**	**7.0 E+0**	**NA**	**NA**	**NA**	**1.6 E+1**	**7.0 E+0**	**NA**	**4 E-5**	**NA**	**NA**	**4 E-5**	**NA**	**NA**	**NA**
225	E	**2.3 E+0**	9.9 E-1	**NA**	**NA**	**NA**	**2.3 E+0**	9.9 E-1	**NA**	**7 E-6**	**NA**	**NA**	**7 E-6**	**NA**	**NA**	**NA**
226	E	5.0 E-1	2.2 E-1	**NA**	**NA**	**NA**	5.0 E-1	2.2 E-1	**NA**	**1 E-6**	**NA**	**NA**	**1 E-6**	**NA**	**NA**	**NA**
85	F	5.9 E-1	2.5 E-1	**NA**	**NA**	**NA**	5.9 E-1	2.5 E-1	**NA**	**5 E-6**	**NA**	**NA**	**5 E-6**	**NA**	**NA**	**NA**
32	S	**3.0 E+0**	**1.3 E+0**	1.9 E-3	8.3 E-4	3.0 E-4	**3.0 E+0**	**1.3 E+0**	3.0 E-4	**9 E-6**	5 E-7	1 E-7	**1 E-5**	1 E-7	**NA**	**NA**
3482	S	**6.3 E+1**	**2.7 E+1**	1.2 E-1	5.1 E-2	1.8 E-2	**6.3 E+1**	**2.7 E+1**	1.8 E-2	**2 E-4**	**1 E-5**	3 E-6	**2 E-4**	**3 E-6**	**NA**	**NA**
434	S	**9.8 E+0**	**4.2 E+0**	3.4 E-2	1.4 E-2	5.1 E-3	**9.8 E+0**	**4.2 E+0**	5.1 E-3	**4 E-5**	**2 E-6**	5 E-7	**4 E-5**	5 E-7	**NA**	**NA**
688	S	**7.4 E+2**	**3.2 E+2**	7.3 E-1	3.1 E-1	1.1 E-1	**7.4 E+2**	**3.2 E+2**	1.1 E-1	**2 E-3**	**1 E-4**	2 E-5	**2 E-3**	**2 E-5**	**1.9 E+2**	**9.6 E+1**
Layer S																
Minimum		**3.0 E+0**	**1.3 E+0**	1.9 E-3	8.3 E-4	3.0 E-4	**3.0 E+0**	**1.3 E+0**	3.0 E-4	**9 E-6**	5 E-7	1 E-7	**1 E-5**	1 E-7	**1.9 E+2**	**9.6 E+1**
Median		**3.6 E+1**	**1.6 E+1**	7.6 E-2	3.3 E-2	1.2 E-2	**3.6 E+1**	**1.6 E+1**	1.2 E-2	**1 E-4**	**8 E-6**	**2 E-6**	**1 E-4**	**2 E-6**	**1.9 E+2**	**9.6 E+1**
Maximum		**7.4 E+2**	**3.2 E+2**	7.3 E-1	3.1 E-1	1.1 E-1	**7.4 E+2**	**3.2 E+2**	1.1 E-1	**2 E-3**	**1 E-4**	**2 E-5**	**2 E-3**	**2 E-5**	**1.9 E+2**	**9.6 E+1**

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.



Legend

Soil Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Groundwater Non-Cancer HIs (Indoor Air)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Surface Water Non-Cancer HIs (Direct)
- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,150 '

0 1,150 2,300

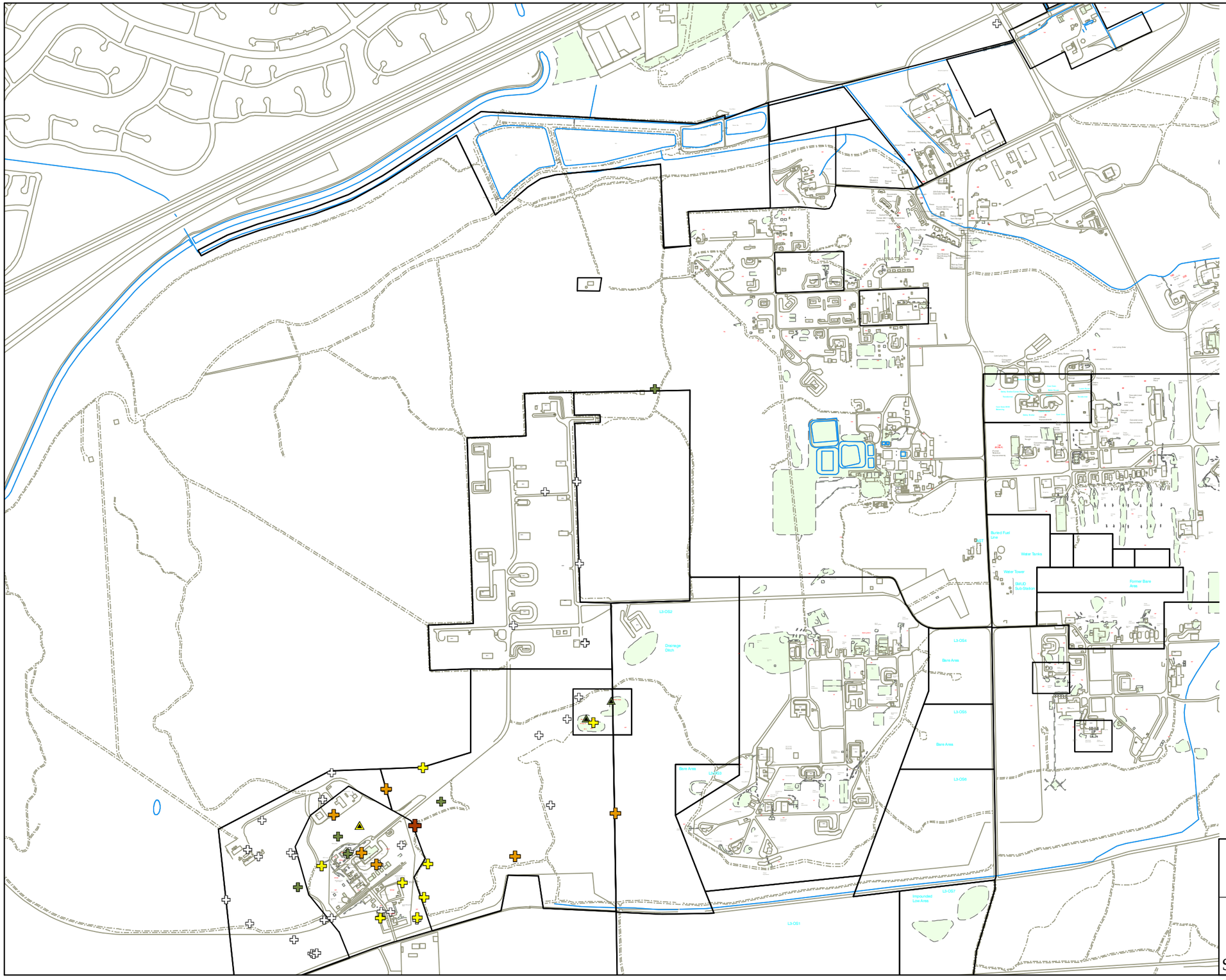
AEROJET

Environmental Remediation

Figure 5.13-1

Residential
Non-Cancer Effects – All Media
Southwest BOU Groundwater and Surface Water

DRAFT



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Groundwater Cancer Risks (Indoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Surface Water Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,150 '

0 1,150 2,300

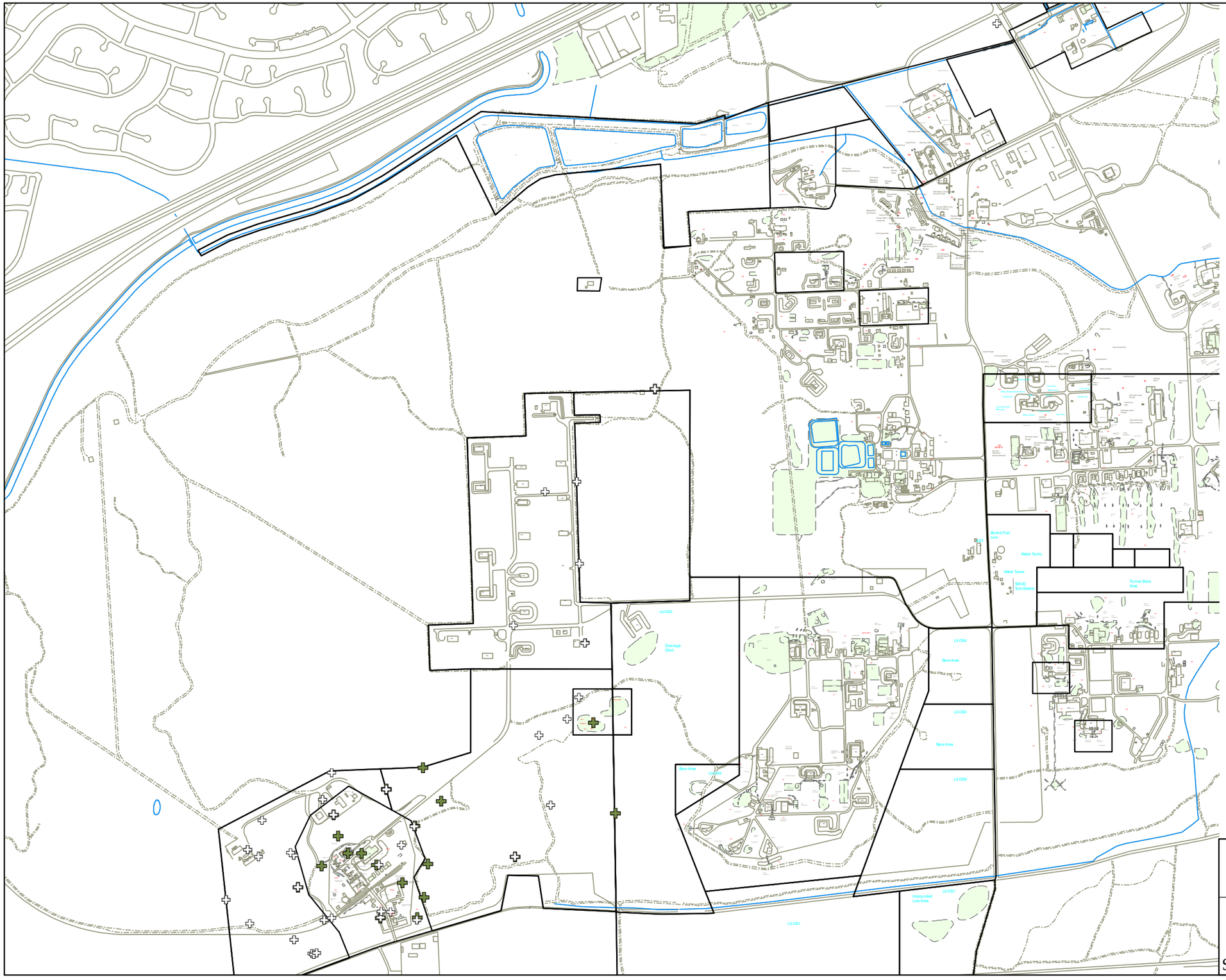
AEROJET

Environmental Remediation

Figure 5.13-2

Residential
Cancer Risks – All Media
Southwest BOU Groundwater and Surface Water

DRAFT



Legend

Soil Non-Cancer HIs (Direct)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Soil Vapor Non-Cancer HIs (Outdoor Air)

- Location Not Quantified - No COPCs
- HI <= 1.0
- HI > 1.0

Non-Cancer HI > 1.0 Risk Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,150 '

0 1,150 2,300

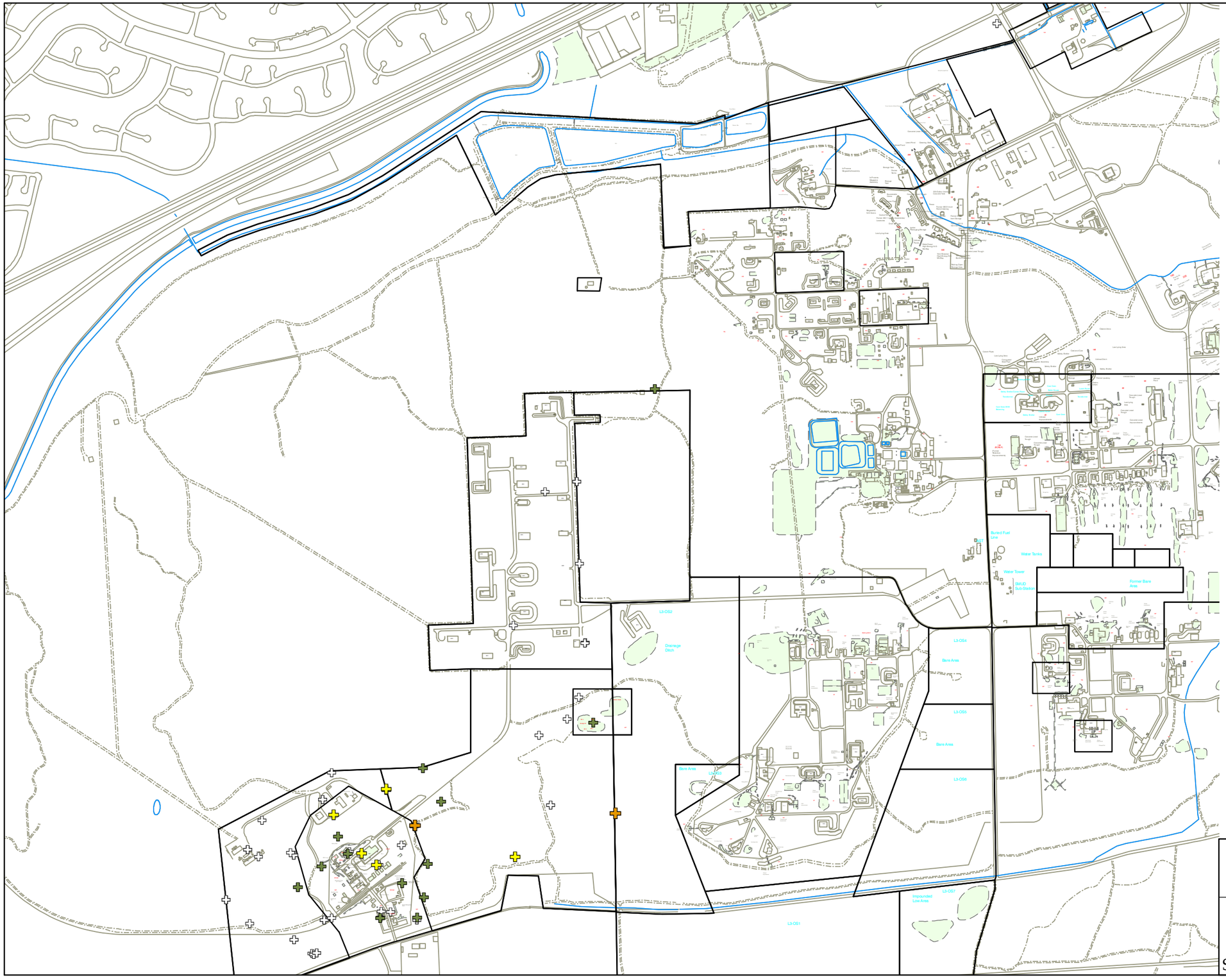
AEROJET

Environmental Remediation

Figure 5.13-3

Commercial/Industrial Worker
Non-Cancer Effects – All Media
Southwest BOU Groundwater and Surface Water

DRAFT



Legend

Soil Cancer Risks (Direct)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

Soil Vapor Cancer Risks (Outdoor Air)
- Location Not Quantified - No COPCs
- <= 1E-6
- > 1E-6 and <= 1E-5
- > 1E-5 and <= 1E-4
- > 1E-4

- Cancer Risk > 10-6 Contour
- Cancer Risk > 10-4 Contour

Note: Some symbols may overlap and hide other symbols beneath them. Risk contours take into account all media, so therefore the contours may appear to be beyond what the symbols would indicate; however, this is due to a symbol that is hidden from view.

N

1 " = 1,150 '

0 1,150 2,300

AEROJET

Environmental Remediation

Figure 5.13-4

Commercial/Industrial Worker
Cancer Risks – All Media
Southwest BOU Groundwater and Surface Water

DRAFT

Table 5.13-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	50	0	0.0%	0.5 - 250	4.3E-02	ca	N	ND*	94%**
	71-55-6	1,1,1-Trichloroethane	0.21	5	µg/L	285	4	1.4%	0.15 - 1200	1.0E+02	nc	N	BSL	NA
	79-34-5	1,1,2,2-Tetrachloroethane	2.7	4	µg/L	285	2	0.7%	0.15 - 1200	5.5E-03	ca	Y		NA
	79-00-5	1,1,2-Trichloroethane	0.35	4.3	µg/L	284	31	10.9%	0.1 - 1200	2.0E-02	ca	Y		NA
	75-34-3	1,1-Dichloroethane	0.52	3.5	µg/L	285	16	5.6%	0.35 - 1200	2.0E-01	nc	Y		NA
	75-35-4	1,1-Dichloroethene	0.27	110.0	µg/L	285	61	21.4%	0.5 - 1200	2.0E-01	nc	Y		NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	NA		N	ND	NA
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	NA		N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	50	0	0.0%	1 - 250	5.6E-04	ca	N	ND*	94%**
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	82	0	0.0%	0.5 - 200	5.0E-01	nc	N	ND*	63%**
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	50	0	NA	0.5 - 250	1.2E+00	nc	N	ND*	26%**
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	50	0	0.0%	1 - 250	1.6E-04	ca	N	ND*	94%**
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	115	0	0.0%	0.5 - 1200	5.6E-04	ca	N	ND*	97%**
	95-50-1	1,2-Dichlorobenzene	0.23	0.23	µg/L	121	1	0.8%	0.5 - 1200	3.7E+01	nc	N	BSL	NA
	107-06-2	1,2-Dichloroethane	0.3	2200.0	µg/L	284	98	34.5%	0.15 - 1200	1.2E-02	ca	Y		NA
	540-59-0	1,2-Dichloroethene (cis/trans)	0.5	120	µg/L	264	119	45.1%	0.5 - 5	6.0E+00	nc	Y		NA
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	285	0	0.0%	0.2 - 1200	1.6E-02	ca	N	ND*	99%**
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	60	0	0.0%	10 - 200	8.4E-03	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	49	0	NA	0.5 - 200	1.2E+00	nc	N	ND*	24%**
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	121	0	0.0%	0.5 - 1200	1.8E+01	nc	N	ND*	2%**
	1190-22-3	1,3-Dichlorobutane	NA	NA	µg/L	NA	NA	NA	NA		nc	NA		NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	50	0	0.0%	0.5 - 250	1.2E+01	nc	N	ND*	12%**
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	121	0	0.0%	0.5 - 1200	5.0E-02	ca	N	ND*	98%**
	123-91-1	1,4-Dioxane	1.2	35	µg/L	40	8	20.0%	2.4 - 10	6.1E-01	ca	Y		NA
	872-50-4	1-Methyl-2-Pyrrolidinone	ND	ND	µg/L	40	0	0.0%	4 - 20	NA		N	ND	NA
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	50	0	0.0%	0.5 - 250	NA		N	ND	NA
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	72	0	0.0%	9.5 - 50	3.6E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	9.6E-02	nc	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	1.1E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	72	0	0.0%	5 - 10.2	7.3E+01	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	72	0	0.0%	20 - 51	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	7.3E+00	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	3.6E+00	nc	N	ND*	100%
	110-75-8	2-CHLOROETHYL VINYL ETHER	ND	ND	µg/L	52	0	0.0%	0.65 - 1000	NA		N	ND	NA
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	72	0	0.0%	5 - 10.2	4.9E+01	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	1.2E+01	nc	N	ND*	12%**
	591-78-6	2-Hexanone	ND	ND	µg/L	49	0	0.0%	10 - 2500	NA		N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	72	0	0.0%	5 - 10.2	9.3E-03	nc	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	µg/L	72	0	0.0%	5 - 10.2	1.8E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	µg/L	72	0	0.0%	10 - 51	1.1E+01	nc	N	ND*	65%

Table 5.13-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	88-75-5	2-Nitrophenol	ND	ND	µg/L	72	0	0.0%	9.5 - 20	NA		N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	72	0	0.0%	2.7 - 50	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	72	0	0.0%	10 - 51	3.2E-01	ca	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	72	0	0.0%	20 - 51	3.6E-01	nc	N	ND*	100%
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	79	0	0.0%	5 - 10.2	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	72	0	0.0%	2.2 - 20	NA		N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	72	0	0.0%	10 - 50	1.5E+01	nc	N	ND*	22%
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	NA		N	ND	NA
	106-44-5	4-Methylphenol	ND	ND	µg/L	68	0	0.0%	5 - 10	1.8E+01	nc	N	ND	NA
	100-01-6	4-Nitroaniline	ND	ND	µg/L	72	0	0.0%	10 - 51	3.2E-01	ca	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	72	0	0.0%	20 - 51	NA		N	ND	NA
	83-32-9	Acenaphthene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	3.7E+01	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	3.7E+01	nc	N	ND	NA
	67-64-1	Acetone	5.9	74	µg/L	66	2	3.0%	10 - 2500	5.5E+02	nc	N	BSL	NA
	107-02-8	Acrolein	39	39	µg/L	6	1	NA	25 - 25	4.2E-03	nc	Y		NA
	107-13-1	Acrylonitrile	ND	ND	µg/L	6	0	NA	25 - 25	1.1E-03	ca	N	ND*	100%
	309-00-2	Aldrin	ND	ND	µg/L	7	0	NA	0.024 - 0.024	4.0E-04	ca	N	ND*	100%
	7429-90-5	Aluminum	54	87000	µg/L	63	27	42.9%	50 - 220	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	1.2E+00	ca	N	ND*	100%
	120-12-7	Anthracene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	1.8E+02	nc	N	ND	NA
	7440-36-0	Antimony	0.055	1.3	µg/L	62	5	8.1%	2 - 500	1.5E+00	nc	Y		NA
	7440-38-2	Arsenic	0.53	25	µg/L	65	7	10.8%	1 - 200	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	39	0	0.0%	5 - 19	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	9.5	1800	µg/L	63	63	100.0%	0 - 0	2.0E+02	nc	Y		NA
	71-43-2	Benzene	1.6	1.6	µg/L	101	1	1.0%	0.5 - 1200	1.5E-02	ca	Y		NA
	92-87-5	Benzidine	ND	ND	µg/L	68	0	0.0%	10 - 50	2.9E-05	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	9.2E-03	ca	N	ND*	100%
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	4.0E-04	ca	N	ND*	100%
	AER-001-419	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	39	0	0.0%	0.4 - 9.7	4.0E-04	ca	N	ND*	100%
	205-99-2	Benzo (b) fluoranthene	ND	ND	µg/L	37	0	0.0%	10 - 10.2	9.2E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	72	0	0.0%	0.4 - 10.2	NA		N	ND	NA
	207-08-9	Benzo (k) fluoranthene	ND	ND	µg/L	37	0	0.0%	10 - 10.2	5.6E-03	ca	N	ND*	100%
	65-85-0	Benzoic acid	4.6	4.8	µg/L	72	2	2.8%	20 - 51	1.5E+04	nc	N	BSL	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	72	0	0.0%	3.7 - 20	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	0.1	7.1	µg/L	66	4	6.1%	0.5 - 10	1.0E-01	nc	Y		NA
	319-84-6	alpha-BHC	ND	ND	µg/L	7	0	0.0%	0.024 - 0.024	1.1E-03	nc	N	ND*	100%
	319-85-7	beta-BHC	ND	ND	µg/L	7	0	0.0%	0.024 - 0.024	3.7E-03	nc	N	ND*	100%
	319-86-8	delta-BHC	0.010	0.099	µg/L	5	2	40.0%	0.024 - 0.024	3.2E-03	nc	Y		NA
	58-89-9	gamma-BHC (Lindane)	0.007	0.008	µg/L	5	2	40.0%	0.024 - 0.024	3.2E-03	nc	Y		NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	72	0	0.0%	5 - 10.2	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	72	0	0.0%	5 - 10.2	1.0E-03	ca	N	ND*	100%
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	74	0	0.0%	9.5 - 10.2	2.7E-02	ca	N	ND*	100%

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Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	117-81-7	Bis(2-ethylhexyl)phthalate	15.3	50	µg/L	72	4	5.6%	5 - 50	4.8E-01	ca	Y		NA
	7440-42-8	Boron	8	220	µg/L	62	14	22.6%	40 - 100	7.3E+02	nc	Y		NA
	108-86-1	Bromobenzene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	2.0E+00	nc	N	ND*	26%**
	74-97-5	Bromochloromethane	ND	ND	µg/L	50	0	0.0%	0.5 - 250	NA		N	ND	NA
	75-27-4	Bromodichloromethane	0.75	0.75	µg/L	285	1	0.4%	0.5 - 1200	1.8E-02	ca	Y		NA
	75-25-2	Bromoform	ND	ND	µg/L	285	0	0.0%	0.5 - 1200	8.5E-01	ca	N	ND*	62%**
	74-83-9	Bromomethane	ND	ND	µg/L	145	0	0.0%	0.5 - 1200	8.7E-01	nc	N	ND*	94%**
	AER-001-005	4-Bromophenyl phenyl ether	ND	ND	µg/L	79	0	0.0%	5 - 10.2	NA	nc	N	ND	NA
	7440-43-9	Cadmium	0.03	12	µg/L	63	12	19.0%	1 - 20	4.0E-03	nc	Y		NA
	7440-70-2	Calcium	12000	880000	µg/L	63	63	100.0%	0 - 0	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	µg/L	25	0	0.0%	10 - 10	3.4E-01	ca	N	ND*	100%
	75-15-0	Carbon disulfide	27000	27000	µg/L	49	1	2.0%	5 - 2000	1.0E+02	nc	Y		NA
	56-23-5	Carbon tetrachloride	0.23	5.8	µg/L	285	15	5.3%	0.5 - 1200	1.0E-02	ca	Y		NA
	57-74-9	Chlordane (tech)	ND	ND	µg/L	7	0	NA	0.47 - 0.47	3.0E-03	ca	N	ND*	100%
	108-90-7	Chlorobenzene	0.25	2.5	µg/L	285	6	2.1%	0.5 - 1200	1.1E+01	nc	N	ND*	3%**
	75-00-3	Chloroethane	ND	ND	µg/L	145	0	0.0%	0.5 - 1200	4.6E-01	ca	N	ND*	98%**
	67-66-3	Chloroform	0.21	1900	µg/L	282	138	48.9%	0.25 - 1200	1.7E-02	ca	Y		NA
	74-87-3	Chloromethane	0.51	0.51	µg/L	145	1	0.7%	0.4 - 1200	1.6E+01	ca	N	ND*	13%**
	7440-47-3	Chromium	3.7	360	µg/L	63	25	39.7%	5 - 40	5.5E+03	nc	Y		NA
	218-01-9	Chrysene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	0.31	100	µg/L	130	55	42.3%	0.5 - 1200	6.1E+00	nc	Y		NA
	10061-01-5	cis-1,3-Dichloropropene	ND	ND	µg/L	123	0	0.0%	0.5 - 1200	NA		N	ND	NA
	7440-48-4	Cobalt	0.15	149	µg/L	61	23	37.7%	1 - 20	7.3E+01	nc	Y		NA
	7440-50-8	Copper	0.55	240	µg/L	63	25	39.7%	2 - 50	1.7E+01	nc	Y		NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	50	0	0.0%	1 - 250	1.6E-04	nc	N	ND*	94%**
	72-54-8	4,4'-DDD	ND	ND	µg/L	7	0	0.0%	0.14 - 0.14	2.8E-02	ca	N	ND*	100%
	72-55-9	4,4'-DDE	ND	ND	µg/L	7	0	0.0%	0.047 - 0.047	2.0E-02	ca	N	ND*	100%
	50-29-3	4,4'-DDT	ND	ND	µg/L	7	0	0.0%	0.14 - 0.14	2.0E-02	ca	N	ND*	100%
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	72	0	0.0%	0.4 - 10.2	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	2.2	2.2	µg/L	285	1	0.4%	0.45 - 1200	1.3E-02	ca	Y		NA
	74-95-3	Dibromomethane	ND	ND	µg/L	50	0	0.0%	0.5 - 250	6.1E+00	nc	N	ND*	12%
	75-71-8	Dichlorodifluoromethane	0.47	0.76	µg/L	284	2	0.7%	0.5 - 1200	3.9E+01	nc	N	ND*	2%**
	60-57-1	Dieldrin	0.013	0.013	µg/L	6	1	16.7%	0.047 - 0.047	4.2E-04	ca	Y		NA
	68334-30-5	Diesel Range Organics (C10-C28)	ND	ND	µg/L	5	0	0.0%	50 - 300000	NA		N	ITC	NA
	60-29-7	Diethyl ether	NA	NA	µg/L	NA	NA	NA	NA	1.2E+02	nc	N	NA	NA
	84-66-2	Diethyl phthalate	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	30	30	µg/L	72	1	1.4%	9.5 - 20	3.6E+02	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	72	0	0.0%	5 - 10.2	1.5E+02	nc	N	ND	NA
	959-98-8	Endosulfan I	0.0	0.013	µg/L	6	1	16.7%	0.047 - 0.047	2.2E+01	nc	Y		NA
	33213-65-9	Endosulfan II	0.0	0.011	µg/L	6	1	16.7%	0.047 - 0.047	2.2E+01	nc	Y		NA
	1031-07-8	Endosulfan sulfate	ND	ND	µg/L	7	0	NA	0.14 - 0.14	NA	nc	N	ND	NA
	72-20-8	Endrin	ND	ND	µg/L	7	0	NA	0.047 - 0.047	1.8E-01	nc	N	ND	NA
	7421-93-4	Endrin aldehyde	ND	ND	µg/L	7	0	NA	0.14 - 0.14	1.8E-01	nc	N	ND	NA

Table 5.13-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	53494-70-5	Endrin ketone	ND	ND	µg/L	7	0	0.0%	0.14 - 0.14	1.8E-01	nc	N	ND	NA
	64-17-5	Ethanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	100-41-4	Ethylbenzene	ND	ND	µg/L	101	0	0.0%	0.5 - 1200	3.0E+01	nc	N	BSL	NA
	106-93-4	Ethylene Dibromide	ND	ND	µg/L	115	0	0.0%	0.5 - 1200	5.6E-04		N	ND*	
	206-44-0	Fluoranthene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	1.5E+02	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	2.4E+01	nc	N	ND	NA
	16984-48-8	Fluoride	NA	NA	µg/L	NA	NA	NA	NA	NA	nc	N	NA	NA
	76-13-1	Freon 113	0.6	6.7	µg/L	270	6	2.2%	0.5 - 1200	4.0E+02	nc	N	ND*	0.38%
	76-44-8	Heptachlor	ND	ND	µg/L	7	0	0.0%	0.024 - 0.024	8.0E-04	nc	N	ND*	100%
	1024-57-3	Heptachlor epoxide	ND	ND	µg/L	7	0	NA	0.024 - 0.024	6.0E-04	ca	N	ND*	100%
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	72	0	0.0%	5 - 10.2	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	82	0	0.0%	1 - 200	8.6E-02	ca*	N	ND*	96%**
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	72	0	0.0%	9.5 - 20	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	72	0	0.0%	5 - 10.2	4.8E-01	ca	N	ND*	100%
	18540-29-9	Hexavalent Chromium	ND	ND	µg/L	21	0	0.0%	10 - 40	1.1E+01	nc	N	ND*	90%
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	72	0	0.0%	0.4 - 10.2	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	110	120000	µg/L	63	32	50.8%	92 - 330	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	72	0	0.0%	5 - 10.2	7.1E+00	ca	N	ND	NA
	67-63-0	Isopropanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	98-82-8	Isopropylbenzene	ND	ND	µg/L	50	0	NA	0.5 - 250	6.6E+01	nc	N	ND*	10%**
	94114-58-6	Jet fuels	ND	ND	µg/L	2	0	NA	100 - 100	NA		N	ND	NA
	8008-20-6	Kerosene	ND	ND	µg/L	2	0	NA	100 - 100	NA		N	ND	NA
	7439-92-1	Lead	0.22	1600	µg/L	63	25	39.7%	1 - 100	0.0E+00		Y		NA
	7439-93-2	Lithium	7.2	21	µg/L	25	3	12.0%	50 - 600	7.3E+01	nc	Y		NA
	7439-95-4	Magnesium	260	96000	µg/L	63	63	100.0%	0 - 0	NA		N	EN	NA
	7439-96-5	Manganese	6.7	24900	µg/L	61	43	70.5%	5 - 36	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	0.063	6	µg/L	59	8	13.6%	0.2 - 1	1.2E-01	nc	Y		NA
	67-56-1	Methanol	NA	NA	µg/L	NA	NA	NA	NA	NA	nc	N	NA	NA
	72-43-5	Methoxychlor	ND	ND	µg/L	4	0	NA	0.19 - 0.47	3.0E+00	nc	N	ND	NA
	78-93-3	Methyl ethyl ketone	26	26	µg/L	49	1	2.0%	10 - 2500	7.0E+02	nc	N	ND*	10%
	108-10-1	Methyl isobutyl ketone (MIBK)	ND	ND	µg/L	49	0	0.0%	10 - 2500	2.0E+02	nc	N	ND*	12%
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	50	0	0.0%	0.5 - 250	1.1E+00	ca	N	BSL	NA
	75-09-2	Methylene chloride	0.5	320	µg/L	282	28	9.9%	0.5 - 1200	4.0E-01	ca	Y		NA
	7439-98-7	Molybdenum	0.75	46	µg/L	59	14	23.7%	2 - 44	1.8E+01	nc	Y		NA
	r Oil Range Organics (C16	Motor Oil Range Organics (C16-C36)	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	108-38-3	m-Xylene	ND	ND	µg/L	1	0	NA	0.5 - 0.5	2.1E+01	nc	N	ND	NA
	1330-20-7	m,p-xylene	ND	ND	µg/L	1	0	0.0%	1 - 1	2.1E+01	nc	N	ND	NA
	91-20-3	Naphthalene	ND	ND	µg/L	82	0	0.0%	0.2 - 200	9.3E-03	ca	N	ND*	96%**
	71-36-3	n-Butyl alcohol	NA	NA	µg/L	NA	NA	NA	NA	NA	nc	N	NA	NA
	104-51-8	n-Butylbenzene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	2.4E+01	nc	N	ND*	10%**

Table 5.13-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	3622-84-2	N-Butylbenzenesulfonamide	430	930	µg/L	26	3	11.5%	10 - 20	NA		N	NA	NA
	7440-02-0	Nickel	2	490	µg/L	63	23	36.5%	10 - 40	1.2E+00	nc	Y		NA
	14797-55-8	Nitrate as NO3	120	140000	µg/L	22	22	100.0%	0 - 0	1.0E+03	nc	Y		NA
	14797-55-8	Nitrate	76	120000	µg/L	245	192	78.4%	30 - 500	1.0E+03	nc	Y		NA
	GIS-230-001	Nitrate plus Nitrite (as N)	50	21000	µg/L	243	37	15.2%	50 - 2000	NA		N	NA	NA
	S-NINO2	Nitrite as NO2	360	360	µg/L	22	1	NA	100 - 1000	1.0E+02	nc	Y		NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	72	0	0.0%	5 - 10.2	3.4E-01	nc	N	ND*	100%
	62-75-9	N-Nitrosodimethylamine	0.001	0.32	µg/L	124	30	24.2%	0.002 - 19	1.3E-04	ca	Y		NA
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	72	0	0.0%	9.5 - 10.2	9.6E-04	ca	N	ND*	100%
	86-30-6	N-Nitrosodiphenylamine	ND	ND	µg/L	49	0	0.0%	9.5 - 10.2	1.4E+00	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	25	0	0.0%	5 - 5	9.1E+01	nc	N	BSL	NA
	71-23-8	n-Propanol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	103-65-1	n-Propylbenzene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	2.4E+01	nc	N	ND*	10%**
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	95-47-6	o-Xylene	ND	ND	µg/L	56	0	0.0%	0.5 - 250	2.1E+01	nc	N	ND*	9%**
	12674-11-2	PCB-1016	ND	ND	µg/L	2	0	NA	1 - 1	9.0E-03	ca	N	ND*	100%
	11104-28-2	PCB-1221	ND	ND	µg/L	2	0	NA	2 - 2	9.0E-03	ca	N	ND*	100%
	11141-16-5	PCB-1232	ND	ND	µg/L	2	0	NA	1 - 1	9.0E-03	ca	N	ND*	100%
	53469-21-9	PCB-1242	ND	ND	µg/L	2	0	NA	1 - 1	9.0E-03	ca	N	ND*	100%
	12672-29-6	PCB-1248	ND	ND	µg/L	2	0	NA	1 - 1	3.4E-03	ca	N	ND*	100%
	11097-69-1	PCB-1254	ND	ND	µg/L	2	0	NA	1 - 1	3.4E-03	ca	N	ND*	100%
	11096-82-5	PCB-1260	ND	ND	µg/L	2	0	NA	1 - 1	3.4E-03	ca	N	ND*	100%
	1336-36-3	PCB's	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	87-86-5	Pentachlorophenol	ND	ND	µg/L	72	0	0.0%	20 - 51	4.0E-02	ca	N	ND*	100%
	40487-42-1	Pendimethalin (Prowl)	ND	ND	µg/L	11	0	0.0%	0.12 - 0.12	1.5E+02	nc	N	ND	NA
	14797-73-0	Perchlorate	2	25000	µg/L	270	157	58.1%	1 - 500	3.6E-01	ca/nc	Y		NA
	85-01-8	Phenanthrene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	1.8E+01	nc	N	ND	NA
	108-95-2	Phenol	1.1	1.1	µg/L	72	1	1.4%	5 - 10.2	1.1E+03	nc	N	ND	NA
	99-87-6	p-Isopropyltoluene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	NA		N	ND	NA
	7440-09-7	Potassium	490	49000	µg/L	64	58	90.6%	1000 - 7500	NA		N	EN	NA
	106-42-3	p-Xylene	ND	ND	µg/L	1	0	NA	0.5 - 0.5	2.1E+01	nc	N	ND	NA
	129-00-0	Pyrene	ND	ND	µg/L	72	0	0.0%	0.2 - 10.2	1.8E+01	nc	N	ND	NA
	78-92-2	sec-Butyl alcohol	NA	NA	µg/L	NA	NA	NA	NA	NA		N	NA	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	2.4E+01	nc	N	ND*	10%**
	7782-49-2	Selenium	0.38	8.2	µg/L	63	6	9.5%	10 - 400	1.8E+01	nc	Y		NA
	7440-22-4	Silver	1.2	4.4	µg/L	63	3	4.8%	1 - 22	1.8E+01	nc	N	ND	NA
	7440-23-5	Sodium	5500	310000	µg/L	64	64	100.0%	0 - 0	NA		N	EN	NA
	8052-41-3	Stoddard solvent	ND	ND	µg/L	2	0	NA	100 - 100	NA		N	ITC	NA

Table 5.13-1 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Groundwater
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Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	7440-24-6	Strontium	140	5600	µg/L	22	22	100.0%	0 - 0	2.2E+03	nc	Y		NA
	100-42-5	Styrene	0.17	0.17	µg/L	65	1	1.5%	0.5 - 250	1.6E+02	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	50	0	0.0%	0.5 - 250	2.4E+01	nc	N	ND*	10%**
	127-18-4	Tetrachloroethene	0.51	9.7	µg/L	285	47	16.5%	0.15 - 1200	6.0E-03	ca	Y		NA
	7440-28-0	Thallium	0.24	0.24	µg/L	65	1	1.5%	1 - 2000	1.0E-02	nc	Y		NA
	7440-32-6	Titanium	3.2	490	µg/L	21	14	66.7%	5 - 75	1.5E+04	nc	Y		NA
	108-88-3	Toluene	ND	ND	µg/L	101	0	0.0%	0.5 - 1200	1.5E+01	nc	N	ND*	8%**
	57-12-5	Total Cyanide	NA	NA	µg/L	NA	NA	NA	NA	NA	nc	N	NA	NA
	8001-35-2	Toxaphene	ND	ND	µg/L	7	0	NA	1.9 - 1.9	3.0E-03	ca	N	ND*	100%
	GIS-130-010	TPH	200	300	µg/L	14	3	21.4%	100 - 200	NA		N	ITC	NA
	156-60-5	trans-1,2-Dichloroethene	0.53	1.8	µg/L	87	7	8.0%	0.5 - 1200	6.0E+00	nc	Y		NA
	10061-02-6	trans-1,3-Dichloropropene	ND	ND	µg/L	123	0	0.0%	0.5 - 1200	2.0E-02	ca	N	ND*	98%**
	79-01-6	Trichloroethene	0.3	14000	µg/L	282	216	76.6%	0.5 - 5	2.8E-03	ca	Y		NA
	75-69-4	Trichlorofluoromethane	0.23	0.56	µg/L	284	2	0.7%	0.5 - 1200	7.0E+01	nc	N	BSL	NA
	7440-62-2	Vanadium	2.9	430	µg/L	61	31	50.8%	2 - 20	3.6E+00	nc	Y		NA
	108-05-4	Vinyl Acetate	ND	ND	µg/L	47	0	0.0%	10 - 5000	4.1E+01	nc	N	ND*	32%
	75-01-4	Vinyl chloride	1.5	21.1	µg/L	285	5	1.8%	0.5 - 1200	2.0E-03	ca	Y		NA
	1330-20-7	Xylene (total)	ND	ND	µg/L	97	0	0.0%	0.5 - 1200	2.1E+01	nc	N	ND*	6%
	7440-66-6	Zinc	16	330000	µg/L	64	42	65.6%	20 - 110	1.1E+03	nc	Y		NA

Footnotes:
(1) See Table 3
(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
* * = Some of the detection limits are null
ITC = individual toxic compounds associated with the mixture are assessed separately.

Key:
ca = Cancer
COPC = Chemical of potential concern
µg/L = Micrograms per liter
nc = Noncancer
NA = Not applicable

Table 5.13-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	4	0	0%	0.5-0.5	4.3E-02	ca	N	ND*	100%
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	4	0	0%	0.5-0.5	1.0E+02	nc	N	ND	NA
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	4	0	0%	1-1	5.5E-03	ca	N	ND*	100%
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	4	0	0%	0.5-0.5	2.0E-02	ca	N	ND*	100%
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	4	0	0%	0.5-0.5	2.0E-01	ca	N	ND*	100%
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.0E+00	nc	N	ND	NA
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	4	0	0%	0.5-0.5	2.0E-02	nc	N	ND*	100%
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	4	0	0%	1-1	5.0E-01	ca	N	ND	NA
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	4	0	0%	1-1	5.6E-04	nc	N	ND*	100%
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	5.0E-01	ca	N	ND	NA
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.2E+00	nc	N	ND	NA
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	4	0	0%	1-1	1.6E-04	nc	N	ND*	100%
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	4	0	0%	0.5-0.5	5.6E-04	ca	N	ND*	100%
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	3.7E+01	ca	N	ND	NA
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	4	0	0%	0.5-0.5	1.2E-02	nc	N	ND*	100%
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	4	0	0%	0.5-0.5	1.6E-02	ca*	N	ND*	100%
	103-33-3	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	4	0	0%	200-200	6.1E-02	ca	N	ND*	100%
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.2E+00	nc	N	ND	NA
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.8E+01	nc	N	ND	NA
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	4	0	0%	0.5-0.5	1.2E+01	nc	N	ND	NA
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	5.0E-02	ca	N	ND*	100%
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	4	0	0%	0.5-0.5	1.6E-02	ca*	N	ND*	100%
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	4	0	0%	10-10	3.6E+02	nc	N	ND	NA
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	4	0	0%	10-10	9.6E-02	nc**	N	ND*	100%
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	4	0	0%	10-10	1.1E+01	nc	N	ND	NA
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	4	0	0%	5-5	7.3E+01	nc	N	ND	NA
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	4	0	0%	20-20	7.3E+00	nc	N	ND*	100%
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	4	0	0%	10-10	7.3E+00	nc	N	ND	NA
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	4	0	0%	10-10	3.6E+00	nc	N	ND*	100%
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	4	0	0%	5-5	4.9E+01	nc	N	ND	NA
	95-57-8	2-Chlorophenol	ND	ND	µg/L	4	0	0%	10-10	3.0E+00	nc	N	ND*	100%
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.2E+01	nc	N	ND	NA
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	4	0	0%	5-5	9.3E-03	ca	N	ND*	100%
	95-48-7	2-Methylphenol	ND	ND	µg/L	4	0	0%	5-5	1.8E+02	nc	N	ND	NA
	88-74-4	2-Nitroaniline	ND	ND	µg/L	4	0	0%	10-10	1.1E+01	nc	N	ND	NA
	88-75-5	2-Nitrophenol	ND	ND	µg/L	4	0	0%	20-20	NA	nc	N	ND	NA
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	4	0	0%	10-10	1.5E-02	ca	N	ND*	100%
	99-09-2	3-Nitroaniline	ND	ND	µg/L	4	0	0%	10-10	3.2E-01	ca**	N	ND*	100%
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	4	0	0%	20-20	3.6E-01	nc	N	ND*	100%

Table 5.13-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	4	0	0%	5-5	NA		N	ND	NA
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	4	0	0%	10-10	NA	nc	N	ND	NA
	106-47-8	4-Chloroaniline	ND	ND	µg/L	4	0	0%	10-10	1.5E+01	nc	N	ND	NA
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	4	0	0%	10-10	NA		N	ND	NA
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.2E+01	nc	N	ND	NA
	106-44-5	4-Methylphenol	6	6	µg/L	4	1	25%	5-5	1.8E+01	nc	Y		NA
	100-01-6	4-Nitroaniline	ND	ND	µg/L	4	0	0%	10-10	3.2E-01	ca*	N	ND*	100%
	100-02-7	4-Nitrophenol	ND	ND	µg/L	4	0	0%	20-20	NA	nc	N	ND	NA
	72-54-8	4,4'-DDD	ND	ND	µg/L	4	0	0%	0.14-1.4	2.8E-02	nc	N	ND*	100%
	72-55-9	4,4'-DDE	ND	ND	µg/L	4	0	0%	0.047-0.47	2.0E-02	nc	N	ND*	100%
	50-29-3	4,4'-DDT	ND	ND	µg/L	4	0	0%	0.14-1.4	2.0E-02	nc	N	ND*	100%
	83-32-9	Acenaphthene	ND	ND	µg/L	4	0	0%	0.2-0.2	3.7E+01	nc	N	ND	NA
	208-96-8	Acenaphthylene	ND	ND	µg/L	4	0	0%	0.2-0.2	3.7E+01	nc	N	ND	NA
	309-00-2	Aldrin	ND	ND	µg/L	4	0	0%	0.024-0.24	4.0E-04	nc	N	ND*	100%
	319-84-6	alpha-BHC	0.12	0.12	µg/L	4	1	25%	0.024-0.024	1.1E-03	nc	Y		NA
	319-85-7	beta-BHC	ND	ND	µg/L	4	0	0%	0.024-0.24	3.7E-03	nc	N	ND*	100%
	7429-90-5	Aluminum	3900	110,000	µg/L	4	4	100%	0-0	6.0E+01	nc	Y		NA
	62-53-3	Aniline	ND	ND	µg/L	4	0	0%	10-10	1.2E+00	ca*	N	ND*	100%
	120-12-7	Anthracene	ND	ND	µg/L	4	0	0%	0.2-0.2	1.8E+02	nc	N	ND	NA
	7440-36-0	Antimony	0.13	0.34	µg/L	4	3	75%	2-2	1.5E+00	nc	N	BSL	NA
	7440-38-2	Arsenic	2.3	7	µg/L	4	4	100%	0-0	4.0E-04	ca	Y		NA
	103-33-3	Azobenzene	ND	ND	µg/L	4	0	0%	5-5	6.1E-02	ca	N	ND*	100%
	7440-39-3	Barium	75	420	µg/L	4	4	100%	0-0	2.0E+02	nc	Y		NA
	71-43-2	Benzene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.5E-02	ca	N	ND*	100%
	92-87-5	Benzidine	ND	ND	µg/L	4	0	0%	50-50	2.9E-05	ca	N	ND*	100%
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	4	0	0%	0.2-0.2	9.2E-03	ca	N	ND*	100%
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	4	0	0%	0.2-0.2	4.0E-04	ca	N	ND*	100%
	205-99-2	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	4	0	0%	0.4-0.4	5.6E-03	ca	N	ND*	100%
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	4	0	0%	0.4-0.4	NA	nc	N	ND	NA
	65-85-0	Benzoic acid	ND	ND	µg/L	4	0	0%	20-20	1.5E+04	nc	N	ND	NA
	100-51-6	Benzyl alcohol	ND	ND	µg/L	4	0	0%	5-5	1.1E+03	nc	N	ND	NA
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	4	0	0%	10-10	7.3E+02	nc	N	ND	NA
	7440-41-7	Beryllium	0.1	1.70	µg/L	4	4	100%	0-0	1.0E-01	nc	Y		NA
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	4	0	0%	5-5	NA		N	ND	NA
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	4	0	0%	5-5	1.0E-03	ca	N	ND*	100%
	108-61-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	4	0	0%	10-10	2.7E-02	ca	N	ND*	100%
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	µg/L	4	0	0%	5-5	4.8E-01	ca	N	ND*	100%
	7440-42-8	Boron	23	110	µg/L	4	3	75%	50-50	7.3E+02	nc	N	BSL	NA
	106-86-1	Bromobenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	2.0E+00	nc	N	ND	NA
	74-97-5	Bromochloromethane	ND	ND	µg/L	4	0	0%	1-1	NA	nc	N	ND	NA
	75-27-4	Bromodichloromethane	ND	ND	µg/L	4	0	0%	0.5-0.5	1.8E-02	ca	N	ND*	100%
	75-25-2	Bromoform	ND	ND	µg/L	4	0	0%	0.5-0.5	8.5E-01	ca*	N	ND	NA
	74-83-9	Bromomethane	ND	ND	µg/L	4	0	0%	1-1	8.7E-01	nc	N	ND	NA

Table 5.13-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	7440-43-9	Cadmium	0.095	0.35	µg/L	4	4	100%	0-0	4.0E-03	nc	Y		NA
		Calcium	2200	19,000	µg/L	4	4	100%	0-0	NA		N	EN	NA
	86-74-8	Carbazole	ND	ND	µg/L	4	0	0%	10-10	3.4E-01	ca	N	ND*	100%
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	4	0	0%	0.5-0.5	1.0E-02	ca*	N	ND*	100%
	57-74-9	Chlordane (tech)	ND	ND	µg/L	4	0	0%	0.47-4.7	3.0E-03	nc	N	ND*	100%
	108-90-7	Chlorobenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.1E+01	nc	N	ND	NA
	75-00-3	Chloroethane	ND	ND	µg/L	4	0	0%	1-1	4.6E-01	ca	N	ND*	100%
	67-66-3	Chloroform	ND	ND	µg/L	4	0	0%	0.5-0.5	1.7E-02	ca	N	ND*	100%
	74-87-3	Chloromethane	ND	ND	µg/L	4	0	0%	1-1	1.6E+01	nc	N	ND	NA
	16065-83-1	Chromium	8.8	100	µg/L	4	4	100%	0-0	5.5E+03	nc	N	BSL	NA
	218-01-9	Chrysene	ND	ND	µg/L	4	0	0%	0.2-0.2	5.6E-02	ca	N	ND*	100%
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	4	0	0%	0.5-0.5	6.1E+00	nc	N	ND	NA
	7440-48-4	Cobalt	1.4	19	µg/L	4	4	100%	0-0	7.3E+01	nc	N	BSL	NA
	7440-50-8	Copper	7.8	71	µg/L	4	4	100%	0-0	1.7E+01	nc	Y		NA
	319-86-8	delta-BHC	0.0077	0.60	µg/L	4	3	75%	0.024-0.024	3.2E-03	nc	Y		NA
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	4	0	0%	0.4-0.4	9.2E-04	ca	N	ND*	100%
	132-64-9	Dibenzofuran	ND	ND	µg/L	4	0	0%	10-10	1.2E+00	nc	N	ND*	100%
	124-48-1	Dibromochloromethane	ND	ND	µg/L	4	0	0%	0.5-0.5	1.3E-02	ca	N	ND*	100%
	74-95-3	Dibromomethane	ND	ND	µg/L	4	0	0%	0.5-0.5	6.1E+00	nc	N	ND	NA
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	4	0	0%	0.5-0.5	3.9E+01	nc	N	ND	NA
	60-57-1	Dieldrin	ND	ND	µg/L	4	0	0%	0.047-0.47	4.2E-04	nc	N	ND*	100%
		Diesel Range Organics (C10-C28)	NA	NA	µg/L	NA	NA	NA	NA	NA		N	PM	NA
	84-66-2	Diethyl phthalate	ND	ND	µg/L	4	0	0%	10-10	2.9E+03	nc	N	ND	NA
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	4	0	0%	10-10	3.6E+04	nc	N	ND	NA
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	4	0	0%	10-10	3.6E+02	nc	N	ND	NA
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	4	0	0%	5-5	1.5E+02	nc	N	ND	NA
	100-41-4	Ethylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	3.0E+01	nc	N	ND	NA
	206-44-0	Fluoranthene	ND	ND	µg/L	4	0	0%	0.2-0.2	1.5E+02	nc	N	ND	NA
	86-73-7	Fluorene	ND	ND	µg/L	4	0	0%	0.2-0.2	2.4E+01	nc	N	ND	NA
	58-89-9	gamma-BHC (Lindane)	ND	ND	µg/L	4	0	0%	0.024-0.24	4.2E-04	nc	N	ND*	100%
	959-98-8	Endosulfan I	ND	ND	µg/L	4	0	0%	0.047-0.47	2.2E+01	nc	N	ND	NA
	33213-65-9	Endosulfan II	ND	ND	µg/L	4	0	0%	0.047-0.47	2.2E+01	nc	N	ND	NA
	1031-07-8	Endosulfan sulfate	ND	ND	µg/L	4	0	0%	0.14-1.4	2.2E+01	nc	N	ND	NA
	72-20-8	Endrin	ND	ND	µg/L	4	0	0%	0.047-0.47	1.8E-01	nc	N	ND*	25%
	7421-93-4	Endrin aldehyde	ND	ND	µg/L	4	0	0%	0.14-1.4	1.8E-01	nc	N	ND*	25%
	53494-70-5	Endrin ketone	ND	ND	µg/L	4	0	0%	0.14-1.4	1.8E-01	nc	N	ND*	25%
	76-44-8	Heptachlor	0.0084	0.008	µg/L	4	1	25%	0.024-0.24	8.0E-04	nc	Y		NA
	1024-57-3	Heptachlor epoxide	0.012	0.110	µg/L	4	2	50%	0.024-0.024	6.0E-04	nc	Y		NA
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	4	0	0%	5-5	3.0E-03	ca	N	ND*	100%
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	4	0	0%	1-1	8.6E-02	ca*	N	ND*	100%
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	4	0	0%	20-20	5.0E+00	nc	N	ND*	100%
	67-72-1	Hexachloroethane	ND	ND	µg/L	4	0	0%	5-5	4.8E-01	ca**	N	ND*	100%
	18540-29-9	Hexavalent Chromium	NA	NA	µg/L	NA	NA	NA	NA	1.1E+01	nc	N	NA	NA

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Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	4	0	0%	0.4-0.4	9.2E-03	ca	N	ND*	100%
	7439-89-6	Iron	2900	110,000	µg/L	4	4	100%	0-0	1.1E+03	nc	Y		NA
	78-59-1	Isophorone	ND	ND	µg/L	4	0	0%	5-5	7.1E+00	ca	N	ND	NA
	98-82-8	Isopropylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	6.6E+01	nc	N	ND	NA
	7439-92-1	Lead	2.1	28	µg/L	4	4	100%	0-0	0.0E+00		Y		NA
	7469-93-2	Lithium	37	37	µg/L	4	1	25%	50-50	7.3E+01	nc	Y		NA
	7439-95-4	Magnesium	1400	8,500	µg/L	4	4	100%	0-0	NA		N	EN	NA
	7439-96-5	Manganese	39	1,100	µg/L	4	4	100%	0-0	8.8E+01	nc	Y		NA
	7439-97-6	Mercury	0.08	2.80	µg/L	4	2	50%	0.2-0.2	1.2E-01	nc	Y		NA
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	4	0	0%	0.5-0.5	1.1E+00	ca	N	ND	NA
	75-09-2	Methylene chloride	ND	ND	µg/L	4	0	0%	1-1	4.0E-01		N	ND*	100%
	72-43-5	Methoxychlor	ND	ND	µg/L	4	0	0%	0.19-1.9	3.0E+00	nc	N	ND	NA
	7439-98-7	Molybdenum	0.15	3.8	µg/L	4	3	75%	2-2	1.8E+01	nc	Y		NA
		Motor Oil Range Organics (C16-C36)	NA	NA	µg/L	NA	NA	NA	NA	NA		N	ITC	NA
	91-20-3	Naphthalene	ND	ND	µg/L	4	0	0%	0.2-0.2	9.3E-03	ca	N	ND*	100%
	104-51-48	n-Butylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	2.4E+01	nc	N	ND	NA
	7440-02-0	Nickel	9	61	µg/L	4	4	100%	0-0	1.2E+00	nc	Y		NA
		Nitrate as NO3	69	3,600	µg/L	4	4	100%	0-0	1.0E+03	nc	Y		NA
		Nitrite as NO2	21	170	µg/L	4	3	75%	100-100	1.0E+02	nc	Y		NA
	98-95-3	Nitrobenzene	ND	ND	µg/L	4	0	0%	5-5	3.4E-01	nc	N	ND*	100%
	62-75-9	N-Nitrosodimethylamine	ND	ND	µg/L	4	0	0%	5-5	1.3E-04	ca	N	ND*	100%
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	4	0	0%	10-10	9.6E-04	ca	N	ND*	100%
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	4	0	0%	5-5	9.1E+01	ca*	N	ND	NA
	40487-42-1	Pendimethalin (Prowl)	0.37	16	µg/L	4	3	75%	0.12-0.12	1.5E+02	nc	Y		NA
	103-65-1	n-Propylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	2.4E+01	nc	N	ND	NA
	12674-11-2	PCB-1016	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca**	N	NA	NA
	11104-28-2	PCB-1221	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca**	N	NA	NA
	11141-16-5	PCB-1232	NA	NA	µg/L	NA	NA	NA	NA	9.0E-03	ca**	N	NA	NA
	53469-21-9	PCB-1242	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca*	N	NA	NA
	12672-29-6	PCB-1248	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca*	N	NA	NA
	11097-69-1	PCB-1254	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca*	N	NA	NA
	11096-82-5	PCB-1260	NA	NA	µg/L	NA	NA	NA	NA	3.4E-03	ca*	N	NA	NA
	87-86-5	Pentachlorophenol	ND	ND	µg/L	4	0	0%	20-20	4.0E-02	ca	N	ND*	100%
		Perchlorate	NA	NA	µg/L	NA	NA	NA	NA	3.6E-01	ca/nc	N		NA
	85-01-8	Phenanthrene	ND	ND	µg/L	4	0	0%	0.2-0.2	NA	nc	N	ND	NA
	108-95-2	Phenol	ND	ND	µg/L	4	0	0%	5-5	1.1E+03	nc	N	ND	NA
	25155-15-1	p-Isopropyltoluene	ND	ND	µg/L	4	0	0%	0.5-0.5	NA	nc	N	ND	NA
	7440-09-7	Potassium	1300	6,500	µg/L	4	4	100%	0-0	NA		N	EN	NA
	129-00-0	Pyrene	ND	ND	µg/L	4	0	0%	0.2-0.2	1.8E+01	nc	N	ND	NA
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	2.4E+01	nc	N	ND	NA
	7782-49-2	Selenium	ND	ND	µg/L	4	0	0%	2-2	1.8E+01	nc	N	ND	NA
	7440-22-4	Silver	0.032	0.18	µg/L	4	4	100%	0-0	1.8E+01	nc	Y		NA
	7440-23-5	Sodium	11000	58,000	µg/L	4	4	100%	0-0	NA		N	EN	NA

Table 5.13-2 Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Surface Water
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	N/C	COPC Flag (Y/N)	Rationale for Deletion (2)	Percent of Non-Detects > Screening Toxicity Value
Southwest BOU	7440-24-6	Strontium	26	96	µg/L	4	4	100%	0-0	2.2E+03	nc	N	BSL	NA
	100-42-5	Styrene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.6E+02	nc	N	ND	NA
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	4	0	0%	0.5-0.5	2.4E+01	nc	N	ND	NA
	127-18-4	Tetrachloroethene	ND	ND	µg/L	4	0	0%	0.5-0.5	6.0E-03	ca	N	ND*	100%
	7440-28-0	Thallium	0.22	0.22	µg/L	4	1	25%	1-1	1.0E-02	nc	Y		NA
	7440-32-6	Titanium	92	2,800	µg/L	4	4	100%	0-0	1.5E+04	nc	N	BSL	NA
	108-88-3	Toluene	ND	ND	µg/L	4	0	0%	0.5-0.5	1.5E+01	nc	N	ND	NA
	8001-35-2	Toxaphene	ND	ND	µg/L	4	0	0%	1.9-19	3.0E-03	nc	N	ND*	100%
		Total Cyanide	NA	NA	µg/L	NA	NA	NA	NA	1.5E+01	nc	N	NA	NA
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	4	0	0%	0.5-0.5	6.0E+00	nc	N	ND	NA
	79-01-6	Trichloroethene	ND	ND	µg/L	4	0	0%	0.5-0.5	2.8E-03	ca	N	ND	NA
	75-69-4	Trichlorofluoromethane	ND	ND	µg/L	4	0	0%	0.5-0.5	7.0E+01	nc	N	ND	NA
	7440-62-2	Vanadium	12	160	µg/L	4	4	100%	0-0	3.6E+00	nc	Y		NA
	75-01-4	Vinyl chloride	ND	ND	µg/L	4	0	0%	0.5-0.5	2.0E-03	ca	N	ND	NA
	1330-20-7	Xylenes (total)	ND	ND	µg/L	4	0	0%	1-1	2.1E+01	nc	N	ND	NA
	7440-66-6	Zinc	20	150	µg/L	4	4	100%	0-0	1.1E+03	nc	N	BSL	NA

Footnotes:

(1) See Table 2.

(2) FOD = Frequency of detection screening
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
NA = Not applicable
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individually

Table 5.13-3 *Chemcial of Potential Concern Summary*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
1,1,1,2-Tetrachloroethane	N	ND*	N	ND*
1,1,1-Trichloroethane	N	BSL	N	ND
1,1,2,2-Tetrachloroethane	Y		N	ND*
1,1,2-Trichloroethane	Y		N	ND*
1,1-Dichloroethane	Y		N	ND*
1,1-Dichloroethene	Y		N	ND
1,1-Dichloropropene	N	ND	N	ND*
1,2,3-Trichlorobenzene	N	ND	N	ND
1,2,3-Trichloropropane	N	ND*	N	ND*
1,2,4-Trichlorobenzene	N	ND*	N	ND
1,2,4-Trimethylbenzene	N	ND*	N	ND
1,2-Dibromo-3-chloropropane	N	ND*	N	ND*
1,2-Dibromoethane (EDB)	N	ND*	N	ND*
1,2-Dichlorobenzene	N	BSL	N	ND
1,2-Dichloroethane	Y		N	ND*
1,2-Dichloroethene (cis/trans)	Y		NA	NA
1,2-Dichloropropane	N	ND*	N	ND*
1,2-Diphenylhydrazine (as Azobenzene)	N	ND*	N	ND*
1,3,5-Trimethylbenzene	N	ND*	N	ND
1,3-Butadiene	NA	NA	NA	NA
1,3-Dichlorobenzene	N	ND*	N	ND
1,3-Dichloropropane	N	ND*	N	ND
1,4-Dichlorobenzene	N	ND*	N	ND*
1,4-Dioxane	Y		NA	NA
1-Methyl-2-Pyrrolidinone	N	ND	NA	NA
2,2,4-Trimethylpentane	NA	NA	NA	NA
2,2-Dichloropropane	N	ND	N	ND*
2,4,5-Trichlorophenol	N	ND	N	ND
2,4,6-Trichlorophenol	N	ND*	N	ND*
2,4-Dichlorophenol	N	ND	N	ND
2,4-Dimethylphenol	N	ND	N	ND
2,4-Dinitrophenol	N	ND*	N	ND*
2,4-Dinitrotoluene	N	ND	N	ND
2,6-Dinitrotoluene	N	ND*	N	ND*
2-Butanone (Methyl Ethyl Ketone)	NA	NA	NA	NA
2-CHLOROETHYL VINYL ETHER	N	ND	NA	NA
2-Chloronaphthalene	N	ND	N	ND
2-Chlorophenol	N	ND*	N	ND*
2-Chlorotoluene	N	ND*	N	ND
2-Hexanone	N	ND	NA	NA
2-Methylnaphthalene	N	ND*	N	ND*
2-Methylphenol	N	ND	N	ND
2-Nitroaniline	N	ND*	N	ND
2-Nitrophenol	N	ND	N	ND
2-Propanol	NA	NA	NA	NA
3,3'-Dichlorobenzidine	N	ND*	N	ND*
3-Chloropropene	NA	NA	NA	NA
3-Nitroaniline	N	ND*	N	ND*
4,6-Dinitro-2-methylphenol	N	ND*	N	ND*
4-Bromophenyl phenyl ether	N	ND	N	ND
4-Chloro-3-methylphenol	N	ND	N	ND
4-Chloroaniline	N	ND*	N	ND
4-Chlorophenyl phenyl ether	N	ND	N	ND
4-Chlorotoluene	N	ND	N	ND
4-Ethyltoluene	NA	NA	NA	NA
4-Methyl-2-pentanone	NA	NA	NA	NA
4-Methylphenol	N	ND	N	ND
4-Nitroaniline	N	ND*	N	ND*
4-Nitrophenol	N	ND	N	ND
Acenaphthene	N	ND	N	ND
Acenaphthylene	N	ND	N	ND

Table 5.13-3 *Chemcial of Potential Concern Summary*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Acetone	N	BSL	NA	NA
Acrolein	Y		NA	NA
Acrylonitrile	N	ND*	NA	NA
Aldrin	N	ND*	NA	NA
alpha-Chlorotoluene	NA	NA	NA	NA
Aluminum	Y		Y	
Aniline	N	ND*	N	ND*
Anthracene	N	ND	N	ND
Antimony	Y		N	BSL
Arsenic	Y		Y	
Azobenzene	N	ND*	N	ND*
Barium	Y		Y	
Benzene	Y		N	ND*
Benzidine	N	ND*	N	ND*
Benzo (a) anthracene	N	ND*	N	ND*
Benzo (a) pyrene	N	ND*	N	ND*
Benzo (b & k) fluoranthene (total)	N	ND*	N	ND*
Benzo (b) fluoranthene	N	ND*	NA	NA
Benzo (ghi) perylene	N	ND	N	ND
Benzo (k) fluoranthene	N	ND*	NA	NA
Benzoic acid	N	BSL	N	ND
Benzyl alcohol	N	ND	N	ND
Benzyl butyl phthalate	N	ND	N	ND
Beryllium	Y		Y	
Bis(2-chloroethoxy)methane	N	ND	N	ND
Bis(2-chloroethyl)ether	N	ND*	N	ND*
Bis(2-chloroisopropyl)ether	N	ND*	N	ND*
Bis(2-ethylhexyl)phthalate	Y		N	ND*
Boron	Y		N	BSL
Bromobenzene	N	ND*	N	ND
Bromochloromethane	N	ND	N	ND
Bromodichloromethane	Y		N	ND*
Bromoform	N	ND*	N	ND
Bromomethane	N	ND*	N	ND
Butylbenzene	NA	NA	NA	NA
Cadmium	Y		Y	
Calcium	N	EN	N	EN
Carbazole	N	ND*	N	ND*
Carbon Disulfide	Y		NA	NA
Carbon Tetrachloride	Y		N	ND*
Chlordane (tech)	N	ND*	N	ND*
Chlorobenzene	N	ND*	N	ND
Chloroethane	N	ND*	N	ND*
Chloroform	Y		N	ND*
Chloromethane	N	ND*	N	ND
Chromium	Y		N	BSL
Chromium VI	NA	NA	NA	NA
Chrysene	N	ND*	N	ND*
cis-1,2-Dichloroethene	Y		N	ND
cis-1,3-Dichloropropene	N	ND	NA	NA
Cobalt	Y		N	BSL
Copper	Y		Y	
Cumene	NA	NA	NA	NA
Cyclohexane	NA	NA	NA	NA
Dibenz (a,h) anthracene	N	ND*	N	ND*
Dibenzofuran	N	ND*	N	ND*
Dibromochloromethane	Y		N	ND*
Dibromomethane	N	ND*	N	ND
Dichlorodifluoromethane	N	ND*	N	ND
Dieldrin	Y		N	ND*
Diesel Range Organics (C10-C28)	N	ITC	N	PM
Diethyl ether	N	NA	NA	NA

Table 5.13-3 *Chemcial of Potential Concern Summary*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
Diethyl phthalate	N	ND	N	ND
Dimethyl phthalate	N	ND	N	ND
Di-n-butyl phthalate	N	ND	N	ND
Di-n-octyl phthalate	N	ND	N	ND
Endosulfan sulfate	N	ND	N	ND
Endrin	N	ND	N	ND*
Endrin aldehyde	N	ND	N	ND*
Ethanol	N	NA	NA	NA
Ethyl Benzene	NA	NA	NA	NA
Fluoranthene	N	ND	N	ND
Fluorene	N	ND	N	ND
Freon 11	NA	NA	NA	NA
Freon 113	N	ND*	NA	NA
Freon 114	NA	NA	NA	NA
Freon 12	NA	NA	NA	NA
Heptachlor epoxide	N	ND*	Y	
Heptane	NA	NA	NA	NA
Hexachlorobenzene	N	ND*	N	ND*
Hexachlorobutadiene	N	ND*	N	ND*
Hexachlorocyclopentadiene	N	ND*	N	ND*
Hexachloroethane	N	ND*	N	ND*
Hexane	NA	NA	NA	NA
Hexavalent Chromium	N	ND*	N	NA
Indeno (1,2,3-cd) pyrene	N	ND*	N	ND*
Iron	Y		Y	
Isophorone	N	ND	N	ND
Isopropanol	N	NA	NA	NA
Isopropylbenzene	N	ND*	N	ND
Jet fuels	N	ND	NA	NA
Kerosene	N	ND	NA	NA
Lead	Y		Y	
Lithium	Y		Y	
m,p-Xylene	N	ND*	NA	NA
Magnesium	N	EN	N	EN
Manganese	Y		Y	
Mercury	N	ND*	Y	
Methanol	N	NA	NA	NA
Methoxychlor	N	ND	N	ND
Methyl ethyl ketone	N	ND*	NA	NA
Methyl isobutyl ketone (MIBK)	N	ND*	NA	NA
Methyl tert-butyl ether	N	BSL	N	ND
Methylene Chloride	Y		N	ND*
Molybdenum	Y		Y	
Motor Oil Range Organics (C16-C36)	N	NA	N	ITC
m-Xylene	N	ND	NA	NA
Naphthalene	N	ND*	N	ND*
n-Butyl alcohol	N	NA	NA	NA
n-Butylbenzene	N	ND*	N	ND
N-Butylbenzenesulfonamide	N	NA	NA	NA
Nickel	Y		Y	
Nitrate as NO3	Y		Y	
Nitrate plus Nitrite (as N)	N	NA	NA	NA
Nitrite as NO2	Y		Y	
Nitrobenzene	N	ND*	N	ND*
N-Nitrosodimethylamine	Y		N	ND*
N-Nitrosodi-n-propylamine	N	ND*	N	ND*
N-Nitrosodiphenylamine	N	ND*	NA	NA
N-Nitrosodiphenylamine (as Diphenylamine)	NA	NA	NA	NA
n-Propanol	N	NA	NA	NA
n-Propylbenzene	N	ND*	N	ND
o-Xylene	N	ND*	NA	NA
Oil & Grease (E413.2-SM5520C Total)	N	NA	NA	NA
p-Cymene	NA	NA	NA	NA

Table 5.13-3 *Chemcial of Potential Concern Summary*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	Groundwater		Surface Water	
Constituent	**COPC Flag**	**Rationale for Deletion**	**COPC Flag**	**Rationale for Deletion**
PCB-1016	N	ND*	N	NA
PCB-1221	N	ND*	N	NA
PCB-1232	N	ND*	N	NA
PCB-1242	N	ND*	N	NA
PCB-1248	N	ND*	N	NA
PCB-1254	N	ND*	N	NA
PCB-1260	N	ND*	N	NA
PCB's	N	NA	NA	NA
Pentachlorophenol	N	ND*	N	ND*
Perchlorate	Y		N	NA
Petroleum Hydrocarbons	NA	NA	NA	NA
Phenanthrene	N	ND	N	ND
Phenol	N	ND	N	ND
p-Isopropyltoluene	N	ND	N	ND
POLYCHLORINATED BIPHENYL	NA	NA	NA	NA
Potassium	N	EN	N	EN
Propylbenzene	NA	NA	NA	NA
p-Xylene	N	ND	NA	NA
Pyrene	N	ND	N	ND
sec-Butyl alcohol	N	NA	NA	NA
sec-Butylbenzene	N	ND*	N	ND
Selenium	Y		N	ND
Silver	N	ND	Y	
Sodium	N	EN	N	EN
Stoddard solvent	N	ITC	NA	NA
Strontium	Y		N	BSL
Styrene	N	ND	N	ND
tert-Butylbenzene	N	ND*	N	ND
Tetrachloroethene	Y		N	ND*
Tetrahydrofuran	NA	NA	NA	NA
Thallium	Y		Y	
Tin	NA	NA	NA	NA
Titanium	Y		N	BSL
Toluene	N	ND*	N	ND
Total Cyanide	N	NA	N	NA
TOTAL RECOV. PETROLEUM HYDROCARBONS	NA	NA	NA	NA
Toxaphene	N	ND*	N	ND*
TPH	N	ITC	NA	NA
trans-1,2-Dichloroethene	Y		N	ND
trans-1,3-Dichloropropene	N	ND*	NA	NA
Trichloroethene	Y		N	ND
Trichlorofluoromethane	N	BSL	N	ND
Vanadium	Y		Y	
Vinyl Acetate	N	ND*	NA	NA
Vinyl Chloride	Y		N	ND
Xylenes (total)	NA	NA	N	ND
Zinc	Y		N	BSL

Key:
Y = COPC
N = Not a COPC
COPC = Constituent of Potential Concern

Rational for Deletion Key
FOD = Frequency of detection screening
BG = Consistent with background
BSL = Below screening level
TIC = Tentatively identified compound
EN = Essential Nutrient
ND = Not detected above the reporting limit
NR = Research has shown that 1,3-Butadiene is not reproducible
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)
ITC = individual toxic compounds associated with the mixture are assessed separately.

Table 5.13-4 *Residential Groundwater to Indoor Air Attenuation Factors*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	AF (µg/m³ per µg/L)	
Chemical	**Layer S (71 ft bgs)**	**Layer Y (24 ft bgs)**
Acrolein	4.8 E-4	1.3 E-3
1,1-Dichloroethane	1.6 E-2	4.2 E-2
1,1,2-Trichloroethane	2.6 E-3	7.1 E-3
1,1-Dichloroethene	8.8 E-2	2.3 E-1
1,2-Dichloroethane	3.7 E-3	9.9 E-3
1,2-Dichloroethene (cis/trans)	1.1 E-2	3.0 E-2
1,1,2,2-Tetrachloroethane	9.0 E-4	2.4 E-3
1,4-Dioxane	3.3 E-5	9.1 E-5
Benzene	1.8 E-2	4.8 E-2
Bromodichloromethane	1.8 E-3	5.0 E-3
Carbon disulfide	1.2 E-1	3.1 E-1
Dibromochloromethane	5.9 E-4	1.7 E-3
Carbon tetrachloride	8.8 E-2	2.4 E-1
Chloroform	8.8 E-2	3.7 E-2
cis-1,2-Dichloroethene	1.1 E-2	3.0 E-2
Methylene chloride	8.2 E-3	2.2 E-2
Tetrachloroethene	4.9 E-2	1.3 E-1
trans-1,2-Dichloroethene	2.5 E-2	6.7 E-2
Vinyl Chloride	1.1 E-1	2.8 E-1
Trichloroethene	3.0 E-2	8.1 E-2

Key:
AF = Attenuation Factor
ft bgs = Feet below ground surface
µg/L = Micrograms per liter
µg/m³ = Micrograms per cubic meter

Table 5.13-5 *Commercial Groundwater to Indoor Air Attenuation Factors*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

	AF (µg/m³ per µg/L)	
Chemical	**Layer S (71 ft bgs)**	**Layer Y (24 ft bgs)**
Acrolein	2.4 E-4	6.3 E-4
1,1-Dichloroethane	7.8 E-3	2.1 E-2
1,1,2-Trichloroethane	1.3 E-3	3.5 E-3
1,1-Dichloroethene	4.4 E-2	1.2 E-1
1,2-Dichloroethane	1.9 E-3	4.9 E-3
1,2-Dichloroethene (cis/trans)	5.6 E-3	1.5 E-2
1,1,2,2-Tetrachloroethane	4.5 E-4	1.2 E-3
1,4-Dioxane	1.7 E-5	4.6 E-5
Benzene	9.0 E-3	2.4 E-2
Bromodichloromethane	9.0 E-4	2.5 E-3
Carbon disulfide	5.8 E-2	1.5 E-1
Dibromochloromethane	2.9 E-4	8.3 E-4
Carbon tetrachloride	4.4 E-2	1.2 E-1
Chloroform	7.0 E-3	1.9 E-2
cis-1,2-Dichloroethene	5.6 E-3	1.5 E-2
Methylene chloride	4.1 E-3	1.1 E-2
Tetrachloroethene	2.4 E-2	6.6 E-2
trans-1,2-Dichloroethene	1.2 E-2	3.4 E-2
Vinyl Chloride	5.3 E-2	1.4 E-1
Trichloroethene	1.5 E-2	4.0 E-2

Key:
AF = Attenuation Factor
ft bgs = Feet below ground surface
µg/L = Micrograms per liter
µg/m³ = Micrograms per cubic meter

Table 5.13-6 *Surface Water Unit Hazard and Unit Cancer Risk Results - Resident*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Soil Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Unit HI	Oral ILCR	Dermal ILCR	Unit ILCR
Inorganics										
Aluminum	1.0 E+0	1.1 E-7	1.4 E-8	1.2 E-7	2.3 E-8	4.9 E-9	2.8 E-8	NA	NA	NA
Arsenic	1.0 E+0	3.7 E-4	4.8 E-5	4.1 E-4	7.8 E-5	1.6 E-5	9.5 E-5	1.6 E-7	2.8 E-8	1.9 E-7
Barium	1.0 E+0	5.5 E-7	1.0 E-6	1.6 E-6	1.2 E-7	3.5 E-7	4.7 E-7	NA	NA	NA
Beryllium	1.0 E+0	5.5 E-5	1.0 E-3	1.1 E-3	1.2 E-5	3.5 E-4	3.6 E-4	NA	NA	NA
Cadmium	1.0 E+0	1.1 E-4	2.9 E-4	4.0 E-4	2.3 E-5	9.8 E-5	1.2 E-4	NA	NA	NA
Copper	1.0 E+0	3.0 E-6	3.9 E-7	3.4 E-6	6.3 E-7	1.3 E-7	7.7 E-7	NA	NA	NA
Iron	1.0 E+0	1.6 E-7	2.1 E-8	1.8 E-7	3.4 E-8	7.0 E-9	4.1 E-8	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lithium	1.0 E+0	5.5 E-6	7.2 E-7	6.2 E-6	1.2 E-6	2.5 E-7	1.4 E-6	NA	NA	NA
Manganese	1.0 E+0	4.6 E-6	1.5 E-5	2.0 E-5	9.8 E-7	5.1 E-6	6.1 E-6	NA	NA	NA
Mercury	1.0 E+0	3.7 E-4	6.9 E-4	1.1 E-3	7.8 E-5	2.3 E-4	3.1 E-4	NA	NA	NA
Molybdenum	1.0 E+0	2.2 E-5	2.9 E-6	2.5 E-5	4.7 E-6	9.8 E-7	5.7 E-6	NA	NA	NA
Nickel	1.0 E+0	5.5 E-6	3.6 E-6	9.1 E-6	1.2 E-6	1.2 E-6	2.4 E-6	NA	NA	NA
Nitrite as NO2	1.0 E+0	6.8 E-7	9.0 E-8	7.8 E-7	1.5 E-7	3.1 E-8	1.8 E-7	NA	NA	NA
Nitrate as NO3	1.0 E+0	6.8 E-8	9.0 E-9	7.8 E-8	1.5 E-8	3.1 E-9	1.8 E-8	NA	NA	NA
Silver	1.0 E+0	2.2 E-5	4.3 E-5	6.5 E-5	4.7 E-6	1.5 E-5	1.9 E-5	NA	NA	NA
Thallium	1.0 E+0	1.7 E-3	2.2 E-4	1.9 E-3	3.6 E-4	7.4 E-5	4.3 E-4	NA	NA	NA
Vanadium	1.0 E+0	2.2 E-5	1.1 E-4	1.3 E-4	4.7 E-6	3.8 E-5	4.2 E-5	NA	NA	NA
SemiVolatile Organic Compounds										
4-Methylphenol	1.0 E+0	2.2 E-5	4.0 E-5	6.2 E-5	4.7 E-6	1.8 E-5	2.3 E-5	NA	NA	NA
alpha-BHC	1.0 E+0	NA	NA	NA	NA	NA	NA	1.1 E-7	1.4 E-6	1.5 E-6
delta-BHC	1.0 E+0	3.7 E-4	3.1 E-3	3.5 E-3	7.8 E-5	1.4 E-3	1.5 E-3	2.3 E-8	2.9 E-7	3.1 E-7
Heptachlor	1.0 E+0	2.2 E-4	2.5 E-3	2.7 E-3	4.7 E-5	1.1 E-3	1.2 E-3	7.9 E-8	1.3 E-6	1.4 E-6
Heptachlor epoxide	1.0 E+0	8.4 E-3	1.2 E-1	1.3 E-1	1.8 E-3	5.4 E-2	5.5 E-2	1.6 E-7	3.4 E-6	3.6 E-6
Pendimethalin (Prowl)	1.0 E+0	2.7 E-6	8.92 E-4	9.0 E-4	5.9 E-7	5.1 E-4	5.2 E-4	NA	NA	NA

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.13-7
Surface Water Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentrations (ug/L)																							
Sample Name	**Depth**	**4-Methylphenol**	**alpha-BHC**	**Aluminum**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Copper**	**delta-BHC**	**Heptachlor**	**Heptachlor epoxide**	**Iron**	**Lead**	**Lithium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Nitrate as NO3**	**Nitrite as NO2**	**Pendimethalin (Prowl)**	**Silver**	**Thallium**	**Vanadium**
Unit Hazard Child		6.2 E-5	NA	1.2 E-7	4.1 E-4	1.6 E-6	1.1 E-3	4.0 E-4	3.4 E-6	3.5 E-3	2.7 E-3	1.3 E-1	1.8 E-7	NA	6.2 E-6	2.0 E-5	1.1 E-3	2.5 E-5	9.1 E-6	7.8 E-8	7.8 E-7	9.0 E-4	6.5 E-5	1.9 E-3	1.3 E-4
Unit Hazard Adult		2.3 E-5	NA	2.8 E-8	9.5 E-5	4.7 E-7	3.6 E-4	1.2 E-4	7.7 E-7	1.5 E-3	1.2 E-3	5.5 E-2	4.1 E-8	NA	1.4 E-6	6.1 E-6	3.1 E-4	5.7 E-6	2.4 E-6	1.8 E-8	1.8 E-7	5.2 E-4	1.9 E-5	4.3 E-4	4.2 E-5
Unit Risk		NA	1.5 E-6	NA	1.9 E-7	NA	NA	NA	NA	3.1 E-7	1.4 E-6	3.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25F-SW01	2			18000	3.1	75	0.42	0.18	27	0.0077	0.0084	0.012	19000	7.7		210	2.8	3.8	28	69		7.3	0.093		38
25F-SW02	2			110000	7.2	420	1.7	0.26	71				110000	28	37	1100	0.080	0.15	61	480	25		0.18	0.22	160
59F-SW01	6	6.0	0.12	3900	4.2	160	0.10	0.35	7.8	0.60		0.11	2900	2.1		39		0.46	13	3600	170	16	0.032		12
59F-SW02	6			12000	2.3	82	0.19	0.095	13	0.019			8800	3.1		60			9.0	1300	21	0.37	0.037		21

Table 5.13-7
Surface Water Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																							
Sample Name	**Depth**	**4-Methylphenol**	**alpha-BHC**	**Aluminum**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Copper**	**delta-BHC**	**Heptachlor**	**Heptachlor epoxide**	**Iron**	**Lead**	**Lithium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Nitrate as NO3**	**Nitrite as NO2**	**Pendimethalin (Prowl)**	**Silver**	**Thallium**	**Vanadium**	**HI**
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
25F-SW01	2	NA	NA	2.2 E-3	1.3 E-3	1.2 E-4	4.6 E-4	7.2 E-5	9.1 E-5	2.7 E-5	2.3 E-5	1.5 E-3	3.4 E-3	NA	NA	4.1 E-3	3.0 E-3	9.4 E-5	2.5 E-4	5.3 E-6	NA	6.5 E-3	6.1 E-6	NA	5.1 E-3	2.8 E-2
25F-SW02	2	NA	NA	1.4 E-2	3.0 E-3	6.6 E-4	1.8 E-3	1.0 E-4	2.4 E-4	NA	NA	NA	1.9 E-2	NA	2.3 E-4	2.2 E-2	8.4 E-5	3.7 E-6	5.5 E-4	3.7 E-5	1.9 E-5	NA	1.2 E-5	4.1 E-4	2.1 E-2	8.3 E-2
59F-SW01	6	3.7 E-4	NA	4.8 E-4	1.7 E-3	2.5 E-4	1.1 E-4	1.4 E-4	2.6 E-5	2.1 E-3	NA	1.4 E-2	5.1 E-4	NA	NA	7.7 E-4	NA	1.1 E-5	1.2 E-4	2.8 E-4	1.3 E-4	1.4 E-2	2.1 E-6	NA	1.6 E-3	3.7 E-2
59F-SW02	6	NA	NA	1.5 E-3	9.5 E-4	1.3 E-4	2.1 E-4	3.8 E-5	4.4 E-5	6.6 E-5	NA	NA	1.6 E-3	NA	NA	1.2 E-3	NA	NA	8.2 E-5	1.0 E-4	1.6 E-5	3.3 E-4	2.4 E-6	NA	2.8 E-3	9.0 E-3

Table 5.13-7
Surface Water Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																							
Sample Name	Depth	4-Methylphenol	alpha-BHC	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Copper	delta-BHC	Heptachlor	Heptachlor epoxide	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Nickel	Nitrate as NO3	Nitrite as NO2	Pendimethalin (Prowl)	Silver	Thallium	Vanadium	HI
Unit Hazard Child																										
Unit Hazard Adult																										
Unit Risk																										
25F-SW01	2	NA	NA	5.1 E-4	2.9 E-4	3.5 E-5	1.5 E-4	2.2 E-5	2.1 E-5	1.1 E-5	9.8 E-6	6.7 E-4	7.7 E-4	NA	NA	1.3 E-3	8.7 E-4	2.2 E-5	6.7 E-5	1.2 E-6	NA	3.8 E-3	1.8 E-6	NA	1.6 E-3	1.0 E-2
25F-SW02	2	NA	NA	3.1 E-3	6.8 E-4	2.0 E-4	6.2 E-4	3.2 E-5	5.4 E-5	NA	NA	NA	4.5 E-3	NA	5.3 E-5	6.7 E-3	2.5 E-5	8.5 E-7	1.5 E-4	8.5 E-6	4.4 E-6	NA	3.5 E-6	9.5 E-5	6.8 E-3	2.3 E-2
59F-SW01	6	1.4 E-4	NA	1.1 E-4	4.0 E-4	7.5 E-5	3.6 E-5	4.3 E-5	6.0 E-6	8.8 E-4	NA	6.1 E-3	1.2 E-4	NA	NA	2.4 E-4	NA	2.6 E-6	3.1 E-5	6.4 E-5	3.0 E-5	8.2 E-3	6.2 E-7	NA	5.1 E-4	1.7 E-2
59F-SW02	6	NA	NA	3.4 E-4	2.2 E-4	3.8 E-5	6.9 E-5	1.2 E-5	1.0 E-5	2.8 E-5	NA	NA	3.6 E-4	NA	NA	3.7 E-4	NA	NA	2.2 E-5	2.3 E-5	3.7 E-6	1.9 E-4	7.2 E-7	NA	8.9 E-4	2.6 E-3

Table 5.13-7
Surface Water Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									Blood Lead	
Sample Name	Depth	4-Methylphenol	alpha-BHC	Aluminum	Arsenic	Barium	Beryllium	Cadmium	Copper	delta-BHC	Heptachlor	Heptachlor epoxide	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Nickel	Nitrate as NO3	Nitrite as NO2	Pendimethalin (Prowl)	Silver	Thallium	Vanadium	ILCR	Child	Adult
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
25F-SW01	2	NA	NA	NA	6.0 E-7	NA	NA	NA	NA	2.4 E-9	1.2 E-8	4.3 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7 E-7	1.9	0.81
25F-SW02	2	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	2.4	0.93
59F-SW01	6	NA	1.8 E-7	NA	8.1 E-7	NA	NA	NA	NA	1.9 E-7	NA	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-6	1.7	0.78
59F-SW02	6	NA	NA	NA	4.4 E-7	NA	NA	NA	NA	6.0 E-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4 E-7	1.8	0.78

Notes and Key:
All concentrations reported in micrograms per liter.
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.13-8 All Receptors Hazard Index and Cancer Risk Results for Surface Water
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index		Incremental Lifetime Cancer Risk	Blood Lead	
		Resident			Resident	
Sample Name	**Depth**	**Child**	**Adult**	**Resident**	**Child**	**Adult**
25F-SW01	2	2.8 E-2	1.0 E-2	7 E-7	1.9 E+0	8.1 E-1
25F-SW02	2	8.3 E-2	2.3 E-2	1 E-6	2.4 E+0	9.3 E-1
59F-SW01	6	3.7 E-2	1.7 E-2	**2 E-6**	1.7 E+0	7.8 E-1
59F-SW02	6	9.0 E-3	2.6 E-3	4 E-7	1.8 E+0	7.8 E-1
Minimum		9.0 E-3	2.6 E-3	4 E-7	1.7 E+0	7.8 E-1
Median		3.3 E-2	1.4 E-2	1 E-6	1.8 E+0	8.0 E-1
Maximum		8.3 E-2	2.3 E-2	**2 E-6**	2.4 E+0	9.3 E-1

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead leve of concern = 10 micrograms per deciliter of blood.

Table 5.13-9 ***Groundwater Unit Hazard and Unit Cancer Risk Results - Resident***
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Groundwater Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Inorganics													
Aluminum	1.0 E+0	6.4 E-5	4.2 E-7	NA	6.4 E-5	2.7 E-5	1.4 E-7	NA	2.8 E-5	NA	NA	NA	NA
Antimony	1.0 E+0	1.6 E-1	7.0 E-3	NA	1.7 E-1	6.8 E-2	2.4 E-3	NA	7.1 E-2	NA	NA	NA	NA
Arsenic	1.0 E+0	2.1 E-1	1.4 E-3	NA	2.1 E-1	9.1 E-2	4.8 E-4	NA	9.2 E-2	1.4 E-4	8.1 E-7	NA	1.4 E-4
Barium	1.0 E+0	3.2 E-4	3.0 E-5	NA	3.5 E-4	1.4 E-4	1.0 E-5	NA	1.5 E-4	NA	NA	NA	NA
Beryllium	1.0 E+0	3.2 E-2	3.0 E-2	NA	6.2 E-2	1.4 E-2	1.0 E-2	NA	2.4 E-2	NA	NA	NA	NA
Boron	1.0 E+0	3.2 E-4	2.1 E-6	NA	3.2 E-4	1.4 E-4	7.2 E-7	NA	1.4 E-4	NA	NA	NA	NA
Cadmium	1.0 E+0	6.4 E-2	8.4 E-3	NA	7.2 E-2	2.7 E-2	2.9 E-3	NA	3.0 E-2	NA	NA	NA	NA
Chromium	1.0 E+0	4.3 E-5	2.8 E-7	NA	4.3 E-5	1.8 E-5	9.5 E-8	NA	1.8 E-5	NA	NA	NA	NA
Cobalt	1.0 E+0	3.2 E-3	8.4 E-6	NA	3.2 E-3	1.4 E-3	2.9 E-6	NA	1.4 E-3	NA	NA	NA	NA
Copper	1.0 E+0	1.7 E-3	1.1 E-5	NA	1.7 E-3	7.4 E-4	3.9 E-6	NA	7.4 E-4	NA	NA	NA	NA
Iron	1.0 E+0	9.1 E-5	6.0 E-7	NA	9.2 E-5	3.9 E-5	2.0 E-7	NA	3.9 E-5	NA	NA	NA	NA
Lead	1.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lithium	1.0 E+0	3.2 E-3	2.1 E-5	NA	3.2 E-3	1.4 E-3	7.2 E-6	NA	1.4 E-3	NA	NA	NA	NA
Manganese	1.0 E+0	2.7 E-3	4.4 E-4	NA	3.1 E-3	1.1 E-3	1.5 E-4	NA	1.3 E-3	NA	NA	NA	NA
Mercury	1.0 E+0	2.1 E-1	2.0 E-2	NA	2.3 E-1	9.1 E-2	6.8 E-3	NA	9.8 E-2	NA	NA	NA	NA
Molybdenum	1.0 E+0	1.3 E-2	8.4 E-5	NA	1.3 E-2	5.5 E-3	2.9 E-5	NA	5.5 E-3	NA	NA	NA	NA
Nickel	1.0 E+0	3.2 E-3	4.2 E-6	NA	3.2 E-3	1.4 E-3	1.4 E-6	NA	1.4 E-3	NA	NA	NA	NA
Nitrate as NO3	1.0 E+0	4.0 E-5	2.6 E-7	NA	4.0 E-5	1.7 E-5	8.9 E-8	NA	1.7 E-5	NA	NA	NA	NA
Nitrite as NO2	1.0 E+0	4.0 E-4	2.6 E-6	NA	4.0 E-4	1.7 E-4	8.9 E-7	NA	1.7 E-4	NA	NA	NA	NA
Nitrate	1.0 E+0	4.0 E-5	2.6 E-7	NA	4.0 E-5	1.7 E-5	8.9 E-8	NA	1.7 E-5	NA	NA	NA	NA
Perchlorate	1.0 E+0	9.1 E-2	6.0 E-4	NA	9.2 E-2	3.9 E-2	2.0 E-4	NA	3.9 E-2	NA	NA	NA	NA
Selenium	1.0 E+0	1.3 E-2	8.4 E-5	NA	1.3 E-2	5.5 E-3	2.9 E-5	NA	5.5 E-3	NA	NA	NA	NA
Strontium	1.0 E+0	1.1 E-4	7.0 E-7	NA	1.1 E-4	4.6 E-5	2.4 E-7	NA	4.6 E-5	NA	NA	NA	NA
Thallium	1.0 E+0	9.7 E-1	6.4 E-3	NA	9.7 E-1	4.2 E-1	2.2 E-3	NA	4.2 E-1	NA	NA	NA	NA
Titanium	1.0 E+0	1.6 E-5	1.1 E-7	NA	1.6 E-5	6.8 E-6	3.6 E-8	NA	6.9 E-6	NA	NA	NA	NA
Vanadium	1.0 E+0	1.3 E-2	8.4 E-5	NA	1.3 E-2	5.5 E-3	2.9 E-5	NA	5.5 E-3	NA	NA	NA	NA
Zinc	1.0 E+0	2.1 E-4	8.4 E-7	NA	2.1 E-4	9.1 E-5	2.9 E-7	NA	9.2 E-5	NA	NA	NA	NA
Semi-Volatile Organic Compounds													
Bis(2-ethylhexyl)phthalate	1.0 E+0	3.2 E-3	5.9 E-3	NA	9.1 E-3	1.4 E-3	2.6 E-3	NA	4.0 E-3	2.1 E-7	4.0 E-7	NA	6.0 E-7
delta-BHC	1.0 E+0	2.1 E-1	9.1 E-2	NA	3.0 E-1	9.1 E-2	4.1 E-2	NA	1.3 E-1	1.9 E-5	8.5 E-6	NA	2.8 E-5
Dieldrin	1.0 E+0	1.3 E+0	1.1 E+0	NA	2.3 E+0	5.5 E-1	4.8 E-1	NA	1.0 E+0	2.4 E-4	2.0 E-4	NA	4.4 E-4
Endosulfan I	1.0 E+0	1.1 E-2	7.3 E-2	NA	8.3 E-2	4.6 E-3	3.2 E-2	NA	3.7 E-2	NA	NA	NA	NA
Endosulfan II	1.0 E+0	1.1 E-2	7.3 E-2	NA	8.3 E-2	4.6 E-3	3.2 E-2	NA	3.7 E-2	NA	NA	NA	NA
gamma-BHC (Lindane)	1.0 E+0	2.1 E-1	9.1 E-2	NA	3.0 E-1	9.1 E-2	4.1 E-2	NA	1.3 E-1	1.9 E-5	8.5 E-6	NA	2.8 E-5
N-Nitrosodimethylamine	1.0 E+0	8.0 E+0	2.1 E+0	NA	1.0 E+1	3.4 E+0	8.9 E-1	NA	4.3 E+0	7.6 E-4	2.0 E-4	NA	9.6 E-4

Table 5.13-9 *Groundwater Unit Hazard and Unit Cancer Risk Results - Resident*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Groundwater Concentration (µg/L)	Child Oral HQ	Child Dermal HQ	Child Inhal HQ	Unit HI	Adult Oral HQ	Adult Dermal HQ	Adult Inhal HQ	Unit HI	Oral ILCR	Dermal ILCR	Inhal ILCR	Unit ILCR
Volatile Organic Compounds													
Acrolein	1.0 E+0	1.3 E-1	7.9 E-4	5.6 E+1	5.6 E+1	5.5 E-2	3.3 E-4	2.4 E+1	2.4 E+1	NA	NA	NA	NA
1,1,2-Trichloroethane	1.0 E+0	1.6 E-2	1.4 E-3	8.0 E-2	9.7 E-2	6.8 E-3	6.4 E-4	3.4 E-2	4.2 E-2	1.1 E-6	9.9 E-8	4.2 E-6	5.4 E-6
1,1-Dichloroethene	1.0 E+0	1.3 E-3	1.8 E-4	1.6 E-2	1.7 E-2	5.5 E-4	7.6 E-5	6.8 E-3	7.5 E-3	NA	NA	NA	NA
1,2-Dichloroethane	1.0 E+0	3.2 E-3	1.6 E-4	2.3 E-1	2.3 E-1	1.4 E-3	6.7 E-5	9.8 E-2	9.9 E-2	1.4 E-6	6.6 E-8	6.8 E-6	8.2 E-6
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA
Chloroform	1.0 E+0	6.4 E-3	5.6 E-4	2.5 E-2	3.2 E-2	2.7 E-3	2.5 E-4	1.1 E-2	1.4 E-2	4.6 E-7	4.1 E-8	6.0 E-6	6.5 E-6
cis-1,2-Dichloroethene	1.0 E+0	6.4 E-3	5.7 E-4	3.2 E-2	3.9 E-2	2.7 E-3	2.4 E-4	1.4 E-2	1.7 E-2	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	1.0 E+0	1.1 E-3	1.3 E-4	5.3 E-3	6.5 E-3	4.6 E-4	5.8 E-5	2.3 E-3	2.8 E-3	4.0 E-6	5.0 E-7	1.5 E-5	1.9 E-5
1,1-Dichloroethane	1.0 E+0	3.2 E-4	2.5 E-5	1.6 E-3	1.9 E-3	1.4 E-4	1.1 E-5	6.8 E-4	8.3 E-4	8.5 E-8	6.6 E-9	4.2 E-7	5.2 E-7
1,4-Dioxane	1.0 E+0	NA	NA	3.7 E-4	3.7 E-4	NA	NA	1.6 E-4	1.6 E-4	4.0 E-7	1.4 E-9	2.0 E-6	2.4 E-6
Benzene	1.0 E+0	1.6 E-2	2.4 E-3	3.7 E-2	5.6 E-2	6.8 E-3	1.0 E-3	1.6 E-2	2.4 E-2	1.5 E-6	2.3 E-7	7.4 E-6	9.2 E-6
Bromodichloromethane	1.0 E+0	3.2 E-3	2.5 E-4	1.6 E-2	1.9 E-2	1.4 E-3	1.1 E-4	6.8 E-3	8.3 E-3	1.9 E-6	1.6 E-7	9.7 E-6	1.2 E-5
Carbon disulfide	1.0 E+0	6.4 E-4	7.2 E-5	1.6 E-3	2.3 E-3	2.7 E-4	2.4 E-5	6.8 E-4	9.8 E-4	NA	NA	NA	NA
Carbon tetrachloride	1.0 E+0	9.1 E-2	2.4 E-2	2.8 E-2	1.4 E-1	3.9 E-2	1.0 E-2	1.2 E-2	6.2 E-2	2.2 E-6	5.9 E-7	1.1 E-5	1.4 E-5
Dibromochloromethane	1.0 E+0	3.2 E-3	2.3 E-4	1.6 E-2	1.9 E-2	1.4 E-3	1.0 E-4	6.8 E-3	8.3 E-3	1.4 E-6	1.0 E-7	7.0 E-6	8.5 E-6
Methylene chloride	1.0 E+0	1.1 E-3	4.0 E-5	3.7 E-4	1.5 E-3	4.6 E-4	1.7 E-5	1.6 E-4	6.3 E-4	2.1 E-7	7.8 E-9	2.6 E-7	4.8 E-7
Tetrachloroethene	1.0 E+0	6.4 E-3	3.7 E-3	3.2 E-2	4.2 E-2	2.7 E-3	1.6 E-3	1.4 E-2	1.8 E-2	8.0 E-6	4.7 E-6	1.6 E-6	1.4 E-5
trans-1,2-Dichloroethene	1.0 E+0	3.2 E-3	2.8 E-4	1.9 E-2	2.2 E-2	1.4 E-3	1.2 E-4	8.1 E-3	9.5 E-3	NA	NA	NA	NA
Trichloroethene	1.0 E+0	2.1 E-1	3.6 E-2	1.9 E-3	2.5 E-1	9.1 E-2	1.6 E-2	8.0 E-4	1.1 E-1	1.9 E-7	3.3 E-8	5.2 E-7	7.5 E-7
Vinyl chloride	1.0 E+0	2.1 E-2	1.2 E-3	1.1 E-2	3.3 E-2	9.1 E-3	4.9 E-4	4.7 E-3	1.4 E-2	2.2 E-5	1.2 E-6	2.0 E-5	4.4 E-5

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.13-10 *Groundwater Inhalation Hazard and Unit Cancer Risk Results - Resident*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Indoor Vapor Concentration (ug/L)	Child Unit Inhal HQ	Adult Unit Inhal HQ	Unit Inhal ILCR
		Volatile Organic Compounds		
Acrolein	1.0 E+0	1.1 E+5	4.8 E+4	NA
1,1-Dichloroethane	1.0 E+0	3.2 E+0	1.4 E+0	8.5 E-4
1,1,2-Trichloroethane	1.0 E+0	1.6 E+2	6.8 E+1	8.5 E-3
1,1-Dichloroethene	1.0 E+0	3.2 E+1	1.4 E+1	NA
1,2-Dichloroethane	1.0 E+0	4.6 E+2	2.0 E+2	1.4 E-2
1,2-Dichloroethene (cis/trans)	1.0 E+0	6.4 E+1	2.7 E+1	NA
1,1,2,2-Tetrachloroethane	1.0 E+0	1.1 E+1	4.6 E+0	3.0 E-2
1,4-Dioxane	1.0 E+0	7.5 E-1	3.2 E-1	4.0 E-3
Benzene	1.0 E+0	7.4 E+1	3.2 E+1	1.5 E-2
Bromodichloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.9 E-2
Carbon disulfide	1.0 E+0	3.2 E+0	1.4 E+0	NA
Dibromochloromethane	1.0 E+0	3.2 E+1	1.4 E+1	1.4 E-2
Carbon tetrachloride	1.0 E+0	5.6 E+1	2.4 E+1	2.2 E-2
Chloroform	1.0 E+0	4.9 E+1	2.1 E+1	1.2 E-2
cis-1,2-Dichloroethene	1.0 E+0	6.4 E+1	2.7 E+1	NA
Methylene chloride	1.0 E+0	7.5 E-1	3.2 E-1	5.2 E-4
Tetrachloroethene	1.0 E+0	6.4 E+1	2.7 E+1	3.1 E-3
trans-1,2-Dichloroethene	1.0 E+0	3.8 E+1	1.6 E+1	NA
Vinyl Chloride	1.0 E+0	2.2 E+1	9.4 E+0	4.0 E-2
Trichloroethene	1.0 E+0	3.7 E+0	1.6 E+0	1.0 E-3

Key:
HQ = Hazard quotient
HI = Hazard index
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration																										
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Benzene**	**Beryllium**	**Bis(2-ethylhexyl) phthalate**	**Boron**	**Bromodichloro methane**	**Cadmium**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**Chromium**	**cis-1,2-Dichloroethene**	**Cobalt**	**Copper**	**delta-BHC**	**Dibromochloro methane**
Unit Hazard Child		6.5 E-3	9.7 E-2	1.9 E-3	1.7 E-2	2.3 E-1	3.9 E-2	3.7 E-4	5.6 E+1	6.4 E-5	1.7 E-1	2.1 E-1	3.5 E-4	5.6 E-2	6.2 E-2	9.1 E-3	3.2 E-4	1.9 E-2	7.2 E-2	2.3 E-3	1.4 E-1	3.2 E-2	4.3 E-5	3.9 E-2	3.2 E-3	1.7 E-3	3.0 E-1	1.9 E-2
Unit Hazard Adult		2.8 E-3	4.2 E-2	8.3 E-4	7.5 E-3	9.9 E-2	1.7 E-2	1.6 E-4	2.4 E+1	2.8 E-5	7.1 E-2	9.2 E-2	1.5 E-4	2.4 E-2	2.4 E-2	4.0 E-3	1.4 E-4	8.3 E-3	3.0 E-2	9.8 E-4	6.2 E-2	1.4 E-2	1.8 E-5	1.7 E-2	1.4 E-3	7.4 E-4	1.3 E-1	8.3 E-3
Unit Risk		1.9 E-5	5.4 E-6	5.2 E-7	NA	8.2 E-6	NA	2.4 E-6	NA	NA	NA	1.4 E-4	NA	9.2 E-6	NA	6.0 E-7	NA	1.2 E-5	NA	NA	1.4 E-5	6.5 E-6	NA	NA	NA	NA	2.8 E-5	8.5 E-6
1	C		2.6	1.3	7.7	210	90	2.6		240			130				23			27000		440	13	100	0.15	2.1		
3	C					11	71			2900			48									60	100	63	5.1	9.9		
4	C		2.8	1.5	8.1	1500	110	2.5		340			110				44					1100	9.7	100		2.2		
7	S					4.2				31400			1400	1.6			220					1.1	57		149	79		
8	B									54			35										5.8					
9	Y												39															
25	S					40	25						67									2.1	4.5	28	0.22			
30	Y																											
75	B					4.1				700		0.74	220										9.3		6.8	2.2		
130	S																											
131	S		2.8		1.1	39	7.0						31									4.8	5.8	4.1	0.17	0.55		
132	C		4.3	3.5	110	3.0	120														0.62	34						
209	C						2.0																	1.0				
210	C					5.0																1.0						
211	D												78									94						
212	S				3.0		13			26000	0.76	3.2	290		0.62		130		12			4.2	250	15	63	100		
213	C				20	2.1	28	35					110									6.0		5.0				
214	D		1.9	2.2	95	1.9							72									30		26				
215	S	2.7	1.7			2200	8.5						32				10		0.44			8.6	3.9	1.2	0.21	3.9		
216	C				33	5.2	12	1.2					43											5.6				
217	C				43	3.0	48															2.0						
218	D				7.8	2.0	22															740						
282	C				3.9	890	16														2.0	310		15				
283	C					17	68														3.0	680		42				
284	D					5.0	20															3.0		3.3				
285	E																											
286	Y									79			12				9.8		0.49				6.7		0.26	2.5		
287	D																							1.8				
288	E					5.0	1.0															7.0						
289	D					0.80	20															15		18				
290	C						6.0															8.0		7.2				
355	S																											
356	C				1.7		8.7															3.9						
357	C																											
358	D									730			54										42			240		
374	S					33	3.0															3.0		1.5				
375	S					13																1.0						
376	Y																											
399	B																											
400	C																											
401	D				2.2	0.85																69						
402	D																											
403	E								39				62															
484	C		4.1	0.79	2.0	480	12			3700		19	1800		1.4		180		0.59		0.23	1200	360	12	6.7	34		
485	C		2.1	3.0	46	1.6	25	5.2				0.53	86				11		0.065		3.8	480	6.7	29	0.25	2.1		
486	D				6.0	1.0	13															82		44				
487	E						1.6																	5.2				
494	C					1.0																53						
495	C				3.0	0.62	4.5															34						
685	S					16	15			160			26															
3057	Y																											
3058	C		2.9	2.4	51	2.4	110														0.74	170		91				
3059	C				1.3																	30		0.81				
3060	C																					1.6						
3061	D																											
3124	C																					1.3						
3125	C																											
3126	C					0.60	1.7															25						
3127	D																											
3128	D																											
3221	Y					1.0				87000			490				90		10				270		80	200		
3222	S					280	35			930	1.3	25	280		7.1		140		0.32			2.2	310	0.73	19	21		
3223	C	4.0				29	24						190									1900		13				
3224	C					130	16															1300						

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration																										
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Benzene**	**Beryllium**	**Bis(2-ethylhexyl) phthalate**	**Boron**	**Bromodichloro methane**	**Cadmium**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**Chromium**	**cis-1,2-Dichloroethene**	**Cobalt**	**Copper**	**delta-BHC**	**Dibromochloro methane**
Unit Hazard Child		6.5 E-3	9.7 E-2	1.9 E-3	1.7 E-2	2.3 E-1	3.9 E-2	3.7 E-4	5.6 E+1	6.4 E-5	1.7 E-1	2.1 E-1	3.5 E-4	5.6 E-2	6.2 E-2	9.1 E-3	3.2 E-4	1.9 E-2	7.2 E-2	2.3 E-3	1.4 E-1	3.2 E-2	4.3 E-5	3.9 E-2	3.2 E-3	1.7 E-3	3.0 E-1	1.9 E-2
Unit Hazard Adult		2.8 E-3	4.2 E-2	8.3 E-4	7.5 E-3	9.9 E-2	1.7 E-2	1.6 E-4	2.4 E+1	2.8 E-5	7.1 E-2	9.2 E-2	1.5 E-4	2.4 E-2	2.4 E-2	4.0 E-3	1.4 E-4	8.3 E-3	3.0 E-2	9.8 E-4	6.2 E-2	1.4 E-2	1.8 E-5	1.7 E-2	1.4 E-3	7.4 E-4	1.3 E-1	8.3 E-3
Unit Risk		1.9 E-5	5.4 E-6	5.2 E-7	NA	8.2 E-6	NA	2.4 E-6	NA	NA	NA	1.4 E-4	NA	9.2 E-6	NA	6.0 E-7	NA	1.2 E-5	NA	NA	1.4 E-5	6.5 E-6	NA	NA	NA	NA	2.8 E-5	8.5 E-6
3225	C					230	8															1.7						
3226	D					13	11						66									1300						
3245	C				3.0		3.0															4.0						
3246	D																					8.0						
3247	D																											
3248	E																											
3249	E																											
3264	S					210	14			150			240			15						1.8				90		
3265	C					93	6.7															140						
3266	C					120	5.8															13						
3267	D					17																						
3268	D					1.2																						
3292	S		2.8			270	7.1						110						0.096			8.0	14		7.9	11		
3293	C				23	23	97															800						
3294	C		3.8	1.9	16	780	59														3.1	380						
3295	B		1.0																			1.1						2.2
3296	C				2.0	2.6	5.0						150									660						
3297	C																					5.0						
3348	S					2.0	2.8						44		0.090							2.0		2.8	8.1	2.1		
3349	D				2.1		2.0						58									110						
3350	E					3.4							36									12		34				
3364	C						1.4			140			86			32								11				
3365	E						21			130			22			32										50		
3440	S									270			210				29						19		2.2	7.9		
3441	C									330			450			50												
3442	C												20															
3638	C		0.69	1.0	7.2	0.93				380		7.9	110								1.7	120	3.7	9.6	0.44			
3641	C									200		0.70	70									1.0	5.7		1.2			
3642	S		0.81			0.34				3900	0.079		130				8.0		0.053			2.4	41	1.2	9.3	8.6		
3644	B									370	0.055		110						0.035			0.21	12	0.75	0.89	3.6	0.099	
3645	S		3.2	1.1	33	4.1				760	0.062		47						0.091		0.33	4.1	25	43	1.1	6.7		
3654	B									700			140				8.2		0.030			2.4	24	2.7	1.2	4.4	0.010	
3656	S					4.7																0.60		0.31				
3696	Y																					0.48						
3728	Y		1.3	0.71		2.5																38		0.53				
4007	A		2.1				1.8	4.0					120								1.2	5.6		1.5				
4140	C			2.8	40	5.6	66	13					130								5.8	440		60		60		
4145	C		2.4	2.0	40	1.3	13						86					0.75			1.3	450		69				
4310	A		1.6			240	2.7						56									2.9						
4315	C		2.7		33	4.5	84	30					120									130		99				

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration																										
Sample Name	**Layer**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**gamma-BHC (Lindane)**	**Iron**	**Lead**	**Lithium**	**Manganese**	**Mercury**	**Methylene chloride**	**Molybdenum**	**Nickel**	**Nitrate**	**Nitrate as NO3**	**Nitrite as NO2**	**N-Nitrosodimethylamine**	**Perchlorate**	**Selenium**	**Strontium**	**Tetrachloroethene**	**Thallium**	**Titanium**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vanadium**	**Vinyl chloride**	**Zinc**
Unit Hazard Child		2.3 E+0	8.3 E-2	8.3 E-2	3.0 E-1	9.2 E-5	NA	3.2 E-3	3.1 E-3	2.3 E-1	1.5 E-3	1.3 E-2	3.2 E-3	4.0 E-5	4.0 E-5	4.0 E-4	1.0 E+1	9.2 E-2	1.3 E-2	1.1 E-4	4.2 E-2	9.7 E-1	1.6 E-5	2.2 E-2	2.5 E-1	1.3 E-2	3.3 E-2	2.1 E-4
Unit Hazard Adult		1.0 E+0	3.7 E-2	3.7 E-2	1.3 E-1	3.9 E-5	NA	1.4 E-3	1.3 E-3	9.8 E-2	6.3 E-4	5.5 E-3	1.4 E-3	1.7 E-5	1.7 E-5	1.7 E-4	4.3 E+0	3.9 E-2	5.5 E-3	4.6 E-5	1.8 E-2	4.2 E-1	6.9 E-6	9.5 E-3	1.1 E-1	5.5 E-3	1.4 E-2	9.2 E-5
Unit Risk		4.4 E-4	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	9.6 E-4	NA	NA	NA	1.4 E-5	NA	NA	NA	7.5 E-7	NA	4.4 E-5	NA
1	C					450	2.2		3200			0.75	8.0	6100	5500		0.042	3700		290	6.3		11	1.8	4600	5.9	21	45
3	C					3500	9.3		210	0.063		13	63	8300	17000			11		320			120		48	14		280
4	C					520	11		48	0.40			4.8	6700	5200		0.039	1700		310	7.8		19	0.88	4500	7		39
7	S					57800	236		24900	1.0	19		290	15930				1100							8.56	156		1530
8	B					110							2.0	20000	4700			150		270			3.5		2.0	3.5		16
9	Y													40000														100
25	S					17000	22	7.2	160					23000	14000			3.8		230					110			3100
30	Y																											
75	B					28000	1.9		540			1.4	5.2	500	120			35		450			32		0.57	10		130
130	S													1000														
131	S					110	2.2					2.3		20000	12000		0.0031	99		620					81	4.5		3000
132	C													4900			0.0015	17000			4.7				14000			
209	C													15000											15			
210	C													7400											29			
211	D													5800				1700							190			310
212	S					39000	480		810	0.12		28	32	1800	3100			1100	4.7	530			490		910	80		64000
213	C													4490				20000			5.0				7700	8.1		180
214	D								12					5000				19000			3.4			0.56	7900	8.6		
215	S					9200	100	21	100				5.8	49000	14000	360		6.1		480					65	2.9		1000
216	C													24000			0.0020	19000							2300			
217	C													7800				25000							4500			
218	D										1.0			7700				3500			1.8				1200			
282	C										3.9			1700			0.32	800			3.3				1700		2.0	
283	C										6.0			6600			0.041	1300			1.8				770			
284	D													4500											57			
285	E													300				71							32			
286	Y					2400	35		21				3.3	800	860					140			3.2		2.0	4.7		1600
287	D													6800											13			
288	E													600											65			
289	D										14			8700			0.028	2300			4.0				4000			
290	C										4.0			2200							1.0				300			
355	S																											
356	C										2.4							9500							190			
357	C																								1.8			
358	D					3700	280		180				22				0.0010											19000
374	S													2040											34			
375	S													700											24			
376	Y																								6.0			
399	B													8200				260							2.2			
400	C													6500				5600							1.3			
401	D													3000				1600							210			
402	D																	24										
403	E								81																			1200
484	C					120000	1600		1100	1.3	41	1.0	7.4	5500	4800			520	8.2	5600	1.7				790	280		140000
485	C						4.8		6.7			0.97		6000	5200			2200		290	4.0			0.53	3500	8.7		2100
486	D										8.0			1000				1000			2.0				1800			
487	E																								17			
494	C													3440				2000							24			
495	C													3560				4500							180			
685	S					2100			1400	6.0				7400											66			1000
3057	Y													11000				8.7							3.7			
3058	C													7700			0.018	11000			5.0				7000			
3059	C													6400				2000							140			
3060	C													5800				190							6.3			
3061	D																											
3124	C													6800				6700							2.5			
3125	C																								7.8			
3126	C													700				1300							370			
3127	D																								12			
3128	D																											
3221	Y					120000	1600		2600				490	300												430		330000
3222	S					120000	1000		390			46	180	19000	680			4.8	5.1	310			47		100	55		32000
3223	C								13		8.0			8500			0.022	6300			5.0				1900			4600
3224	C										24			6200				7400			7.0				1700			

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration																										
Sample Name	**Layer**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**gamma-BHC (Lindane)**	**Iron**	**Lead**	**Lithium**	**Manganese**	**Mercury**	**Methylene chloride**	**Molybdenum**	**Nickel**	**Nitrate**	**Nitrate as NO3**	**Nitrite as NO2**	**N-Nitrosodimethylamine**	**Perchlorate**	**Selenium**	**Strontium**	**Tetrachloroethene**	**Thallium**	**Titanium**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vanadium**	**Vinyl chloride**	**Zinc**
Unit Hazard Child		2.3 E+0	8.3 E-2	8.3 E-2	3.0 E-1	9.2 E-5	NA	3.2 E-3	3.1 E-3	2.3 E-1	1.5 E-3	1.3 E-2	3.2 E-3	4.0 E-5	4.0 E-5	4.0 E-4	1.0 E+1	9.2 E-2	1.3 E-2	1.1 E-4	4.2 E-2	9.7 E-1	1.6 E-5	2.2 E-2	2.5 E-1	1.3 E-2	3.3 E-2	2.1 E-4
Unit Hazard Adult		1.0 E+0	3.7 E-2	3.7 E-2	1.3 E-1	3.9 E-5	NA	1.4 E-3	1.3 E-3	9.8 E-2	6.3 E-4	5.5 E-3	1.4 E-3	1.7 E-5	1.7 E-5	1.7 E-4	4.3 E+0	3.9 E-2	5.5 E-3	4.6 E-5	1.8 E-2	4.2 E-1	6.9 E-6	9.5 E-3	1.1 E-1	5.5 E-3	1.4 E-2	9.2 E-5
Unit Risk		4.4 E-4	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	9.6 E-4	NA	NA	NA	1.4 E-5	NA	NA	NA	7.5 E-7	NA	4.4 E-5	NA
3225	C													6300											40			
3226	D								55									6100			3.2				1600			180
3245	C										2.9			2700				5800							350			
3246	D													1600				7.5										
3247	D																											
3248	E																											
3249	E																											
3264	S					2500	200		64	1.0	4.0			120000				1000							80			13000
3265	C										2.0			32000				2300							350			
3266	C										2.5			59000				1000							78			
3267	D													4200				700							4.0			
3268	D																	500										
3292	S					13000	66		59			2.6	6.3	21000	270			8.4		420	0.51				39	8.6		2900
3293	C										120			10000			0.012	14000			4.0				5900			
3294	C										320			38000				11000			6.1				2600		9.6	
3295	B													300											2.4			
3296	C													8700				3700							930	7.2		
3297	C													6700				600							32			
3348	S					3300	0.22		130			2.9	2.0	15000	8000		0.0023	19		720					30	3.7		780
3349	D													6100				5800							490	10		
3350	E								45					300				1700							260			
3364	C					39000			190					5100				2900							520			200
3365	E					38000			220																27			200
3440	S					38000	3.2	10	98			4.3	19		990			2.0		500			10			8.8		500
3441	C													470														
3442	C										0.50			76														
3638	C					390	0.96								5500			690		490	2.2		17		850	7.5		
3641	C					340	1.2						2.3		25000			4.9		210			4.7			5.7		
3642	S			0.011	0.0069	4000	1.5		96			4.3	26		140000			14	0.85	490			150		9.6	15		83
3644	B					420	0.64		45			1.4	6.0		8800			140	0.38	510		0.24	18		5.7	9.9		49
3645	S					750	0.89		44				24		36000			6100		330	7.8			0.86	1800	6.2		
3654	B	0.013	0.013		0.0080	710	0.52		34			7.9	13		8200			14	1.7	420			22		11	7.6		
3656	S																	2.7							1.3			
3696	Y																											
3728	Y																	216			0.54			0.53	2.0			
4007	A													26000			0.0025	39							9.3			
4140	C													9000			0.037	9300			8.9				5800			
4145	C													7600			0.030	6400			9.7			1.2	2800			
4310	A								740				28	47000				550							51	8.4		120
4315	C													9500			0.023	9600			7.3				7900	8.2		

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																										
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dioxane	Acrolein	Aluminum	Antimony	Arsenic	Barium	Benzene	Beryllium	Bis(2-ethylhexyl) phthalate	Boron	Bromodichloro methane	Cadmium	Carbon disulfide	Carbon tetrachloride	Chloroform	Chromium	cis-1,2-Dichloroethene	Cobalt	Copper	delta-BHC	Dibromochloro methane
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
1	C	NA	2.5 E-1	2.5 E-3	1.3 E-1	4.9 E+1	3.5 E+0	9.7 E-4	NA	1.5 E-2	NA	NA	4.5 E-2	NA	NA	NA	7.4 E-3	NA	NA	6.2 E+1	NA	1.4 E+1	5.6 E-4	3.9 E+0	4.8 E-4	3.7 E-3	NA	NA
3	C	NA	NA	NA	NA	2.5 E+0	2.8 E+0	NA	NA	1.9 E-1	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E+0	4.3 E-3	2.4 E+0	1.6 E-2	1.7 E-2	NA	NA
4	C	NA	2.7 E-1	2.9 E-3	1.4 E-1	3.5 E+2	4.3 E+0	9.3 E-4	NA	2.2 E-2	NA	NA	3.8 E-2	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	3.5 E+1	4.2 E-4	3.9 E+0	NA	3.8 E-3	NA	NA
7	S	NA	NA	NA	NA	9.7 E-1	NA	NA	NA	2.0 E+0	NA	NA	4.9 E-1	8.9 E-2	NA	NA	7.1 E-2	NA	NA	NA	NA	3.5 E-2	2.4 E-3	NA	4.8 E-1	1.4 E-1	NA	NA
8	B	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	S	NA	NA	NA	NA	9.3 E+0	9.7 E-1	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	6.6 E-2	1.9 E-4	1.1 E+0	7.1 E-4	NA	NA	NA
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75	B	NA	NA	NA	NA	9.5 E-1	NA	NA	NA	4.5 E-2	NA	1.6 E-1	7.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-4	NA	2.2 E-2	3.8 E-3	NA	NA
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
131	S	NA	2.7 E-1	NA	1.9 E-2	9.0 E+0	2.7 E-1	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	2.5 E-4	1.6 E-1	5.4 E-4	9.6 E-4	NA	NA
132	C	NA	4.2 E-1	6.8 E-3	1.9 E+0	6.9 E-1	4.7 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-2	1.1 E+0	NA	NA	NA	NA	NA	NA
209	C	NA	NA	NA	NA	NA	7.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	NA
210	C	NA	NA	NA	NA	1.2 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA
211	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E+0	NA	NA	NA	NA	NA	NA
212	S	NA	NA	NA	5.2 E-2	NA	5.1 E-1	NA	NA	1.7 E+0	1.3 E-1	6.9 E-1	1.0 E-1	NA	3.9 E-2	NA	4.2 E-2	NA	8.7 E-1	NA	NA	1.3 E-1	1.1 E-2	5.8 E-1	2.0 E-1	1.7 E-1	NA	NA
213	C	NA	NA	NA	3.5 E-1	4.9 E-1	1.1 E+0	1.3 E-2	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	1.9 E-1	NA	NA	NA	NA
214	D	NA	1.8 E-1	4.3 E-3	1.7 E+0	4.4 E-1	NA	NA	NA	NA	NA	NA	2.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-1	NA	1.0 E+0	NA	NA	NA	NA
215	S	1.8 E-2	1.7 E-1	NA	NA	5.1 E+2	3.3 E-1	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	3.2 E-3	NA	3.2 E-2	NA	NA	2.7 E-1	1.7 E-4	4.7 E-2	6.7 E-4	6.8 E-3	NA	NA
216	C	NA	NA	NA	5.8 E-1	1.2 E+0	4.7 E-1	4.5 E-4	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	NA	NA
217	C	NA	NA	NA	7.5 E-1	6.9 E-1	1.9 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	NA	NA	NA	NA	NA
218	D	NA	NA	NA	1.4 E-1	4.6 E-1	8.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E+1	NA	NA	NA	NA	NA	NA
282	C	NA	NA	NA	6.8 E-2	2.1 E+2	6.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-1	9.8 E+0	NA	5.8 E-1	NA	NA	NA	NA
283	C	NA	NA	NA	NA	3.9 E+0	2.6 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	2.1 E+1	NA	1.6 E+0	NA	NA	NA	NA
284	D	NA	NA	NA	NA	1.2 E+0	7.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-2	NA	1.3 E-1	NA	NA	NA	NA
285	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	NA	4.2 E-3	NA	NA	NA	3.2 E-3	NA	3.5 E-2	NA	NA	NA	2.9 E-4	NA	8.3 E-4	4.3 E-3	NA	NA
287	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-2	NA	NA	NA	NA
288	E	NA	NA	NA	NA	1.2 E+0	3.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	NA	NA	NA	NA
289	D	NA	NA	NA	NA	1.9 E-1	7.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-1	NA	7.0 E-1	NA	NA	NA	NA
290	C	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	2.8 E-1	NA	NA	NA	NA
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
356	C	NA	NA	NA	3.0 E-2	NA	3.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA
357	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
358	D	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-2	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	4.2 E-1	NA	NA
374	S	NA	NA	NA	NA	7.6 E+0	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-2	NA	5.8 E-2	NA	NA	NA	NA
375	S	NA	NA	NA	NA	3.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	NA	NA	NA	NA	NA	NA
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
399	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
401	D	NA	NA	NA	3.8 E-2	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E+0	NA	NA	NA	NA	NA	NA
402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
403	E	NA	NA	NA	NA	NA	NA	NA	2.2 E+3	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
484	C	NA	4.0 E-1	1.5 E-3	3.5 E-2	1.1 E+2	4.7 E-1	NA	NA	2.4 E-1	NA	4.1 E+0	6.3 E-1	NA	8.7 E-2	NA	5.8 E-2	NA	4.3 E-2	NA	3.3 E-2	3.8 E+1	1.5 E-2	4.7 E-1	2.1 E-2	5.9 E-2	NA	NA
485	C	NA	2.0 E-1	5.8 E-3	8.0 E-1	3.7 E-1	9.7 E-1	1.9 E-3	NA	NA	NA	1.1 E-1	3.0 E-2	NA	NA	NA	3.5 E-3	NA	4.7 E-3	NA	5.4 E-1	1.5 E+1	2.9 E-4	1.1 E+0	8.0 E-4	3.7 E-3	NA	NA
486	D	NA	NA	NA	1.0 E-1	2.3 E-1	5.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E+0	NA	1.7 E+0	NA	NA	NA	NA
487	E	NA	NA	NA	NA	NA	6.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	NA	NA	NA
494	C	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E+0	NA	NA	NA	NA	NA	NA
495	C	NA	NA	NA	5.2 E-2	1.4 E-1	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E+0	NA	NA	NA	NA	NA	NA
685	S	NA	NA	NA	NA	3.7 E+0	5.8 E-1	NA	NA	1.0 E-2	NA	NA	9.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3058	C	NA	2.8 E-1	4.7 E-3	8.9 E-1	5.6 E-1	4.3 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	5.4 E+0	NA	3.5 E+0	NA	NA	NA	NA
3059	C	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-1	NA	3.2 E-2	NA	NA	NA	NA
3060	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-2	NA	NA	NA	NA	NA	NA
3061	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3124	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	NA	NA	NA	NA	NA
3125	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3126	C	NA	NA	NA	NA	1.4 E-1	6.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.9 E-1	NA	NA	NA	NA	NA	NA
3127	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3128	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3221	Y	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	5.6 E+0	NA	NA	1.7 E-1	NA	NA	NA	2.9 E-2	NA	7.2 E-1	NA	NA	NA	1.2 E-2	NA	2.6 E-1	3.5 E-1	NA	NA
3222	S	NA	NA	NA	NA	6.5 E+1	1.4 E+0	NA	NA	6.0 E-2	2.2 E-1	5.4 E+0	9.8 E-2	NA	4.4 E-1	NA	4.5 E-2	NA	2.3 E-2	NA	NA	6.9 E-2	1.3 E-2	2.8 E-2	6.1 E-2	3.7 E-2	NA	NA
3223	C	2.6 E-2	NA	NA	NA	6.7 E+0	9.3 E-1	NA	NA	NA	NA	NA	6.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E+1	NA	5.1 E-1	NA	NA	NA	NA
3224	C	NA	NA	NA	NA	3.0 E+1	6.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E+1	NA	NA	NA	NA	NA	NA

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																										
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dioxane	Acrolein	Aluminum	Antimony	Arsenic	Barium	Benzene	Beryllium	Bis(2-ethylhexyl) phthalate	Boron	Bromodichloro methane	Cadmium	Carbon disulfide	Carbon tetrachloride	Chloroform	Chromium	cis-1,2-Dichloroethene	Cobalt	Copper	delta-BHC	Dibromochloro methane
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
3225	C	NA	NA	NA	NA	5.3 E+1	3.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	NA	NA	NA	NA
3226	D	NA	NA	NA	NA	3.0 E+0	4.3 E-1	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E+1	NA	NA	NA	NA	NA	NA
3245	C	NA	NA	NA	5.2 E-2	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA
3246	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	NA	NA	NA	NA	NA
3247	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3248	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3249	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3264	S	NA	NA	NA	NA	4.9 E+1	5.4 E-1	NA	NA	9.7 E-3	NA	NA	8.4 E-2	NA	NA	1.4 E-1	NA	NA	NA	NA	NA	5.7 E-2	NA	NA	NA	1.6 E-1	NA	NA
3265	C	NA	NA	NA	NA	2.2 E+1	2.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E+0	NA	NA	NA	NA	NA	NA
3266	C	NA	NA	NA	NA	2.8 E+1	2.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	NA	NA	NA	NA	NA
3267	D	NA	NA	NA	NA	3.9 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3268	D	NA	NA	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3292	S	NA	2.7 E-1	NA	NA	6.3 E+1	2.8 E-1	NA	NA	NA	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	6.9 E-3	NA	NA	2.5 E-1	6.0 E-4	NA	2.5 E-2	1.9 E-2	NA	NA
3293	C	NA	NA	NA	4.0 E-1	5.3 E+0	3.8 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E+1	NA	NA	NA	NA	NA	NA
3294	C	NA	3.7 E-1	3.7 E-3	2.8 E-1	1.8 E+2	2.3 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-1	1.2 E+1	NA	NA	NA	NA	NA	NA
3295	B	NA	9.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	4.3 E-2
3296	C	NA	NA	NA	3.5 E-2	6.0 E-1	1.9 E-1	NA	NA	NA	NA	NA	5.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E+1	NA	NA	NA	NA	NA	NA
3297	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	NA	NA	NA	NA	NA	NA
3348	S	NA	NA	NA	NA	4.6 E-1	1.1 E-1	NA	NA	NA	NA	NA	1.5 E-2	NA	5.6 E-3	NA	NA	NA	NA	NA	NA	6.3 E-2	NA	1.1 E-1	2.6 E-2	3.7 E-3	NA	NA
3349	D	NA	NA	NA	3.7 E-2	NA	7.8 E-2	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E+0	NA	NA	NA	NA	NA	NA
3350	E	NA	NA	NA	NA	7.9 E-1	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-1	NA	1.3 E+0	NA	NA	NA	NA
3364	C	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	9.0 E-3	NA	NA	3.0 E-2	NA	NA	2.9 E-1	NA	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	NA	NA	NA
3365	E	NA	NA	NA	NA	NA	8.2 E-1	NA	NA	8.4 E-3	NA	NA	7.7 E-3	NA	NA	2.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	NA
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	7.3 E-2	NA	NA	NA	9.3 E-3	NA	NA	NA	NA	NA	8.2 E-4	NA	7.1 E-3	1.4 E-2	NA	NA
3441	C	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	1.6 E-1	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3442	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3638	C	NA	6.7 E-2	1.9 E-3	1.3 E-1	2.2 E-1	NA	NA	NA	2.4 E-2	NA	1.7 E+0	3.8 E-2	NA	NA	NA	NA	NA	NA	NA	2.4 E-1	3.8 E+0	1.6 E-4	3.7 E-1	1.4 E-3	NA	NA	NA
3641	C	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-2	NA	1.5 E-1	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-2	2.4 E-4	NA	3.8 E-3	NA	NA	NA
3642	S	NA	7.9 E-2	NA	NA	7.9 E-2	NA	NA	NA	2.5 E-1	1.3 E-2	NA	4.5 E-2	NA	NA	NA	2.6 E-3	NA	3.8 E-3	NA	NA	7.6 E-2	1.8 E-3	4.7 E-2	3.0 E-2	1.5 E-2	NA	NA
3644	B	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	9.2 E-3	NA	3.8 E-2	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	6.6 E-3	5.1 E-4	2.9 E-2	2.9 E-3	6.3 E-3	3.0 E-2	NA
3645	S	NA	3.1 E-1	2.1 E-3	5.8 E-1	9.5 E-1	NA	NA	NA	4.9 E-2	1.0 E-2	NA	1.6 E-2	NA	NA	NA	NA	NA	6.6 E-3	NA	4.7 E-2	1.3 E-1	1.1 E-3	1.7 E+0	3.5 E-3	1.2 E-2	NA	NA
3654	B	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-2	NA	NA	4.9 E-2	NA	NA	NA	2.6 E-3	NA	2.2 E-3	NA	NA	7.6 E-2	1.0 E-3	1.1 E-1	3.8 E-3	7.7 E-3	3.0 E-3	NA
3656	S	NA	NA	NA	NA	1.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	1.2 E-2	NA	NA	NA	NA
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA
3728	Y	NA	1.3 E-1	1.4 E-3	NA	5.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E+0	NA	2.1 E-2	NA	NA	NA	NA
4007	A	NA	2.0 E-1	NA	NA	NA	7.0 E-2	1.5 E-3	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	1.8 E-1	NA	5.8 E-2	NA	NA	NA	NA
4140	C	NA	NA	5.4 E-3	7.0 E-1	1.3 E+0	2.6 E+0	4.8 E-3	NA	NA	NA	NA	4.5 E-2	NA	NA	NA	NA	NA	NA	NA	8.3 E-1	1.4 E+1	NA	2.3 E+0	NA	1.0 E-1	NA	NA
4145	C	NA	2.3 E-1	3.9 E-3	7.0 E-1	3.0 E-1	5.1 E-1	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA	1.5 E-2	NA	NA	1.9 E-1	1.4 E+1	NA	2.7 E+0	NA	NA	NA	NA
4310	A	NA	1.6 E-1	NA	NA	5.6 E+1	1.1 E-1	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-2	NA	NA	NA	NA	NA	NA
4315	C	NA	2.6 E-1	NA	5.8 E-1	1.0 E+0	3.3 E+0	1.1 E-2	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E+0	NA	3.9 E+0	NA	NA	NA	NA

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																											
Sample Name	Layer	Dieldrin	Endosulfan I	Endosulfan II	gamma-BHC (Lindane)	Iron	Lead	Lithium	Manganese	Mercury	Methylene chloride	Molybdenum	Nickel	Nitrate	Nitrate as NO3	Nitrite as NO2	N-Nitrosodimethylamine	Perchlorate	Selenium	Strontium	Tetrachloroethene	Thallium	Titanium	trans-1,2-Dichloroethene	Trichloroethene	Vanadium	Vinyl chloride	Zinc	HI
Unit Hazard Child																													
Unit Hazard Adult																													
Unit Risk																													
1	C	NA	NA	NA	NA	4.1 E-2	NA	NA	9.9 E+0	NA	NA	9.7 E-3	2.6 E-2	2.5 E-1	2.2 E-1	NA	4.2 E-1	3.4 E+2	NA	3.1 E-2	2.6 E-1	NA	1.8 E-4	4.0 E-2	1.2 E+3	7.6 E-2	7.1 E-1	9.6 E-3	1.6 E+3
3	C	NA	NA	NA	NA	3.2 E-1	NA	NA	6.5 E-1	1.5 E-2	NA	1.7 E-1	2.0 E-1	3.3 E-1	6.8 E-1	NA	NA	1.0 E+0	NA	3.4 E-2	NA	NA	1.9 E-3	NA	1.2 E+1	1.8 E-1	NA	6.0 E-2	2.6 E+1
4	C	NA	NA	NA	NA	4.8 E-2	NA	NA	1.5 E-1	9.3 E-2	NA	NA	1.5 E-2	2.7 E-1	2.1 E-1	NA	3.9 E-1	1.6 E+2	NA	3.3 E-2	3.3 E-1	NA	3.1 E-4	2.0 E-2	1.1 E+3	9.0 E-2	NA	8.3 E-3	1.7 E+3
7	S	NA	NA	NA	NA	5.3 E+0	NA	NA	7.7 E+1	2.3 E-1	2.9 E-2	NA	9.3 E-1	6.4 E-1	NA	NA	NA	1.0 E+2	NA	NA	NA	NA	NA	NA	2.1 E+0	2.0 E+0	NA	3.3 E-1	1.9 E+2
8	B	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	6.4 E-3	8.0 E-1	1.9 E-1	NA	NA	1.4 E+1	NA	2.9 E-2	NA	NA	5.6 E-5	NA	5.0 E-1	4.5 E-2	NA	3.4 E-3	1.5 E+1
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	1.6 E+0
25	S	NA	NA	NA	NA	1.6 E+0	NA	2.3 E-2	5.0 E-1	NA	NA	NA	NA	9.3 E-1	5.6 E-1	NA	NA	3.5 E-1	NA	2.5 E-2	NA	NA	NA	NA	2.8 E+1	NA	NA	6.6 E-1	4.4 E+1
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75	B	NA	NA	NA	NA	2.6 E+0	NA	NA	1.7 E+0	NA	NA	1.8 E-2	1.7 E-2	2.0 E-2	4.8 E-3	NA	NA	3.2 E+0	NA	4.8 E-2	NA	NA	5.1 E-4	NA	1.4 E-1	1.3 E-1	NA	2.8 E-2	9.1 E+0
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-2
131	S	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	3.0 E-2	NA	8.0 E-1	4.8 E-1	NA	3.1 E-2	9.1 E+0	NA	6.6 E-2	NA	NA	NA	NA	2.0 E+1	5.8 E-2	NA	6.4 E-1	4.1 E+1
132	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	NA	1.5 E-2	1.6 E+3	NA	NA	2.0 E-1	NA	NA	NA	3.5 E+3	NA	NA	NA	5.1 E+3
209	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E+0	NA	NA	NA	4.5 E+0
210	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E+0	NA	NA	NA	8.8 E+0
211	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	1.6 E+2	NA	NA	NA	NA	NA	NA	4.8 E+1	NA	NA	6.6 E-2	2.1 E+2
212	S	NA	NA	NA	NA	3.6 E+0	NA	NA	2.5 E+0	2.8 E-2	NA	3.6 E-1	1.0 E-1	7.2 E-2	1.2 E-1	NA	NA	1.0 E+2	6.0 E-2	5.7 E-2	NA	NA	7.9 E-3	NA	2.3 E+2	1.0 E+0	NA	1.4 E+1	3.6 E+2
213	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	1.8 E+3	NA	NA	2.1 E-1	NA	NA	NA	1.9 E+3	1.0 E-1	NA	3.9 E-2	3.8 E+3
214	D	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	NA	NA	NA	2.0 E-1	NA	NA	NA	1.7 E+3	NA	NA	1.4 E-1	NA	NA	1.2 E-2	2.0 E+3	1.1 E-1	NA	NA	3.7 E+3
215	S	NA	NA	NA	NA	8.5 E-1	NA	6.8 E-2	3.1 E-1	NA	NA	NA	1.9 E-2	2.0 E+0	5.6 E-1	1.4 E-1	NA	5.6 E-1	NA	5.1 E-2	NA	NA	NA	NA	1.6 E+1	3.7 E-2	NA	2.1 E-1	5.3 E+2
216	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-1	NA	NA	2.0 E-2	1.7 E+3	NA	NA	NA	NA	NA	NA	5.8 E+2	NA	NA	NA	2.3 E+3
217	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	NA	2.3 E+3	NA	NA	NA	NA	NA	NA	1.1 E+3	NA	NA	NA	3.4 E+3
218	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	3.1 E-1	NA	NA	NA	3.2 E+2	NA	NA	7.6 E-2	NA	NA	NA	3.0 E+2	NA	NA	NA	6.5 E+2
282	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-3	NA	NA	6.8 E-2	NA	NA	3.2 E+0	7.4 E+1	NA	NA	1.4 E-1	NA	NA	NA	4.3 E+2	NA	6.7 E-2	NA	7.2 E+2
283	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-3	NA	NA	2.7 E-1	NA	NA	4.1 E-1	1.2 E+2	NA	NA	7.6 E-2	NA	NA	NA	1.9 E+2	NA	NA	NA	3.4 E+2
284	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E+1	NA	NA	NA	1.7 E+1
285	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	6.5 E+0	NA	NA	NA	NA	NA	NA	8.0 E+0	NA	NA	NA	1.5 E+1
286	Y	NA	NA	NA	NA	2.2 E-1	NA	NA	6.5 E-2	NA	NA	NA	1.1 E-2	3.2 E-2	3.5 E-2	NA	NA	NA	NA	1.5 E-2	NA	NA	5.1 E-5	NA	5.0 E-1	6.0 E-2	NA	3.4 E-1	1.3 E+0
287	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E+0	NA	NA	NA	3.6 E+0
288	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E+1	NA	NA	NA	1.8 E+1
289	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	3.5 E-1	NA	NA	2.8 E-1	2.1 E+2	NA	NA	1.7 E-1	NA	NA	NA	1.0 E+3	NA	NA	NA	1.2 E+3
290	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-3	NA	NA	8.8 E-2	NA	NA	NA	NA	NA	NA	4.2 E-2	NA	NA	NA	7.5 E+1	NA	NA	NA	7.6 E+1
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
356	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	8.7 E+2	NA	NA	NA	NA	NA	NA	4.8 E+1	NA	NA	NA	9.2 E+2
357	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-1	NA	NA	NA	4.5 E-1
358	D	NA	NA	NA	NA	3.4 E-1	NA	NA	5.6 E-1	NA	NA	NA	7.0 E-2	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E+0	5.5 E+0
374	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E+0	NA	NA	NA	1.7 E+1
375	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E+0	NA	NA	NA	9.1 E+0
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E+0	NA	NA	NA	1.5 E+0
399	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3 E-1	NA	NA	NA	2.4 E+1	NA	NA	NA	NA	NA	NA	5.5 E-1	NA	NA	NA	2.5 E+1
400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1	NA	NA	NA	5.1 E+2	NA	NA	NA	NA	NA	NA	3.3 E-1	NA	NA	NA	5.2 E+2
401	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	1.5 E+2	NA	NA	NA	NA	NA	NA	5.3 E+1	NA	NA	NA	2.0 E+2
402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E+0
403	E	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1	2.2 E+3
484	C	NA	NA	NA	NA	1.1 E+1	NA	NA	3.4 E+0	3.0 E-1	6.1 E-2	1.3 E-2	2.4 E-2	2.2 E-1	1.9 E-1	NA	NA	4.8 E+1	1.1 E-1	6.0 E-1	7.1 E-2	NA	NA	NA	2.0 E+2	3.6 E+0	NA	3.0 E+1	4.5 E+2
485	C	NA	NA	NA	NA	NA	NA	NA	2.1 E-2	NA	NA	1.2 E-2	NA	2.4 E-1	2.1 E-1	NA	NA	2.0 E+2	NA	3.1 E-2	1.7 E-1	NA	NA	1.2 E-2	8.8 E+2	1.1 E-1	NA	4.5 E-1	1.1 E+3
486	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	4.0 E-2	NA	NA	NA	9.2 E+1	NA	NA	8.4 E-2	NA	NA	NA	4.5 E+2	NA	NA	NA	5.5 E+2
487	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E+0	NA	NA	NA	4.5 E+0
494	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	1.8 E+2	NA	NA	NA	NA	NA	NA	6.0 E+0	NA	NA	NA	1.9 E+2
495	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	4.1 E+2	NA	NA	NA	NA	NA	NA	4.5 E+1	NA	NA	NA	4.6 E+2
685	S	NA	NA	NA	NA	1.9 E-1	NA	NA	4.3 E+0	1.4 E+0	NA	NA	NA	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E+1	NA	NA	2.1 E-1	2.7 E+1
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-1	NA	NA	NA	8.0 E-1	NA	NA	NA	NA	NA	NA	9.3 E-1	NA	NA	NA	2.2 E+0
3058	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	1.8 E-1	1.0 E+3	NA	NA	2.1 E-1	NA	NA	NA	1.8 E+3	NA	NA	NA	2.8 E+3
3059	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1	NA	NA	NA	1.8 E+2	NA	NA	NA	NA	NA	NA	3.5 E+1	NA	NA	NA	2.2 E+2
3060	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-1	NA	NA	NA	1.7 E+1	NA	NA	NA	NA	NA	NA	1.6 E+0	NA	NA	NA	1.9 E+1
3061	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3124	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-1	NA	NA	NA	6.2 E+2	NA	NA	NA	NA	NA	NA	6.3 E-1	NA	NA	NA	6.2 E+2
3125	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E+0	NA	NA	NA	2.0 E+0
3126	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	1.2 E+2	NA	NA	NA	NA	NA	NA	9.3 E+1	NA	NA	NA	2.1 E+2
3127	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E+0	NA	NA	NA	3.0 E+0
3128	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3221	Y	NA	NA	NA	NA	1.1 E+1	NA	NA	8.1 E+0	NA	NA	NA	1.6 E+0	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E+0	NA	7.1 E+1	1.0 E+2
3222	S	NA	NA	NA	NA	1.1 E+1	NA	NA	1.2 E+0	NA	NA	5.9 E-1	5.8 E-1	7.6 E-1	2.7 E-2	NA	NA	4.4 E-1	6.6 E-2	3.3 E-2	NA	NA	7.6 E-4	NA	2.5 E+1	7.1 E-1	NA	6.8 E+0	1.2 E+2
3223	C	NA	NA	NA	NA	NA	NA	NA	4.0 E-2	NA	1.2 E-2	NA	NA	3.4 E-1	NA	NA	2.2 E-1	5.8 E+2	NA	NA	2.1 E-1	NA	NA	NA	4.8 E+2	NA	NA	9.8 E-1	1.1 E+3
3224	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	2.5 E-1	NA	NA	NA	6.8 E+2	NA	NA	2.9 E-1	NA	NA	NA	4.3 E+2	NA	NA	NA	1.2 E+3

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																											
Sample Name	Layer	Dieldrin	Endosulfan I	Endosulfan II	gamma-BHC (Lindane)	Iron	Lead	Lithium	Manganese	Mercury	Methylene chloride	Molybdenum	Nickel	Nitrate	Nitrate as NO3	Nitrite as NO2	N-Nitrosodimethylamine	Perchlorate	Selenium	Strontium	Tetrachloroethene	Thallium	Titanium	trans-1,2-Dichloroethene	Trichloroethene	Vanadium	Vinyl chloride	Zinc	HI
Unit Hazard Child																													
Unit Hazard Adult																													
Unit Risk																													
3225	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+1	NA	NA	NA	6.4 E+1
3226	D	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E+2	NA	NA	1.3 E-1	NA	NA	NA	4.0 E+2	NA	NA	3.9 E-2	1.0 E+3
3245	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-3	NA	NA	1.1 E-1	NA	NA	NA	5.3 E+2	NA	NA	NA	NA	NA	NA	8.8 E+1	NA	NA	NA	6.2 E+2
3246	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-2	NA	NA	NA	6.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+0
3247	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3248	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3249	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3264	S	NA	NA	NA	NA	2.3 E-1	NA	NA	2.0 E-1	2.3 E-1	5.9 E-3	NA	NA	4.8 E+0	NA	NA	NA	9.2 E+1	NA	NA	NA	NA	NA	NA	2.0 E+1	NA	NA	2.8 E+0	1.7 E+2
3265	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-3	NA	NA	1.3 E+0	NA	NA	NA	2.1 E+2	NA	NA	NA	NA	NA	NA	8.8 E+1	NA	NA	NA	3.3 E+2
3266	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-3	NA	NA	2.4 E+0	NA	NA	NA	9.2 E+1	NA	NA	NA	NA	NA	NA	2.0 E+1	NA	NA	NA	1.4 E+2
3267	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-1	NA	NA	NA	6.4 E+1	NA	NA	NA	NA	NA	NA	1.0 E+0	NA	NA	NA	6.9 E+1
3268	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E+1
3292	S	NA	NA	NA	NA	1.2 E+0	NA	NA	1.8 E-1	NA	NA	3.3 E-2	2.0 E-2	8.4 E-1	1.1 E-2	NA	NA	7.7 E-1	NA	4.5 E-2	2.1 E-2	NA	NA	NA	9.8 E+0	1.1 E-1	NA	6.2 E-1	7.7 E+1
3293	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	4.0 E-1	NA	NA	1.2 E-1	1.3 E+3	NA	NA	1.7 E-1	NA	NA	NA	1.5 E+3	NA	NA	NA	2.8 E+3
3294	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-1	NA	NA	1.5 E+0	NA	NA	NA	1.0 E+3	NA	NA	2.6 E-1	NA	NA	NA	6.5 E+2	NA	3.2 E-1	NA	1.9 E+3
3295	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-1	NA	NA	NA	7.9 E-1
3296	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-1	NA	NA	NA	3.4 E+2	NA	NA	NA	NA	NA	NA	2.3 E+2	9.3 E-2	NA	NA	6.0 E+2
3297	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-1	NA	NA	NA	5.5 E+1	NA	NA	NA	NA	NA	NA	8.0 E+0	NA	NA	NA	6.4 E+1
3348	S	NA	NA	NA	NA	3.0 E-1	NA	NA	4.0 E-1	NA	NA	3.7 E-2	6.4 E-3	6.0 E-1	3.2 E-1	NA	2.3 E-2	1.7 E+0	NA	7.7 E-2	NA	NA	NA	NA	7.5 E+0	4.8 E-2	NA	1.7 E-1	1.2 E+1
3349	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	NA	NA	5.3 E+2	NA	NA	NA	NA	NA	NA	1.2 E+2	1.3 E-1	NA	NA	6.6 E+2
3350	E	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	1.6 E+2	NA	NA	NA	NA	NA	NA	6.5 E+1	NA	NA	NA	2.2 E+2
3364	C	NA	NA	NA	NA	3.6 E+0	NA	NA	5.9 E-1	NA	NA	NA	NA	2.1 E-1	NA	NA	NA	2.7 E+2	NA	NA	NA	NA	NA	NA	1.3 E+2	NA	NA	4.3 E-2	4.0 E+2
3365	E	NA	NA	NA	NA	3.5 E+0	NA	NA	6.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E+0	NA	NA	4.3 E-2	1.2 E+1
3440	S	NA	NA	NA	NA	3.5 E+0	NA	3.2 E-2	3.0 E-1	NA	NA	5.5 E-2	6.1 E-2	NA	4.0 E-2	NA	NA	1.8 E-1	NA	5.4 E-2	NA	NA	1.6 E-4	NA	NA	1.1 E-1	NA	1.1 E-1	4.6 E+0
3441	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-1
3442	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-4	NA	NA	3.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2
3638	C	NA	NA	NA	NA	3.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-1	NA	NA	6.3 E+1	NA	5.3 E-2	9.2 E-2	NA	2.7 E-4	NA	2.1 E+2	9.7 E-2	NA	NA	2.8 E+2
3641	C	NA	NA	NA	NA	3.1 E-2	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	1.0 E+0	NA	NA	4.5 E-1	NA	2.3 E-2	NA	NA	7.6 E-5	NA	NA	7.3 E-2	NA	NA	1.8 E+0
3642	S	NA	NA	9.2 E-4	2.1 E-3	3.7 E-1	NA	NA	3.0 E-1	NA	NA	5.5 E-2	8.3 E-2	NA	5.6 E+0	NA	NA	1.3 E+0	1.1 E-2	5.3 E-2	NA	NA	2.4 E-3	NA	2.4 E+0	1.9 E-1	NA	1.8 E-2	1.1 E+1
3644	B	NA	NA	NA	NA	3.9 E-2	NA	NA	1.4 E-1	NA	NA	1.8 E-2	1.9 E-2	NA	3.5 E-1	NA	NA	1.3 E+1	4.9 E-3	5.5 E-2	NA	2.3 E-1	2.9 E-4	NA	1.4 E+0	1.3 E-1	NA	1.0 E-2	1.5 E+1
3645	S	NA	NA	NA	NA	6.9 E-2	NA	NA	1.4 E-1	NA	NA	NA	7.7 E-2	NA	1.4 E+0	NA	NA	5.6 E+2	NA	3.5 E-2	3.3 E-1	NA	NA	1.9 E-2	4.5 E+2	8.0 E-2	NA	NA	1.0 E+3
3654	B	3.1 E-2	1.1 E-3	NA	2.4 E-3	6.5 E-2	NA	NA	1.1 E-1	NA	NA	1.0 E-1	4.2 E-2	NA	3.3 E-1	NA	NA	1.3 E+0	2.2 E-2	4.5 E-2	NA	NA	3.5 E-4	NA	2.8 E+0	9.8 E-2	NA	NA	5.2 E+0
3656	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-1	NA	NA	NA	NA	NA	NA	3.3 E-1	NA	NA	NA	1.7 E+0
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2
3728	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E+1	NA	NA	2.3 E-2	NA	NA	1.2 E-2	5.0 E-1	NA	NA	NA	2.2 E+1
4007	A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+0	NA	NA	2.5 E-2	3.6 E+0	NA	NA	NA	NA	NA	NA	2.3 E+0	NA	NA	NA	7.7 E+0
4140	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	NA	NA	3.7 E-1	8.5 E+2	NA	NA	3.7 E-1	NA	NA	NA	1.5 E+3	NA	NA	NA	2.3 E+3
4145	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-1	NA	NA	3.0 E-1	5.9 E+2	NA	NA	4.1 E-1	NA	NA	2.7 E-2	7.0 E+2	NA	NA	NA	1.3 E+3
4310	A	NA	NA	NA	NA	NA	NA	NA	2.3 E+0	NA	NA	NA	9.0 E-2	1.9 E+0	NA	NA	NA	5.1 E+1	NA	NA	NA	NA	NA	NA	1.3 E+1	1.1 E-1	NA	2.6 E-2	1.2 E+2
4315	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-1	NA	NA	2.3 E-1	8.8 E+2	NA	NA	3.1 E-1	NA	NA	NA	2.0 E+3	1.1 E-1	NA	NA	2.9 E+3

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																										
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dioxane	Acrolein	Aluminum	Antimony	Arsenic	Barium	Benzene	Beryllium	Bis(2-ethylhexyl) phthalate	Boron	Bromodichloro methane	Cadmium	Carbon disulfide	Carbon tetrachloride	Chloroform	Chromium	cis-1,2-Dichloroethene	Cobalt	Copper	delta-BHC	Dibromochloro methane
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
1	C	NA	1.1 E-1	1.1 E-3	5.8 E-2	2.1 E+1	1.5 E+0	4.2 E-4	NA	6.6 E-3	NA	NA	1.9 E-2	NA	NA	NA	3.2 E-3	NA	NA	2.7 E+1	NA	6.0 E+0	2.4 E-4	1.7 E+0	2.1 E-4	1.6 E-3	NA	NA
3	C	NA	NA	NA	NA	1.1 E+0	1.2 E+0	NA	NA	8.0 E-2	NA	NA	7.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-1	1.8 E-3	1.0 E+0	7.0 E-3	7.4 E-3	NA	NA
4	C	NA	1.2 E-1	1.2 E-3	6.1 E-2	1.5 E+2	1.8 E+0	4.0 E-4	NA	9.4 E-3	NA	NA	1.6 E-2	NA	NA	NA	6.1 E-3	NA	NA	NA	NA	1.5 E+1	1.8 E-4	1.7 E+0	NA	1.6 E-3	NA	NA
7	S	NA	NA	NA	NA	4.2 E-1	NA	NA	NA	8.6 E-1	NA	NA	2.1 E-1	3.8 E-2	NA	NA	3.0 E-2	NA	NA	NA	NA	1.5 E-2	1.0 E-3	NA	2.0 E-1	5.9 E-2	NA	NA
8	B	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	S	NA	NA	NA	NA	4.0 E+0	4.2 E-1	NA	NA	NA	NA	NA	9.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	8.3 E-5	4.7 E-1	3.0 E-4	NA	NA	NA
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75	B	NA	NA	NA	NA	4.1 E-1	NA	NA	NA	1.9 E-2	NA	6.8 E-2	3.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	9.3 E-3	1.6 E-3	NA	NA
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
131	S	NA	1.2 E-1	NA	8.2 E-3	3.9 E+0	1.2 E-1	NA	NA	NA	NA	NA	4.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-2	1.1 E-4	6.8 E-2	2.3 E-4	4.1 E-4	NA	NA
132	C	NA	1.8 E-1	2.9 E-3	8.2 E-1	3.0 E-1	2.0 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-2	4.6 E-1	NA	NA	NA	NA	NA	NA
209	C	NA	NA	NA	NA	NA	3.3 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA
210	C	NA	NA	NA	NA	5.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA
211	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E+0	NA	NA	NA	NA	NA	NA
212	S	NA	NA	NA	2.2 E-2	NA	2.2 E-1	NA	NA	7.2 E-1	5.4 E-2	2.9 E-1	4.3 E-2	NA	1.5 E-2	NA	1.8 E-2	NA	3.6 E-1	NA	NA	5.7 E-2	4.6 E-3	2.5 E-1	8.6 E-2	7.4 E-2	NA	NA
213	C	NA	NA	NA	1.5 E-1	2.1 E-1	4.7 E-1	5.6 E-3	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-2	NA	8.3 E-2	NA	NA	NA	NA
214	D	NA	7.9 E-2	1.8 E-3	7.1 E-1	1.9 E-1	NA	NA	NA	NA	NA	NA	1.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	4.3 E-1	NA	NA	NA	NA
215	S	7.6 E-3	7.1 E-2	NA	NA	2.2 E+2	1.4 E-1	NA	NA	NA	NA	NA	4.7 E-3	NA	NA	NA	1.4 E-3	NA	1.3 E-2	NA	NA	1.2 E-1	7.2 E-5	2.0 E-2	2.9 E-4	2.9 E-3	NA	NA
216	C	NA	NA	NA	2.5 E-1	5.2 E-1	2.0 E-1	1.9 E-4	NA	NA	NA	NA	6.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-2	NA	NA	NA	NA
217	C	NA	NA	NA	3.2 E-1	3.0 E-1	8.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA
218	D	NA	NA	NA	5.8 E-2	2.0 E-1	3.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E+1	NA	NA	NA	NA	NA	NA
282	C	NA	NA	NA	2.9 E-2	8.8 E+1	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	4.2 E+0	NA	2.5 E-1	NA	NA	NA	NA
283	C	NA	NA	NA	NA	1.7 E+0	1.1 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	9.2 E+0	NA	7.0 E-1	NA	NA	NA	NA
284	D	NA	NA	NA	NA	5.0 E-1	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	5.5 E-2	NA	NA	NA	NA
285	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-3	NA	NA	1.8 E-3	NA	NA	NA	1.3 E-3	NA	1.5 E-2	NA	NA	NA	1.2 E-4	NA	3.6 E-4	1.9 E-3	NA	NA
287	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	NA	NA	NA	NA
288	E	NA	NA	NA	NA	5.0 E-1	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-2	NA	NA	NA	NA	NA	NA
289	D	NA	NA	NA	NA	7.9 E-2	3.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	3.0 E-1	NA	NA	NA	NA
290	C	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	1.2 E-1	NA	NA	NA	NA
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
356	C	NA	NA	NA	1.3 E-2	NA	1.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-2	NA	NA	NA	NA	NA	NA
357	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
358	D	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-2	NA	NA	7.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-4	NA	NA	1.8 E-1	NA	NA
374	S	NA	NA	NA	NA	3.3 E+0	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-2	NA	2.5 E-2	NA	NA	NA	NA
375	S	NA	NA	NA	NA	1.3 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	NA	NA	NA	NA	NA	NA
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
399	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
401	D	NA	NA	NA	1.6 E-2	8.4 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-1	NA	NA	NA	NA	NA	NA
402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
403	E	NA	NA	NA	NA	NA	NA	NA	9.4 E+2	NA	NA	NA	9.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
484	C	NA	1.7 E-1	6.6 E-4	1.5 E-2	4.8 E+1	2.0 E-1	NA	NA	1.0 E-1	NA	1.7 E+0	2.6 E-1	NA	3.3 E-2	NA	2.5 E-2	NA	1.8 E-2	NA	1.4 E-2	1.6 E+1	6.6 E-3	2.0 E-1	9.2 E-3	2.5 E-2	NA	NA
485	C	NA	8.8 E-2	2.5 E-3	3.4 E-1	1.6 E-1	4.2 E-1	8.3 E-4	NA	NA	NA	4.9 E-2	1.3 E-2	NA	NA	NA	1.5 E-3	NA	2.0 E-3	NA	2.3 E-1	6.5 E+0	1.2 E-4	4.8 E-1	3.4 E-4	1.6 E-3	NA	NA
486	D	NA	NA	NA	4.5 E-2	9.9 E-2	2.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E+0	NA	7.3 E-1	NA	NA	NA	NA
487	E	NA	NA	NA	NA	NA	2.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-2	NA	NA	NA	NA
494	C	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-1	NA	NA	NA	NA	NA	NA
495	C	NA	NA	NA	2.2 E-2	6.2 E-2	7.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-1	NA	NA	NA	NA	NA	NA
685	S	NA	NA	NA	NA	1.6 E+0	2.5 E-1	NA	NA	4.4 E-3	NA	NA	3.8 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3058	C	NA	1.2 E-1	2.0 E-3	3.8 E-1	2.4 E-1	1.8 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-2	2.3 E+0	NA	1.5 E+0	NA	NA	NA	NA
3059	C	NA	NA	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	1.4 E-2	NA	NA	NA	NA
3060	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	NA
3061	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3124	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA
3125	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3126	C	NA	NA	NA	NA	6.0 E-2	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-1	NA	NA	NA	NA	NA	NA
3127	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3128	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3221	Y	NA	NA	NA	NA	9.9 E-2	NA	NA	NA	2.4 E+0	NA	NA	7.2 E-2	NA	NA	NA	1.2 E-2	NA	3.0 E-1	NA	NA	NA	5.0 E-3	NA	1.1 E-1	1.5 E-1	NA	NA
3222	S	NA	NA	NA	NA	2.8 E+1	5.8 E-1	NA	NA	2.6 E-2	9.2 E-2	2.3 E+0	4.1 E-2	NA	1.7 E-1	NA	1.9 E-2	NA	9.7 E-3	NA	NA	3.0 E-2	5.7 E-3	1.2 E-2	2.6 E-2	1.6 E-2	NA	NA
3223	C	1.1 E-2	NA	NA	NA	2.9 E+0	4.0 E-1	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E+1	NA	2.2 E-1	NA	NA	NA	NA
3224	C	NA	NA	NA	NA	1.3 E+1	2.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E+1	NA	NA	NA	NA	NA	NA

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																									
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dioxane	Acrolein	Aluminum	Antimony	Arsenic	Barium	Benzene	Beryllium	Bis(2-ethylhexyl) phthalate	Boron	Bromodichloro methane	Cadmium	Carbon disulfide	Carbon tetrachloride	Chloroform	Chromium	cis-1,2-Dichloroethene	Cobalt	Copper	delta-BHC	Dibromochloro methane
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
3225	C	NA	NA	NA	NA	2.3 E+1	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	NA	NA	NA	NA
3226	D	NA	NA	NA	NA	1.3 E+0	1.8 E-1	NA	NA	NA	NA	NA	9.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E+1	NA	NA	NA	NA	NA	NA
3245	C	NA	NA	NA	2.2 E-2	NA	5.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.4 E-2	NA	NA	NA	NA	NA	NA
3246	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA
3247	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3248	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3249	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3264	S	NA	NA	NA	NA	2.1 E+1	2.3 E-1	NA	NA	4.1 E-3	NA	NA	3.5 E-2	NA	NA	6.1 E-2	NA	NA	NA	NA	NA	2.4 E-2	NA	NA	NA	6.7 E-2	NA	NA
3265	C	NA	NA	NA	NA	9.2 E+0	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E+0	NA	NA	NA	NA	NA	NA
3266	C	NA	NA	NA	NA	1.2 E+1	9.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	NA	NA	NA
3267	D	NA	NA	NA	NA	1.7 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3268	D	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3292	S	NA	1.2 E-1	NA	NA	2.7 E+1	1.2 E-1	NA	NA	NA	NA	NA	1.6 E-2	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	1.1 E-1	2.6 E-4	NA	1.1 E-2	8.2 E-3	NA	NA
3293	C	NA	NA	NA	1.7 E-1	2.3 E+0	1.6 E+0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E+1	NA	NA	NA	NA	NA	NA
3294	C	NA	1.6 E-1	1.6 E-3	1.2 E-1	7.7 E+1	9.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	5.1 E+0	NA	NA	NA	NA	NA	NA
3295	B	NA	4.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	1.8 E-2
3296	C	NA	NA	NA	1.5 E-2	2.6 E-1	8.3 E-2	NA	NA	NA	NA	NA	2.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E+0	NA	NA	NA	NA	NA	NA
3297	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-2	NA	NA	NA	NA	NA	NA
3348	S	NA	NA	NA	NA	2.0 E-1	4.7 E-2	NA	NA	NA	NA	NA	6.5 E-3	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	2.7 E-2	NA	4.7 E-2	1.1 E-2	1.6 E-3	NA	NA
3349	D	NA	NA	NA	1.6 E-2	NA	3.3 E-2	NA	NA	NA	NA	NA	8.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E+0	NA	NA	NA	NA	NA	NA
3350	E	NA	NA	NA	NA	3.4 E-1	NA	NA	NA	NA	NA	NA	5.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	NA	5.7 E-1	NA	NA	NA	NA
3364	C	NA	NA	NA	NA	NA	2.3 E-2	NA	NA	3.9 E-3	NA	NA	1.3 E-2	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	1.8 E-1	NA	NA	NA	NA
3365	E	NA	NA	NA	NA	NA	3.5 E-1	NA	NA	3.6 E-3	NA	NA	3.2 E-3	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-2	NA	NA
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	7.4 E-3	NA	NA	3.1 E-2	NA	NA	NA	4.0 E-3	NA	NA	NA	NA	NA	3.5 E-4	NA	3.0 E-3	5.9 E-3	NA	NA
3441	C	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-3	NA	NA	6.6 E-2	NA	NA	2.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3442	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3638	C	NA	2.9 E-2	8.3 E-4	5.4 E-2	9.2 E-2	NA	NA	NA	1.0 E-2	NA	7.3 E-1	1.6 E-2	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	1.6 E+0	6.8 E-5	1.6 E-1	6.0 E-4	NA	NA	NA
3641	C	NA	NA	NA	NA	NA	NA	NA	NA	5.5 E-3	NA	6.4 E-2	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-2	1.0 E-4	NA	1.6 E-3	NA	NA	NA
3642	S	NA	3.4 E-2	NA	NA	3.4 E-2	NA	NA	NA	1.1 E-1	5.6 E-3	NA	1.9 E-2	NA	NA	NA	1.1 E-3	NA	1.6 E-3	NA	NA	3.2 E-2	7.5 E-4	2.0 E-2	1.3 E-2	6.4 E-3	NA	NA
3644	B	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	3.9 E-3	NA	1.6 E-2	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	2.8 E-3	2.2 E-4	1.3 E-2	1.2 E-3	2.7 E-3	1.3 E-2	NA
3645	S	NA	1.3 E-1	9.2 E-4	2.5 E-1	4.1 E-1	NA	NA	NA	2.1 E-2	4.4 E-3	NA	6.9 E-3	NA	NA	NA	NA	NA	2.8 E-3	NA	2.0 E-2	5.5 E-2	4.6 E-4	7.2 E-1	1.5 E-3	5.0 E-3	NA	NA
3654	B	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-2	NA	NA	2.1 E-2	NA	NA	NA	1.1 E-3	NA	9.1 E-4	NA	NA	3.2 E-2	4.4 E-4	4.5 E-2	1.6 E-3	3.3 E-3	1.3 E-3	NA
3656	S	NA	NA	NA	NA	4.7 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	5.2 E-3	NA	NA	NA	NA
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-3	NA	NA	NA	NA	NA	NA
3728	Y	NA	5.4 E-2	5.9 E-4	NA	2.5 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-1	NA	8.8 E-3	NA	NA	NA	NA
4007	A	NA	8.8 E-2	NA	NA	NA	3.0 E-2	6.4 E-4	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	7.4 E-2	7.6 E-2	NA	2.5 E-2	NA	NA	NA	NA
4140	C	NA	NA	2.3 E-3	3.0 E-1	5.6 E-1	1.1 E+0	2.1 E-3	NA	NA	NA	NA	1.9 E-2	NA	NA	NA	NA	NA	NA	NA	3.6 E-1	6.0 E+0	NA	1.0 E+0	NA	4.5 E-2	NA	NA
4145	C	NA	1.0 E-1	1.7 E-3	3.0 E-1	1.3 E-1	2.2 E-1	NA	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	6.2 E-3	NA	NA	8.0 E-2	6.1 E+0	NA	1.2 E+0	NA	NA	NA	NA
4310	A	NA	6.7 E-2	NA	NA	2.4 E+1	4.5 E-2	NA	NA	NA	NA	NA	8.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-2	NA	NA	NA	NA	NA	NA
4315	C	NA	1.1 E-1	NA	2.5 E-1	4.5 E-1	1.4 E+0	4.8 E-3	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E+0	NA	1.7 E+0	NA	NA	NA	NA

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																												
Sample Name	Layer	Dieldrin	Endosulfan I	Endosulfan II	gamma-BHC (Lindane)	Iron	Lead	Lithium	Manganese	Mercury	Methylene chloride	Molybdenum	Nickel	Nitrate	Nitrate as NO3	Nitrite as NO2	N-Nitrosodimethylamine	Perchlorate	Selenium	Strontium	Tetrachloroethene	Thallium	Titanium	trans-1,2-Dichloroethene	Trichloroethene	Vanadium	Vinyl chloride	Zinc	HI
Unit Hazard Child																														
Unit Hazard Adult																														
Unit Risk																														
1	C	NA	NA	NA	NA	1.8 E-2	NA	NA	4.1 E+0	NA	NA	4.1 E-3	1.1 E-2	1.0 E-1	9.5 E-2	NA	1.8 E-1	1.5 E+2	NA	1.3 E-2	1.1 E-1	NA	7.6 E-5	1.7 E-2	5.0 E+2	3.2 E-2	3.0 E-1	4.1 E-3	7.0 E+2
3	C	NA	NA	NA	NA	1.4 E-1	NA	NA	2.7 E-1	6.2 E-3	NA	7.2 E-2	8.6 E-2	1.4 E-1	2.9 E-1	NA	NA	4.3 E-1	NA	1.5 E-2	NA	NA	8.3 E-4	NA	5.2 E+0	7.7 E-2	NA	2.6 E-2	1.1 E+1
4	C	NA	NA	NA	NA	2.0 E-2	NA	NA	6.2 E-2	3.9 E-2	NA	NA	6.6 E-3	1.2 E-1	9.0 E-2	NA	1.7 E-1	6.7 E+1	NA	1.4 E-2	1.4 E-1	NA	1.3 E-4	8.4 E-3	4.9 E+2	3.9 E-2	NA	3.6 E-3	7.2 E+2
7	S	NA	NA	NA	NA	2.3 E+0	NA	NA	3.2 E+1	9.8 E-2	1.2 E-2	NA	4.0 E-1	2.7 E-1	NA	NA	NA	4.3 E+1	NA	NA	NA	NA	NA	NA	9.2 E-1	8.6 E-1	NA	1.4 E-1	8.2 E+1
8	B	NA	NA	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	2.7 E-3	3.4 E-1	8.1 E-2	NA	NA	5.9 E+0	NA	1.2 E-2	NA	NA	2.4 E-5	NA	2.2 E-1	1.9 E-2	NA	1.5 E-3	6.6 E+0
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-3	7.0 E-1
25	S	NA	NA	NA	NA	6.7 E-1	NA	9.9 E-3	2.1 E-1	NA	NA	NA	NA	4.0 E-1	2.4 E-1	NA	NA	1.5 E-1	NA	1.1 E-2	NA	NA	NA	NA	1.2 E+1	NA	NA	2.8 E-1	1.9 E+1
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75	B	NA	NA	NA	NA	1.1 E+0	NA	NA	7.0 E-1	NA	NA	7.7 E-3	7.1 E-3	8.6 E-3	2.1 E-3	NA	NA	1.4 E+0	NA	2.1 E-2	NA	NA	2.2 E-4	NA	6.2 E-2	5.5 E-2	NA	1.2 E-2	3.9 E+0
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-2
131	S	NA	NA	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	1.3 E-2	NA	3.4 E-1	2.1 E-1	NA	1.3 E-2	3.9 E+0	NA	2.8 E-2	NA	NA	NA	NA	8.7 E+0	2.5 E-2	NA	2.7 E-1	1.8 E+1
132	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-2	NA	NA	6.5 E-3	6.7 E+2	NA	NA	8.5 E-2	NA	NA	NA	1.5 E+3	NA	NA	NA	2.2 E+3
209	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E+0	NA	NA	NA	1.9 E+0
210	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E+0	NA	NA	NA	3.8 E+0
211	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	6.7 E+1	NA	NA	NA	NA	NA	NA	2.1 E+1	NA	NA	2.8 E-2	8.9 E+1
212	S	NA	NA	NA	NA	1.5 E+0	NA	NA	1.0 E+0	1.2 E-2	NA	1.5 E-1	4.4 E-2	3.1 E-2	5.3 E-2	NA	NA	4.3 E+1	2.6 E-2	2.4 E-2	NA	NA	3.4 E-3	NA	9.8 E+1	4.4 E-1	NA	5.9 E+0	1.5 E+2
213	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-2	NA	NA	NA	7.9 E+2	NA	NA	9.0 E-2	NA	NA	NA	8.3 E+2	4.5 E-2	NA	1.6 E-2	1.6 E+3
214	D	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	8.6 E-2	NA	NA	NA	7.5 E+2	NA	NA	6.1 E-2	NA	NA	5.3 E-3	8.5 E+2	4.7 E-2	NA	NA	1.6 E+3
215	S	NA	NA	NA	NA	3.6 E-1	NA	2.9 E-2	1.3 E-1	NA	NA	NA	8.0 E-3	8.4 E-1	2.4 E-1	6.2 E-2	NA	2.4 E-1	NA	2.2 E-2	NA	NA	NA	NA	7.0 E+0	1.6 E-2	NA	9.2 E-2	2.3 E+2
216	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.1 E-1	NA	NA	8.6 E-3	7.5 E+2	NA	NA	NA	NA	NA	NA	2.5 E+2	NA	NA	NA	1.0 E+3
217	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	NA	9.8 E+2	NA	NA	NA	NA	NA	NA	4.9 E+2	NA	NA	NA	1.5 E+3
218	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.3 E-4	NA	NA	1.3 E-1	NA	NA	NA	1.4 E+2	NA	NA	3.3 E-2	NA	NA	NA	1.3 E+2	NA	NA	NA	2.8 E+2
282	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	2.9 E-2	NA	NA	1.4 E+0	3.1 E+1	NA	NA	6.0 E-2	NA	NA	NA	1.8 E+2	NA	2.9 E-2	NA	3.1 E+2
283	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-3	NA	NA	1.1 E-1	NA	NA	1.8 E-1	5.1 E+1	NA	NA	3.3 E-2	NA	NA	NA	8.3 E+1	NA	NA	NA	1.5 E+2
284	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.2 E+0	NA	NA	NA	7.2 E+0
285	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	2.8 E+0	NA	NA	NA	NA	NA	NA	3.5 E+0	NA	NA	NA	6.3 E+0
286	Y	NA	NA	NA	NA	9.4 E-2	NA	NA	2.7 E-2	NA	NA	NA	4.5 E-3	1.4 E-2	1.5 E-2	NA	NA	NA	NA	6.4 E-3	NA	NA	2.2 E-5	NA	2.2 E-1	2.6 E-2	NA	1.5 E-1	5.7 E-1
287	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E+0	NA	NA	NA	1.6 E+0
288	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0 E+0	NA	NA	NA	7.6 E+0
289	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.9 E-3	NA	NA	1.5 E-1	NA	NA	1.2 E-1	9.0 E+1	NA	NA	7.2 E-2	NA	NA	NA	4.3 E+2	NA	NA	NA	5.2 E+2
290	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-3	NA	NA	3.8 E-2	NA	NA	NA	NA	NA	NA	1.8 E-2	NA	NA	NA	3.2 E+1	NA	NA	NA	3.3 E+1
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
356	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-3	NA	NA	NA	NA	NA	NA	3.7 E+2	NA	NA	NA	NA	NA	NA	2.1 E+1	NA	NA	NA	3.9 E+2
357	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	1.9 E-1
358	D	NA	NA	NA	NA	1.5 E-1	NA	NA	2.3 E-1	NA	NA	NA	3.0 E-2	NA	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E+0	2.4 E+0
374	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E+0	NA	NA	NA	7.1 E+0
375	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E+0	NA	NA	NA	3.9 E+0
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-1	NA	NA	NA	6.5 E-1
399	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	1.0 E+1	NA	NA	NA	NA	NA	NA	2.4 E-1	NA	NA	NA	1.1 E+1
400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	2.2 E+2	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	2.2 E+2
401	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-2	NA	NA	NA	6.3 E+1	NA	NA	NA	NA	NA	NA	2.3 E+1	NA	NA	NA	8.7 E+1
402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.4 E-1
403	E	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	9.4 E+2
484	C	NA	NA	NA	NA	4.7 E+0	NA	NA	1.4 E+0	1.3 E-1	2.6 E-2	5.5 E-3	1.0 E-2	9.5 E-2	8.3 E-2	NA	NA	2.0 E+1	4.5 E-2	2.6 E-1	3.1 E-2	NA	NA	NA	8.5 E+1	1.5 E+0	NA	1.3 E+1	1.9 E+2
485	C	NA	NA	NA	NA	NA	NA	NA	8.6 E-3	NA	NA	5.3 E-3	NA	1.0 E-1	9.0 E-2	NA	NA	8.7 E+1	NA	1.3 E-2	7.2 E-2	NA	NA	5.1 E-3	3.8 E+2	4.8 E-2	NA	1.9 E-1	4.7 E+2
486	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-3	NA	NA	1.7 E-2	NA	NA	NA	3.9 E+1	NA	NA	3.6 E-2	NA	NA	NA	1.9 E+2	NA	NA	NA	2.4 E+2
487	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E+0	NA	NA	NA	1.9 E+0
494	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.9 E-2	NA	NA	NA	7.9 E+1	NA	NA	NA	NA	NA	NA	2.6 E+0	NA	NA	NA	8.2 E+1
495	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-2	NA	NA	NA	1.8 E+2	NA	NA	NA	NA	NA	NA	1.9 E+1	NA	NA	NA	2.0 E+2
685	S	NA	NA	NA	NA	8.3 E-2	NA	NA	1.8 E+0	5.9 E-1	NA	NA	NA	1.3 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E+0	NA	NA	9.2 E-2	1.2 E+1
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-1	NA	NA	NA	3.4 E-1	NA	NA	NA	NA	NA	NA	4.0 E-1	NA	NA	NA	9.3 E-1
3058	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	7.8 E-2	4.3 E+2	NA	NA	9.0 E-2	NA	NA	NA	7.6 E+2	NA	NA	NA	1.2 E+3
3059	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	7.9 E+1	NA	NA	NA	NA	NA	NA	1.5 E+1	NA	NA	NA	9.4 E+1
3060	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	7.5 E+0	NA	NA	NA	NA	NA	NA	6.8 E-1	NA	NA	NA	8.3 E+0
3061	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3124	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	2.6 E+2	NA	NA	NA	NA	NA	NA	2.7 E-1	NA	NA	NA	2.6 E+2
3125	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-1	NA	NA	NA	8.4 E-1
3126	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	5.1 E+1	NA	NA	NA	NA	NA	NA	4.0 E+1	NA	NA	NA	9.2 E+1
3127	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E+0	NA	NA	NA	1.3 E+0
3128	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3221	Y	NA	NA	NA	NA	4.7 E+0	NA	NA	3.4 E+0	NA	NA	NA	6.7 E-1	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E+0	NA	3.0 E+1	4.4 E+1
3222	S	NA	NA	NA	NA	4.7 E+0	NA	NA	5.0 E-1	NA	NA	2.5 E-1	2.5 E-1	3.3 E-1	1.2 E-2	NA	NA	1.9 E-1	2.8 E-2	1.4 E-2	NA	NA	3.2 E-4	NA	1.1 E+1	3.0 E-1	NA	2.9 E+0	5.1 E+1
3223	C	NA	NA	NA	NA	NA	NA	NA	1.7 E-2	NA	5.1 E-3	NA	NA	1.5 E-1	NA	NA	9.5 E-2	2.5 E+2	NA	NA	9.0 E-2	NA	NA	NA	2.1 E+2	NA	NA	4.2 E-1	4.8 E+2
3224	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	1.1 E-1	NA	NA	NA	2.9 E+2	NA	NA	1.3 E-1	NA	NA	NA	1.8 E+2	NA	NA	NA	5.1 E+2

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																											
Sample Name	Layer	Dieldrin	Endosulfan I	Endosulfan II	gamma-BHC (Lindane)	Iron	Lead	Lithium	Manganese	Mercury	Methylene chloride	Molybdenum	Nickel	Nitrate	Nitrate as NO3	Nitrite as NO2	N-Nitrosodimethylamine	Perchlorate	Selenium	Strontium	Tetrachloroethene	Thallium	Titanium	trans-1,2-Dichloroethene	Trichloroethene	Vanadium	Vinyl chloride	Zinc	HI
Unit Hazard Child																													
Unit Hazard Adult																													
Unit Risk																													
3225	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E+0	NA	NA	NA	2.7 E+1
3226	D	NA	NA	NA	NA	NA	NA	NA	7.1 E-2	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E+2	NA	NA	5.8 E-2	NA	NA	NA	1.7 E+2	NA	NA	1.6 E-2	4.3 E+2
3245	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-3	NA	NA	4.6 E-2	NA	NA	NA	2.3 E+2	NA	NA	NA	NA	NA	NA	3.8 E+1	NA	NA	NA	2.7 E+2
3246	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-2	NA	NA	NA	3.0 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-1
3247	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3248	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3249	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3264	S	NA	NA	NA	NA	9.8 E-2	NA	NA	8.3 E-2	9.8 E-2	2.5 E-3	NA	NA	2.1 E+0	NA	NA	NA	3.9 E+1	NA	NA	NA	NA	NA	NA	8.6 E+0	NA	NA	1.2 E+0	7.3 E+1
3265	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-3	NA	NA	5.5 E-1	NA	NA	NA	9.0 E+1	NA	NA	NA	NA	NA	NA	3.8 E+1	NA	NA	NA	1.4 E+2
3266	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-3	NA	NA	1.0 E+0	NA	NA	NA	3.9 E+1	NA	NA	NA	NA	NA	NA	8.4 E+0	NA	NA	NA	6.1 E+1
3267	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-2	NA	NA	NA	2.8 E+1	NA	NA	NA	NA	NA	NA	4.3 E-1	NA	NA	NA	3.0 E+1
3268	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E+1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E+1
3292	S	NA	NA	NA	NA	5.1 E-1	NA	NA	7.6 E-2	NA	NA	1.4 E-2	8.6 E-3	3.6 E-1	4.6 E-3	NA	NA	3.3 E-1	NA	1.9 E-2	9.2 E-3	NA	NA	NA	4.2 E+0	4.7 E-2	NA	2.7 E-1	3.3 E+1
3293	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.6 E-2	NA	NA	1.7 E-1	NA	NA	5.2 E-2	5.5 E+2	NA	NA	7.2 E-2	NA	NA	NA	6.4 E+2	NA	NA	NA	1.2 E+3
3294	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-1	NA	NA	6.5 E-1	NA	NA	NA	4.3 E+2	NA	NA	1.1 E-1	NA	NA	NA	2.8 E+2	NA	1.4 E-1	NA	8.0 E+2
3295	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-1	NA	NA	NA	3.4 E-1
3296	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	NA	1.5 E+2	NA	NA	NA	NA	NA	NA	1.0 E+2	4.0 E-2	NA	NA	2.6 E+2
3297	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-1	NA	NA	NA	2.4 E+1	NA	NA	NA	NA	NA	NA	3.5 E+0	NA	NA	NA	2.7 E+1
3348	S	NA	NA	NA	NA	1.3 E-1	NA	NA	1.7 E-1	NA	NA	1.6 E-2	2.7 E-3	2.6 E-1	1.4 E-1	NA	9.9 E-3	7.5 E-1	NA	3.3 E-2	NA	NA	NA	NA	3.2 E+0	2.0 E-2	NA	7.1 E-2	5.2 E+0
3349	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-1	NA	NA	NA	2.3 E+2	NA	NA	NA	NA	NA	NA	5.3 E+1	5.5 E-2	NA	NA	2.8 E+2
3350	E	NA	NA	NA	NA	NA	NA	NA	5.8 E-2	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	6.7 E+1	NA	NA	NA	NA	NA	NA	2.8 E+1	NA	NA	NA	9.6 E+1
3364	C	NA	NA	NA	NA	1.5 E+0	NA	NA	2.5 E-1	NA	NA	NA	NA	8.8 E-2	NA	NA	NA	1.1 E+2	NA	NA	NA	NA	NA	NA	5.6 E+1	NA	NA	1.8 E-2	1.7 E+2
3365	E	NA	NA	NA	NA	1.5 E+0	NA	NA	2.8 E-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E+0	NA	NA	1.8 E-2	5.2 E+0
3440	S	NA	NA	NA	NA	1.5 E+0	NA	1.4 E-2	1.3 E-1	NA	NA	2.4 E-2	2.6 E-2	NA	1.7 E-2	NA	NA	7.9 E-2	NA	2.3 E-2	NA	NA	6.9 E-5	NA	NA	4.8 E-2	NA	4.6 E-2	1.9 E+0
3441	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-1
3442	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-4	NA	NA	1.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-3
3638	C	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-2	NA	NA	2.7 E+1	NA	2.2 E-2	4.0 E-2	NA	1.2 E-4	NA	9.2 E+1	4.1 E-2	NA	NA	1.2 E+2
3641	C	NA	NA	NA	NA	1.3 E-2	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	4.3 E-1	NA	NA	1.9 E-1	NA	9.6 E-3	NA	NA	3.2 E-5	NA	NA	3.1 E-2	NA	NA	7.8 E-1
3642	S	NA	NA	4.1 E-4	9.1 E-4	1.6 E-1	NA	NA	1.2 E-1	NA	NA	2.4 E-2	3.6 E-2	NA	2.4 E+0	NA	NA	5.5 E-1	4.7 E-3	2.2 E-2	NA	NA	1.0 E-3	NA	1.0 E+0	8.3 E-2	NA	7.6 E-3	4.7 E+0
3644	B	NA	NA	NA	NA	1.7 E-2	NA	NA	5.8 E-2	NA	NA	7.7 E-3	8.2 E-3	NA	1.5 E-1	NA	NA	5.5 E+0	2.1 E-3	2.3 E-2	NA	1.0 E-1	1.2 E-4	NA	6.2 E-1	5.5 E-2	NA	4.5 E-3	6.6 E+0
3645	S	NA	NA	NA	NA	3.0 E-2	NA	NA	5.7 E-2	NA	NA	NA	3.3 E-2	NA	6.2 E-1	NA	NA	2.4 E+2	NA	1.5 E-2	1.4 E-1	NA	NA	8.2 E-3	1.9 E+2	3.4 E-2	NA	NA	4.4 E+2
3654	B	1.3 E-2	4.8 E-4	NA	1.1 E-3	2.8 E-2	NA	NA	4.4 E-2	NA	NA	4.4 E-2	1.8 E-2	NA	1.4 E-1	NA	NA	5.5 E-1	9.4 E-3	1.9 E-2	NA	NA	1.5 E-4	NA	1.2 E+0	4.2 E-2	NA	NA	2.2 E+0
3656	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-1	NA	NA	NA	NA	NA	NA	1.4 E-1	NA	NA	NA	7.3 E-1
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-3
3728	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.5 E+0	NA	NA	9.8 E-3	NA	NA	5.1 E-3	2.2 E-1	NA	NA	NA	9.6 E+0
4007	A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-1	NA	NA	1.1 E-2	1.5 E+0	NA	NA	NA	NA	NA	NA	1.0 E+0	NA	NA	NA	3.3 E+0
4140	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-1	NA	NA	1.6 E-1	3.7 E+2	NA	NA	1.6 E-1	NA	NA	NA	6.3 E+2	NA	NA	NA	1.0 E+3
4145	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-1	NA	NA	1.3 E-1	2.5 E+2	NA	NA	1.8 E-1	NA	NA	1.1 E-2	3.0 E+2	NA	NA	NA	5.6 E+2
4310	A	NA	NA	NA	NA	NA	NA	NA	9.5 E-1	NA	NA	NA	3.8 E-2	8.1 E-1	NA	NA	NA	2.2 E+1	NA	NA	NA	NA	NA	NA	5.5 E+0	4.6 E-2	NA	1.1 E-2	5.3 E+1
4315	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-1	NA	NA	9.9 E-2	3.8 E+2	NA	NA	1.3 E-1	NA	NA	NA	8.5 E+2	4.5 E-2	NA	NA	1.2 E+3

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																										
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dioxane	Acrolein	Aluminum	Antimony	Arsenic	Barium	Benzene	Beryllium	Bis(2-ethylhexyl) phthalate	Boron	Bromodichloromethane	Cadmium	Carbon disulfide	Carbon tetrachloride	Chloroform	Chromium	cis-1,2-Dichloroethene	Cobalt	Copper	delta-BHC	Dibromochloromethane
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
1	C	NA	1.4 E-5	6.7 E-7	NA	1.7 E-3	NA	6.3 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-3	NA	NA	NA	NA	NA	NA
3	C	NA	NA	NA	NA	9.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	NA	NA	NA
4	C	NA	1.5 E-5	7.7 E-7	NA	1.2 E-2	NA	6.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-3	NA	NA	NA	NA	NA	NA
7	S	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	1.5 E-5	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	NA	NA	NA	NA	NA
8	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	S	NA	NA	NA	NA	3.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75	B	NA	NA	NA	NA	3.4 E-5	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
131	S	NA	1.5 E-5	NA	NA	3.2 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	NA	NA	NA
132	C	NA	2.3 E-5	1.8 E-6	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-6	2.2 E-4	NA	NA	NA	NA	NA	NA
209	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
210	C	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	NA	NA
211	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.1 E-4	NA	NA	NA	NA	NA	NA
212	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	NA	NA	NA
213	C	NA	NA	NA	NA	1.7 E-5	NA	8.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	NA	NA	NA
214	D	NA	1.0 E-5	1.1 E-6	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA
215	S	5.2 E-5	9.2 E-6	NA	NA	1.8 E-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.6 E-5	NA	NA	NA	NA	NA	NA
216	C	NA	NA	NA	NA	4.3 E-5	NA	2.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
217	C	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA
218	D	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-3	NA	NA	NA	NA	NA	NA
282	C	NA	NA	NA	NA	7.3 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-5	2.0 E-3	NA	NA	NA	NA	NA	NA
283	C	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.2 E-5	4.4 E-3	NA	NA	NA	NA	NA	NA
284	D	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA
285	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
287	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
288	E	NA	NA	NA	NA	4.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-5	NA	NA	NA	NA	NA	NA
289	D	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-5	NA	NA	NA	NA	NA	NA
290	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	NA
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
356	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	NA	NA	NA
357	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
358	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
374	S	NA	NA	NA	NA	2.7 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA
375	S	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	NA	NA
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
399	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
401	D	NA	NA	NA	NA	7.0 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-4	NA	NA	NA	NA	NA	NA
402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
403	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
484	C	NA	2.2 E-5	4.1 E-7	NA	3.9 E-3	NA	NA	NA	NA	NA	2.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	7.8 E-3	NA	NA	NA	NA	NA	NA
485	C	NA	1.1 E-5	1.5 E-6	NA	1.3 E-5	NA	1.3 E-5	NA	NA	NA	7.5 E-5	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-5	3.1 E-3	NA	NA	NA	NA	NA	NA
486	D	NA	NA	NA	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.3 E-4	NA	NA	NA	NA	NA	NA
487	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
494	C	NA	NA	NA	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-4	NA	NA	NA	NA	NA	NA
495	C	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-4	NA	NA	NA	NA	NA	NA
685	S	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3058	C	NA	1.6 E-5	1.2 E-6	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	1.1 E-3	NA	NA	NA	NA	NA	NA
3059	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA
3060	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-5	NA	NA	NA	NA	NA	NA
3061	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3124	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	NA	NA	NA
3125	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3126	C	NA	NA	NA	NA	4.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	NA	NA	NA
3127	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3128	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3221	Y	NA	NA	NA	NA	8.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3222	S	NA	NA	NA	NA	2.3 E-3	NA	NA	NA	NA	NA	3.5 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA
3223	C	7.8 E-5	NA	NA	NA	2.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-2	NA	NA	NA	NA	NA	NA
3224	C	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-3	NA	NA	NA	NA	NA	NA

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																									
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dioxane	Acrolein	Aluminum	Antimony	Arsenic	Barium	Benzene	Beryllium	Bis(2-ethylhexyl) phthalate	Boron	Bromodichloromethane	Cadmium	Carbon disulfide	Carbon tetrachloride	Chloroform	Chromium	cis-1,2-Dichloroethene	Cobalt	Copper	delta-BHC	Dibromochloromethane
Unit Hazard Child																												
Unit Hazard Adult																												
Unit Risk																												
3225	C	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA
3226	D	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-3	NA	NA	NA	NA	NA	NA
3245	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	NA
3246	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	NA
3247	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3248	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3249	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3264	S	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.3 E-6	NA	NA	NA	NA	NA	1.2 E-5	NA	NA	NA	NA	NA	NA
3265	C	NA	NA	NA	NA	7.6 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.1 E-4	NA	NA	NA	NA	NA	NA
3266	C	NA	NA	NA	NA	9.8 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-5	NA	NA	NA	NA	NA	NA
3267	D	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3268	D	NA	NA	NA	NA	9.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3292	S	NA	1.5 E-5	NA	NA	2.2 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-5	NA	NA	NA	NA	NA	NA
3293	C	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.2 E-3	NA	NA	NA	NA	NA	NA
3294	C	NA	2.1 E-5	9.8 E-7	NA	6.4 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	2.5 E-3	NA	NA	NA	NA	NA	NA
3295	B	NA	5.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-6	NA	NA	NA	NA	NA	1.9 E-5
3296	C	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-3	NA	NA	NA	NA	NA	NA
3297	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-5	NA	NA	NA	NA	NA	NA
3348	S	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	NA	NA	NA
3349	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.1 E-4	NA	NA	NA	NA	NA	NA
3350	E	NA	NA	NA	NA	2.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-5	NA	NA	NA	NA	NA	NA
3364	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3365	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3441	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3442	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3638	C	NA	3.7 E-6	5.2 E-7	NA	7.6 E-6	NA	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	7.8 E-4	NA	NA	NA	NA	NA	NA
3641	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.9 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.5 E-6	NA	NA	NA	NA	NA	NA
3642	S	NA	4.4 E-6	NA	NA	2.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	NA	NA
3644	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	2.8 E-6	NA
3645	S	NA	1.7 E-5	5.7 E-7	NA	3.4 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-6	2.7 E-5	NA	NA	NA	NA	NA	NA
3654	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-5	NA	NA	NA	NA	2.8 E-7	NA
3656	S	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-6	NA	NA	NA	NA	NA	NA
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-6	NA	NA	NA	NA	NA	NA
3728	Y	NA	7.0 E-6	3.7 E-7	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	NA	NA	NA	NA	NA	NA
4007	A	NA	1.1 E-5	NA	NA	NA	NA	9.6 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	3.6 E-5	NA	NA	NA	NA	NA	NA
4140	C	NA	NA	1.4 E-6	NA	4.6 E-5	NA	3.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.1 E-5	2.9 E-3	NA	NA	NA	NA	NA	NA
4145	C	NA	1.3 E-5	1.0 E-6	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8 E-6	NA	NA	1.8 E-5	2.9 E-3	NA	NA	NA	NA	NA	NA
4310	A	NA	8.7 E-6	NA	NA	2.0 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-5	NA	NA	NA	NA	NA	NA
4315	C	NA	1.5 E-5	NA	NA	3.7 E-5	NA	7.2 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.4 E-4	NA	NA	NA	NA	NA	NA

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																												Blood Lead	
Sample Name	Layer	Dieldrin	Endosulfan I	Endosulfan II	gamma-BHC (Lindane)	Iron	Lead	Lithium	Manganese	Mercury	Methylene chloride	Molybdenum	Nickel	Nitrate	Nitrate as NO3	Nitrite as NO2	N-Nitrosodimethylamine	Perchlorate	Selenium	Strontium	Tetrachloroethene	Thallium	Titanium	trans-1,2-Dichloroethene	Trichloroethene	Vanadium	Vinyl chloride	Zinc	ILCR	Child	Adult
Unit Hazard Child																															
Unit Hazard Adult																															
Unit Risk																															
1	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-5	NA	NA	NA	9.0 E-5	NA	NA	NA	3.4 E-3	NA	9.2 E-4	NA	9 E-3	2.8	1.4
3	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.6 E-5	NA	NA	NA	5 E-4	6.2	3.1
4	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-5	NA	NA	NA	1.1 E-4	NA	NA	NA	3.4 E-3	NA	NA	NA	2 E-2	7.0	3.5
7	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.4 E-6	NA	NA	NA	7 E-5	115	57
8	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	1 E-6	NA	NA
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-5	NA	NA	NA	4 E-4	12	6.1
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
75	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-7	NA	NA	NA	1 E-4	2.7	1.3
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
131	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	NA	4 E-4	2.8	1.4
132	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	6.7 E-5	NA	NA	NA	1.0 E-2	NA	NA	NA	1 E-2	NA	NA
209	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	1 E-5	NA	NA
210	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	7 E-5	NA	NA
211	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	8 E-4	NA	NA
212	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8 E-4	NA	NA	NA	1 E-3	231	116
213	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-5	NA	NA	NA	5.8 E-3	NA	NA	NA	6 E-3	NA	NA
214	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	5.9 E-3	NA	NA	NA	6 E-3	NA	NA
215	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	2 E-2	50	25
216	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	1.7 E-3	NA	NA	NA	2 E-3	NA	NA
217	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	3 E-3	NA	NA
218	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-5	NA	NA	NA	9.0 E-4	NA	NA	NA	6 E-3	NA	NA
282	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	3.1 E-4	NA	NA	NA	4.7 E-5	NA	NA	NA	1.3 E-3	NA	8.7 E-5	NA	1 E-2	NA	NA
283	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-6	NA	NA	NA	NA	NA	3.9 E-5	NA	NA	NA	2.6 E-5	NA	NA	NA	5.8 E-4	NA	NA	NA	5 E-3	NA	NA
284	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-5	NA	NA	NA	1 E-4	NA	NA
285	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	2 E-5	NA	NA
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-6	NA	NA	NA	1 E-6	19	9.2
287	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-6	NA	NA	NA	1 E-5	NA	NA
288	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	1 E-4	NA	NA
289	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7 E-6	NA	NA	NA	NA	NA	2.7 E-5	NA	NA	NA	5.7 E-5	NA	NA	NA	3.0 E-3	NA	NA	NA	3 E-3	NA	NA
290	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	2.2 E-4	NA	NA	NA	3 E-4	NA	NA
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
356	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-4	NA	NA	NA	2 E-4	NA	NA
357	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-6	NA	NA	NA	1 E-6	NA	NA
358	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.6 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-6	136	68
374	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.5 E-5	NA	NA	NA	3 E-4	NA	NA
375	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	1 E-4	NA	NA
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5 E-6	NA	NA	NA	4 E-6	NA	NA
399	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-6	NA	NA	NA	2 E-6	NA	NA
400	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-7	NA	NA	NA	1 E-6	NA	NA
401	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.6 E-4	NA	NA	NA	6 E-4	NA	NA
402	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
403	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
484	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	5.9 E-4	NA	NA	NA	2 E-2	767	383
485	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	NA	2.6 E-3	NA	NA	NA	6 E-3	4.1	2.0
486	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	1.3 E-3	NA	NA	NA	2 E-3	NA	NA
487	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-5	NA	NA	NA	1 E-5	NA	NA
494	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-5	NA	NA	NA	4 E-4	NA	NA
495	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	4 E-4	NA	NA
685	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-5	NA	NA	NA	2 E-4	NA	NA
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-6	NA	NA	NA	3 E-6	NA	NA
3058	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	7.2 E-5	NA	NA	NA	5.2 E-3	NA	NA	NA	6 E-3	NA	NA
3059	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	3 E-4	NA	NA
3060	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7 E-6	NA	NA	NA	2 E-5	NA	NA
3061	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3124	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	1 E-5	NA	NA
3125	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-6	NA	NA	NA	6 E-6	NA	NA
3126	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	NA	NA	4 E-4	NA	NA
3127	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.0 E-6	NA	NA	NA	9 E-6	NA	NA
3128	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3221	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 E-6	767	383
3222	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.5 E-5	NA	NA	NA	6 E-3	480	240
3223	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-6	NA	NA	NA	NA	NA	2.1 E-5	NA	NA	NA	7.2 E-5	NA	NA	NA	1.4 E-3	NA	NA	NA	1 E-2	NA	NA
3224	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0 E-4	NA	NA	NA	1.3 E-3	NA	NA	NA	1 E-2	NA	NA

Table 5.13-11
Groundwater Location-Specific Risk Assessment Results-Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																												Blood Lead	
Sample Name	Layer	Dieldrin	Endosulfan I	Endosulfan II	gamma-BHC (Lindane)	Iron	Lead	Lithium	Manganese	Mercury	Methylene chloride	Molybdenum	Nickel	Nitrate	Nitrate as NO3	Nitrite as NO2	N-Nitrosodimethylamine	Perchlorate	Selenium	Strontium	Tetrachloroethene	Thallium	Titanium	trans-1,2-Dichloroethene	Trichloroethene	Vanadium	Vinyl chloride	Zinc	ILCR	Child	Adult
Unit Hazard Child																															
Unit Hazard Adult																															
Unit Risk																															
3225	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-5	NA	NA	NA	2 E-3	NA	NA
3226	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.6 E-5	NA	NA	NA	1.2 E-3	NA	NA	NA	1 E-2	NA	NA
3245	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	3 E-4	NA	NA
3246	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5 E-5	NA	NA
3247	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3248	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3249	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3264	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0 E-5	NA	NA	NA	2 E-3	97	49
3265	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.5 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	NA	NA	2 E-3	NA	NA
3266	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.8 E-5	NA	NA	NA	1 E-3	NA	NA
3267	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.0 E-6	NA	NA	NA	1 E-4	NA	NA
3268	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-5	NA	NA
3292	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-6	NA	NA	NA	2.9 E-5	NA	NA	NA	2 E-3	33	17
3293	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.7 E-5	NA	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	5.7 E-5	NA	NA	NA	4.4 E-3	NA	NA	NA	1 E-2	NA	NA
3294	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.7 E-5	NA	NA	NA	1.9 E-3	NA	4.2 E-4	NA	1 E-2	NA	NA
3295	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8 E-6	NA	NA	NA	3 E-5	NA	NA
3296	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	5 E-3	NA	NA
3297	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-5	NA	NA	NA	6 E-5	NA	NA
3348	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	5 E-5	1.9	0.89
3349	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 E-4	NA	NA	NA	1 E-3	NA	NA
3350	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	NA	3 E-4	NA	NA
3364	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9 E-4	NA	NA	NA	4 E-4	NA	NA
3365	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0 E-5	NA	NA	NA	4 E-5	NA	NA
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3	1.6
3441	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-5	NA	NA
3442	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 E-7	NA	NA
3638	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-5	NA	NA	NA	6.3 E-4	NA	NA	NA	3 E-3	2.2	1.1
3641	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-4	2.3	1.1
3642	S	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.2 E-6	NA	NA	NA	3 E-5	2.5	1.2
3644	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3 E-6	NA	NA	NA	8 E-6	2.1	1.0
3645	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	1.3 E-3	NA	NA	NA	2 E-3	2.2	1.0
3654	B	5.7 E-6	NA	NA	2.2 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.2 E-6	NA	NA	NA	3 E-5	2.0	1.0
3656	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7 E-7	NA	NA	NA	4 E-5	NA	NA
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-6	NA	NA
3728	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.7 E-6	NA	NA	NA	1.5 E-6	NA	NA	NA	3 E-4	NA	NA
4007	A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.4 E-6	NA	NA	NA	NA	NA	NA	NA	6.9 E-6	NA	NA	NA	8 E-5	NA	NA
4140	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.5 E-5	NA	NA	NA	1.3 E-4	NA	NA	NA	4.3 E-3	NA	NA	NA	8 E-3	NA	NA
4145	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9 E-5	NA	NA	NA	1.4 E-4	NA	NA	NA	2.1 E-3	NA	NA	NA	5 E-3	NA	NA
4310	A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-5	NA	NA	NA	2 E-3	NA	NA
4315	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 E-5	NA	NA	NA	1.0 E-4	NA	NA	NA	5.9 E-3	NA	NA	NA	7 E-3	NA	NA

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x the unit hazard or unit risk for the chemical).

Table 5.13-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration																			
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Benzene**	**Bromodichloro methane**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dibromochloromethane**	**Methylene chloride**	**Tetrachloroethene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**
Unit Hazard Child		1.1 E+1	1.6 E+2	3.2 E+0	3.2 E+1	4.6 E+2	6.4 E+1	7.5 E-1	1.1 E+5	7.4 E+1	3.2 E+1	3.2 E+0	5.6 E+1	4.9 E+1	6.4 E+1	3.2 E+1	7.5 E-1	6.4 E+1	3.8 E+1	3.7 E+0	2.2 E+1
Unit Hazard Adult		4.6 E+0	6.8 E+1	1.4 E+0	1.4 E+1	2.0 E+2	2.7 E+1	3.2 E-1	4.8 E+4	3.2 E+1	1.4 E+1	1.4 E+0	2.4 E+1	2.1 E+1	2.7 E+1	1.4 E+1	3.2 E-1	2.7 E+1	1.6 E+1	1.6 E+0	9.4 E+0
Unit Risk		3.0 E-2	8.5 E-3	8.5 E-4	NA	1.4 E-2	NA	4.0 E-3	NA	1.5 E-2	1.9 E-2	NA	2.2 E-2	1.2 E-2	NA	1.4 E-2	5.2 E-4	3.1 E-3	NA	1.0 E-3	4.0 E-2
7	S					4.2				1.6				1.1			19			8.6	
9	Y																				
25	S					40	25							2.1	28					110	
30	Y																				
130	S																				
131	S		2.8		1.1	39	7.0							4.8	4.1					81	
212	S				3.0		13							4.2	15					910	
215	S	2.7	1.7			2200	8.5							8.6	1.2					65	
286	Y																			2.0	
355	S																				
374	S					33	3.0							3.0	1.5					34	
375	S					13								1.0						24	
376	Y																			6.0	
685	S					16	15													66	
3057	Y																			3.7	
3221	Y					1.0															
3222	S					280	35							2.2	0.73					100	
3264	S					210	14							1.8			4.0			80	
3292	S		2.8			270	7.1							8.0				0.51		39	
3348	S					2.0	2.8							2.0	2.8					30	
3440	S																				
3642	S		0.81			0.34								2.4	1.2					9.6	
3645	S		3.2	1.1	33	4.1							0.33	4.1	43			7.8	0.86	1800	
3656	S					4.7								0.6	0.31					1.3	
3696	Y													0.48							
3728	Y		1.3	0.71		2.5								38	0.53				0.53	2.0	

Table 5.13-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Child Non-Cancer Hazard Index																				
Sample Name	Layer	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,2-Dichloroethene (cis/trans)	1,4-Dioxane	Acrolein	Benzene	Bromodichloromethane	Carbon disulfide	Carbon tetrachloride	Chloroform	cis-1,2-Dichloroethene	Dibromochloromethane	Methylene chloride	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride	HI
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
7	S	NA	NA	NA	NA	7.2E-03	NA	NA	NA	2.1E-03	NA	NA	NA	4.8E-03	NA	NA	1.2E-04	NA	NA	9.6E-04	NA	1.5E-02
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	S	NA	NA	NA	NA	6.8E-02	1.8E-02	NA	NA	NA	NA	NA	NA	9.1E-03	2.0E-02	NA	NA	NA	NA	1.2E-02	NA	1.3E-01
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
131	S	NA	1.2E-03	NA	3.1E-03	6.6E-02	5.0E-03	NA	NA	NA	NA	NA	NA	2.1E-02	2.9E-03	NA	NA	NA	NA	9.1E-03	NA	1.1E-01
212	S	NA	NA	NA	8.4E-03	NA	9.3E-03	NA	NA	NA	NA	NA	NA	1.8E-02	1.1E-02	NA	NA	NA	NA	1.0E-01	NA	1.5E-01
215	S	2.6E-05	7.1E-04	NA	NA	3.7E+00	6.1E-03	NA	NA	NA	NA	NA	NA	3.7E-02	8.6E-04	NA	NA	NA	NA	7.3E-03	NA	3.8E+00
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.0E-04	NA	6.0E-04
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
374	S	NA	NA	NA	NA	5.6E-02	2.1E-03	NA	NA	NA	NA	NA	NA	1.3E-02	1.1E-03	NA	NA	NA	NA	3.8E-03	NA	7.6E-02
375	S	NA	NA	NA	NA	2.2E-02	NA	NA	NA	NA	NA	NA	NA	4.3E-03	NA	NA	NA	NA	NA	2.7E-03	NA	2.9E-02
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8E-03	NA	1.8E-03
685	S	NA	NA	NA	NA	2.7E-02	1.1E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4E-03	NA	4.5E-02
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1E-03	NA	1.1E-03
3221	Y	NA	NA	NA	NA	4.5E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.5E-03
3222	S	NA	NA	NA	NA	4.8E-01	2.5E-02	NA	NA	NA	NA	NA	NA	9.5E-03	5.2E-04	NA	NA	NA	NA	1.1E-02	NA	5.2E-01
3264	S	NA	NA	NA	NA	3.6E-01	1.0E-02	NA	NA	NA	NA	NA	NA	7.8E-03	NA	NA	2.4E-05	NA	NA	9.0E-03	NA	3.8E-01
3292	S	NA	1.2E-03	NA	NA	4.6E-01	5.1E-03	NA	NA	NA	NA	NA	NA	3.5E-02	NA	NA	NA	1.6E-03	NA	4.4E-03	NA	5.1E-01
3348	S	NA	NA	NA	NA	3.4E-03	2.0E-03	NA	NA	NA	NA	NA	NA	8.7E-03	2.0E-03	NA	NA	NA	NA	3.4E-03	NA	1.9E-02
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3642	S	NA	3.4E-04	NA	NA	5.8E-04	NA	NA	NA	NA	NA	NA	NA	1.0E-02	8.6E-04	NA	NA	NA	NA	1.1E-03	NA	1.3E-02
3645	S	NA	1.3E-03	5.5E-05	9.2E-02	7.0E-03	NA	NA	NA	NA	NA	NA	1.6E-03	1.8E-02	3.1E-02	NA	NA	2.4E-02	8.0E-04	2.0E-01	NA	3.8E-01
3656	S	NA	NA	NA	NA	8.0E-03	NA	NA	NA	NA	NA	NA	NA	2.6E-03	2.2E-04	NA	NA	NA	NA	1.5E-04	NA	1.1E-02
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8E-04	NA	NA	NA	NA	NA	NA	NA	8.8E-04
3728	Y	NA	1.5E-03	9.5E-05	NA	1.1E-02	NA	NA	NA	NA	NA	NA	NA	7.0E-02	1.0E-03	NA	NA	NA	1.3E-03	6.0E-04	NA	8.5E-02

Table 5.13-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Adult Non-Cancer Hazard Index																				
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Benzene**	**Bromodichloro methane**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dibromochloro methane**	**Methylene chloride**	**Tetrachloroethene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**HI**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
7	S	NA	NA	NA	NA	3.1E-03	NA	NA	NA	9.2E-04	NA	NA	NA	2.0 E-3	NA	NA	5.0 E-5	NA	NA	4.1 E-4	NA	6.5 E-3
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	S	NA	NA	NA	NA	2.9E-02	7.7E-03	NA	NA	NA	NA	NA	NA	3.9 E-3	8.6 E-3	NA	NA	NA	NA	5.3 E-3	NA	5.5 E-2
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
131	S	NA	5.0E-04	NA	1.3E-03	2.8E-02	2.1E-03	NA	NA	NA	NA	NA	NA	8.9 E-3	1.3 E-3	NA	NA	NA	NA	3.9 E-3	NA	4.6 E-2
212	S	NA	NA	NA	3.6E-03	NA	4.0E-03	NA	NA	NA	NA	NA	NA	7.8 E-3	4.6 E-3	NA	NA	NA	NA	4.4 E-2	NA	6.4 E-2
215	S	1.1E-05	3.1E-04	NA	NA	1.6E+00	2.6E-03	NA	NA	NA	NA	NA	NA	1.6 E-2	3.7 E-4	NA	NA	NA	NA	3.1 E-3	NA	1.6 E+0
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 E-4	NA	2.6 E-4
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
374	S	NA	NA	NA	NA	2.4E-02	9.2E-04	NA	NA	NA	NA	NA	NA	5.6 E-3	4.6 E-4	NA	NA	NA	NA	1.6 E-3	NA	3.3 E-2
375	S	NA	NA	NA	NA	9.5E-03	NA	NA	NA	NA	NA	NA	NA	1.9 E-3	NA	NA	NA	NA	NA	1.2 E-3	NA	1.3 E-2
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.8 E-4	NA	7.8 E-4
685	S	NA	NA	NA	NA	1.2E-02	4.6E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.2 E-3	NA	1.9 E-2
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.8 E-4	NA	4.8 E-4
3221	Y	NA	NA	NA	NA	1.9E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9 E-3
3222	S	NA	NA	NA	NA	2.0E-01	1.1E-02	NA	NA	NA	NA	NA	NA	4.1 E-3	2.2 E-4	NA	NA	NA	NA	4.8 E-3	NA	2.2 E-1
3264	S	NA	NA	NA	NA	1.5E-01	4.3E-03	NA	NA	NA	NA	NA	NA	3.3 E-3	NA	NA	1.0 E-5	NA	NA	3.8 E-3	NA	1.6 E-1
3292	S	NA	5.0E-04	NA	NA	2.0E-01	2.2E-03	NA	NA	NA	NA	NA	NA	1.5 E-2	NA	NA	NA	6.8 E-4	NA	1.9 E-3	NA	2.2 E-1
3348	S	NA	NA	NA	NA	1.5E-03	8.6E-04	NA	NA	NA	NA	NA	NA	3.7 E-3	8.6 E-4	NA	NA	NA	NA	1.4 E-3	NA	8.3 E-3
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3642	S	NA	1.5E-04	NA	NA	2.5E-04	NA	NA	NA	NA	NA	NA	NA	4.5 E-3	3.7 E-4	NA	NA	NA	NA	4.6 E-4	NA	5.7 E-3
3645	S	NA	5.7E-04	2.3E-05	4.0E-02	3.0E-03	NA	NA	NA	NA	NA	NA	7.0E-04	7.6 E-3	1.3 E-2	NA	NA	1.0 E-2	3.4 E-4	8.7 E-2	NA	1.6 E-1
3656	S	NA	NA	NA	NA	3.4E-03	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	9.5 E-5	NA	NA	NA	NA	6.2 E-5	NA	4.7 E-3
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.8 E-4	NA	NA	NA	NA	NA	NA	NA	3.8 E-4
3728	Y	NA	6.3E-04	4.1E-05	NA	4.8E-03	NA	NA	NA	NA	NA	NA	NA	3.0 E-2	4.4 E-4	NA	NA	NA	5.7 E-4	2.6 E-4	NA	3.7 E-2

Table 5.13-12
Groundwater Location-Specific Indoor Air Risk Assessment Results - Resident
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																			
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Benzene**	**Bromodichloro methane**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dibromochloro methane**	**Methylene chloride**	**Tetrachloroethene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**ILCR**
Unit Hazard Child																						
Unit Hazard Adult																						
Unit Risk																						
7	S	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	4.3 E-7	NA	NA	NA	1.2 E-6	NA	NA	8.2 E-8	NA	NA	2.7 E-7	NA	2 E-6
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
25	S	NA	NA	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	2.2 E-6	NA	NA	NA	NA	NA	3.4 E-6	NA	8 E-6
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
131	S	NA	6.2 E-8	NA	NA	2.0 E-6	NA	NA	NA	NA	NA	NA	NA	5.1 E-6	NA	NA	NA	NA	NA	2.5 E-6	NA	1 E-5
212	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4 E-6	NA	NA	NA	NA	NA	2.8 E-5	NA	3 E-5
215	S	7.2 E-8	3.8 E-8	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	NA	NA	9.1 E-6	NA	NA	NA	NA	NA	2.0 E-6	NA	1 E-4
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	2 E-7
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
374	S	NA	NA	NA	NA	1.7 E-6	NA	NA	NA	NA	NA	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	1.1 E-6	NA	6 E-6
375	S	NA	NA	NA	NA	6.6 E-7	NA	NA	NA	NA	NA	NA	NA	1.1 E-6	NA	NA	NA	NA	NA	7.5 E-7	NA	2 E-6
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.1 E-7	NA	5 E-7
685	S	NA	NA	NA	NA	8.1 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	3 E-6
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1 E-7	NA	3 E-7
3221	Y	NA	NA	NA	NA	1.3 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 E-7
3222	S	NA	NA	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	2.3 E-6	NA	NA	NA	NA	NA	3.1 E-6	NA	2 E-5
3264	S	NA	NA	NA	NA	1.1 E-5	NA	NA	NA	NA	NA	NA	NA	1.9 E-6	NA	NA	1.7 E-8	NA	NA	2.5 E-6	NA	2 E-5
3292	S	NA	6.2 E-8	NA	NA	1.4 E-5	NA	NA	NA	NA	NA	NA	NA	8.4 E-6	NA	NA	NA	7.8 E-8	NA	1.2 E-6	NA	2 E-5
3348	S	NA	NA	NA	NA	1.0 E-7	NA	NA	NA	NA	NA	NA	NA	2.1 E-6	NA	NA	NA	NA	NA	9.4 E-7	NA	3 E-6
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
3642	S	NA	1.8 E-8	NA	NA	1.7 E-8	NA	NA	NA	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	NA	3.0 E-7	NA	3 E-6
3645	S	NA	7.1 E-8	1.4 E-8	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	6.5 E-7	4.3 E-6	NA	NA	NA	1.2 E-6	NA	5.6 E-5	NA	6 E-5
3656	S	NA	NA	NA	NA	2.4 E-7	NA	NA	NA	NA	NA	NA	NA	6.3 E-7	NA	NA	NA	NA	NA	4.1 E-8	NA	9 E-7
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 E-7	NA	NA	NA	NA	NA	NA	NA	2 E-7
3728	Y	NA	7.8 E-8	2.5 E-8	NA	3.3 E-7	NA	NA	NA	NA	NA	NA	NA	1.7 E-5	NA	NA	NA	NA	NA	1.7 E-7	NA	2 E-5

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x groundwater to indoor air attenuation factor (from Table 5.13- 4) x the unit hazard or unit risk for the chemical).

Table 5.13-13 *Groundwater Inhalation Hazard and Unit Cancer Risk Results - Commercial Worker*
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Chemical	Indoor Vapor Concentration (µg/L)	Unit Inhal HQ	Unit Inhal ILCR
Volatile Organic Compounds			
Acrolein	1.0 E+0	3.4 E+4	NA
1,1-Dichloroethane	1.0 E+0	9.8 E-1	4.0 E-4
1,1,2-Trichloroethane	1.0 E+0	4.9 E+1	4.0 E-3
1,1-Dichloroethene	1.0 E+0	9.8 E+0	NA
1,2-Dichloroethane	1.0 E+0	1.4 E+2	6.4 E-3
1,2-Dichloroethene (cis/trans)	1.0 E+0	2.0 E+1	NA
1,1,2,2-Tetrachloroethane	1.0 E+0	3.3 E+0	1.4 E-2
1,4-Dioxane	1.0 E+0	2.3 E-1	1.9 E-3
Benzene	1.0 E+0	2.3 E+1	7.0 E-3
Bromodichloromethane	1.0 E+0	9.8 E+0	9.1 E-3
Carbon disulfide	1.0 E+0	9.8 E-1	NA
Dibromochloromethane	1.0 E+0	9.8 E+0	6.6 E-3
Carbon tetrachloride	1.0 E+0	1.7 E+1	1.0 E-2
Chloroform	1.0 E+0	1.5 E+1	5.6 E-3
cis-1,2-Dichloroethene	1.0 E+0	2.0 E+1	NA
Methylene chloride	1.0 E+0	2.3 E-1	2.4 E-4
Tetrachloroethene	1.0 E+0	2.0 E+1	1.5 E-3
trans-1,2-Dichloroethene	1.0 E+0	1.2 E+1	NA
Vinyl Chloride	1.0 E+0	6.7 E+0	1.9 E-2
Trichloroethene	1.0 E+0	1.1 E+0	4.9 E-4

Key:
HQ = Hazard quotient
ILCR = Incremental lifetime cancer risk
µg/L = Micrograms per liter
NA = Not applicable

Table 5.13-14
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Concentration																			
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Benzene**	**Bromodichloro methane**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dibromochloro methane**	**Methylene chloride**	**Tetrachloroethene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**
Unit Hazard		1.1 E+1	4.9 E+1	9.8 E-1	9.8 E+0	1.4 E+2	2.0 E+1	2.3 E-1	3.4 E+4	2.3 E+1	9.8 E+0	9.8 E-1	1.7 E+1	1.5 E+1	2.0 E+1	9.8 E+0	2.3 E-1	2.0 E+1	1.2 E+1	1.1 E+0	6.7 E+0
Unit Risk		1.4 E-2	4.0 E-3	4.0 E-4	NA	6.4 E-3	NA	1.9 E-3	NA	7.0 E-3	9.1 E-3	NA	1.0 E-2	5.6 E-3	NA	6.6 E-3	2.4 E-4	1.5 E-3	NA	4.9 E-4	1.9 E-2
7	S					4.2				1.6				1.1			19			8.6	
9	Y																				
25	S					40	25							2.1	28					110	
30	Y																				
130	S																				
131	S		2.8		1.1	39	7.0							4.8	4.1					81	
212	S				3.0		13							4.2	15					910	
215	S	2.7	1.7			2200	8.5							8.6	1.2					65	
286	Y																			2.0	
355	S																				
374	S					33	3.0							3.0	1.5					34	
375	S					13								1.0						24	
376	Y																			6.0	
685	S					16	15													66	
3057	Y																			3.7	
3221	Y					1.0															
3222	S					280	35							2.2	0.73					100	
3264	S					210	14							1.8			4.0			80	
3292	S		2.8			270	7.1							8.0				0.51		39	
3348	S					2.0	2.8							2.0	2.8					30	
3440	S																				
3642	S		0.81			0.34								2.4	1.2					9.6	
3645	S		3.2	1.1	33	4.1							0.33	4.1	43			7.8	0.86	1800	
3656	S					4.7								0.6	0.31					1.3	
3696	Y													0.48							
3728	Y		1.3	0.71		2.5								38	0.53				0.53	2.0	

Table 5.13-14
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index																				
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Benzene**	**Bromodichloro methane**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dibromochloro methane**	**Methylene chloride**	**Tetrachloroethene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**HI**
Unit Hazard																						
Unit Risk																						
7	S	NA	NA	NA	NA	1.1 E-3	NA	NA	NA	3.3 E-4	NA	NA	NA	1.2 E-4	NA	NA	1.8 E-5	NA	NA	1.5 E-4	NA	1.7 E-3
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	S	NA	NA	NA	NA	1.0 E-2	2.7 E-3	NA	NA	NA	NA	NA	NA	2.2 E-4	3.1 E-3	NA	NA	NA	NA	1.9 E-3	NA	1.8 E-2
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
131	S	NA	1.8 E-4	NA	4.7 E-4	1.0 E-2	7.7 E-4	NA	NA	NA	NA	NA	NA	5.1 E-4	4.5 E-4	NA	NA	NA	NA	1.4 E-3	NA	1.4 E-2
212	S	NA	NA	NA	1.3 E-3	NA	1.4 E-3	NA	NA	NA	NA	NA	NA	4.4 E-4	1.6 E-3	NA	NA	NA	NA	1.6 E-2	NA	2.0 E-2
215	S	1.3 E-5	1.1 E-4	NA	NA	5.7 E-1	9.3 E-4	NA	NA	NA	NA	NA	NA	9.1 E-4	1.3 E-4	NA	NA	NA	NA	1.1 E-3	NA	5.8 E-1
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.2 E-5	NA	9.2 E-5
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
374	S	NA	NA	NA	NA	8.6 E-3	3.3 E-4	NA	NA	NA	NA	NA	NA	3.2 E-4	1.6 E-4	NA	NA	NA	NA	5.8 E-4	NA	1.0 E-2
375	S	NA	NA	NA	NA	3.4 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-4	NA	NA	NA	NA	NA	4.1 E-4	NA	3.9 E-3
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.8 E-4	NA	2.8 E-4
685	S	NA	NA	NA	NA	4.2 E-3	1.6 E-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1 E-3	NA	6.9 E-3
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-4	NA	1.7 E-4
3221	Y	NA	NA	NA	NA	6.9 E-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9 E-4
3222	S	NA	NA	NA	NA	7.3 E-2	3.8 E-3	NA	NA	NA	NA	NA	NA	2.3 E-4	8.0 E-5	NA	NA	NA	NA	1.7 E-3	NA	7.9 E-2
3264	S	NA	NA	NA	NA	5.5 E-2	1.5 E-3	NA	NA	NA	NA	NA	NA	1.9 E-4	NA	NA	3.7 E-6	NA	NA	1.4 E-3	NA	5.8 E-2
3292	S	NA	1.8 E-4	NA	NA	7.0 E-2	7.8 E-4	NA	NA	NA	NA	NA	NA	8.5 E-4	NA	NA	NA	2.4 E-4	NA	6.7 E-4	NA	7.3 E-2
3348	S	NA	NA	NA	NA	5.2 E-4	3.1 E-4	NA	NA	NA	NA	NA	NA	2.1 E-4	3.1 E-4	NA	NA	NA	NA	5.2 E-4	NA	1.9 E-3
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3642	S	NA	5.2 E-5	NA	NA	8.9 E-5	NA	NA	NA	NA	NA	NA	NA	2.5 E-4	1.3 E-4	NA	NA	NA	NA	1.6 E-4	NA	6.9 E-4
3645	S	NA	2.1 E-4	8.4 E-6	1.4 E-2	1.1 E-3	NA	NA	NA	NA	NA	NA	2.5 E-4	4.3 E-4	4.7 E-3	NA	NA	3.7 E-3	1.2 E-4	3.1 E-2	NA	5.6 E-2
3656	S	NA	NA	NA	NA	1.2 E-3	NA	NA	NA	NA	NA	NA	NA	6.3 E-5	3.4 E-5	NA	NA	NA	NA	2.2 E-5	NA	1.3 E-3
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3 E-4	NA	NA	NA	NA	NA	NA	NA	1.3 E-4
3728	Y	NA	2.2 E-4	1.5 E-5	NA	1.7 E-3	NA	NA	NA	NA	NA	NA	NA	1.1 E-2	1.6 E-4	NA	NA	NA	2.0 E-4	9.2 E-5	NA	1.3 E-2

Table 5.13-14
Groundwater Location-Specific Indoor Air Risk Assessment Results - Commercial Worker
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Incremental Lifetime Cancer Risk																				
Sample Name	**Layer**	**1,1,2,2-Tetrachloroethane**	**1,1,2-Trichloroethane**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**1,2-Dichloroethene (cis/trans)**	**1,4-Dioxane**	**Acrolein**	**Benzene**	**Bromodichloro methane**	**Carbon disulfide**	**Carbon tetrachloride**	**Chloroform**	**cis-1,2-Dichloroethene**	**Dibromochloro methane**	**Methylene chloride**	**Tetrachloroethene**	**trans-1,2-Dichloroethene**	**Trichloroethene**	**Vinyl chloride**	**ILCR**
Unit Hazard																						
Unit Risk																						
7	S	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	1.0 E-7	NA	NA	NA	4.3 E-8	NA	NA	1.9 E-8	NA	NA	6.3 E-8	NA	3 E-7
9	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
25	S	NA	NA	NA	NA	4.7 E-7	NA	NA	NA	NA	NA	NA	NA	8.3 E-8	NA	NA	NA	NA	NA	8.1 E-7	NA	1 E-6
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
130	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
131	S	NA	1.5 E-8	NA	NA	4.6 E-7	NA	NA	NA	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	6.0 E-7	NA	1 E-6
212	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.7 E-7	NA	NA	NA	NA	NA	6.7 E-6	NA	7 E-6
215	S	1.7 E-8	8.9 E-9	NA	NA	2.6 E-5	NA	NA	NA	NA	NA	NA	NA	3.4 E-7	NA	NA	NA	NA	NA	4.8 E-7	NA	3 E-5
286	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	4 E-8
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
374	S	NA	NA	NA	NA	3.9 E-7	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	NA	NA	NA	NA	2.5 E-7	NA	8 E-7
375	S	NA	NA	NA	NA	1.5 E-7	NA	NA	NA	NA	NA	NA	NA	4.0 E-8	NA	NA	NA	NA	NA	1.8 E-7	NA	4 E-7
376	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 E-7	NA	1 E-7
685	S	NA	NA	NA	NA	1.9 E-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.9 E-7	NA	7 E-7
3057	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3 E-8	NA	7 E-8
3221	Y	NA	NA	NA	NA	3.1 E-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3 E-8
3222	S	NA	NA	NA	NA	3.3 E-6	NA	NA	NA	NA	NA	NA	NA	8.7 E-8	NA	NA	NA	NA	NA	7.4 E-7	NA	4 E-6
3264	S	NA	NA	NA	NA	2.5 E-6	NA	NA	NA	NA	NA	NA	NA	7.1 E-8	NA	NA	4.0 E-9	NA	NA	5.9 E-7	NA	3 E-6
3292	S	NA	1.5 E-8	NA	NA	3.2 E-6	NA	NA	NA	NA	NA	NA	NA	3.2 E-7	NA	NA	NA	1.8 E-8	NA	2.9 E-7	NA	4 E-6
3348	S	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	NA	NA	NA	7.9 E-8	NA	NA	NA	NA	NA	2.2 E-7	NA	3 E-7
3440	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0
3642	S	NA	4.2 E-9	NA	NA	4.0 E-9	NA	NA	NA	NA	NA	NA	NA	9.5 E-8	NA	NA	NA	NA	NA	7.1 E-8	NA	2 E-7
3645	S	NA	1.7 E-8	3.4 E-9	NA	4.9 E-8	NA	NA	NA	NA	NA	NA	1.5 E-7	1.6 E-7	NA	NA	NA	2.8 E-7	NA	1.3 E-5	NA	1 E-5
3656	S	NA	NA	NA	NA	5.6 E-8	NA	NA	NA	NA	NA	NA	NA	2.4 E-8	NA	NA	NA	NA	NA	9.6 E-9	NA	9 E-8
3696	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.0 E-8	NA	NA	NA	NA	NA	NA	NA	5 E-8
3728	Y	NA	1.8 E-8	5.9 E-9	NA	7.9 E-8	NA	NA	NA	NA	NA	NA	NA	4.0 E-6	NA	NA	NA	NA	NA	4.0 E-8	NA	4 E-6

Notes and Key:
All concentrations reported in micrograms per liter.
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable.
Note: Blank cells indicate sample locations that were either not detected or where data were not available. Blank cells are intentional to allow the reader to quickly see the relevant data presented in the table.
Hazard (HI) or risk (ILCR) is the concentration for the chemical x groundwater to indoor air attenuation factor (from Table 5.13- 5) x the unit hazard or unit risk for the chemical).

Table 5.13-15 All Receptors Hazard Index and Cancer Risk Results for Groundwater
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk					Blood Lead	
		Ingestion and Domestic Use		Vapor Intrusion			Domestic + Vapor Intrusion			Ingestion and Domestic Use	Vapor Intrusion		Domestic + Vapor Intrusion			
		Resident		Resident		Commercial	Resident		Commercial			Commercial		Commercial	Resident	
Sample Name	Layer	Child	Adult	Child	Adult	Worker	Child	Adult	Worker	Resident	Resident	Worker	Resident	Worker	Child	Adult
4007	A	7.7 E+0	3.3 E+0	NA	NA	NA	7.7 E+0	3.3 E+0	NA	8 E-5	NA	NA	8 E-5	NA	NA	NA
4310	A	1.2 E+2	5.3 E+1	NA	NA	NA	1.2 E+2	5.3 E+1	NA	2 E-3	NA	NA	2 E-3	NA	NA	NA
8	B	1.5 E+1	6.6 E+0	NA	NA	NA	1.5 E+1	6.6 E+0	NA	1 E-6	NA	NA	1 E-6	NA	NA	NA
75	B	9.1 E+0	3.9 E+0	NA	NA	NA	9.1 E+0	3.9 E+0	NA	1 E-4	NA	NA	1 E-4	NA	2.7 E+0	1.3 E+0
399	B	2.5 E+1	1.1 E+1	NA	NA	NA	2.5 E+1	1.1 E+1	NA	2 E-6	NA	NA	2 E-6	NA	NA	NA
3295	B	7.9 E-1	3.4 E-1	NA	NA	NA	7.9 E-1	3.4 E-1	NA	3 E-5	NA	NA	3 E-5	NA	NA	NA
3644	B	1.5 E+1	6.6 E+0	NA	NA	NA	1.5 E+1	6.6 E+0	NA	8 E-6	NA	NA	8 E-6	NA	2.1 E+0	9.9 E-1
3654	B	5.2 E+0	2.2 E+0	NA	NA	NA	5.2 E+0	2.2 E+0	NA	3 E-5	NA	NA	3 E-5	NA	2.0 E+0	9.6 E-1
1	C	1.6 E+3	7.0 E+2	NA	NA	NA	1.6 E+3	7.0 E+2	NA	9 E-3	NA	NA	9 E-3	NA	2.8 E+0	1.4 E+0
3	C	2.6 E+1	1.1 E+1	NA	NA	NA	2.6 E+1	1.1 E+1	NA	5 E-4	NA	NA	5 E-4	NA	6.2 E+0	3.1 E+0
4	C	1.7 E+3	7.2 E+2	NA	NA	NA	1.7 E+3	7.2 E+2	NA	2 E-2	NA	NA	2 E-2	NA	7.0 E+0	3.5 E+0
132	C	5.1 E+3	2.2 E+3	NA	NA	NA	5.1 E+3	2.2 E+3	NA	1 E-2	NA	NA	1 E-2	NA	NA	NA
209	C	4.5 E+0	1.9 E+0	NA	NA	NA	4.5 E+0	1.9 E+0	NA	1 E-5	NA	NA	1 E-5	NA	NA	NA
210	C	8.8 E+0	3.8 E+0	NA	NA	NA	8.8 E+0	3.8 E+0	NA	7 E-5	NA	NA	7 E-5	NA	NA	NA
213	C	3.8 E+3	1.6 E+3	NA	NA	NA	3.8 E+3	1.6 E+3	NA	6 E-3	NA	NA	6 E-3	NA	NA	NA
216	C	2.3 E+3	1.0 E+3	NA	NA	NA	2.3 E+3	1.0 E+3	NA	2 E-3	NA	NA	2 E-3	NA	NA	NA
217	C	3.4 E+3	1.5 E+3	NA	NA	NA	3.4 E+3	1.5 E+3	NA	3 E-3	NA	NA	3 E-3	NA	NA	NA
282	C	7.2 E+2	3.1 E+2	NA	NA	NA	7.2 E+2	3.1 E+2	NA	1 E-2	NA	NA	1 E-2	NA	NA	NA
283	C	3.4 E+2	1.5 E+2	NA	NA	NA	3.4 E+2	1.5 E+2	NA	5 E-3	NA	NA	5 E-3	NA	NA	NA
290	C	7.6 E+1	3.3 E+1	NA	NA	NA	7.6 E+1	3.3 E+1	NA	3 E-4	NA	NA	3 E-4	NA	NA	NA
356	C	9.2 E+2	3.9 E+2	NA	NA	NA	9.2 E+2	3.9 E+2	NA	2 E-4	NA	NA	2 E-4	NA	NA	NA
357	C	4.5 E-1	1.9 E-1	NA	NA	NA	4.5 E-1	1.9 E-1	NA	1 E-6	NA	NA	1 E-6	NA	NA	NA
400	C	5.2 E+2	2.2 E+2	NA	NA	NA	5.2 E+2	2.2 E+2	NA	1 E-6	NA	NA	1 E-6	NA	NA	NA
484	C	4.5 E+2	1.9 E+2	NA	NA	NA	4.5 E+2	1.9 E+2	NA	2 E-2	NA	NA	2 E-2	NA	7.7 E+2	3.8 E+2
485	C	1.1 E+3	4.7 E+2	NA	NA	NA	1.1 E+3	4.7 E+2	NA	6 E-3	NA	NA	6 E-3	NA	4.1 E+0	2.0 E+0
494	C	1.9 E+2	8.2 E+1	NA	NA	NA	1.9 E+2	8.2 E+1	NA	4 E-4	NA	NA	4 E-4	NA	NA	NA
495	C	4.6 E+2	2.0 E+2	NA	NA	NA	4.6 E+2	2.0 E+2	NA	4 E-4	NA	NA	4 E-4	NA	NA	NA
3058	C	2.8 E+3	1.2 E+3	NA	NA	NA	2.8 E+3	1.2 E+3	NA	6 E-3	NA	NA	6 E-3	NA	NA	NA
3059	C	2.2 E+2	9.4 E+1	NA	NA	NA	2.2 E+2	9.4 E+1	NA	3 E-4	NA	NA	3 E-4	NA	NA	NA
3060	C	1.9 E+1	8.3 E+0	NA	NA	NA	1.9 E+1	8.3 E+0	NA	2 E-5	NA	NA	2 E-5	NA	NA	NA
3124	C	6.2 E+2	2.6 E+2	NA	NA	NA	6.2 E+2	2.6 E+2	NA	1 E-5	NA	NA	1 E-5	NA	NA	NA
3125	C	2.0 E+0	8.4 E-1	NA	NA	NA	2.0 E+0	8.4 E-1	NA	6 E-6	NA	NA	6 E-6	NA	NA	NA
3126	C	2.1 E+2	9.2 E+1	NA	NA	NA	2.1 E+2	9.2 E+1	NA	4 E-4	NA	NA	4 E-4	NA	NA	NA
3223	C	1.1 E+3	4.8 E+2	NA	NA	NA	1.1 E+3	4.8 E+2	NA	1 E-2	NA	NA	1 E-2	NA	NA	NA
3224	C	1.2 E+3	5.1 E+2	NA	NA	NA	1.2 E+3	5.1 E+2	NA	1 E-2	NA	NA	1 E-2	NA	NA	NA
3225	C	6.4 E+1	2.7 E+1	NA	NA	NA	6.4 E+1	2.7 E+1	NA	2 E-3	NA	NA	2 E-3	NA	NA	NA
3245	C	6.2 E+2	2.7 E+2	NA	NA	NA	6.2 E+2	2.7 E+2	NA	3 E-4	NA	NA	3 E-4	NA	NA	NA
3265	C	3.3 E+2	1.4 E+2	NA	NA	NA	3.3 E+2	1.4 E+2	NA	2 E-3	NA	NA	2 E-3	NA	NA	NA
3266	C	1.4 E+2	6.1 E+1	NA	NA	NA	1.4 E+2	6.1 E+1	NA	1 E-3	NA	NA	1 E-3	NA	NA	NA
3293	C	2.8 E+3	1.2 E+3	NA	NA	NA	2.8 E+3	1.2 E+3	NA	1 E-2	NA	NA	1 E-2	NA	NA	NA
3294	C	1.9 E+3	8.0 E+2	NA	NA	NA	1.9 E+3	8.0 E+2	NA	1 E-2	NA	NA	1 E-2	NA	NA	NA
3296	C	6.0 E+2	2.6 E+2	NA	NA	NA	6.0 E+2	2.6 E+2	NA	5 E-3	NA	NA	5 E-3	NA	NA	NA
3297	C	6.4 E+1	2.7 E+1	NA	NA	NA	6.4 E+1	2.7 E+1	NA	6 E-5	NA	NA	6 E-5	NA	NA	NA
3364	C	4.0 E+2	1.7 E+2	NA	NA	NA	4.0 E+2	1.7 E+2	NA	4 E-4	NA	NA	4 E-4	NA	NA	NA
3441	C	6.5 E-1	2.8 E-1	NA	NA	NA	6.5 E-1	2.8 E-1	NA	3 E-5	NA	NA	3 E-5	NA	NA	NA
3442	C	1.1 E-2	4.6 E-3	NA	NA	NA	1.1 E-2	4.6 E-3	NA	2 E-7	NA	NA	2 E-7	NA	NA	NA
3638	C	2.8 E+2	1.2 E+2	NA	NA	NA	2.8 E+2	1.2 E+2	NA	3 E-3	NA	NA	3 E-3	NA	2.2 E+0	1.1 E+0
3641	C	1.8 E+0	7.8 E-1	NA	NA	NA	1.8 E+0	7.8 E-1	NA	1 E-4	NA	NA	1 E-4	NA	2.3 E+0	1.1 E+0
4140	C	2.3 E+3	1.0 E+3	NA	NA	NA	2.3 E+3	1.0 E+3	NA	8 E-3	NA	NA	8 E-3	NA	NA	NA
4145	C	1.3 E+3	5.6 E+2	NA	NA	NA	1.3 E+3	5.6 E+2	NA	5 E-3	NA	NA	5 E-3	NA	NA	NA
4315	C	2.9 E+3	1.2 E+3	NA	NA	NA	2.9 E+3	1.2 E+3	NA	7 E-3	NA	NA	7 E-3	NA	NA	NA
211	D	2.1 E+2	8.9 E+1	NA	NA	NA	2.1 E+2	8.9 E+1	NA	8 E-4	NA	NA	8 E-4	NA	NA	NA
214	D	3.7 E+3	1.6 E+3	NA	NA	NA	3.7 E+3	1.6 E+3	NA	6 E-3	NA	NA	6 E-3	NA	NA	NA
218	D	6.5 E+2	2.8 E+2	NA	NA	NA	6.5 E+2	2.8 E+2	NA	6 E-3	NA	NA	6 E-3	NA	NA	NA
284	D	1.7 E+1	7.2 E+0	NA	NA	NA	1.7 E+1	7.2 E+0	NA	1 E-4	NA	NA	1 E-4	NA	NA	NA
287	D	3.6 E+0	1.6 E+0	NA	NA	NA	3.6 E+0	1.6 E+0	NA	1 E-5	NA	NA	1 E-5	NA	NA	NA
289	D	1.2 E+3	5.2 E+2	NA	NA	NA	1.2 E+3	5.2 E+2	NA	3 E-3	NA	NA	3 E-3	NA	NA	NA
358	D	5.5 E+0	2.4 E+0	NA	NA	NA	5.5 E+0	2.4 E+0	NA	1 E-6	NA	NA	1 E-6	NA	1.4 E+2	6.8 E+1

Table 5.13-15 All Receptors Hazard Index and Cancer Risk Results for Groundwater
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk					Blood Lead	
		Ingestion and Domestic Use		Vapor Intrusion			Domestic + Vapor Intrusion			Ingestion and Domestic Use	Vapor Intrusion		Domestic + Vapor Intrusion			
		Resident		Resident		Commercial	Resident		Commercial			Commercial		Commercial	Resident	
Sample Name	Layer	Child	Adult	Child	Adult	Worker	Child	Adult	Worker	Resident	Resident	Worker	Resident	Worker	Child	Adult
401	D	2.0 E+2	8.7 E+1	NA	NA	NA	2.0 E+2	8.7 E+1	NA	6 E-4	NA	NA	6 E-4	NA	NA	NA
402	D	2.2 E+0	9.4 E-1	NA	NA	NA	2.2 E+0	9.4 E-1	NA	NA	NA	NA	NA	NA	NA	NA
486	D	5.5 E+2	2.4 E+2	NA	NA	NA	5.5 E+2	2.4 E+2	NA	2 E-3	NA	NA	2 E-3	NA	NA	NA
3061	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3127	D	3.0 E+0	1.3 E+0	NA	NA	NA	3.0 E+0	1.3 E+0	NA	9 E-6	NA	NA	9 E-6	NA	NA	NA
3128	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3226	D	1.0 E+3	4.3 E+2	NA	NA	NA	1.0 E+3	4.3 E+2	NA	1 E-2	NA	NA	1 E-2	NA	NA	NA
3246	D	1.0 E+0	4.3 E-1	NA	NA	NA	1.0 E+0	4.3 E-1	NA	5 E-5	NA	NA	5 E-5	NA	NA	NA
3247	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3267	D	6.9 E+1	3.0 E+1	NA	NA	NA	6.9 E+1	3.0 E+1	NA	1 E-4	NA	NA	1 E-4	NA	NA	NA
3268	D	4.6 E+1	2.0 E+1	NA	NA	NA	4.6 E+1	2.0 E+1	NA	1 E-5	NA	NA	1 E-5	NA	NA	NA
3349	D	6.6 E+2	2.8 E+2	NA	NA	NA	6.6 E+2	2.8 E+2	NA	1 E-3	NA	NA	1 E-3	NA	NA	NA
285	E	1.5 E+1	6.3 E+0	NA	NA	NA	1.5 E+1	6.3 E+0	NA	2 E-5	NA	NA	2 E-5	NA	NA	NA
288	E	1.8 E+1	7.6 E+0	NA	NA	NA	1.8 E+1	7.6 E+0	NA	1 E-4	NA	NA	1 E-4	NA	NA	NA
403	E	2.2 E+3	9.4 E+2	NA	NA	NA	2.2 E+3	9.4 E+2	NA	NA	NA	NA	NA	NA	NA	NA
487	E	4.5 E+0	1.9 E+0	NA	NA	NA	4.5 E+0	1.9 E+0	NA	1 E-5	NA	NA	1 E-5	NA	NA	NA
3248	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3249	E	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3350	E	2.2 E+2	9.6 E+1	NA	NA	NA	2.2 E+2	9.6 E+1	NA	3 E-4	NA	NA	3 E-4	NA	NA	NA
3365	E	1.2 E+1	5.2 E+0	NA	NA	NA	1.2 E+1	5.2 E+0	NA	4 E-5	NA	NA	4 E-5	NA	NA	NA
7	S	1.9 E+2	8.2 E+1	1.5 E-2	6.5 E-3	1.7 E-3	1.9 E+2	8.2 E+1	1.7 E-3	7 E-5	2 E-6	3 E-7	7 E-5	3 E-7	1.1 E+2	5.7 E+1
25	S	4.4 E+1	1.9 E+1	1.3 E-1	5.5 E-2	1.8 E-2	4.4 E+1	1.9 E+1	1.8 E-2	4 E-4	8 E-6	1 E-6	4 E-4	1 E-6	1.2 E+1	6.1 E+0
130	S	4.0 E-2	1.7 E-2	NA	NA	NA	4.0 E-2	1.7 E-2	NA	NA	0 E+0	0 E+0	NA	NA	NA	NA
131	S	4.1 E+1	1.8 E+1	1.1 E-1	4.6 E-2	1.4 E-2	4.2 E+1	1.8 E+1	1.4 E-2	4 E-4	1 E-5	1 E-6	4 E-4	1 E-6	2.8 E+0	1.4 E+0
212	S	3.6 E+2	1.5 E+2	1.5 E-1	6.4 E-2	2.0 E-2	3.6 E+2	1.5 E+2	2.0 E-2	1 E-3	3 E-5	7 E-6	1 E-3	7 E-6	2.3 E+2	1.2 E+2
215	S	5.3 E+2	2.3 E+2	3.8 E+0	1.6 E+0	5.8 E-1	5.4 E+2	2.3 E+2	5.8 E-1	2 E-2	1 E-4	3 E-5	2 E-2	3 E-5	5.0 E+1	2.5 E+1
355	S	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0	0 E+0	NA	NA	NA	NA
374	S	1.7 E+1	7.1 E+0	7.6 E-2	3.3 E-2	1.0 E-2	1.7 E+1	7.1 E+0	1.0 E-2	3 E-4	6 E-6	8 E-7	3 E-4	8 E-7	NA	NA
375	S	9.1 E+0	3.9 E+0	2.9 E-2	1.3 E-2	3.9 E-3	9.1 E+0	3.9 E+0	3.9 E-3	1 E-4	2 E-6	4 E-7	1 E-4	4 E-7	NA	NA
685	S	2.7 E+1	1.2 E+1	4.5 E-2	1.9 E-2	6.9 E-3	2.7 E+1	1.2 E+1	6.9 E-3	2 E-4	3 E-6	7 E-7	2 E-4	7 E-7	NA	NA
3222	S	1.2 E+2	5.1 E+1	5.2 E-1	2.2 E-1	7.9 E-2	1.2 E+2	5.2 E+1	7.9 E-2	6 E-3	2 E-5	4 E-6	6 E-3	4 E-6	4.8 E+2	2.4 E+2
3264	S	1.7 E+2	7.3 E+1	3.8 E-1	1.6 E-1	5.8 E-2	1.7 E+2	7.3 E+1	5.8 E-2	2 E-3	2 E-5	3 E-6	2 E-3	3 E-6	9.7 E+1	4.9 E+1
3292	S	7.7 E+1	3.3 E+1	5.1 E-1	2.2 E-1	7.3 E-2	7.8 E+1	3.3 E+1	7.3 E-2	2 E-3	2 E-5	4 E-6	2 E-3	4 E-6	3.3 E+1	1.7 E+1
3348	S	1.2 E+1	5.2 E+0	1.9 E-2	8.3 E-3	1.9 E-3	1.2 E+1	5.2 E+0	1.9 E-3	5 E-5	3 E-6	3 E-7	6 E-5	3 E-7	1.9 E+0	8.9 E-1
3440	S	4.6 E+0	1.9 E+0	NA	NA	NA	4.6 E+0	1.9 E+0	NA	NA	0 E+0	0 E+0	NA	NA	3.3 E+0	1.6 E+0
3642	S	1.1 E+1	4.7 E+0	1.3 E-2	5.7 E-3	6.9 E-4	1.1 E+1	4.7 E+0	6.9 E-4	3 E-5	3 E-6	2 E-7	3 E-5	2 E-7	2.5 E+0	1.2 E+0
3645	S	1.0 E+3	4.4 E+2	3.8 E-1	1.6 E-1	5.6 E-2	1.0 E+3	4.4 E+2	5.6 E-2	2 E-3	6 E-5	1 E-5	2 E-3	1 E-5	2.2 E+0	1.0 E+0
3656	S	1.7 E+0	7.3 E-1	1.1 E-2	4.7 E-3	1.3 E-3	1.7 E+0	7.3 E-1	1.3 E-3	4 E-5	9 E-7	9 E-8	4 E-5	9 E-8	NA	NA
9	Y	1.6 E+0	7.0 E-1	NA	NA	NA	1.6 E+0	7.0 E-1	NA	NA	0 E+0	0 E+0	NA	NA	NA	NA
30	Y	NA	NA	NA	NA	NA	NA	NA	NA	NA	0 E+0	0 E+0	NA	NA	NA	NA
286	Y	1.3 E+0	5.7 E-1	6.0 E-4	2.6 E-4	9.2 E-5	1.3 E+0	5.7 E-1	9.2 E-5	1 E-6	2 E-7	4 E-8	2 E-6	4 E-8	1.9 E+1	9.2 E+0
376	Y	1.5 E+0	6.5 E-1	1.8 E-3	7.8 E-4	2.8 E-4	1.5 E+0	6.5 E-1	2.8 E-4	4 E-6	5 E-7	1 E-7	5 E-6	1 E-7	NA	NA
3057	Y	2.2 E+0	9.3 E-1	1.1 E-3	4.8 E-4	1.7 E-4	2.2 E+0	9.3 E-1	1.7 E-4	3 E-6	3 E-7	7 E-8	3 E-6	7 E-8	NA	NA
3221	Y	1.0 E+2	4.4 E+1	4.5 E-3	1.9 E-3	6.9 E-4	1.0 E+2	4.5 E+1	6.9 E-4	8 E-6	1 E-7	3 E-8	8 E-6	3 E-8	7.7 E+2	3.8 E+2
3696	Y	1.5 E-2	6.5 E-3	8.8 E-4	3.8 E-4	1.3 E-4	1.6 E-2	6.9 E-3	1.3 E-4	3 E-6	2 E-7	5 E-8	3 E-6	5 E-8	NA	NA
3728	Y	2.2 E+1	9.6 E+0	8.5 E-2	3.7 E-2	1.3 E-2	2.2 E+1	9.6 E+0	1.3 E-2	3 E-4	2 E-5	4 E-6	3 E-4	4 E-6	NA	NA
Layer A																
Minimum		7.7 E+0	3.3 E+0	0.0 E+0	0.0 E+0	0.0 E+0	7.7 E+0	3.3 E+0	0.0 E+0	8 E-5	0 E+0	0 E+0	8 E-5	0 E+0	0.0 E+0	0.0 E+0
Median		6.6 E+1	2.8 E+1	NA	NA	NA	NA	NA	NA	1 E-3	NA	NA	NA	NA	NA	NA
Maximum		1.2 E+2	5.3 E+1	0.0 E+0	0.0 E+0	0.0 E+0	1.2 E+2	5.3 E+1	0.0 E+0	2 E-3	0 E+0	0 E+0	2 E-3	0 E+0	0.0 E+0	0.0 E+0
Layer B																
Minimum		7.9 E-1	3.4 E-1	0.0 E+0	0.0 E+0	0.0 E+0	7.9 E-1	3.4 E-1	0.0 E+0	1 E-6	0 E+0	0 E+0	1 E-6	0 E+0	2.0 E+0	9.6 E-1
Median		1.2 E+1	5.2 E+0	NA	NA	NA	NA	NA	NA	2 E-5	NA	NA	NA	NA	2.1 E+0	9.9 E-1
Maximum		2.5 E+1	1.1 E+1	0.0 E+0	0.0 E+0	0.0 E+0	2.5 E+1	1.1 E+1	0.0 E+0	1 E-4	0 E+0	0 E+0	1 E-4	0 E+0	2.7 E+0	1.3 E+0
Layer C																
Minimum		1.1 E-2	4.6 E-3	0.0 E+0	0.0 E+0	0.0 E+0	1.1 E-2	4.6 E-3	0.0 E+0	2 E-7	0 E+0	0 E+0	2 E-7	0 E+0	2.2 E+0	1.1 E+0
Median		4.6 E+2	2.0 E+2	NA	NA	NA	NA	NA	NA	2 E-3	NA	NA	NA	NA	4.1 E+0	2.0 E+0

Table 5.13-15 All Receptors Hazard Index and Cancer Risk Results for Groundwater
Southwest Boundary Operable Unit Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

		Non-Cancer Hazard Index								Incremental Lifetime Cancer Risk					Blood Lead	
		Ingestion and Domestic Use		Vapor Intrusion			Domestic + Vapor Intrusion			Ingestion and Domestic Use	Vapor Intrusion		Domestic + Vapor Intrusion			
		Resident		Resident		Commercial	Resident		Commercial			Commercial		Commercial	Resident	
Sample Name	**Layer**	**Child**	**Adult**	**Child**	**Adult**	**Worker**	**Child**	**Adult**	**Worker**	**Resident**	**Resident**	**Worker**	**Resident**	**Worker**	**Child**	**Adult**
Maximum		**5.1 E+3**	**2.2 E+3**	0.0 E+0	0.0 E+0	0.0 E+0	**5.1 E+3**	**2.2 E+3**	0.0 E+0	**2 E-2**	0 E+0	0 E+0	**2 E-2**	0 E+0	**7.7 E+2**	**3.8 E+2**
Layer D																
Minimum		**1.0 E+0**	4.3 E-1	0.0 E+0	0.0 E+0	0.0 E+0	**1.0 E+0**	4.3 E-1	0.0 E+0	1 E-6	0 E+0	0 E+0	1 E-6	0 E+0	**1.4 E+2**	**6.8 E+1**
Median		**1.4 E+2**	**5.8 E+1**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**6 E-4**	**NA**	**NA**	**NA**	**NA**	**1.4 E+2**	**6.8 E+1**
Maximum		**3.7 E+3**	**1.6 E+3**	0.0 E+0	0.0 E+0	0.0 E+0	**3.7 E+3**	**1.6 E+3**	0.0 E+0	**1 E-2**	0 E+0	0 E+0	**1 E-2**	0 E+0	**1.4 E+2**	**6.8 E+1**
Layer E																
Minimum		**4.5 E+0**	**1.9 E+0**	0.0 E+0	0.0 E+0	0.0 E+0	**4.5 E+0**	**1.9 E+0**	0.0 E+0	**1 E-5**	0 E+0	0 E+0	**1 E-5**	0 E+0	0.0 E+0	0.0 E+0
Median		**1.6 E+1**	**6.9 E+0**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**4 E-5**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Maximum		**2.2 E+3**	**9.4 E+2**	0.0 E+0	0.0 E+0	0.0 E+0	**2.2 E+3**	**9.4 E+2**	0.0 E+0	**3 E-4**	0 E+0	0 E+0	**3 E-4**	0 E+0	0.0 E+0	0.0 E+0
Layer S																
Minimum		4.0 E-2	1.7 E-2	1.1 E-2	4.7 E-3	6.9 E-4	4.0 E-2	1.7 E-2	6.9 E-4	**3 E-5**	0 E+0	0 E+0	**3 E-5**	9 E-8	1.9 E+0	8.9 E-1
Median		**4.1 E+1**	**1.8 E+1**	1.1 E-1	4.6 E-2	1.4 E-2	**4.2 E+1**	**1.8 E+1**	1.4 E-2	**4 E-4**	**5 E-6**	7 E-7	**4 E-4**	1 E-6	**2.3 E+1**	**1.1 E+1**
Maximum		**1.0 E+3**	**4.4 E+2**	**3.8 E+0**	**1.6 E+0**	5.8 E-1	**1.0 E+3**	**4.4 E+2**	5.8 E-1	**2 E-2**	**1 E-4**	**3 E-5**	**2 E-2**	**3 E-5**	**4.8 E+2**	**2.4 E+2**
Layer Y																
Minimum		1.5 E-2	6.5 E-3	6.0 E-4	2.6 E-4	9.2 E-5	1.6 E-2	6.9 E-3	9.2 E-5	**1 E-6**	0 E+0	0 E+0	**2 E-6**	3 E-8	**1.9 E+1**	9.2 E+0
Median		**1.6 E+0**	7.0 E-1	1.5 E-3	6.3 E-4	2.2 E-4	**1.6 E+0**	7.0 E-1	2.2 E-4	**4 E-6**	2 E-7	4 E-8	**4 E-6**	6 E-8	**3.9 E+2**	**2.0 E+2**
Maximum		**1.0 E+2**	**4.4 E+1**	8.5 E-2	3.7 E-2	1.3 E-2	**1.0 E+2**	**4.5 E+1**	1.3 E-2	**3 E-4**	**2 E-5**	**4 E-6**	**3 E-4**	**4 E-6**	**7.7 E+2**	**3.8 E+2**

Key:
HI = Hazard index
ILCR = Incremental lifetime cancer risk
NA = Not applicable
Note: Blood lead level of concern = 10 micrograms per deciliter of blood.

6.0 SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT

This section presents the SLERA performed to provide a preliminary screening-level characterization of potential risks to ecological receptors that may be exposed to chemicals in soil, soil vapor, sediment, and surface water under both current and future land-use scenarios at the source areas within the BOU. This information will be used to: (a) guide remedial planning for the site; (b) guide supplemental investigation activities, if any; and/or (c) determine whether a more detailed Baseline Ecological Risk Assessment (BERA) is required.

It should be noted that a more detailed evaluation of potential future exposure to COPECs in samples collected under facility areas (i.e., not habitat) is presented in the BOU FS.

This SLERA was conducted in a manner consistent with USEPA's current guidance for performing ERAs entitled *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments* (USEPA, 1997c). This guidance recommends an eight-step process for an ERA, of which this SLERA represents the completion of the following first two steps:

- Step 1: Screening-Level Problem Formulation and Ecological Effects Evaluation; and
- Step 2: Screening-Level Exposure Estimate and Risk Calculation.

At the conclusion of these two steps of the SLERA, a Scientific/ Management Decision Point (SMDP) is reached (USEPA, 1997c). The first SMDP is a risk management review of the findings of the SLERA that leads to one of the following conclusions:

- Ecological risks are negligible and there is no need for remediation;
- The information is inadequate and further work is required to address data gaps; or
- The information indicates a potential risk and a more thorough evaluation is warranted.

In addition to the above-referenced USEPA guidance, this SLERA is consistent with guidance for conducting ERAs by the DTSC (1996), as well as *Guidelines for Ecological Risk Assessment* (USEPA 1998), *Ecological Risk*

Assessment and Risk Management Principles for Superfund Sites (USEPA 1999), *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments* (USEPA 2001c), and other relevant USEPA EcoUpdates, such as USEPA (1991d, 1992b, 1994b, 1996b).

The BOU investigation was initially planned as discussed in the BOU Work Plan (2005c), refined in the BOU Field Sampling Plan (2006b), and used ecological screening levels (ESLs) as presented in the Ecological Risk Assessment White Paper (2007b). The methods and results of this SLERA are discussed below.

6.1 OVERVIEW OF THE SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT PROCESS

The following overview of the SLERA process for the BOU is organized as follows:

- SLERA problem formulation;
- SLERA effects assessment;
- SLERA exposure assessment; and
- SLERA risk characterization.

6.1.1 Screening Level Ecological Risk Assessment Problem Formulation

Problem formulation establishes the goals and focus of the SLERA. Elements of screening-level problem formulation consist of the following:

- Description of the environmental setting;
- Identification of potentially affected ecological receptors;
- Identification of site-related constituents of potential ecological concern (COPECs);
- Development of the CSM and identification of complete exposure pathways; and
- Definition of ecological (assessment and measurement) endpoints.

The findings of the SLERA problem formulation are described below.

6.1.1.1 *Environmental Setting*

The environmental setting is summarized in Sections 2.2 and 2.3 of this report and is discussed for each MA in Volume I (RI Report) of the BOU RI/FS. All of the MAs are shown in Figure 1.2-1 of the RI Report. Additional field observations made at each of the sites in May 2006 are included in the MA-specific environmental settings descriptions. Photographs taken at the MAs as part of the May 2006 visit are included in Appendix G. The surveys identified the following habitats within each of the BOU MAs:

Management Area	Spatial Extent of Habitat (acres)	Identified Habitats
Administration Area East	0.56	Ruderal/disturbed, paved, annual grassland.
Administration Area West	5.8	Ruderal/disturbed, dredge tailings, annual grassland.
Line 02	22.3	Ruderal/disturbed, dredger tailings with patches of oak woodland, Fremont cottonwood-oak woodland, and willow scrub.
Line 05 North	10.6	Ruderal/disturbed, paved, annual grassland, oak woodland, Fremont cottonwood-oak, coyote brush scrub, and willow scrub.
Westlakes /OS6	74.3	Annual grassland and dredge tailings; riparian within the ponds.
Buffalo Creek	0.4	Ruderal/disturbed, riparian, dredge tailings, annual grassland, oak woodland, Fremont cottonwood-oak woodland, patches of coyote and willow scrub.
Open Space 1	269 (Total acreage for OS1, OS2, and OS4)	Ruderal/disturbed, dredger tailings, annual grassland, and coyote brush scrub. Large areas of Fremont-cottonwood woodland with coyote brush-willow scrub in slickens valleys.
OS2	269 (Total acreage for OS1, OS2, and OS4)	Dredger tailings with some Fremont cottonwood-oak woodland surrounded by annual grassland and patches of willow scrub.
OS4	269 (Total acreage for OS1, OS2, and OS4)	Dredger tailings with Fremont cottonwood woodland or coyote brush-willow scrub in slickens valleys.
OS5 and OS7	12.6	Annual grassland with Valley Foothill riparian along Buffalo Creek.

Management Area	Spatial Extent of Habitat (acres)	Identified Habitats
Chemical Plant 2	14.1	Ruderal/disturbed, paved, dredger tailings, annual grassland, Fremont cottonwood woodland, Fremont cottonwood-oak woodland, coyote and willow scrub.
Magazine Area / OS3	101	Buildings, paved, ruderal/disturbed, dredger tailings, annual grassland, Fremont cottonwood-oak woodland, coyote and willow scrub.
Dredge Pit and Eastern Basin	5.7	Dredger tailings with patches of coyote scrub brush.
Area 39	90	Ruderal/disturbed, annual grassland, paved areas, some seasonal ponds.

Notes:

1. Areas of habitats are also included in subsequent MA-specific sections (Sections 6.2 to 6.11). Total areas of each MA (habitat plus facility) are shown in each MA figure.

It should be noted that the 14 MAs listed above have been consolidated into ten separate discussions in Sections 6.2 through 6.11, such as combining OS1, OS2, and OS4 into one discussion, and including the Dredge Pit and Eastern Basin into the Chemical Plant 2 discussion.

Some areas identified as "Facility" in the Biological Resources Assessment (ECORP, 2005) are now vacant and have the potential to revert back to ecological habitat. The FS will evaluate all Facility areas and determine if action needs to be taken to prevent establishment of ecological habitat in these areas. However, information from biological surveys indicates that the majority of the MAs within the BOU are covered by pavement, buildings/structures, landscaped ornamental vegetation, or ruderal vegetation. Though native habitat may not be present at each MA, attractive aquatic and/or terrestrial habitats are commonly observed adjacent to MAs within the BOU. Potentially affected habitats are identified in MA-specific sections (Sections 6.2 through 6.11).

It should also be noted that Source Areas on the MA-specific Section 6 Figures are indicated by Sample ID numbers. For example, Source Area 33B is depicted by Samples 33B-SB02, etc. Due to the large amount of information already on the Section 6 Figures, adding additional details on Source Area locations would render these Figures unreadable. Complete Source Area details are shown in the Site Features Maps, specifically Figures 3.1-2, 3.1-6, 3.2-1, 3.2.5, 3.2.9, 3.2.12, 3.3-1, 3.3-5, 3.3-9, and 3.4-1, for Administration Area East, Administration Area West, Line 2, Line 5

North, Westlakes Area and OS6, Buffalo Creek, Chemical Plant 2, Magazine Area and OS3, Dredge Pit and Eastern Basin, and Area 39.

6.1.1.2 *Identification of Potentially Exposed Ecological Receptors*

The identification of potentially exposed ecological receptors is based on current understanding of source areas and potential migration pathways, site-specific habitat characterizations, California Department of Fish and Game's (DFG) Wildlife Habitat Relationship System, and RareFind queries of the DFG's California Natural Diversity Database. This SLERA also considered recent characterizations of habitats, plants, wildlife, and special status species that are described in the biological resource assessment included as Appendix B of the BOU FSP (Aerojet and others, 2006). Lists of habitats and characteristic biota may be found in the biological resource assessment.

Where habitats may be affected by anthropogenic constituents at BOU MAs, this SLERA will consider the following potentially exposed ecological receptors on an MA-by-MA basis:

<u>Terrestrial Habitats</u>

- Terrestrial plant communities;
- Soil invertebrate communities;
- Reptile and amphibian populations;[2]
- Bird populations (including burrowing species such as burrowing owls); and
- Mammal populations (including burrowing mammals).

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[2] Potentially exposed reptile and amphibian populations were identified as assessment endpoints for this SLERA, but terrestrial exposure could not be quantitatively evaluated (see Section 6.1.1.5, *Ecological Endpoints*). This lack of recognized toxicity benchmarks for amphibians and reptiles is characteristic of the state-of-the-practice for ERAs and is not unique to the BOU SLERA; however some toxicity values are available for amphibians exposed to surface water. The lack of a quantitative evaluation was identified as a potential data gap and discussed in Section 7.3.2 of this SLERA.

Aquatic Habitats

- Aquatic plant communities;
- Aquatic invertebrate communities;
- Sediment-dwelling invertebrate communities (aquatic benthic macroinvertebrates);
- Fish populations;
- Amphibian populations;
- Bird populations (e.g., waterfowl, wading birds); and
- Mammal populations (e.g., raccoon).

Notable plants and animals observed at specific MAs are identified in MA-specific sections (Sections 6.2 to 6.11). A list of ecological receptors observed/expected at BOU, from the *Biological Resources Assessment for Aerojet BOU* (ECORP, 2005), is presented in Appendix L.

6.1.1.3 *Constituents of Potential Ecological Concern*

COPECs are site-related constituents that may adversely affect receptors of concern. COPECs do not necessarily signify a risk; rather, they are merely constituents that have been identified for advancement to further analyses.

As discussed in the BOU RI Report (Volume I of the BOU RI/FS), the classes of chemicals identified in soil, soil vapor, sediment, and surface water within the BOU include the following:

- Metals;
- VOCs;
- PAHs and other SVOCs;
- Chlorinated pesticides;
- PCBs/Aroclors;
- Dioxins and furans; and
- Other constituents (e.g., perchlorate, NDMA).

An ecological evaluation of the preliminary RI data was performed prior to preparation of the SLERA to determine if additional data were needed to define the extent of site-related constituents. The preliminary data were

compared to ESLs[3] and, if metals, to background threshold values (BTVs)[4]. Based on the findings of the preliminary screening, locations for step-out samples were identified and additional sampling was performed in spring 2007. The step-out sampling approach is described in the following paragraph, and was discussed and approved during Agency Meetings on April 24, 2007 and February 11, 2008.

Decision rules were used for identifying the locations and analytes needed to address data gaps. These rules included: identifying COPECs that exceeded soil benchmarks by a factor of five or more (5x) in areas of potential habitat; identifying COPECs that exceeded the "upper" sediment benchmarks; and inclusion of metal mixtures in the set of analytes regardless of whether each metal individually exceeded the benchmark. In general, Aerojet's approach was to identify areas that exceeded levels of acceptable risk and remediate those areas rather than to conduct extensive sampling to define the extent of chemical impact within acceptable risk levels.

Section 4.0 describes the complete dataset evaluated in this SLERA.

Media of Interest

Where appropriate at each MA, COPECs were identified for the following media of interest:

- Soil (0 to 6 feet bgs);
- Soil vapor[5];
- Sediment (generally 0 to 1.5 feet bgs); and
- Surface water.

It should be noted that sediment samples were collected from 0-1.0 ft bgs and from 1-2 ft bgs, and for sediment sample IDs, these results were

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[3] See Section 6.1.2 and Appendix A for further details regarding ecotoxicity-/risk-based ESLs.

[4] See Appendix C for further details regarding BTVs.

[5] Although it is generally accepted that soil vapor from 0 to 6 ft bgs is of ecological interest (Cal-EPA, 1998), to be conservative, all soil vapor data, regardless of depth, was screened against benchmarks to identify soil vapor COPECs.

labeled as 0.5 and 1.5, respectively (the mid-points of the sampled depth intervals). For the selection of sediment COPECs, sample results from both 0 – 1, and 1 -2 ft. were used; however, for sediment risk characterization, only results from 0 – 1 ft were used, as this is the depth interval of most concern for ecological receptors. Groundwater is generally considered inaccessible to biota unless it (a) discharges to surface water and/or (b) occurs within 6 feet of the surface (e.g., shallow (< 6 feet bgs) perched groundwater) (Eichelberger, 2007; Reynolds and Fraley, 1989). An evaluation of potential discharge of groundwater to surface water within the BOU was performed and concluded that there are no groundwater discharges to surface water within the BOU (Section 3.1.1.6 and Volume I, Section 2.6 of the RI report). Moreover, no groundwater was observed to occur within 6 feet of the surface at MAs within the BOU. Accordingly, groundwater was not identified as a medium of concern within the BOU for the SLERA.

Identification of COPECs

To screen for COPECs in a particular medium of interest, all samples within the MA for that medium were considered and the maximum concentration for each constituent was identified.

COPECs in Soil, Soil Vapor, Surface Water, Sediment – Comparison to ESLs. For each medium of interest, maximum concentrations were screened against constituent-specific, ESLs for that particular medium (Tables 6.1-1 through 6.1-5). ESLs were from the Ecological Risk Assessment White Paper (Aerojet, 2007b) and these ESLs were developed using widely recognized sources of ESLs at the time of the ERA White Paper. Those constituents that exceeded ESLs for soil, soil vapor, sediment, or surface water were identified as COPECs in their respective environmental medium. For soil, as discussed in the following paragraph, a further background evaluation was performed for inorganics. Constituents for which no ESLs were available are also identified as COPECs and listed for each MA, except for soil vapor. Soil vapor COPECs lacking ESLs are discussed separately in Section 7.3.2.5. Other COPECs lacking ESLs are identified and discussed as part of the Uncertainty Analysis (Sections 7.1 and 7.3).

COPECs in Soil – Comparison to Background Concentrations.[6] Organic compounds were considered to be anthropogenic in source. Consequently, all organic compounds detected in soil that exceeded their respective ESLs for soil were identified as COPECs. On the other hand, metals occur naturally in soils. Accordingly, for those metals in soil that exceeded ESLs for soil, concentrations in soil at the MA were also compared to facility-specific background concentrations.[7] Because greater than 10 samples existed for both the MA and facility-specific background datasets, comparisons to background were conducted using both the Gehan and Quantile statistical tests as recommended by USEPA guidance (USEPA, 2009b). Comparisons to background using these statistical tests[8] is consistent with USEPA's (2002d) *Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites* and were performed using USEPA's ProUCL Version 4.00.01 software. If either the Gehan or the Quantile test found that the concentrations of a particular metal were greater than background concentrations, the metal was identified as a COPEC. However, if both the Gehan and Quantile test found that the concentrations were equal to or less than background concentrations, the metal was removed as a COPEC and not evaluated further in the SLERA.

Boron and Lithium. Boron and lithium were not analyzed for facility-specific background soils. Thus, statistical methods used to determine whether MA soil concentrations are elevated with respect to background concentration could not be performed as was conducted for other metals. The mean background concentrations reported for boron and lithium for California soils are 19 and 23 mg/kg, respectively (Kearney Foundation,

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[6] Aerojet (facility)-specific background concentrations were not available for soil vapor, surface water, or sediments.

[7] With regard to metals, note that background data are quantitatively used at two key points in the BOU SLERA:

- Identification of COPECs; and
- Risk characterization screening.

Use of background as part of the risk characterization screening is discussed in Section 6.1.4.1.

[8] USEPA (2002d, 2009b) recommends using the Gehan and Quantile tests where data sets:

- Are not normally distributed; and
- Contain nondetected values having multiple detection limits.

Soil data sets for MAs and background soil types have these features.

1996). The plant and soil invertebrate ecotoxicity benchmarks for boron and lithium, as reported in Efroymson et al. (1997a,b), are less than these background values and were considered to be low in confidence by the authors. Therefore, where the soil concentrations of these metals are lower than background soil levels documented in the 1996 Kearney Foundation report, they are eliminated as COPECs in the Risk Characterization, as approved by DTSC in response to Specific Comment No. 14 (ERM-West, 2010).

Details on the methods used to establish the background concentration dataset for metals and conduct background comparisons are presented in Appendix C.

COPECs identified at MAs are listed in MA-specific sections (Sections 6.2 through 6.11). Uncertainties associated with the selection of COPECs are discussed in Section 7.1.3.

6.1.1.4 *Potentially Complete Exposure Pathways and Conceptual Site Model*

According to USEPA (1989), an exposure pathway generally consists of the following four elements:

1) A source;
2) A retention or transport medium;
3) A point of potential contact with the impacted medium; and
4) An exposure route.

In some situations, the source itself is the exposure point, without a release to any other medium.

<u>Constituent Fate</u>

Fate processes generally involve a transformation of the chemical constituent via physical, chemical, or biological action. Examples of fate processes are biodegradation, photolysis (chemical degradation caused by sunlight), and chemical reactions with other COPECs. Fate processes serve to reduce the concentrations of the constituents present over time, generally reducing the COPECs either to basic compounds (such as water and carbon dioxide) or to less toxic compounds. In some cases, however, biodegradation and other fate processes can transform a compound into a more toxic one. The chemical and biological fate of constituents is not considered further in this SLERA, but may be considered in subsequent

evaluations, if required. Notable fate attributes for classes of chemicals identified in the BOU are provided below. A summary of physical fate mechanisms is provided in Appendix H.

Volatile Organic Compounds. VOCs exhibit varying degrees of water solubility and tend to rapidly volatilize from soil and water. Based on their low organic-carbon partitioning coefficient (K_{oc}) values and high water solubilities, bioaccumulation of VOCs is not considered significant. VOCs are not identified as bioaccumulative constituents of concern by the USEPA (USEPA, 2000b).

Phthalates. Phthalates are relatively insoluble and tend to adsorb strongly to soils. When released to water, they tend to partition from the water column to sediment and suspended particulates, although some portion remains in the aqueous phase. Bioconcentration of phthalates has been observed in plants, invertebrates, fish, and terrestrial organisms. Residues of phthalates have been found in the organs of terrestrial animals such as rats, rabbits, dogs, cows, and humans. However, accumulation of phthalates will be minimized by metabolism, particularly in higher trophic level organisms, and biomagnification of phthalates in the food chain is not expected to occur (ATSDR, 2000a; ATSDR, 2001).

Polycyclic Aromatic Hydrocarbons. PAHs are generally immobile in soils/sediments because they are poorly soluble and have a strong tendency to bind to organic particulates. Plant uptake is expected to be minimal due to the high K_{oc} values. With regard to animal exposures, PAHs tend to be metabolized and excreted rapidly by most organisms and thus display lower bioaccumulation potential than might be predicted based on their K_{oc} values (ATSDR, 1995). Although PAH accumulations in marine mollusks have been reported, decreasing PAH concentrations were found with increasing trophic levels in aquatic food-chain studies, indicating rapid biotransformation of these compounds (ATSDR, 1995).

Perchlorate. Perchlorate has low volatility, high solubility, absorbs weakly, and does not bind to most soil minerals. Therefore, perchlorate in soil is expected to readily dissolve and leach through the soil column (i.e., vertical transport, with little to no lateral transport potential). Soluble perchlorate can be taken up by plants through the roots and studies have documented that plants may accumulate perchlorate in their tissues. Although perchlorate is known to effect thyroid function in vertebrate species, at this time, the ecological effects of perchlorate in soil are not well understood. Amphibians appear to be the most sensitive organisms to perchlorate exposure, although responses depend on the timing of

exposure. Perchlorate exhibits low acute toxicity to fish and does not bioaccumulate in fish (Kendell and Smith, 2006).

*Polychlorinated Biphenyls***.** The fate and transport of PCBs is largely dependent on the number of chlorine compounds. Higher chlorinated PCB congeners are generally immobile in soils/sediments because they are poorly soluble and have a strong tendency to bind to organic particulates. PCBs also have high affinities for lipids in tissues and, therefore, show high affinities for bioaccumulation and biomagnification. PCBs therefore can pose a risk of exposure to the aquatic and terrestrial food webs (ATSDR, 2000b).

Dioxins and Furans. Dioxins and furans, as a group, are characterized as largely immobile in soil. They volatilize poorly and generally degrade slowly and are very persistent in the environment. Important fate and transport pathways for dioxins in soils would be limited to erosion and transport via storm water runoff and/or fugitive dust. Finally, based on a bioconcentration factor of 5,000, dioxins would be expected to bioaccumulate in wildlife should exposure take place (ATSDR, 1998).

Metals and Other Inorganics. The migration and fate of metals and other inorganics is highly site-specific and primarily takes place through the physical and chemical interactions with the particulates to which they are attached. For these constituents, the pH of the soil and the valence state of the constituent are important factors that govern whether migration occurs. Inorganics detected at the site are considered non-volatile, such that volatilization from soil is not generally considered a migration pathway. Additionally, processes such as biodegradation and photolysis are also not considered typical fate and transport mechanisms for inorganics. Food-chain transfers and biomagnification are important processes in the fate of mercury. Under certain conditions, mercury can be converted to a methyl form that is soluble and bioaccumulative. Should this occur, organisms could then be exposed through ingestion of plant or prey species (Schoof, 2003).

Migration/Transport Pathways

In general, the primary mechanisms of transport for PCBs, dioxins and furans, and metals in soil are the entrainment of particles of those constituents in storm water runoff or attached to soil in fugitive dust. Each of these migration pathways is discussed below. A summary of migration/transport mechanisms is provided in Appendix H.

Storm Water Runoff. Storm water runoff can result in surficial particulate transport when soil is suspended in storm water during and after heavy precipitation events, and, in the case of more water-soluble substances, transport of constituents dissolved in storm water. Due to their low water solubility and high organic-carbon partitioning coefficients (i.e., the substances are adsorbed to particles that are then transported in the storm water by suspension or erosion), PCBs and dioxins and furans would migrate primarily through particulate movement with storm water rather than in solution. Most metals are also bound to particles in soil and would likely migrate to the greatest extent through a similar mechanism.

Surface soils may be subject to erosion and transport via storm water runoff, with exposed areas not covered by pavement or structures being more susceptible than covered areas. Further, the ditches and drainages under consideration are man-made and serve as storm water conveyances. The ditches in the Administration Area ultimately discharge to the Westlakes storm water retention cells, which have National Pollutant Discharge Elimination System-regulated discharges to Buffalo Creek, and ultimately to the American River. The ditches in other areas (Area 39, Line 02, Line 05 North, Chemical Plant 2, and Magazine Area) discharge to low-lying areas where storm water is allowed to infiltrate the soil and constituents of concern may accumulate in those areas. Persistent constituents that remain or accumulate in the drainages and discharge areas could be mobilized during storm events and serve as a continuing release of constituents to areas receiving storm water flow.

Fugitive Dust. Windblown constituents could migrate to surrounding undeveloped areas where exposure of ecological receptors to these constituents may occur. Exposed areas not covered by pavement or structures would be more susceptible than covered areas. Note that should the dispersion of windblown constituents follow a Fickian diffusion model, concentrations are anticipated to decrease exponentially with distance from the source.

<u>Exposure Routes</u>

The following exposure routes were identified as part of this SLERA:

- Contact and absorption of soil by terrestrial plants and terrestrial macroinvertebrates;
- Contact and absorption of surface water and sediment by aquatic plants and aquatic macroinvertebrates;

- Contact and ingestion of surface water by fish, if present;
- Incidental ingestion of soil or sediment by wildlife;
- Ingestion of food by wildlife (ingestion of COPECs that are bioaccumulated into the tissues of plant or animal foods);
- Inhalation of VOCs by burrowing mammals and birds;
- Dermal contact with soil, surface water, and/or sediment by terrestrial and/or aquatic receptors; and
- Incidental ingestion of surface water by wildlife.

The identified exposure routes are further discussed below.

Contact and Absorption by Plants and Macroinvertebrates. Uptake or absorption of constituents from soil, sediment, or surface water is a potential exposure pathway. Terrestrial plants may be exposed to constituents in soil via root uptake. Moreover, soil-dwelling macroinvertebrates are in constant contact with the affected media; exposure routes for macroinvertebrates also include absorption across body surfaces, as well as ingestion (note that both routes are included with exposure and effects assessment). Uptake by terrestrial plants and macroinvertebrates are considered potentially complete exposure routes in this SLERA.

Similarly, aquatic plants may uptake constituents via root uptake as well as absorb dissolved constituents in surface water across plant surfaces.[9] Moreover, sediment-dwelling macroinvertebrates are in constant contact with the affected media; exposure routes for macroinvertebrates also include absorption across body surfaces, as well as ingestion (note that both routes are included with exposure and effects assessment). Uptake by aquatic plants and benthic macroinvertebrates are considered potentially complete exposure routes in this SLERA.

Incidental Ingestion of Soil and Sediment by Wildlife. Wildlife may be exposed to constituents through the incidental ingestion of soil and/or sediment. Beyer et al (1994) provides rates for the incidental ingestion of soil. The incidental ingestion of soil is considered a potentially complete

[9] ESLs used in the SLERA account for these routes.

exposure route in this SLERA. While incidental ingestion of sediment by wildlife is possible, ESLs used in the SLERA do not account for this pathway, as benthic invertebrate exposure to sediment COPECs is deemed to be the more significant exposure pathway.

Food Chain (Uptake into the Tissues of Plants and Animals and Subsequent Ingestion by Higher Trophic Consumers). The uptake of constituents by plants and animals and subsequent transfer and bioaccumulation of these constituents through the food chain is a fundamental exposure pathway for constituents. The literature indicates that food-chain effects for mercury, chlorinated pesticides, PCBs, and dioxins and furans are of particular concern for higher trophic-level organisms at the top of the food chain. Based on their low K_{oc} values and high water solubilities, bioaccumulation of VOCs is not considered significant and VOCs are not identified as bioaccumulative constituents of concern by the USEPA (USEPA, 2000b).

Assessing the food-chain pathway requires the development of a conceptual model of the site-specific food web and identification of target receptors for evaluation. At the screening level, this pathway is addressed through the use of conservative screening benchmarks that are based on potential food-chain effects where appropriate (Section 6.1.3).

Inhalation. VOCs were detected in soil vapor samples collected at the source areas within the BOU. Studies indicate that VOCs are quickly dispersed in aboveground air and inhalation by surface-dwelling wildlife is considered an insignificant exposure route. However, it is acknowledged that the inhalation of VOCs in the confined air space of burrows is particularly relevant for fossorial wildlife that may be present on site. The inhalation pathway for burrowing mammals and burrowing birds such as burrowing owls is therefore considered a potentially complete exposure route in this SLERA.

Dermal Contact. Dermal absorption of chemicals is considered to be an insignificant exposure pathway for identified wildlife receptors of concern because results of exposure studies indicate that exposures due to dermal absorption are insignificant compared to ingestion for terrestrial receptors (Peterle, 1991). While the dermal contact pathways may be potentially complete for terrestrial wildlife species, it is considered to be less significant relative to other routes of exposure (USEPA, 2005a).

Incidental Ingestion of Surface Water by Wildlife. Wildlife may consume surface water present in the MAs within the BOU; however, these

exposures to COPECs in drinking water (a) are generally negligible relative to exposure contributions through dietary food items and incidental ingestion of soil; and (b) seldom pose a risk when considered as the lone exposure pathway. Therefore, ingestion of surface water is not considered a significant wildlife exposure route for this SLERA.

Contact and Ingestion of Surface Water by Fish. Fish may contact or consume surface water present in the MAs within the BOU, and direct-contact exposure to fish is evaluated in the SLERA using surface water screening levels. Food chain uptake of COPECs by fish is a potentially complete exposure pathway for higher order consumers, however, this pathway is not quantitatively evaluated in this SLERA due to a general lack of surface water screening values protective of fish-eating wildlife.

Conceptual Site Model

Based on information generated above, exposure pathways for each medium are identified in an ecological CSM. The CSM describes how ecological receptors may be exposed to COPECs.

A diagram of the ecological CSM is provided in Figures 6.1-1a and 6.1-1b. Based upon a review of the site's ecological features, there is a lack of significant terrestrial habitat for wildlife and plant species on the developed portions of the site. The majority of the operational areas within the BOU are covered by buildings, pavement, or landscaped/ ruderal grass. The use of landscaped/ruderal grasses by receptors is considered to be transient and limited; therefore, exposure to receptors within this habitat would be minimal. Conversely, some source areas within the BOU have been inactive for many years and are reverting to habitat used by ecological receptors.[10] At several MAs, aquatic and terrestrial ecosystems are observed to be adjacent or proximal to MAs within the BOU and are considered to provide habitat for ecological receptors.

It is not feasible to individually evaluate every species that may occur on the Aerojet site; therefore, a guild and representative receptor approach was used to assess potential ecological risk. As illustrated in the

[10] It was noted during the May 2006 site survey that inactive buildings could be providing shelter and food for avian wildlife.

ecological CSM, receptors are grouped into taxonomic and trophic guilds. Representative receptors from each guild were identified in the Final RI/FS Work Plan (Aerojet, 2005c). Potential risks to representative species are used to infer risks to other members of the guild.

As shown in Figures 6.1-1a and 6.1-1b, the ecological CSM illustrates potential exposure pathways for ecological receptors. It is important to note that not all potentially ecologically relevant exposure pathways are subject to quantification using predictive methods in an ERA. This is because of the lack of widely recognized toxicity reference values (TRVs) and/or exposure parameters needed to quantitatively address particular exposure routes and species. For example, reptiles are not commonly quantitatively assessed due to a paucity of agency-recognized ecotoxicity and exposure information relevant to such analysis.

6.1.1.5 *Ecological Endpoints*

A key product of the problem formulation phase of this SLERA is the establishment of ecological endpoints. Ecological endpoints are defined as measurable or estimable biological or ecological attributes associated with one or more levels of biological organization that serve as the focus of the risk assessment (USEPA, 1997c). Levels of biological organization can span and encompass the biochemical and cellular levels through individuals, populations, communities, and ecosystems.

<u>Assessment Endpoints</u>

Assessment endpoints are explicit expressions of the unique or critical ecosystem characteristics or features that are to be protected. Assessment endpoints developed for this SLERA are based on the characteristics of the ecosystem potentially at risk and the constituent pathways within that ecosystem.

In accordance with USEPA guidance, standard practices, and the Final RI/FS Work Plan (Aerojet, 2005c), the assessment endpoints for the BOU SLERA include:

- Survival and reproductive success of the communities of terrestrial receptors (primarily plants, invertebrates, reptiles[11], birds, and mammals) potentially utilizing and/or inhabiting areas with soil and soil vapor containing COPECs;
- Survival and reproductive success of the communities of aquatic receptors (plants, invertebrates, fishes, amphibians, birds, and mammals) potentially utilizing and/or inhabiting areas with sediment and/or surface water containing COPECs; and
- Survival, reproductive success, and persistence of state- and federal-listed threatened and endangered species.

Potential risks evaluated in this SLERA include adverse effects on these plant and animal populations and communities that may potentially be related to past site activities.

Measurement Endpoints

Measurement endpoints are biological or ecological variables that can be measured or observed and are related to the valued characteristic of the ecosystem as described by the selected assessment endpoints. Because assessment endpoints often cannot be measured directly, measurement endpoints are developed that can be related, either qualitatively or quantitatively, to the selected assessment endpoint(s).

The terrestrial and aquatic ecosystem measurement endpoints for this SLERA are published toxicity thresholds or screening-level ecotoxicity benchmarks for chemicals in soil, soil vapor, sediment, and surface water. These benchmarks have been derived based on field and laboratory studies of a range of species, and a variety of screening benchmarks have been developed for this purpose, as discussed below.

[11] Though identified in assessment endpoint statements, reptiles were not quantitatively evaluated in the BOU SLERA using screening values due the lack of relevant, applicable, agency-recognized toxicity values. This lack of recognized toxicity values for reptiles is characteristic of the state-of-the-practice for ERAs and is not unique to the BOU SLERA. The lack of a quantitative evaluation was identified as a potential data gap and discussed in Section 7.3.2.

6.1.2 *Screening Level Ecological Risk Assessment Effects Assessment*

The SLERA problem formulation is followed by the review of readily available ecological risk-based benchmarks and/or ecotoxicity data to establish protective ESLs. Establishment of protective ESLs concludes Step 1 of the USEPA's ERA process.

Consistent with the scope of a SLERA (USEPA 1997c), existing, protective, and agency-recognized ESLs were selected to evaluate the potential for adverse effects in a wide variety of ecological receptors in soil, sediment, surface water, and soil vapor (Tables 6.1-1 through 6.1-5 and Ecological Risk Assessment White Paper, Appendix A).[12] ESLs are conservatively designed to be utilized to represent exposure concentrations that are protective of ecological receptors across all guilds potentially exposed to that medium. With respect to positively detected chemical constituents in soil, water, sediment, and soil vapor, ESLs were found for most COPECs from widely recognized sources (e.g., USEPA National Recommended Water Quality Criteria).

USEPA (2005-2007) conducted a comprehensive review of the toxicity literature to derive defensible ESLs on a constituent-by-constituent basis, for 21 constituents, for up to four receptor guilds: (1) terrestrial plants; (2) terrestrial invertebrates; (3) mammalian wildlife; and (4) avian wildlife. If USEPA determined that there was insufficient information with which to derive a guild-specific Eco-SSL, then no ESL was identified for that constituent/receptor. Given USEPA's comprehensive review, Aerojet did not propose an ESL for soil if the USEPA determined that there was insufficient information to derive an Eco-SSL for that particular constituent/receptor. For example, some Eco-SSLs do not have a terrestrial plant benchmark, as USEPA determined that there was insufficient information with which to derive an ecotoxicity benchmark to support an Eco-SSL for plants. Gaps in toxicity values/ESLs are discussed in the uncertainty analysis.

In the Risk Characterization (Sections 6.2 through 6.11) portion of this SLERA, the target receptor group used as the basis for the ESL is further evaluated with respect to the exceedance.

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[12] Note that Ecological Risk Assessment White Paper does not include ESLs for soil vapor as they were under discussion at the time.

In the case of screening COPECs in soils, the Risk Characterization evaluates potential risks using an expanded set of ESLs[13]—specifically, guild-specific ESL for mammals, birds, terrestrial plants, and soil invertebrates.[14] These ESLs were obtained following the methodology presented in the *ERA White Paper* (Aerojet, 2007b).

- Where available, USEPA Eco-SSLs for each receptor guild were preferred and used as ESLs in this SLERA. For some constituents, USEPA determined that enough information was available to develop Eco-SSLs for some receptor guilds, but not for others. In these cases, if USEPA determined that insufficient information was available to derive an Eco-SSL for a specific receptor guild, it was left as a data gap.[15]
- Where an Eco-SSL was not available for a constituent (e.g., it was not one of the 21 Eco-SSL constituents currently available), an avian and/or mammalian ESL was calculated based on USEPA Eco-SSL models and equations – using the lowest available TRVs from USEPA Region 9, USEPA Region 6, or ORNL, in that order.
- Finally, for those constituents where required input information to calculate an Eco-SSL was not available (and USEPA had not determined that not enough information was available to develop an Eco-SSL), benchmarks were obtained from the following ORNL documents, and used as ESLs:
  - *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision* (Efroymson et al. 1997a);

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[13] As compared to the use of the lowest ESL across all receptor guilds to identify COPECs (Section 6.1.1.3).

[14] Based predominantly on earthworm toxicity data. Earthworms are presumed to be representative surrogates for soil invertebrates.

[15] Given the comprehensive and thorough research, it was deemed that if USEPA concluded that insufficient information was available to derive an Eco-SSL, the same was true for deriving an ESL for this SLERA. Accordingly, Aerojet did not propose an ESL for soil if the USEPA determined that there was insufficient information to derive an Eco-SSL for that particular constituent. Gaps in toxicity values/ESLs are discussed in the uncertainty analysis (Sections 7.1 and 7.3).

- *Toxicological Benchmarks for Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Processes: 1997 Revision* (Efroymson et al. 1997b); or
- *Preliminary Remediation Goals (PRG) for Ecological Endpoints* (Efroymson et al. 1997c).[16]

With the exception of perchlorate, the sources of ecotoxicity benchmarks used in the SLERA are documented in the *Ecological Risk Assessment White Paper* for the Aerojet site. ESLs for sediment, surface water, and soil vapor that are further evaluated in the SLERA Risk Characterization sections are the same as those used to identify COPECs (Section 6.1.1.3).

For those constituents lacking an ESL from a recognized source, every effort was made to identify readily available, widely recognized alternative sources of ecotoxicity- and/or risk-based screening benchmarks (including the use of surrogates) from publically available, peer-reviewed sources (e.g., Oak Ridge National Laboratory [ORNL] toxicological benchmark documents)—use of such sources is commensurate with the methodology for conducting screening level ecological risk assessments (see Section 6.1.3). Where ecotoxicity benchmarks were not available from these widely recognized sources, the lack of ecotoxicity data was identified and consequences were discussed in the uncertainty analysis (Section 7.1 and 7.3). As with the majority of SLERAs, risk managers will decide whether decisions may be made in light of uncertainties.

6.1.2.1 *Aluminum*

In its *Ecological Soil Screening Level for Aluminum* (USEPA, 2003c), USEPA states that "aluminum is identified as a COPEC only for those soils with a soil pH less than 5.5." Soil pH was measured at levels less than 5.5 in only 11 (1.3 percent) of the 835 samples. The 11 samples were scattered over several MAs as follows: two samples in Administration Area East, three samples in Administration Area West, one sample in Line 2, two samples in Westlakes, and three samples in Chemical Plant 2 plus one duplicate. Therefore, the pH results are not spatially clustered together and by virtue

[16] An ORNL PRG was used to derive an ESL for mercury only—USEPA Eco-SSLs were not available for mercury. Where an ORNL source was used, the ESLs were derived using NOAEL-equivalent values without allometric scaling.

of their scattered locations there is no indication that aluminum is a COPEC at the site. Therefore, aluminum is not identified as a COPEC in the Risk Characterization, but will be discussed on a case-by-case basis in those MAs where soil pH is less than 5.5.

6.1.2.2 *Perchlorate*

The ESL for perchlorate was developed based on the use of the ecotoxicity benchmarks recommended by the U.S. Army (CHHPM, 2007), and plant and soil invertebrate uptake factors as presented in *Literature-Derived Bioaccumulation Models for Energetic Compounds in Plants and Soil Invertebrates* (CH2M Hill, 2005; MWH, 2007). Both the MWH (2007) and the CH2M Hill (2005) memorandums are based on robust datasets developed from empirical data in peer-reviewed published literature.

Aerojet derived alternate screening levels for perchlorate in soil following the methodology presented in the *Ecological Risk Assessment White Paper*, which is based on the USEPA methodology for deriving USEPA Eco-SSLs (USEPA, 2005). Per this methodology, the following general equation was used to estimate exposure of representative herbivorous and insectivorous wildlife species to perchlorate—this equation was then solved for the soil concentration (Soil):

$$HQ = [FIR * (Soil * Ps + Bi)] / EB$$

where:

HQ	=	hazard quotient for perchlorate in soil (set equal to one)
FIR	=	food ingestion rate (kg food/kg body weight/day)
Soil	=	concentration of perchlorate in soil (mg/kg) [parameter to be solved for]
Ps	=	proportion of diet that is soil
EB	=	ecotoxicity benchmark value for perchlorate (mg/kg body weight/d)
Bi	=	concentration of perchlorate in food type(i) (mg/kg)

Bi for plants and soil invertebrates (earthworms) were calculated using uptake factors from CH2M Hill (2005):

$$Bi \text{ (uptake into plants)} = \ln(plant) = 2.41 + 0.5891 * \ln(Soil)$$

$$Bi \text{ (uptake into earthworms)} = \ln(worm) = 3.474 - 0.1985 * \ln(Soil)$$

Ecotoxicity benchmarks were based on NOAELs as presented in USACHHPM (2007):

Class Mammalia = 6.4 mg/kg-d

Class Aves = 13 mg/kg-d

Perchlorate is not expected to biomagnify through the food chain; in addition, there are no factors available for small mammal uptake of perchlorate from soil. Therefore, carnivorous receptor species were not included in the calculation of alternate soil screening levels for perchlorate. The lower of the calculated alternate screening benchmarks for herbivorous and insectivorous wildlife species (20.3 mg/kg and 24 mg/kg), and the soil invertebrate screening level (1.17 mg/kg), were selected as the primary screening level; all calculated guild-specific benchmarks for perchlorate in soil were utilized in the Risk Characterization.

6.1.2.3 *Soil Vapor Ecological Screening Levels*

Currently, there is no widely recognized or regulatory agency-approved source of ESLs to support screening of soil vapor data. Following discussions with regulatory agencies, Aerojet was directed to:

- Identify VOC COPECs based on human health-based soil vapor screening levels;[17] and
- Consider benchmarks[18] developed by DTSC for Edwards Air Force Base (AFB).

Aerojet decided to use the Edwards AFB benchmarks (Table 6.1-3) as soil vapor ESLs for this SLERA to evaluate potential risks to burrowing small mammals due to exposures to VOCs in soil vapor given:

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[17] Human health-based screening levels were considered to be more protective (i.e., lower in value) as compared to ESLs (pers. comm., B.Faulkner, DTSC). Accordingly, these VOCs represent an initial set of constituents from which to screen using ESLs and are listed in the left-hand column of Table 6.1-3.

[18] Edwards AFB benchmarks for soil vapor are in terms of concentration (mg/m^3, and also converted to µg/m^3), to match the units used for soil vapor ESLs.

- These values generally provide the most conservative soil vapor screening values of the ecotoxicity benchmark sources considered;
- These values are currently undergoing an evaluation by the USEPA Region 9 Biological Technical Advisory Group (BTAG) as prospective soil vapor ESLs; and
- It is anticipated that soil vapor ESLs accepted by BTAG will be comparable to or greater than the Edwards AFB benchmarks (pers. comm., B.Sample, N.Black, USEPA Region 9).

Uncertainties related to soil vapor ESLs are presented in Section 7.3.2.

6.1.3 *Screening Level Ecological Risk Assessment Exposure Assessment*

To develop exposure estimates and risk calculations consistent with the methodology presented in USEPA (1997b), soil, soil vapor, sediment, and surface water concentrations were used as a surrogate for in-field exposure estimates. Moreover, for the purposes of this SLERA, exposures were evaluated on a sample location-by-location basis (see Section 6.1.4). This is considered to be a conservative approach because:

- Receptors are exposed throughout their life to the maximum concentration of a constituent at a particular location.
- Receptors do not avoid contamination or move/integrate exposure over a biologically relevant exposure area.
- Constituents are assumed to be 100 percent bioavailable.

Actual exposure and bioavailability can vary with field conditions and may differ from the conditions for which the ESLs are derived.

6.1.4 *Screening Level Ecological Risk Assessment Risk Characterization*

Risk characterization integrates the results of the SLERA exposure and SLERA effects assessments to evaluate the potential for adverse ecological impacts associated with exposure to COPECs (USEPA, 1998). The SLERA risk characterization provides information from which to draw conclusions regarding the need to conduct further investigations to address potential ecological risk at the site.

The SLERA risk characterization presents the findings of a risk characterization screening in terms of a HQ and discusses these risk estimates in light of other lines of evidence.

6.1.4.1 *Risk Characterization Screen*

In the risk characterization, identified COPECs were further evaluated by performing the following tasks:

- A sample location-by-location spatial analysis of identified COPECs to understand the relationship of the identified COPEC to ecological habitat areas, or potential migration to these areas.
- For soil, a sample location-by-location comparison of the identified COPEC concentrations to guild-specific ESLs to characterize potential risks to terrestrial ecological receptors of concern within each habitat.
- Calculation of HQs, defined as the maximum concentration divided by the ESL to characterize the magnitude of the detected concentration relative to this benchmark. In the case of soil COPECs, HQs were calculated as the maximum concentration divided by the guild-specific ESL.
- COPECs are further evaluated with respect to frequency of exceedance, magnitude of exceedance, and their spatial distribution.

This risk characterization screening provided one line-of-evidence to support the SLERA risk characterization (see Section 6.1.4.4 for other factors considered in the SLERA Risk Characterization).

6.1.4.2 *Additional Screen for Metal COPECs in Soils*

For metal COPECs in soil, a sample location-by-location comparison to the appropriate background concentration (as characterized by the BTV) was also performed in addition to the guild-specific ESL comparisons. At a particular sampling location, if the maximum concentration of a metal was less than its BTV, it was eliminated from the risk characterization for that location.

With regard to comparisons to background, the BTV is a common metric used to characterize the upper bound of background concentrations and is frequently used for screening on a sample-by-sample or location-by-location basis. As discussed with the Agencies, for this SLERA, the BTV is defined as the 95 percent upper confidence limit on the 95th percentile of the background concentrations or the maximum concentration, whichever was less. BTVs were calculated using USEPA's ProUCL v. 4.00.01. Details on the methods used to establish the background concentration dataset for metals and conduct background comparisons are presented in Appendix C.

Note that lithium and boron were not analyzed in background soils. Thus, facility-specific BTVs were not developed for these metals. The mean soil background concentrations reported for lithium and boron in California are 19 and 23 mg/kg, respectively (Kearney Foundation, 1996). Where the concentrations of these metals in MA soils were lower than their respective mean background soil levels as documented in the 1996 Kearney Foundation report, they are eliminated as COPECs in the Risk Characterization.

6.1.4.3 *Vertical Profile*

In some MAs, the risk characterization identified areas where further understanding of the vertical profile of the identified soil COPECs could affect decision making. Within these areas of potentially affected ecological habitat, the soil and soil vapor sample results were organized in the following manner:

- Soil samples were classified and separated according to the following designations: facility, potential habitat, or potential COPEC migration to habitat (e.g., drainage ditch). Samples collected within a designated facility area and were considered unlikely to migrate to habitat were not carried forward since this is considered to be non-habitat and, therefore, does not present a significant potential exposure or migration pathway to ecological receptors. Facility boundaries were determined using information presented in Figure 3 of the Biological Resource Assessment for Aerojet BOU (ECORP, 2005). If a sample location was outside of a facility area that was not classified during a previous field survey and/or from aerial photographs, it was assumed to be potential habitat.
- Soil samples collected from the surface (0 to 1 foot bgs) interval were evaluated separately from soil samples collected from the subsurface (1 to 6 feet bgs) interval. For soil vapor data, the shallowest depth interval at each location was selected to represent the exposure zone for ecological receptors.

Exceedances for COPECs in the surface interval (0 to 1 foot bgs) were identified to evaluate potential risks for surface-dwelling wildlife as opposed to burrowing wildlife.

6.1.4.4 *Hazard Quotients*

The SLERA is designed to ensure that it is protective of receptors of concern and to make the underestimation of risk an unlikely outcome.

Accordingly, at the screening level stage of an ERA, HQs less than 1 are considered to represent an unlikely/negligible potential for ecological risk. Constituents with HQs greater than or equal to 1 are considered to present potential ecological risk.

Maps showing relationships to soil, soil vapor, sediment, and/or surface water ESLs on a sampling location-by-location within habitat at MAs are provided in each MA-specific section (Sections 6.2 through 6.11). Each sampling location is color-coded to show the following relationships:

- Does not exceed the ESL and/or BTV – blue
- 1x the ESL – green
- 2x the ESL – yellow
- 5x the ESL – orange
- 10x the ESL – red
- No ESL available – grey

Note that given the design of the SLERA, HQs greater than or equal to 1 do not necessarily imply that an ecological risk is actually present. As described above, an HQ is one factor among the many considered in the weight-of-evidence approach to assessing potential ecological risk. The need for further assessment and/or management decision should be considered in light of HQs and identified critical factors. Also note that if no COPEC exceedances were noted, or COPEC exceedances were restricted to samples collected from under facility areas, no map was prepared. Cross-reference Table 6.1-6 lists RI, HHRA, and SLERA sections for each MA, so that text, tables, and figures associated with each MA may be reviewed for a more complete understanding of sampling and risks.

The results of the risk characterization for each MA within the BOU are presented in Sections 6.2 through 6.11 of this report.

6.1.4.5 *Other Factors Discussed in the SLERA*

Ecological risk is not just a function of constituents present in environmental media at concentrations greater than ESLs. Rather, a weight-of-evidence approach that integrates this information with other pertinent factors is typically required to support decision-making. Other pertinent factors discussed in this SLERA include:

- Land use (present and planned future);
- Location, size, and quality of habitat;

- Magnitude and spatial distribution of COPEC concentrations;
- Presence or absence of special status species (e.g., threatened or endangered species); and
- Potential for ecological recovery.

Where relevant, these factors are discussed in MA-specific sections (Sections 6.2 to 6.11) and are further elaborated below.

Land Use

Although considered at the outset, information on the future land use at identified MAs should be reconsidered prior to advancing to the next tier of the ERA. If future land uses are incompatible or unattractive with respect to the persistence of native habitats and wildlife, risk managers may decide that advancement to the next tier of the ERA may be deemed a "less than effective expenditure of limited resources." Based on the preponderance of evidence in combination with future land use, decision-makers may consider that resources required to advance to and complete the next tier of the ERA would be better spent on other elements of the remedial investigation.

Location, Size, and Quality of Habitat

Information on the size and nature of potentially affected habitats can support interpretations of the ecological significance of predicted effects. Habitats with the following features will be considered of greater ecological significance:

- Limited or rare habitat that provides critical breeding, stopping over, or refuge for identified receptors of concern;
- Potentially affected habitat that is a significant portion of the entire habitat in the vicinity of the site; and
- Habitat that is located in areas designated as wildlife MAs or wildlife refuges.

Habitats considered to be of lesser ecological significance include:

- Highly disturbed, non-native habitats in areas designated as industrial or commercial use;
- Habitat comprised of introduced exotics that provide marginal habitat compared to native species; and

- Potentially affected habitat that represents only a small portion of a much larger, common habitat.

High quality habitat (e.g., habitat that provides foraging, cover, or nesting opportunities) in areas more remote to human activity will be expected to be utilized by ecological receptors to a greater degree than low quality habitat where foraging, cover, or nesting opportunities are limited. In the latter case, potential ecological exposures are considered "low," based on the limited frequency and duration of time a receptor is expected to utilize low quality habitat.

Any pertinent observations of stressed habitats, as well as healthy vegetation or wildlife, will be noted.

Presence of Threatened or Endangered Species and/or Designated Critical Habitat

State- and federal-listed threatened or endangered species are included as assessment endpoints in this SLERA (see Section 6.1.1.5). Hence, information on the presence of listed species and/or designated critical habitat at specific MAs has been identified by decision-makers as important when considering possible risk management actions. Accordingly, evidence of the presence of federal- and state-listed threatened or endangered species on an MA-by-MA basis includes:

- Direct observations of individuals;
- Observations of signs of individuals (e.g., scat);
- Designated or candidate critical habitat for threatened and endangered species;[19] and
- Obligatory vegetation (e.g., elderberry bush for the valley elderberry longhorn beetle [VELB]).

[19] See Biological Resource Assessment for the Aerojet Boundary Operable Unit (ECORP, 2005) in Appendix L.

According to the California Natural Diversity Database (CNDDB, 2011), the follow 37 species are listed for Sacramento County as being federal- or state-listed threatened, endangered, rare, or candidate species, or species of concern to DFG, including species of species concern (SSC), watch list (WL) species and fully protected (FP) species:

COMMON NAME	FED STATUS	CAL STATUS	DFG STATUS
western yellow-billed cuckoo	Candidate	Endangered	
vernal pool tadpole shrimp	Endangered	None	
Antioch Dunes evening-primrose	Endangered	Endangered	
Ione buckwheat	Endangered	Endangered	
soft bird's-beak	Endangered	Rare	
Sacramento Orcutt grass	Endangered	Endangered	
western spadefoot	None	None	SSC
double-crested cormorant	None	None	WL
white-tailed kite	None	None	FP
Cooper's hawk	None	None	WL
Swainson's hawk	None	Threatened	
ferruginous hawk	None	None	WL
golden eagle	None	None	FP | WL
merlin	None	None	WL
California black rail	None	Threatened	FP
burrowing owl	None	None	SSC
purple martin	None	None	SSC
bank swallow	None	Threatened	
saltmarsh common yellowthroat	None	None	SSC
grasshopper sparrow	None	None	SSC
Suisun song sparrow	None	None	SSC
tricolored blackbird	None	None	SSC
yellow-headed blackbird	None	None	SSC
Sacramento splittail	None	None	SSC
Sacramento perch	None	None	SSC
western red bat	None	None	SSC
pallid bat	None	None	SSC
American badger	None	None	SSC
western pond turtle	None	None	SSC
Mason's lilaeopsis	None	Rare	
Boggs Lake hedge-hyssop	None	Endangered	
California tiger salamander	Threatened	Threatened	SSC
Delta smelt	Threatened	Endangered	
giant garter snake	Threatened	Threatened	
vernal pool fairy shrimp	Threatened	None	
valley elderberry longhorn beetle	Threatened	None	
slender Orcutt grass	Threatened	Endangered	

Magnitude and Spatial Distribution of COPEC Concentrations

The magnitude and spatial distribution of COPEC concentrations relative to habitats of interest provides information as to whether exceedances appear to be isolated and unlikely to affect biota in these habitats. For habitats where COPEC concentrations greater than screening values are spatially limited (i.e., only one or two sample locations within a MA), and where HQs are low, it may be concluded that potential ecological exposure is low. In addition, if a sample location with exceedances is surrounded by other sample locations with concentrations below screening values, it may be concluded that the potential ecological exposure is "bounded" and low. For example, the spatial distribution of non-exceedances to COPECs is discussed relative to elderberry bushes to characterize potential risks to the VELB as "bounded."

As discussed in the BOU FS, the presence of COPECs exceeding ESLs by a factor of 10X or more was one of the lines of evidence used to identify areas of ecological concern and subject to potential active remediation. The factor of 10X the ESL was chosen as a driver for remediation because while the ESLs are based on No Observed Adverse Effect Levels (NOAELs), remediation goals for ecological risk are often based on the Lowest Observed Adverse Effect Level (LOAEL) rather than the NOAEL, and the LOAEL is typically a factor of 10X greater than the NOAEL.

Potential for Recovery

Populations or communities that are unlikely to recover or are slow to recover from disturbance were considered to be of greater ecological significance compared to populations or communities that recover rapidly. In general, populations or communities that are comprised of organisms that (i) are mobile, (ii) have short generation times, and (iii) produce many offspring have a greater potential to recover more quickly than populations comprised of organisms that (i) have limited movement, (ii) possess long generation times, and (iii) produce few offspring (Ricklefs, 1990).

6.2 *ADMINISTRATION AREA*

The SLERAs for Administration Area East and Administration Area West are presented separately below.

6.2.1 *Administration Area East*

The SLERA for Administration Area East is presented below.

6.2.1.1 *Habitat and Receptors of Potential Concern*

The majority of Administration Area East is graded, paved, and comprised of buildings (Figure 6.2-1). Within Administration Area East, there is a small area of ruderal/disturbed habitat in the southeast corner of the area boundary. Surface water runoff in Administration Area East is channeled into a system of man-made ditches that eventually discharge into the Westlakes storm water retention cells. Administration Area East drainage ditches were inspected for potential aquatic habitat in May 2006. The ditches were dry, with no evidence of recent inundation or surface water flow. Terrestrial grasses were the dominant vegetation on the banks or within the channel bottoms of the ditches. Wildlife species were not observed utilizing the ditches during the site visit, and the habitat needed for the potential occurrence of special-status wildlife on, or adjacent to, the sites was not present. Based on these observations, it was determined that Administration Area East drainage ditches are not suitable to support aquatic ecological receptors and should be evaluated only in terms of potential transport to downstream habitats such as Westlakes (Section 6.5). Only transient use of the area by common and/or introduced terrestrial wildlife species that are tolerant of human activity/disturbance is expected due to lack of significant forage or cover habitat.

6.2.1.2 *Constituents of Potential Ecological Concern*

Although standing water may be present after storm events in the ditch system, Administration Area East primarily consists of terrestrial habitat. Therefore, analytical results of soil and soil vapor samples collected from the Administration Area East were evaluated as part of this SLERA. In addition, analytical results from surface water samples collected from standing water within the Administration Area ditches (East and West combined) were also evaluated.

Soil. COPECs identified in pooled soil samples from Administration Area East (i.e., all soil samples from within the Management Area) are identified on Table 6.2-1 and summarized below. These COPECs are identified from samples collected from within both habitat and facility designated areas.

Detected Constituents > Screening Levels

- Anthracene
- PCB-1248
- Benzo (a) anthracene
- Benzo (ghi) perylene
- Boron
- Dibenz (a,h) anthracene
- Fluoranthene
- Lithium
- Phenanthrene
- Total Cyanide
- PCB-1254
- Benzo (a) pyrene
- Benzo(k) fluoranthene
- Dimethyl phthalate
- Indeno(1,2,3-cd)pyrene
- Mercury
- Pyrene
- Zinc
- PCB-1016
- PCB-1260
- Benzo (b) fluoranthene
- Bis(2-Ethylhexyl)phthalate
- Chrysene
- Di-n-butyl phthalate
- Perchlorate
- Molybdenum
- Titanium

Detected Constituents Lacking Screening Levels

- 1,1,2,2-Tetrachloroethane
- Iron
- Benzyl alcohol
- N-Nitrosodimethylamine
- Dibenzofuran
- Strontium

Soil Vapor. COPECs identified in soil vapor samples from Administration Area East are identified in Table 6.2-2 and summarized below.

Detected Constituents > Screening Levels

- Benzene
- Carbon Disulfide
- Chloroform
- 1,1-Dichloroethene
- cis-1,2-Dichloroethene
- Freon 113
- Tetrachloroethene
- Toluene
- Trichloroethene
- Vinyl Chloride

Surface Water. COPECs identified in surface water samples from Administration Area (East and West combined) drainage ditch system are identified in Table 6.2-3 and summarized below.

Detected Constituents > Screening Levels

- Aluminum
- Copper
- Manganese
- Zinc
- Barium
- Iron
- Silver
- Boron
- Lead
- Vanadium

Detected Constituents Lacking Screening Levels

- Bromodichloromethane
- Nitrate as NO3
- Bromoform
- Nitrite as NO2
- Dibromochloromethane
- Titanium

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.2.1.3 *SLERA Exposure Estimates*

COPECs identified in pooled soil samples from Administration Area East are identified in the summary above and on Table 6.2-1. These COPECs are identified from samples collected from within both habitat and facility areas. To understand potential current ecological risk, a comparison of only those Administration Area East soil samples collected within potential ecological habitat were compared to guild-specific ESLs. These soil samples were organized into the following two groups:

- Potential Habitat Samples (surface and subsurface soil samples): These samples were collected from ruderal/disturbed habitat or areas outside facility boundaries not formally characterized with respect to habitat; and
- Drainage Ditch Samples (surface soil samples): These soil samples are evaluated for the potential migration of COPECs to Westlakes.

<u>Potential Habitat Samples</u>

Administration Area East soil samples collected outside facility boundaries were from small areas of ruderal/disturbed habitat. Two soil samples were collected from the surface interval and one sample was collected from the subsurface interval within ruderal/disturbed habitat. The number of analyses varied among the individual samples. Guild-specific ESLs compared to COPEC concentrations reported in Administration Area East soil collected from the surface and subsurface interval within potential habitat areas are presented on Tables 6.2-4 and 6.2-5, respectively.

The only habitat COPEC identified in the surface interval (0 to 1 foot bgs) samples with an HQ above 1 was molybdenum (Table 6.2-4), and iron and strontium were identified as COPECs because no ESLs exist. Molybdenum is greater than the plant ESL (HQ < 2), but does not exceed the soil invertebrate, avian, or mammalian ESLs. No habitat COPECs were identified in subsurface soil samples (1 to 6 feet bgs) (Table 6.2-5), although strontium was a COPEC because no ESL exists. COPECs identified at each sample location are presented in Figures 6.2-1 and 6.2-2 for habitat surface and subsurface soil, respectively.

Exposure potential in ruderal/disturbed habitat is expected to be minimal due to the lack of suitable resources necessary to support resident breeding populations of plants and animals and the close proximity to active facility buildings. Exceedances of guild-specific ESLs are limited

(being either of low magnitude or few in number). No common wildlife species were observed during the site-specific habitat characterization of Administration Area East, nor does Administration Area East support designated critical habitat and, therefore, is unlikely to support resident populations of special-status species. Based on these considerations, ecological exposure to soils, and thus ecological risk, in Administration Area East is considered to be low.

Drainage Ditch Samples

The guild-specific ESL comparison of the COPECs identified in surface soil from the Administration Area East drainage ditches is presented on Table 6.2-6 and exceedances are depicted in Figure 6.2-3. Surface soil in the drainage ditch clearly serves as a depositional area for particles entrained in surface water runoff from Administration Area East. Inorganic constituents are the primary class of COPECs that are greater than guild-specific ESL values. Positively detected organic constituents greater than guild-specific ESL levels in surface soil include dimethylphthalate and PCBs. Six inorganic constituents are greater than guild-specific screening level levels in surface soil, in addition to being greater than their respective BTVs. In particular, PCBs and mercury levels are elevated above ESLs in drainage ditch surface soil (maximum HQs considerably > 10), which is of concern because they are bioaccumulative contaminants in wildlife.

The following points should also be noted with respect to the results:

- Drainage ditches within Administration Area East are part of a storm water conveyance system that eventually discharges into the Westlakes storm water retention cells. The land surrounding the ditches is classified as facility or ruderal habitat. Only transient use of the area by common and/or introduced terrestrial wildlife species that are tolerant of human activity/disturbance is expected due to lack of significant forage or cover habitat. Therefore, ecological exposure potential in the drainage ditches is considered to be low. However, COPECs in the drainage ditches could be transported during rain events to downstream areas that may provide more suitable ecological habitat.
- The downstream areas potentially affected by COPECs originating from Administration Area East drainage ditches have been sampled as part of the BOU RI (Westlakes and Buffalo Creek) and/or additional step-out sampling. Therefore, further evaluation of the COPECs identified in the Administration Area East drainage ditches as a source

of COPECs to downstream areas will be taken into consideration in the Risk Characterization discussion for those other areas (Sections 6.5 and 6.6, respectively).

Soil Vapor

The screening results for the shallowest soil vapor samples collected within potential habitat areas within Administration Area East are presented on Table 6.2-7. Toluene was the only constituent detected at a concentration greater than the ESL (HQ < 2), at 1 of 13 locations (Soil Vapor Sample A20-ST05-SP03-10; Figure 3.1-3). The ESL for toluene derived from the Edwards AFB benchmark (= 84 $\mu g/m^3$) is considered to be very conservative based on a comparison to the NOAEL-equivalent benchmark from Gallegos et al. (2007) (= 2400 $\mu g/m^3$) (see also Section 7.3). Further, ecological exposure in ruderal/disturbed habitat is expected to be minimal due to the lack of suitable resources necessary to support resident breeding populations of plants and animals. Therefore, ecological exposure to soil vapor, and thus ecological risk, in Administration Area East is considered to be low.

Surface Water

Surface water screening results for the Administration Area are presented on Table 6.2-3. Surface water samples were collected from standing water within the Administration Area drainage ditch system (East and West combined). Total metals were identified as COPECs based on a comparison of maximum detected surface water concentrations to ESLs for effects on aquatic biota. A small number of organic constituents were also identified as COPECs because they were positively detected and did not have ESLs. As discussed previously, the drainage ditch system in the Administration Area contains water intermittently and does not support aquatic ecological receptors. Wildlife may consume water present in the Administration Area ditch system; however, calculations of wildlife exposures indicate that exposures to COPECs in drinking water (a) are generally negligible relative to exposure contributions through dietary food items and incidental ingestion of soil; and (b) seldom pose a risk when considered as the lone exposure pathway. Furthermore, habitat adjacent to the ditch is characterized as ruderal/disturbed, where wildlife activity is expected to be low and surface water is present only intermittently. Based on these considerations, ecological exposure to surface water, and thus ecological risk, in Administration Area East is considered to be low. For informational purposes, the sample locations of

the ten COPECs that had maximum detected concentrations that exceeded ESLs may be found on Figure 3.1-10.

6.2.1.4 *Risk Characterization Summary*

Exposure potential in ruderal/disturbed habitat in Administration Area East is expected to be minimal due to the lack of suitable resources necessary to support resident breeding populations of plants and animals and the close proximity to active facility buildings. No common wildlife species were observed during the site-specific habitat characterization of Administration Area East and given the type and quality of habitat at the MA, special-status species are unlikely to be attracted and spend time at or in areas adjacent to the site. Therefore, potential ecological exposures to COPECs in soil, surface water, or soil vapor in Administration Area East are considered to be low, and not significant enough to produce ecological risk.

Further evaluation of the COPECs identified in the Administration Area East drainage ditches as a potential source of COPECs to downstream areas (Westlakes and Buffalo Creek) will be taken into consideration in the risk characterization discussion for those areas (Sections 6.5 and 6.6, respectively).[20]

It should also be noted that the current land use in Administration Area East is commercial/industrial. Future land use is expected to remain the same. In addition, the land surrounding Administration Area East is likely to be developed into additional commercial and new residential areas, which will further reduce the available native habitat for ecological receptors. Hence, no significant ecological risk is likely in the future.

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[20] As part of activities under PGOU, the top 2 to 10 feet of soils was removed from 11D-SNS21 to 11D-SNS22, thereby reducing exposure to contaminated ditch soils in Administration Area East.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendation
Soil: 0.56 acre	Poor (ruderal)	None	Commercial	Current – Moderate Future – Moderate	Phthalates PCBs Inorganics	SMDP: potential downgradient migration (drainage ditch)
Surface Water: Dependent on rainfall	Poor (intermittent)	None	Commercial	Current – Low Future – Low	Inorganics	SMDP: potential downgradient migration (drainage ditch)
Soil Vapor: 0.56 acre	Poor (ruderal)	None	Commercial	Current – Low Future – Low	Toluene	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.2.2 *Administration Area West*

The SLERA for Administration Area West is presented below.

6.2.2.1 *Habitat and Receptors of Potential Concern*

Similar to Administration Area East, the majority of Administration Area West is graded, paved, and comprised of buildings. An area of ruderal/disturbed habitat exists along the western boundary of Administration Area West. This habitat generally occurs in an area that has been previously graded or modified and is dominated by weedy herbaceous species. The primary habitat of concern identified within Administration Area West is an area of annual grassland habitat in the southwest corner of the area. The area west of the western boundary of Administration Area West was included in the step-out sampling conducted in 2007 and, hence, was also evaluated as potential habitat. The habitat within this area has not been formally classified, but review of aerial photographs indicates that it consists of ruderal/disturbed habitat with mixed grasslands. Even though this area is not included within the BOU, it is evaluated in this SLERA due to the potential for migration of COPECs from Administration Area West.

Surface water runoff in Administration Area West is channeled into a system of man-made ditches that eventually discharge into the Westlakes storm water retention cells. Similar to the discussion of the drainage

ditches in Administration Area East, it was determined that the Administration Area West drainage ditches are terrestrial and not suitable to support aquatic ecological receptors. Therefore, three samples collected within the Administration Area West drainage ditches[21] that were originally designated as sediment samples were evaluated as soil and screened against soil ESLs. Given the marginal habitat, the drainage ditches may be subject to transient use by common terrestrial wildlife that are tolerant of human activity/disturbance, but are not considered attractive ecological habitat areas as compared to surrounding undisturbed terrestrial habitat. COPECs identified in drainage ditches are evaluated only in terms of their potential transport to downstream habitats such as Westlakes.

6.2.2.2 *Constituents of Potential Ecological Concern*

Administration Area West consists of terrestrial habitat, although standing water may be present after storm events in the ditch system. Therefore, analytical results of soil and soil vapor samples collected from the Administration Area West were evaluated as part of this SLERA. In addition, analytical results from surface water samples collected from standing water within the Administration Area ditches (East and West combined) were also evaluated.

Soil. COPECs identified in pooled soil samples from Administration Area West are identified on Table 6.2-8 and summarized below. These COPECs are identified from samples collected from within both habitat and facility designated areas.

Detected Constituents > Screening Levels

- Antimony
- Boron
- Chromium VI
- Lead
- Mercury
- PCB-1254
- Silver
- Zinc
- Barium
- Cadmium
- Copper
- Lithium
- Molybdenum
- PCB-1260
- Titanium
- Bis(2-ethylhexyl)phthalate
- Chromium
- Di-n-butyl phthalate
- Manganese
- Nickel
- Perchlorate
- Total Cyanide

[21] Sediment samples were collected from: a man-made drainage ditch (9D-SD01), the accumulated soil within a concrete-lined ditch (D(b)-SD01), and a grated drop inlet receiving storm water runoff (D(d)-SD01).

Detected Constituents Lacking Screening Levels

- 1,1,2,2-Tetrachloroethane
- N-Nitrosodiphenylamine
- Carbazole
- Strontium
- Iron

Soil Vapor. COPECs identified in soil vapor samples from Administration Area West are identified in Table 6.2-9 and summarized below.

Detected Constituents > Screening Levels

- Toluene
- Trichloroethene

Surface Water: Results are presented on Table 6.2-3 and in Section 6.2.1.2.

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.2.2.3 *SLERA Exposure Estimates*

COPECs identified in pooled soil samples from Administration Area West are summarized in the previous section. These COPECs are identified from samples collected from within both habitat and facility designated areas. To understand potential current ecological risk, a comparison of only those soil samples collected within potential ecological habitat were compared to guild-specific ESLs. These soil samples were organized into the following two groups:

- Potential Habitat Samples (surface and subsurface soil samples): These samples were collected from ruderal/disturbed habitat, grassland habitat, or areas outside facility boundaries determined to be habitat from site visit or aerial review.
- Drainage Ditch Samples (surface soil samples): These soil samples are evaluated for the potential migration of COPECs to Westlakes. As previously stated, results from sediment samples (surface) have been combined for analysis with the surface soil samples and compared to soil ESLs.

Potential Habitat Samples

Twenty-nine surface soil samples and 21 subsurface soil samples were collected within potential ecological habitat within Administration Area West. The number of analyses performed on the samples varied as

specified in the BOU FSP (Aerojet, 2005). Comparison of guild-specific ESLs to COPEC concentrations identified in surface and subsurface soil, collected from potential ecological habitat areas within Administration Area West, are presented on Tables 6.2-10 and 6.2-11, respectively.

Soil samples collected outside facility boundaries were from ruderal/disturbed habitat to the west of the formal Administration Area West boundary and a small grassland habitat in the southern portion of Administration Area West. Habitat COPECs identified in the surface soil samples were B(2-EH)P, di-n-butyl phthalate, PCB-1254, PCB-1260, antimony, boron, cadmium, chromium, copper, lead, manganese, mercury, molybdenum, nickel, silver, and zinc (Table 6.2-10). Habitat COPECs identified in subsurface soil samples were similar to those identified in surface soil (Table 6.2-11). COPECs at each sample location are presented in Figures 6.2-4 and 6.2-5 for surface and subsurface soil, respectively.

The habitat area immediately west of the Administration Area West boundary sampled in 2007 as part of the step-out sampling has not been formally classified. As stated previously, a review of aerial photographs indicates that it consists of ruderal/disturbed with mixed grasslands. While ecological exposure to soils in ruderal/disturbed areas is possible, it is expected to be minimal due to a lack of suitable resources necessary to support significant ecological communities. However, numerous constituents, particularly inorganics, are detected in this area at concentrations greater than 10 times the ESLs. Further, this area is adjacent to the Administration Area ditch system and could contribute to the migration of COPECs to higher quality ecological habitats. Therefore, further evaluation of potential ecological risk in this area may be warranted depending on future planned land use.

Exposure potential in the grassland habitat in the southern portion of Administration Area West shown in Figures 6.2-4 and 6.2-5 (surface and subsurface, respectively) is generally considered to be greater than that for the ruderal/disturbed habitat. Five surface soil samples were collected within the grassland habitat, three of which had no concentrations greater than guild-specific ESLs. Constituent concentrations detected in the samples greater than guild-specific ESLs include silver (HQ <2 in one of five samples) and di-n-butyl phthalate (HQ >10 in one of five samples).

With respect to silver and di-n-butyl phthalate, the exceedances of the avian ESL in surface soil are isolated. The maximum concentration of silver (6.7 mg/kg) in grassland habitat surface soil is only slightly greater

than the avian ESL (4.2 mg/kg) for surface soil (HQ <2). The avian ESL for di-n-butyl phthalate is based on its uptake into earthworms and their subsequent consumption by birds. However, di-n-butyl phthalate is not a compound that will biomagnify through the food chain (ATSDR, 2001). Therefore, this single exceedance of this ESL in grassland surface soil is considered unlikely to result in adverse ecological effects to wildlife populations.

Four subsurface soil samples were collected within the grassland habitat, two of which had no exceedances of guild-specific ESLs. Exceedances in the other two soil samples include molybdenum and di-n-butyl phthalate. Molybdenum was detected at a concentration just greater than the plant ESL in one of four samples (HQ < 2), but did not exceed the soil invertebrate, avian, or mammalian ESLs. Di-n-butyl phthalate was detected at a concentration greater than the avian ESL in one of four samples (HQ >10), but did not exceed the plant or mammalian ESLs.

With respect to molybdenum and di-n-butyl phthalate, the exceedances of the plant and avian ESLs in subsurface soil, respectively, are isolated. The maximum concentration of molybdenum (2.2 mg/kg) in grassland habitat subsurface soil is only slightly greater than the plant ESL (2.0 mg/kg). The avian ESL for di-n-butyl phthalate is based on its uptake into earthworms and their subsequent consumption by birds. The single exceedance of this ESL in grassland subsurface soil is considered unlikely to result in significant ecological exposure. For the reasons outlined above, further evaluation of potential ecological risk in this portion of Administration Area West (annual grassland) is not warranted.

Drainage Ditch Soil

The guild-specific ESL comparison of COPEC concentrations identified in surface soil collected from the drainage ditches within Administration Area West is presented on Table 6.2-12 and exceedances are depicted in Figure 6.2-6. Due to the conservative nature of the ESLs selected by Aerojet for this investigation and the conservatism inherent in a SLERA, Aerojet and the Agencies agreed that a HQ<10 did not represent a significant threat. Therefore, to ensure areas that posed a significant threat were readily identifiable, data was only posted for locations with HI>10. To obtain the HQ for locations where HQ<10, please refer to Tables 6.2-12. Surface soil in the drainage ditch clearly serves as a depositional area for particles entrained in surface water runoff from Administration Area West. Inorganic constituents are the primary class of COPECs that are greater than guild-specific ESLs, particularly in surface

soil. Many of these inorganic compounds are present at concentrations greater than ESLs and BTVs (antimony, barium, boron, cadmium, chromium, copper, lead, manganese, mercury, molybdenum, nickel, silver, and zinc). In particular, mercury levels are elevated above ESLs and the BTV in drainage ditch surface soil (maximum HQs considerably > 10), which is of concern because it is a bioaccumulative contaminant in wildlife and a concern to the aquatic ecological habitats downgradient of the Administration Area. The only positively detected organic constituent greater than a guild-specific ESL in surface soil is PCB-1260, also a bioaccumulative COPEC.

Drainage ditches within Administration Area West are part of a storm water conveyance system that eventually discharges into the Westlakes storm water retention cells. The land surrounding the ditches is classified as ruderal habitat, except in the southern portion of Administration Area West where grassland habitat is present. As observed by ecologists during numerous visits to the site, the Administration Area ditches have intermittent flow during and after rainfall, and do not provide a consistent food source or cover for either aquatic or terrestrial wildlife (ECORP, 2005). Therefore, ecological exposure potential in the drainage ditches is considered to be low. However, COPECs in the drainage ditches could be transported during rain events to downstream areas that may provide more suitable ecological habitat.

The downstream areas potentially affected by COPECs originating from the Administration Area West drainage ditches were sampled as part of the BOU RI and/or additional step-out sampling (e.g., Westlakes and Buffalo Creek). Therefore, further evaluation of the COPECs identified in the Administration Area West drainage ditches will be taken into consideration in the Risk Characterization discussion for the downstream receiving areas (Sections 6.5 and 6.6, respectively).

Soil Vapor

The screening results for the shallowest soil vapor samples collected from potential habitat areas within Administration Area West are presented on Table 6.2-13 (Figure 3.1-7 shows soil vapor sampling locations). No constituents were detected at concentrations greater than ESLs (11 samples). Therefore, soil vapor in Administration Area West does not represent a medium of potential ecological concern.

Surface Water

The screening results for surface water samples collected from the Administration Area ditches are presented on Table 6.2-3. Surface water samples were collected from standing water within the Administration Area (East and West combined) drainage ditch system. Total metals were identified as COPECs based on a comparison of maximum detected metal concentrations in surface water to ESLs for effects on aquatic biota. A small number of organic constituents were also identified as COPECs because they were positively detected and did not have screening levels. As discussed previously, the drainage ditch system in the Administration Area does not support aquatic ecological receptors. Theoretically, wildlife may consume water present in the Administration Area ditches; however, wildlife exposure to COPECs in drinking water is generally considered negligible relative to exposure contributions through dietary food items and incidental ingestion of soil, and seldom poses a risk when considered as the lone exposure pathway. Furthermore, surface water is expected to be present only intermittently. Therefore, ecological exposure to surface water, and any chemicals present in surface water, in Administration Area West is considered to be low. For informational purposes, the sample locations of the ten COPECs that had maximum detected concentrations that exceeded ESLs may be found on Figure 3.1-10.

6.2.2.4 *Risk Characterization Summary*

Exposure potential in ruderal/disturbed habitat within Administration Area West is expected to be minimal due to the lack of suitable resources necessary to support populations of plants and animals. However, COPECs detected above guild-specific ESLs in the ruderal/disturbed habitat west of the facility in Administration Area West were significant in magnitude and frequency of exceedance. This area also represents a source of COPECs to the adjacent ditch, which could lead to the migration of COPECs from this area to higher quality ecological habitats. Thus, further evaluation of this area with respect to potential ecological risk may be warranted depending on future planned use.

COPEC concentrations detected greater than guild-specific ESLs in the annual grassland and in the southern portion of Administration Area West were limited both in frequency and magnitude. Therefore, potential ecological exposures to soil, and any chemicals present in soil, in this area are considered to be low, and thus not significant enough to produce ecological risk. Potential exposure to soil vapor and surface water, and any chemicals present in soil vapor and surface water, in Administration

Area West is also considered to be low. Further evaluation of the COPECs identified in the Administration Area West drainage ditches as a potential source of COPECs to downstream receiving areas will be taken into consideration in the Risk Characterization discussion for those areas (Section 6.5 – Westlakes and Section 6.6 - Buffalo Creek).

It should also be noted that future land use is likely to transform this area into a fully developed commercial and residential area, which will further reduce the available native habitat for ecological receptors. Hence, no significant ecological risk is likely in the future.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Conclusion
Soil: 5.8 acres	Moderate (grassland+ ruderal)	None	Commercial	Current – Moderate Future – Moderate	Phthalates PCBs Inorganics	SMDP: potential downgradient migration (drainage ditch)
Surface Water: Dependent on rainfall	Poor (intermittent)	None	Commercial	Current – Low Future – Low	Inorganics	SMDP: potential downgradient migration (drainage ditch)
Soil Vapor: 5.8 acres	Poor (ruderal)	None	Commercial	Current – Low Future – Low	None	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.3 *LINE 02*

The SLERA for Line 02 is presented below.

6.3.1 *Habitat and Receptors of Potential Concern*

Line 02 is a complex area consisting of former facility buildings surrounded by ecologically significant terrestrial and seasonal aquatic habitats (Figure 6.3-1). Buffalo Creek is adjacent to Source Areas 59E and 28E (DSA) and numerous ditches are present within Line 02. Buffalo

Creek and its tributaries will be evaluated separately in this SLERA and, therefore, will not be further discussed as part of the Risk Characterization for Line 02. The dominant habitat of concern for Line 02 is annual grassland habitat, but there is also oak woodland habitat, Freemont cottonwood–oak woodland habitat, coyote brush scrub habitat, and willow scrub habitat present. In addition, low-lying areas are present around the DSA at the south-southwest side of Line 02 and on the north side of Line 02. Seasonally inundated areas were also identified along the north-northeastern boundary of Line 02. No vernal pools were identified at Line 02, or any other MA within the BOU (ECORP, 2005).

The series of ditches present in the northern portion of Line 02 were observed to contain no standing water, and vegetation was indicative of terrestrial habitat. Abundant wildlife usage of Line 02 was observed during site visits and numerous elderberries occur in and adjacent to Line 02. Bird species noted at the MA include spotted towhee, ash-throated flycatcher, house finch, starling, Anna's hummingbird, sharp-shinned hawk, red-tailed hawk, and turkey vulture. A great blue heron was also observed taking flight from the seasonally inundated area to the north-northeast of Line 02.

6.3.2 *Constituents of Potential Ecological Concern*

Line 02 consists of primarily terrestrial habitat; therefore, analytical results of soil and soil vapor samples collected from Line 02 were evaluated as part of this SLERA.

Soil. COPECs identified in pooled soil samples from Line 02 are identified on Table 6.3-1 and summarized below. These COPECs are identified from samples collected from within both the habitat and facility designated areas.

Detected Constituents > Screening Levels

- Antimony
- Boron
- Chromium
- Copper
- Di-n-butyl phthalate
- Lithium
- Molybdenum
- Nickel
- Perchlorate
- Thallium
- Titanium
- Zinc

Detected Constituents Lacking Screening Levels

- Aluminum
- Benzoic acid
- Strontium

Soil Vapor. COPECs identified in soil vapor samples from Line 02 are identified on Table 6.3-2 and summarized below.

Detected Constituents > Screening Levels

- Carbon disulfide
- Carbon tetrachloride
- Chloroform
- 1,1-Dichloroethene
- cis-1,2-Dichloroethene
- Freon 113
- Tetrachloroethene
- Toluene
- Trichloroethene

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.3.3 SLERA Exposure Estimates

To understand potential ecological exposures, a comparison of only those Line 02 soil samples collected within potential ecological habitat were compared to guild-specific ESLs. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Potential Habitat Soil. Line 02 soil samples collected outside facility boundaries were primarily from annual grassland habitat areas, although three were collected from within coyote brush scrub habitat and two from within oak woodland habitat. Eighteen soil samples were collected from the surface interval and 30 samples were collected from the subsurface interval as specified in the BOU FSP (Aerojet, 2005). The sample size for each COPEC varied depending on the analyses performed on the individual sample as specified in the BOU FSP (Aerojet, 2005). Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat areas for the surface and subsurface soil intervals in the Line 02 area are presented on Tables 6.3-3 and 6.3-4, respectively.

Habitat COPECs identified in the surface soil samples were di-n-butyl phthalate, molybdenum, thallium, and zinc (Table 6.3-3). COPECs identified at each sample location are presented in Figure 6.3-1. The following points should be noted with respect to these results:

- There was only one detection of di-n-butylphthalate in 16 (0 - 1 foot bgs) surface soil samples. Overall in the Line 02 MA, di-n-butylphthalate was positively detected in only 5 of 86 samples (6 percent frequency of detection). Although the single surface soil detection of di-n-butylphthalate is greater than the avian ESL

(HQ >10), it does not exceed the plant or mammalian ESL. These results indicate that this single exceedance may be isolated, but could be indicative of localized contamination, that di-n-butylphthalate is not likely widespread within this MA, and is unlikely to be an ecological risk driver. Therefore, additional soil characterization for di-n-butylphthalate in this MA is not warranted.

- The maximum concentration of molybdenum exceeds the plant and mammalian ESLs in only 1 of 12 samples (HQs <5 and <2, respectively), but does not exceed the soil invertebrate or avian ESLs. The single location (28E-SB03) where molybdenum is greater than ESLs is shown in Figure 6.3-1. As shown in Figure 6.3-1, surrounding habitat samples do not have molybdenum greater than the guild-specific ESLs.
- Concentrations of thallium exceed the plant and mammalian ESLs in 6 of 15 and 3 of 15 samples, respectively. However, thallium was greater than the BTV (by a factor of 2 or less) in only 3 of the 15 sample locations. The three locations (L2-ST26-SB04, E(n)-SB01, and 28E-SPB01) where thallium is greater than the BTV are shown in Figure 6.3-1. As shown in Figure 6.3-1, surrounding habitat samples do not have thallium greater than the plant and mammalian ESLs.
- Concentrations of zinc exceed the soil invertebrate ESL in only 1 of 18 samples (HQ <2), the avian ESL in 12 of 18 samples (maximum HQ <5), and the mammalian ESL in 5 of 18 samples (maximum HQ <2). However, zinc was greater than the BTV (by a factor of less than 2) in only 1 of the 18 sample locations. The single location (29E-SNS07) where zinc is greater than the BTV is shown in Figure 6.3-1. As shown in Figure 6.3-1, the habitat samples surrounding this location do not have zinc greater than the guild-specific ESLs.

Habitat COPECs identified in the subsurface soil samples were antimony, copper, lithium, molybdenum, nickel, perchlorate, thallium, and titanium (Table 6.3-4). COPECs identified at each sample location are presented in Figure 6.3-2. The following points should be noted with respect to these results:

- The maximum concentrations of all of the constituents greater than guild-specific ESLs were marginally greater than the BTV, except molybdenum. Perchlorate and titanium do not have BTVs.
- Concentrations of molybdenum exceed the guild-specific ESLs for plants and mammals in 2 of 28 and 1 of 28 samples only (HQ < 5 and

HQ < 2, respectively), and do not exceed the soil invertebrate or avian ESLs.

- Perchlorate and titanium are greater than the soil invertebrate ESLs in only 1 of 30 and 1 of 28 samples (HQ < 5 and HQ < 2, respectively).

Soil Vapor. Screening results for soil vapor samples collected at a depth of 10 feet bgs within potential habitat areas near Line 02 are presented on Table 6.3-5 and Figure 6.3-3. The maximum soil vapor concentrations of 5 constituents (1,1-DCE; cis-1,2-DCE; PCE; toluene; and TCE) were greater than soil vapor ESLs in samples collected in Line 02 (HQ < 5 for 1,1-DCE and cis-1,2-DCE and HQ >10 for TCE, PCE, and toluene). Of these, all except toluene were detected above ESLs in only 1 of 21 samples (toluene was detected above the ESL in 5 of 21 samples). The elevated VOC concentrations at location 28E-SP16 are associated with a former small unlined pond adjacent to a former cleaning slab, and were delineated as part of the RI (Figure 5.1-5a). As indicated in the RI figure, VOC concentrations in soil vapor decrease rapidly within a short distance from this area. Additional soil vapor samples in proximity to the former unlined pond collected as part of the RI (59E-SP09, DSA-SP08 and DSA-SP05) show levels of TCE in soil vapor well below the ecological screening benchmark of 6,400 $\mu g/m^3$. It should be noted that samples DSA-SP05 and DSA–SP08 are not shown on Figure 6.3-3 because they are within the facility area. None of the 20 remaining soil vapor habitat samples from Line 02 have concentrations of 1,1-DCE, cis-1,2-DCE, PCE, or TCE above ESLs. Toluene is elevated above the ESL in only 4 of the remaining 20 samples. The soil vapor ESL for toluene is considered to be conservative (see Section 6.2.1.3 and Section 7.3). Therefore, VOCs in soil vapor do not represent widespread contamination, and as such, are not considered to pose ecological risks at the population level.

6.3.4 *Risk Characterization Summary*

Exposure potential in annual grassland, coyote brush scrub, and oak woodland habitat is expected to be significant due to the presence of suitable resources necessary to support resident breeding populations of plants and animals. Common wildlife species were observed during the site-specific habitat characterization of Line 02.

Line 02 supports elderberry shrubs, which may provide potential habitat for the VELB, a federally listed threatened species (Appendix L). Exceedances of plant and invertebrate ESLs may be of particular interest at MAs where potential VELB habitat occurs. However, as noted in the

previous discussion of potential habitat soils and shown in Figure 6.3-1, exceedances of guild-specific ESLs and/or the BTV, are limited in magnitude, number, and/or areal extent in Line 02. With respect to the potential occurrence of VELBs at Line 02, locations where plant and invertebrate ESL exceedances occur are bounded by sample locations with no exceedances of plant or soil invertebrate ESLs. Based on these considerations, the potential for adverse effects to ecological receptors as a result of exposure to soil or soil vapor in Line 02 is not considered significant.

It should also be noted that future land use is likely to transform this area and its surroundings into a fully developed commercial and residential area. These land uses typically support lawns and landscaped ornamental plants and do not, and are not intended to, support native plant communities and wildlife populations (i.e., ecological receptors of concern). As part of redevelopment for this or any other MA, a VELB Management Plan may be considered to address issues related to the potential presence of and risk to this federally listed threatened species. Hence, no significant ecological risk is likely in the future.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendation
Soil: 22.3 acres	Good	VELB habitat	Mixed Commercial/ Residential	Current – High Future – Low	Phthalates Inorganics	No further action
Soil Vapor: 22.3 acres	Good	VELB habitat	Mixed Commercial/ Residential	Current – High Future – Low	VOCs	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.4 *LINE 05 NORTH*

The SLERA for Line 05 is presented below.

6.4.1 *Habitat and Receptors of Potential Concern*

Line 05 North is primarily paved and surrounded by sparsely vegetated, large cobble, dredger tailing piles, which represent the dominant habitat type (Figure 6.4-1). Also present are small patches of oak woodland habitat, Freemont cottonwood–oak woodland habitat, and willow scrub habitat. A ditch runs from the northeast corner of Line 05 North in a northeasterly direction, connecting to Buffalo Creek upgradient of the Westlakes area. The ditch was dry and was vegetated with shrubs and trees (a mixture of dredger tailings and Freemont cottonwood–oak woodland habitat), and thus represents potential terrestrial habitat. Buffalo Creek forms the northern boundary of Line 05 North and has a narrow fringe of riparian habitat associated with it.

A low-lying area was identified by Tetra-Tech, Inc., on the west side of Line 05 North; this low-lying area should also be considered potential terrestrial habitat (Figure 6.4-1). No evidence of wetland habitat was observed during visual inspection of this area and no vernal pools were identified at Line 05 North, or any other MA within the BOU (ECORP, 2005).

Wildlife observations include house finches, tree swallows, starlings, jackrabbit, and coyote scat (presumed). Only transient, common/introduced terrestrial wildlife species that are tolerant of human activity/disturbance are expected due to lack of significant forage or cover habitat within Line 05 North.

6.4.2 *Constituents of Potential Ecological Concern*

Line 05 North consists of terrestrial habitat; therefore, analytical results of soil and soil vapor samples collected from Line 05 North were evaluated as part of this SLERA.

Soil. COPECs identified in pooled soil samples from Line 05 North are identified on Table 6.4-1 and summarized below. These COPECs are identified from samples collected from within both the habitat and facility designated areas.

Detected Constituents > Screening Levels

- Boron
- Cadmium
- Di-n-octyl phthalate
- Lithium
- Molybdenum
- Titanium

Detected Constituents Lacking Screening Levels

- Strontium

Soil Vapor. Only trichloroethene was identified as a COPEC in soil vapor samples from Line 05 North (Table 6.4-2).

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.4.3 SLERA Exposure Estimates

To understand potential ecological exposures, a comparison of only those Line 05 North soil samples collected within potential ecological habitat were compared to guild-specific ESLs. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Potential Habitat Soil. Line 05 North soil samples collected outside facility boundaries were primarily from dredger tailing habitat areas, although one was collected within Freemont cottonwood–oak woodland habitat (within the dry drainage ditch) and one within/adjacent to the riparian habitat associated with Buffalo Creek. Four soil samples were collected from the surface interval and two from the subsurface interval. The sample size for each COPEC varied depending on the analyses performed on the individual sample as specified in the BOU FSP (Aerojet, 2005). Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat areas for the surface and subsurface soil intervals in the Line 05 North Area are presented on Tables 6.4-3 and 6.4-4, respectively.

Cadmium, boron (in 1 to 6 ft bgs soil only), and lithium were detected above guild-specific ESL levels, but were eliminated as COPECs because the maximum concentration for each constituent did not exceed their respective BTVs. Therefore, no COPECs were identified within habitat areas in Line 05 North, either in the surface or subsurface interval.

Soil Vapor. Screening results for soil vapor samples collected at a depth of 10 feet bgs within potential habitat areas near Line 05 North are presented on Table 6.4-5. None of the detected soil vapor concentrations are greater than ESLs (11 samples). Therefore, soil vapor in Line 05 North does not represent a medium of potential ecological concern.

6.4.4 *Risk Characterization Summary*

Exposure potential in sparsely vegetated, large cobble dredger tailing piles is expected to be relatively low due to poor substrate characteristics. As indicated in Figure 6.4-1, small areas of potential habitat also exist at Line 05 North.

Three metals were detected above guild-specific ESLs, but concentrations were not elevated relative to their respective BTVs. Therefore, no COPECs were identified in Line 05 North surface or subsurface soil. Further, there are no exceedances of soil vapor screening levels at Line 05 North. Therefore, the potential for adverse effects to ecological receptors as a result of exposure to soil or soil vapor in Line 05 North is not considered significant.

It should also be noted that future land use is likely to transform this area and its surroundings into a fully developed residential area. These land uses typically support lawns and landscaped ornamental plants and do not, and are not intended to, support native plant communities and wildlife populations (i.e., ecological receptors of concern). Hence, no significant ecological risk is likely in the future.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendation
Soil: 10.6 acres	Fair (tailings)	None	Residential	Current – Medium Future – Low	None	No further action
Soil Vapor: 10.6 acres	Fair (tailings)	None	Residential	Current – Medium Future – Low	None	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.5 *WESTLAKES*

The SLERA for Westlakes is presented below.

6.5.1 *Habitat and Receptors of Potential Concern*

The Westlakes area (East Pond, West Pond, Cell 1, Cell 2, and Cell 3) is comprised of a series of detention basins that are seasonally inundated with standing water (Figure 6.5-1). As previously discussed in Section 3.1.1.4, most storm water runoff originating in the Administration Area flows through a series of man-made ditches that empty into the main Administration Ditch, which in turn discharges to the Westlakes Storm Water Retention Ponds. Storm water runoff is staged in the Westlakes Ponds where it is allowed to infiltrate or, when the Westlakes become full, is discharged to Buffalo Creek and ultimately to the American River. Section 6.6.1 discusses hydrology of Buffalo Creek. Habitats surrounding the detention basins include primarily annual grasslands and sparsely vegetated dredger tailings. The East Pond, West Pond, and Cells 1 and 2 contained water as a result of heavy rainfall during March and early April 2006. Due to potential effects upon the Folsom South Canal, Cell 3 has not been used for many years and does not become inundated during the wet season (ECORP, 2005).

Wildlife and signs of wildlife were observed in Westlakes detention basins during the site visit. Diving waterfowl (pied-billed grebes and American coot) and dabbling ducks (mallards) were observed foraging in each of the Westlakes detention basins. Wading birds (great blue heron and great egret) were observed foraging in East Pond. Deer tracks were observed on the shoreline of East Pond. Buffalo Creek runs along the southern boundary of the East Pond and West Pond and then discharges into the southeast corner of Cell 1. Numerous elderberry shrubs occur adjacent to and in the vicinity of the Westlakes detention basins. Bird species noted in addition to those listed above include black phoebe, swallows, killdeer, red-tailed hawk, and turkey vulture. A variety of other common avian and mammalian wildlife species are also expected to utilize the terrestrial habitats within the Westlakes area. Aquatic receptors (benthic and aquatic invertebrates and small fish) are expected to utilize the aquatic habitats within the Westlakes area during periods when sufficient water levels are present.

6.5.2 *Constituents of Potential Ecological Concern*

Due to significant periods of inundation within the Westlakes detention basins, some samples identified as "soil" may also be considered sediment

during the wet season.[22] Similarly, some samples identified as "sediment" may also be considered soil during the dry season.[23] Accordingly, for the purposes of identifying COPECs, the following procedures were performed:

1. To ensure an appropriate screen for sediments, any samples identified as "soil" that were inundated during the wet season were also considered sediment. To further ensure a conservative screen (as maximum concentrations were used), any "inundated" soil samples to a depth of 1.5 feet bgs were included in the dataset for COPEC screening for sediments.
2. To ensure an appropriate screen for soils, samples identified as "sediment" that were dry during the dry season were also considered soil. These samples were included in the dataset for COPEC screening for soils.
3. Samples identified as "sediment" that were deeper than 1.5 feet bgs and less than 6 feet bgs were considered soil (as freshwater sediment-dwelling biota are not considered to be exposed to this medium). These samples were included in the dataset for COPEC screening for soils.

As previously noted, Cell 3 has not been used for many years and does not become inundated during the wet season (ECORP, 2005). Accordingly, the three soil samples (WL-SB13, WL-SB14, and WL-SB15) and one sediment sample (WL-SD03) collected from Cell 3 were screened against soil ESLs only. Figure 6.5-1 provides a summary of screening of COPEC concentrations in surface soil and sediment samples against both terrestrial and sediment ESLs (sediment ESLs are for benthic macroinvertebrates, designated as "B" in the figure).

It should be noted that soil vapor samples were not collected in Westlakes during the RI due to the presence of shallow/standing water.

Soil. COPECs identified in pooled soil samples from Westlakes are identified in Table 6.5-1 and summarized below. These COPECs are

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[22] Sediment-dwelling biota may colonize and be exposed to these inundated "soils."

[23] Terrestrial biota may establish and be exposed to these dry "sediments."

identified from samples collected from within both the habitat and facility designated areas.

Detected Constituents > Screening Levels

- Antimony
- Boron
- Lithium
- Mercury
- PCB-1254
- PCB-1260
- Perchlorate
- Silver
- Titanium
- Zinc

Detected Constituents Lacking Screening Levels

- Strontium

Surface Water. The initial surface water COPEC screening included all surface water samples collected from the Westlakes. COPECs are identified on Table 6.5-2 and summarized below. Where total and dissolved metal analyses were performed, both analyses were included in this COPEC table.

Detected Constituents > Screening Levels

- Aluminum
- Barium
- Bis(2-ethylhexyl)phthalate
- Boron
- Copper
- Endrin aldehyde
- Heptachlor
- Heptachlor epoxide
- Iron
- Lead
- Silver
- Titanium
- Zinc

Detected Constituents Lacking Screening Levels

- Nitrate as NO3
- Trichlorofluoromethane

Sediment. COPECs identified in sediment samples from Westlakes are identified on Table 6.5-3 and summarized below.

Detected Constituents > Screening Levels

- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Phenol
- Selenium
- Silver
- Zinc

Detected Constituents Lacking Screening Levels

- Aluminum
- Barium
- Beryllium
- Boron
- Chromium VI
- Cobalt
- Lithium
- Molybdenum
- Strontium
- Thallium
- Titanium
- Vanadium

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these

constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.5.3 *SLERA Exposure Estimates*

Since soil samples were not collected from the small areas considered facility (mainly roadways along the site perimeter), all soil samples collected within the Westlakes MA were considered habitat locations and, therefore, evaluated for potential ecological exposures. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Potential Habitat Soil. Soil samples were collected from all five of the detention basins. Twenty soil samples were collected from the surface interval and 26 samples were collected from the subsurface interval as specified in the BOU FSP (Aerojet, 2005). The sample size for each COPEC varied depending on the analyses performed on the individual sample. Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat areas for the surface and subsurface soil intervals in the Westlakes area are presented on Tables 6.5-4 and 6.5-5, respectively.

In the surface soil samples, PCB-1254, PCB-1260, antimony, boron, mercury, silver, and zinc were identified as habitat COPECs (Figure 6.5-1). The following should be noted concerning these COPECs:

- PCB analysis was performed on all surface soil and sediment samples in East Pond, West Pond, Cell 1, and Cell 2. The four detections of PCB-1254 and PCB-1260 exceeded the avian ESL with HQs <5.
- Antimony was greater than the BTV in 2 of 15 samples (by a factor of 3.1 at the most). Antimony was not greater than the soil invertebrate ESL, but was above the mammalian ESL in 5 of 15 samples (HQ <10).
- Mercury and boron were detected at concentrations greater than the BTV in only 1 of 17 and 1 of 15 samples, by a factor of 1.7 and 1.5, respectively. Boron was greater than the soil invertebrate ESL in 1 of 15 samples (HQ <2) and above the plant ESL in 5 of 15 samples (HQ >10). Mercury was greater than avian and mammalian ESLs in 17 of 17 samples (HQs >10).
- Silver and zinc were greater than BTVs by factors of up to 3.5 to 5.2, in 4 of 17 and 5 of 20 samples, respectively. Silver was greater than the avian ESL in 3 of 20 samples (HQ <2), and did not exceed the plant or mammalian ESLs. Zinc was detected at concentrations above plant,

soil invertebrate, avian and mammalian ESLs in multiple samples (HQs range from <5 to 10).

The exceedances found in the subsurface soil were generally the same as those found in the surface soils with the addition of perchlorate and titanium (Table 6.5-5 and Figure 6.5-2).

- One detection of PCB-1254 and PCB-1260 (each) exceeded the avian ESL with HQs of <5. These detections did not exceed the mammalian ESL.
- For antimony, mercury, and silver, two detections were greater than the BTV for each of these constituents by factors ranging from 1.3 to 2.7. Concentrations of antimony and silver compared to ESLs produced HQs <5. Mercury was greater than avian and mammalian ESLs in 25 of 26 samples (HQs >10).
- Perchlorate was not detected in the surface soil samples, but was detected in a subsurface soil sample at one location (WL-SB01) at a depth of 5 feet bgs. It exceeded the soil invertebrate ESL with an HQ <10, but did not exceed avian or mammalian ESLs.
- One detection of titanium was slightly greater than the soil invertebrate ESL with an HQ <2.
- Zinc was detected at concentrations above plant, soil invertebrate, avian and mammalian ESLs in multiple samples (HQs range from <5 to <10)

Surface Water. An evaluation of surface water COPECs included examining the results for the two samples that were collected only within the Westlakes basins (Figure 6.5-3). Surface water samples collected within Line 02, Line 05 North, and Buffalo Creek were evaluated separately (Section 6.6.3). The results of the surface water screening for Westlakes are presented on Table 6.5-6. As shown in Figure 6.5-3, the B(2-EH)P, total and dissolved aluminum, total and dissolved barium, total boron, total and dissolved copper, total iron, total lead, total silver, and total zinc exceed surface water ESLs. The following should be noted with respect to these exceedances:

- B(2-EH)P was detected at WL-SW04 and exceeded the surface water ESL with an HQ >10. However, as shown in Figure 6.5-1, B(2-EH)P was not detected in the co-located sediment sample WL-SD10. B(2-EH)P is poorly soluble and is expected to be associated with sediment in aquatic systems. Furthermore, B(2-EH)P is not toxic at concentrations below its limit of solubility in the water column

(USEPA, 1986). Therefore, this isolated concentration of B(2-EH)P is not of ecological concern in Westlakes.

- According to USEPA (2003c), aluminum in surface waters is associated with clay particles, which is less toxic than aluminum associated with other forms. Aluminum is also substantially less toxic in waters with pH in the neutral range (6.5 to 7.5) and high hardness. USEPA states that "many high quality waters in the United States contain more than 87 µg/L aluminum."
- Based on experimental data, soluble barium would have to exceed a concentration of 50 mg/L (50,000 µg/L) before toxicity to aquatic life would be expected (USEPA, 1986). Dissolved concentrations of barium in surface water in the Westlakes are substantially lower than this.
- The iron ESL of 1,000 µg/L is the national ambient water quality criteria, but it is based on a field study of a site receiving acid mine drainage and is not consistent with the current method for deriving criteria (Suter and Tsao, 1996). According to USEPA, ferrous (Fe^{2+}) and ferric (Fe^{3+}) iron are the primary forms of concern in the aquatic environment. Ferrous iron occurs primarily under anoxic conditions (not a condition in Westlakes); and for practical purposes, the ferric form is insoluble (USEPA, 1986). Moreover, high iron concentrations are likely due to naturally occurring conditions.

Based on these considerations, B(2-EH)P, aluminum, barium, and iron are not of ecological concern in Westlakes. However, maximum detections of boron, copper, lead, silver, and zinc in surface water exceeded ESLs.

Sediment. To determine direct exposure to sediment aquatic receptors, sediment samples collected from 0 to 1 foot bgs[24] were evaluated as part of the risk characterization. As seen on Table 6.5-7 and Figure 6.5-1, the following exceedances of ESLs were identified:

- Cadmium, lead, and mercury exceeded their respective ESLs in only 1 of 16 samples;
- Zinc exceeded its sediment ESL in 3 of 16 samples;
- Silver exceeded its sediment ESL in 7 of 16 samples;

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[24] Considered likely to include biologically active zone.

- Chromium and copper exceeded their respective sediment ESLs in 9 of 16 samples;
- Manganese exceeded its sediment ESL in 10 of 16 samples; and
- Nickel exceeded its sediment ESL in all 16 samples.

The HQs for the above exceedances ranged from <2 to <10. The maximum detection concentrations of cadmium, chromium, copper, and nickel were found at one location (WL-SB10) at a depth of 0.5 foot bgs.

6.5.4 *Risk Characterization Summary*

At Westlakes, exposures of aquatic receptors to sediment and surface water are anticipated during the wet season. It has been observed that various waterfowl visit and use these detention basins during the wet season. However, during the dry season, these detention basins do not retain water and, therefore, would not support aquatic receptors. It should be noted that all flow from Buffalo Creek is directed past Line 02 to the Westlakes MA (Cell 1) from the south via a 'Westlake diversion' feature constructed in the late 1970s. Most of the water from Buffalo Creek infiltrates into the subsurface within Westlakes. However, during periods of heavy rainfall, weirs and culverts control surface water levels in the Westlakes MA (East Pond, West Pond, Cell 1, Cell 2, and Cell 3), which also receives storm water input from the Administration Area drainage ditch system from the north. Flow from the Administration Area drainage ditch is checked by a weir and pumped into the East and West Ponds on the north side. Water within Westlakes or the Administration Area drainage ditch can also be directed from the weir to the north (the point at which the Administration Area ditch and Buffalo Creek are considered to form a confluence) and continue to flow west.

The habitat surrounding the Westlakes detention basins would most likely support transient ecological receptors as terrestrial animal tracks were observed. Multiple elderberry shrubs are also present in the surrounding habitat and as mentioned previously, elderberry shrubs may provide potential habitat for the VELB, a federally listed threatened species.

As follow-up to the discussion presented in Section 6.2.1.4 and 6.2.2.4 (Risk Characterizations for Administration Area East and West, respectively), COPECs identified in sediment and surface water in the Westlakes MA were compared to COPECs identified in surface soil samples in the Administration Area drainage ditch system. The objective of this comparison is to ascertain whether there is evidence for the downgradient migration of COPECs from the Administration Area

drainage ditch system to Westlakes. Recall that PCBs and inorganics in the Administration Area ditch system were elevated above ESLs—particularly PCB-1254 in the Administration Area East drainage ditch (Table 6.2-6) and mercury in the Administration Area West drainage ditch (Table 6.2-12). However, PCBs were not identified as COPECs in Westlakes sediment[25] (not measured in surface water) and mercury was detected above the ESL in only 1 of 16 Westlake sediment samples (HQ <2), and was not a COPEC in surface water. It should be noted that COPEC-specific ESLs for soil and sediment are based on different receptor guilds; therefore the comparison of HQs between soil and sediment is inexact. However, a comparison of the maximum detected concentrations of PCB-1254 and mercury in sampled habitat for these areas, including Buffalo Creek, is presented as follows:

Area	**PCB-1254 (mg/kg)**	**Mercury (mg/kg)**
Admin Area East 0-1 ft Soil	Not analyzed	0.02
Admin Area East Ditch Soil	10	0.354
Admin Area West 0-1 ft Soil	2.5	1.4
Admin Area West Ditch Soil	Not detected	31.1
Westlakes Sediment	0.02	0.21
Buffalo Creek Sediment	1.1	0.55

This information suggests that PCB-1254 and mercury present in the Westlakes system (and Buffalo Creek; Section 6.6.1) are likely due to upstream sources such as the Administration Area ditch; however, concentrations are reduced considerably during downstream transport due to dilution/mixing.

Additionally, soil in the Administration Area ditch system containing PCB-1254 was removed as part of the remedial action conducted for the PGOU to prevent further migration of that compound to downstream drainages, including the Westlakes. Concentrations of other inorganics in Westlakes sediment (as well as dissolved inorganic concentrations in surface water) produced HQs of <5, with the exception of silver in sediment. However, it is difficult to draw a conclusion regarding specific sources to Westlakes because:

[25] Examination of constituents in sediments is appropriate as sediments are considered a "sink" for contaminants (USEPA, 1992b).

- Inorganics are naturally occurring and ubiquitous;
- There are a number of potential sources upstream of Westlake within BOU; and
- There are likely potential sources upstream of BOU.

However, based on the distribution of PCBs and mercury, the Administration Area drainage ditch system does not appear to have significantly impacted sediments at the Westlakes MA.

Potential future exposures by ecological receptors are dependant on future land use. Future land use is likely to transform this area and its surroundings into a combination of high-density residential areas and open space/preserves/park. A visual assessment of the sampling locations in relation to the Easton Composite Land Use Plan shows that the majority of sampling locations are located in areas planned for medium- to low-density residential development. The residential land uses typically support lawns and landscaped ornamental plants and do not, and are not intended to, support native plant communities and wildlife populations (i.e., ecological receptors of concern). Hence, no significant ecological risk is likely in the residential portions in the future.

Depending on the final plan, the open space/preserves/park areas may support or be attractive to ecological receptors—e.g., native plant communities and/or wildlife populations. A visual assessment of the sampling locations in relation to the Easton Composite Land Use Plan shows that three Westlake sediment samples[26] (collected in the Buffalo Creek drainage) lie on the border of the planned open space between the proposed Westborough and Easton Place developments. ESLs for benthic macroinvertebrates are exceeded at these sampling locations. To support future uses, the following activities are likely to occur:

- The detention basins would likely be regraded;
- The berms surrounding the basins would be removed; and/or
- The existing soil/sediment would be covered with fill material.

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[26] WL-SD02, WL-SD16, and WL-SD09 (Westlake). Note there also is one sediment sample (59E-SD03) in the now dry drainage that lies in the southeastern portion of this open space and exceeds ESLs for benthic macroinvertebrates.

These activities are likely to reduce/eliminate exposure pathways to COPECs in soil, surface water, and sediment.

Nonetheless, based on the weight-of-evidence summarized in this SLERA, if exposure pathways to existing soil, surface water, and sediment are not reduced/eliminated, then potential risk to terrestrial and aquatic biota may require further evaluation.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendation
Soil: 74.3 acre	Fair	VELB habitat	Residential, Open/Preserves, Parks	Current – High Future – Low	PCBs Inorganics	SMDP to determine if further action necessary
Surface Water: 74.3 acre	Fair (intermittent)	None	Residential, Open/Preserves, Parks	Current – High Future – Low	Phthalate Inorganics	SMDP to determine if further action necessary
Sediment: 74.3 acre	Fair (intermittent)	None	Residential, Open/Preserves, Parks,	Current – High Future – Low	Inorganics	SMDP to determine if further action necessary

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.6 *BUFFALO CREEK*

This SLERA evaluates the section of Buffalo Creek within the BOU between Line 02 and its point of entry into the Westlakes and between Westlakes and its point of exit from the Aerojet property near the Folsom South Canal.

6.6.1 *Habitat and Receptors of Potential Concern*

Buffalo Creek is seasonal, whereby the primary source of water as it flows within the boundary of the BOU comes from a series of upgradient perennial wetland features formed by the Rebel Hill Ditch (Figure 6.6-1). All flow from Buffalo Creek is directed past Line 02 to the Westlakes MA (Cell 1) from the south via a 'Westlake diversion' feature constructed in the late 1970s. Most of the water from Buffalo Creek infiltrates into the

subsurface within Westlakes. However, during periods of heavy rainfall, weirs and culverts control surface water levels in the Westlakes MA (East Pond, West Pond, Cell 1, Cell 2, and Cell 3), which also receives storm water input from the Administration Area drainage ditch system from the north. Flow from the Administration Area drainage ditch is checked by a weir and pumped into the East and West Ponds on the north side. Water within Westlakes or the Administration Area drainage ditch can also be directed from the weir to the north (the point at which the Administration Area ditch and Buffalo Creek are considered to form a confluence) and continue to flow west. This portion of Buffalo Creek is ephemeral along its length until it receives discharge from the American River Ground Water Extraction Treatment System (ARGET) to the north of Cell 1 and Cell 2. Discharge from ARGET creates a perennially wet system as it flows off site (ECORP, 2005).

The May 2006 site visit included observations of Buffalo Creek adjacent to Line 02 and Westlakes MAs. Buffalo Creek in the Line 02 East area was observed to have rapid flow, with a water depth of approximately 6 to 12 inches. Well-vegetated riparian banks were present along the length of the creek. Cattails (*Typha* spp.) and rushes (*Juncus* spp.) were growing in the stream at certain places, and the tree canopy consisted primarily of willow tree/shrub. Wildlife and signs of wildlife were observed in this portion of Buffalo Creek during the site visit. Several elderberry plants were observed adjacent to and in the vicinity of Line 02 East. Bird species noted include spotted towhee, ash-throated flycatcher, house finch, starling, Anna's hummingbird, sharp-shinned hawk, red-tailed hawk, and turkey vulture.

Buffalo Creek runs along the southern boundary of the East Pond and West Pond and then discharges into the Westlakes at the southeast corner of Cell 1. Buffalo Creek was observed to be deep, with relatively stagnant flow immediately upgradient of the weir gate located adjacent to West Pond. Downstream of the weir gate, flow was shallow and rapid with natural riffle-run characteristics. Well-vegetated riparian banks are present along the length of Buffalo Creek in the Westlakes MA. Several elderberry plants were observed adjacent to and in the vicinity of the Westlakes ponds. Bird species noted in addition to those listed above include black phoebe, swallows, killdeer, red-tailed hawk, and turkey vulture.

A variety of other common avian and mammalian wildlife species are also expected to utilize the terrestrial and aquatic habitats within the Buffalo Creek and its riparian area. Aquatic receptors (benthic and aquatic

invertebrates, amphibians, and small fish) are expected to utilize the aquatic habitats within the Buffalo Creek during periods when sufficient water levels are present.

6.6.2 *Constituents of Potential Ecological Concern*

Consistent with the approach for the Westlakes MA, the Buffalo Creek "soil" and "sediment" samples were evaluated with the following approach:

- Sediment samples (WL-SD15 and 29E-SD01) collected from areas where surface water flow is present only after storm events, and exposure to aquatic receptors is considered to be negligible, were screened against soil screening levels only;
- Sediment samples (59E-SD01, 59E-SD02, 59E-SD03, 59E-SD04, BC-SD01, BC-SD02, BC-SD03, and BC-SD04) collected from areas where surface water flow is seasonally influenced (inundated during wet season and dry during dry season), and exposure to terrestrial and sediment-dwelling receptors is possible, were screened against soil and sediment screening levels;
- Sediment samples (WL-SD01, WL-SD02, WL-SD09, WL-SD11, WL-SD12, WL-SD13, WL-SD14, and WL-SD16) collected from areas where potential exposure to sediment-dwelling receptors is present (perennially inundated and covered with water) were screened against sediment screening levels only;
- Sediment samples (59E-SD01 at 5 feet bgs) collected at depths deeper than 1.5 feet bgs were screened against soil screening levels only; and
- Soil samples (28E-SNS01, 59E-SB05, 59E-SB06, 59E-SB07, and 59E-SB08) collected from the banks of Buffalo Creek were screened against soil screening levels.

Figure 6.6-1 provides a summary of the screening against both terrestrial and sediment ESLs (sediment ESLs are for benthic macroinvertebrates, designated as "B" in the figure).

It should be noted that soil vapor samples were not collected from Buffalo Creek during the RI due to the presence of shallow/standing water.

Soil. COPECs identified in pooled soil samples from Buffalo Creek are identified on Table 6.6-1 and summarized below. Since the entire portion

of Buffalo Creek evaluated in this SLERA is considered habitat suitable for ecological receptors, all soil samples are considered to be within habitat.

Detected Constituents > Screening Levels

- Barium
- Boron
- Lead
- Lithium
- Mercury
- PCB-1254
- Silver
- Titanium
- Zinc

Detected Constituents Lacking Screening Levels

- alpha-Chlordane
- gamma-Chlordane
- Strontium

Surface Water. The initial surface water COPEC screening included all surface water samples collected within the WLLO Area, including Lines 02 and 05. COPECs are identified on Table 6.5-2 and summarized below. Where total and dissolved metal analyses were performed, both analyses were included in this COPEC table.

Detected Constituents > Screening Levels

- Aluminum
- Barium
- Bis(2-ethylhexyl)phthalate
- Boron
- Copper
- Endrin aldehyde
- Heptachlor
- Heptachlor epoxide
- Iron
- Lead
- Silver
- Titanium
- Zinc

Detected Constituents Lacking Screening Levels

- Nitrate as NO3
- Trichlorofluoromethane

Sediment. COPECs identified in sediment samples from Buffalo Creek are identified on Table 6.6-2 and summarized below.

Detected Constituents > Screening Levels

- 4,4'-DDE
- 4,4'-DDT
- Arsenic
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- PCB-1254
- Selenium
- Silver
- Zinc

Detected Constituents Lacking Screening Levels

- alpha-Chlordane
- Aluminum
- Barium
- Boron
- Chromium VI
- Cobalt
- Furan, tetrahydro-
- gamma-Chlordane
- Lithium
- Molybdenum
- Strontium
- Thallium
- Titanium
- Vanadium

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these

constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.6.3 *SLERA Exposure Estimates*

Since there are no facility areas associated with Buffalo Creek, all soil samples collected from Buffalo Creek were considered habitat locations and, therefore, evaluated for potential ecological exposures. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Potential Habitat Soil. Fifteen soil samples were collected from the surface interval and three samples were collected from the subsurface interval. The sample size for each COPEC varied depending on the analyses performed on the individual sample as specified in the BOU FSP (Aerojet, 2005). Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat areas for the surface and subsurface soil intervals from the Buffalo Creek area are presented on Tables 6.6-3 and 6.6-4, respectively.

In the surface soil samples, PCB-1254, lead, mercury, silver, titanium, and zinc were identified as COPECs (Figure 6.6-1):

- The maximum detections for PCB-1254, lead, mercury, silver, and titanium were located in surface soil samples collected from source area 59E and upstream of Line 02 (BC-SD-01 and BC-SD02). Zinc was the exception with the maximum detection located at location 29E-SD01.
- PCB-1254 was detected in six of eight samples. All six detections were greater than the avian and mammalian soil ESLs with a maximum avian HQ >10 and a maximum mammalian HQ >10. The highest concentrations of PCB-1254 were detected in two samples (1.1 J mg/kg at BC-SD02 and 0.74 J mg/kg at BC-SD01) collected upstream of Line 02.
- Lead was detected in all 15 surface soil samples with 6 detections greater than the BTV. The maximum concentration in the soil sample collected at BC-SD01 was greater than background by a factor of 3.2. Lead also exceeded mammalian and avian ESLs in 2 and 9 samples, respectively (maximum HQs of <2 and <10, respectively).
- Mercury and titanium were detected in 3 of 3 surface soil samples. Mercury was detected greater than the BTV, and mammalian and avian ESLs (maximum HQs >10) in all three samples. Titanium was

detected greater than the soil invertebrate ESL at one location by a factor of 1.1.

- Silver was detected in 14 of 15 surface soil samples. Silver exceeded the BTV at 9 of 15 locations with a maximum concentration greater than background by a factor of 32. Silver also exceeded mammalian and avian screening levels in 4 and 8 samples, respectively (maximum HQs of <10 and >10, respectively).
- Zinc was detected in all 15 surface soil samples with concentrations in 8 samples greater than the BTV. The maximum concentration of zinc exceeded the BTV by a factor of 2.7. Numerous concentrations of zinc exceeded soil invertebrate, plant, avian and mammalian screening levels as well, with maximum HQs ranging from <2 to <10.

As shown in Figure 6.6-2, PCB-1254, barium, titanium, and zinc were identified as COPECs in the subsurface soil.

- Barium, titanium, and zinc were detected in 3 of 3 samples with the maximum detection for each of these constituents found in a single sample (59E-SD01). The maximum concentrations of barium and zinc were marginally greater than their BTVs (by a factor of 1.2 and 1.02, respectively) and titanium was greater than the soil invertebrate ESL (HQ <5).
- PCB-1254 was detected in only 1 of 3 samples at a concentration greater than the avian ESL (HQ <2).

Surface Water. A further evaluation of surface water COPECs included examining results for the eight samples that were collected within Line 02, Line 05, and Buffalo Creek (Figure 6.6-3) separately from Westlakes surface water sample results (Figure 6.5-3). Table 6.6-5 presents the results of this screening. As shown in Figure 6.6-3, chemicals that exceeded ESLs included endrin aldehyde, heptachlor, heptachlor epoxide, total and dissolved aluminum, total and dissolved barium, total and dissolved boron, total and dissolved copper, total iron, total and dissolved lead, and total and dissolved silver. With respect to the detections of these chemicals above ESLs, the following should be noted:

- The three pesticides (endrin aldehyde, heptachlor, and heptachlor epoxide) were each detected in only one of six samples, at the same location (59E-SW02), and exceeded the surface water ESL by a factor of 1.2, 3.4, and 29, respectively. These constituents are typically associated with sediment particulates and do not reflect dissolved concentrations in the surface water; however, they were not detected

in the sediment sample (59E-SD02) co-located with this surface water sample. Of the 52 sediment samples collected from the Buffalo Creek and the Westlakes MAs, positive detections of these pesticides are limited and none were present at concentrations in sediment greater than protective ESLs. Therefore, the single surface water sample with an exceedance of endrin aldehyde, heptachlor, and heptachlor epoxide is considered to be an isolated and potentially transient result. Accordingly, based on these water and sediment samples, these pesticides are considered to pose a limited potential risk. Therefore, additional characterization for pesticides in surface water in this MA is not warranted given this single surface water sample and the lack of exceedances in sediments.

- Total and dissolved copper and lead were detected in surface water above the ESL in only one sample (WL-SW08), collected from a ditch that originates from the Schnitzer Steel property; thus copper and lead in surface water at this location are not considered to be attributable to Aerojet source areas. It should also be noted that aluminum, barium, and boron concentrations detected at this location were comparable to or higher than the concentrations of these constituents detected within the Buffalo Creek system.
- Total silver was detected in surface water at concentrations greater than the ESL in two samples (WL-SW05 and 59E-SW02). Although dissolved silver was not detected above the ESL, silver was also detected in sediment in the Buffalo Creek system above the ESL.
- For the same reasons as discussed in Section 6.5.3 (Westlakes surface water), aluminum, barium, and iron are not of ecological concern in surface water in the Buffalo Creek system.

In summary, of the constituents (endrin aldehyde, heptachlor, heptachlor epoxide, total and dissolved aluminum, total and dissolved barium, total boron, total and dissolved copper, total iron, total and dissolved lead, and total silver) detected in surface water at concentrations greater than screening levels, total silver may require further ecological evaluation depending on future anticipated planned use of Buffalo Creek.

Sediment. To determine direct exposure to sediment aquatic receptors, sediment samples collected from surface to 1 foot bgs were evaluated as part of the risk characterization. As seen on Table 6.6-6 and Figure 6.6-1, the following chemicals exceeded ESLs: 4,4'-DDE, 4,4'-DDT, arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel, PCB-1254, silver, and zinc.

- Chromium, copper, nickel, silver, and zinc had the highest frequency of exceedance and were found along the entire length of Buffalo Creek within the BOU.
- PCB-1254 was also frequently detected with exceedances in 10 out of 14 samples. The highest concentrations were detected in samples (BC-SD01 and BC-SD02) with HQs >10, respectively. These two sample locations are upstream of Line 02.
- 4,4'-DDE, 4,4'-DDT, arsenic, lead, manganese, and mercury were detected greater than sediment ESLs at low frequencies with low HQs ranging from <2 to <5.
- Cadmium was also detected greater than sediment ESLs at low frequency (3 out of 16 samples). However, the maximum detection found at BC-SD01 had an HQ >10. The other two exceedances had HQs of <2.

6.6.4 *Risk Characterization Summary*

Based on land use and habitat information, potential exposures to terrestrial and aquatic receptors in Buffalo Creek are anticipated. Buffalo Creek provides the habitat and food necessary to support ecological receptors. COPECs are found along the entire length of the creek with a decrease in frequency and magnitude of exceedance as Buffalo Creek approaches the BOU boundary. However, due to high frequency and magnitude of exceedances within the surface soils and sediments (and to a lesser extent, surface water), the following constituents present the greatest potential risk to ecological receptors along the entire length of Buffalo Creek within the BOU:

- PCB-1254 and silver present a potential risk to terrestrial and aquatic receptors; and
- Chromium, copper, nickel, and zinc present a potential risk to aquatic receptors.

There are also several elderberry shrubs present within the habitat adjacent to the banks of Buffalo Creek. Elderberry shrubs may provide potential habitat for VELB, a federally listed threatened species. However, as shown in Figure 6.6-1, zinc is the only inorganic that exceeds plant and invertebrate ESLs (at six locations), and all detected concentrations have HQs <2. Titanium is detected at only one location, at a concentration marginally above the invertebrate ESL (factor of 1.1).

As follow-up to the discussion presented in Sections 6.2.1.4 and 6.2.2.4 (Risk Characterizations for Administration Area East and West, respectively), COPECs identified in sediment and surface water Buffalo Creek were compared to COPECs identified in surface soil samples in the Administration Area drainage ditch system. The objective of this comparison is to ascertain whether there is evidence for the downgradient migration of COPECs from the Administration Area drainage ditch system to Buffalo Creek. Recall that PCBs and inorganics in the Administration Area ditch system were elevated above ESLs—particularly PCB-1254 in the Administration Area East drainage ditch (Table 6.2-6) and mercury in the Administration Area West drainage ditch (Table 6.2-12). The potential influence of the Administration Area ditch on Buffalo Creek would be as a result of pumping of Administration Area ditch water into ponds at Westlakes (e.g., Cell 1, East/West Ponds) and the subsequent discharge of water from these ponds into Buffalo Creek (near sampling location WL-SD12). Accordingly, evidence of a possible influence, should it exist, is likely to be seen in samples collected in Buffalo Creek immediately downgradient of this discharge point. Recall that surface water runoff from areas outside of BOU (upgradient reaches of Buffalo Creek) may also be conveyed and discharged to Buffalo Creek.

PCBs and inorganics are identified as COPECs in Buffalo Creek sediment (and to a lesser extent surface water) as it flows west from the north side of East and West Ponds. PCB-1254 was identified as a COPEC in two of five sediment samples, where concentrations ranged from 0.098 mg/kg to 0.24 mg/kg (HQs of <2 and <5, respectively) (see Figure 6.6-1, samples WL-SD12 and WL-SD02). Numerous inorganics were also elevated in sediment from this reach of Buffalo Creek. Although mercury was a COPEC in only one of five sediment samples (HQ <5 at WL-SD02), silver was greater than 10 times the sediment ESL in four of 16 samples. It is difficult to draw a conclusion regarding specific sources because:

- Inorganics are naturally occurring and ubiquitous;
- There are a number of potential sources upstream of Westlake within BOU; and
- There are likely potential sources upstream of BOU.

The upgradient reaches of Buffalo Creek (outside the potential influence of the Administration Area ditch system) contain PCB-1254 and inorganics above sediment ESLs (see Figure 6.6-1, samples BC-SD01 and BC-SD02, *e.g.*). However, given the distribution of PCBs and inorganics, the Administration Area drainage ditch system cannot be ruled out as a

potential source of constituents in Buffalo Creek downgradient of Westlakes. Although the future land use is likely to alter the surroundings of Buffalo Creek, it appears that the creek will generally follow the current path to its confluence with the American River. Based on future land use, Buffalo Creek will likely be surrounded by high-density residential, open space/preserves, and possibly park land. The open space/preserves and park land could potentially provide the habitat necessary to support ecological receptors. Therefore, the future land use of Buffalo Creek could potentially support ecological receptors.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendation
Soil: 0.4 acre	Fair	VELB habitat	Unknown	Current–High Future–Medium	PCBs Inorganics	SMDP to determine if further action necessary
Surface Water: Dependent on rainfall	Fair (intermittent)	None	Unknown	Current–High Future–Medium	Pesticides Inorganics	SMDP to determine if further action necessary
Sediment: 0.4 acre	Fair (intermittent)	None	Unknown	Current–High Future–Medium	Pesticides PCBs Inorganics	SMDP to determine if further action necessary

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.7 *OPEN SPACE AREAS 5 AND 7*

The SLERA for OS Areas 5 and 7 is presented below.

6.7.1 *Habitat and Receptors of Potential Concern*

The main habitat within OS5 is annual grassland with smaller areas of dredger tailings, oak woodland, and Fremont cottonwood-oak woodland (Figure 6.7-1). In OS7, dredger tailings cover most of the area with Fremont cottonwood-oak woodland, coyote brush scrub, and willow scrub. Valley foothill riparian borders the corridor for Buffalo Creek that runs through OS5 and OS7.

Wildlife use was not noted in OS5 and OS7 during the May 2006 site visit. However, it is likely that the wildlife use would be similar to Line 05, which includes common songbirds and small mammals.

6.7.2 *Constituents of Potential Ecological Concern*

Within OS5, soil and soil vapor samples were collected from two locations. No areas of potential concern were identified in OS7, so samples were not collected during the BOU RI (BOU FSP, Aerojet, 2006b).

Soil. COPECs identified in pooled soil samples from OS5 are identified on Table 6.7-1 and summarized below.

Detected Constituents > Screening Levels

- Boron
- Lithium

Detected Constituents Lacking Screening Levels

- Strontium

It should be noted that boron and lithium, although above ESLs, were below BTVs from the Kearney Foundation (1996).

Soil Vapor. No COPECs were identified in soil vapor samples from OS5 (Table 6.7-2).

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.7.3 *SLERA Exposure Estimates*

Since there are no facility areas associated with OS5, all soil samples collected from this area were considered habitat locations and, therefore, evaluated for potential ecological exposures. Although typically surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples are evaluated separately, in the case of OS5, no subsurface samples were collected.

Potential Habitat Soil. As presented on Table 6.7-3, two soil samples were collected from the surface interval. These samples were collected from the southeastern corner of OS5 within the annual grassland habitat adjacent to the Buffalo Creek corridor. No COPECs were retained for

further evaluation in OS5, since the three inorganics detected were either below background (boron and lithium) or, in case of strontium, did not have a background dataset and ESL. Strontium, as a detected constituent without a background level or ESL, represents an uncertainty and is addressed in Section 7.0.

Soil Vapor. Screening results for soil vapor samples collected from the shallowest depth within OS5 are presented on Table 6.7-4. None of the detected soil vapor concentrations are above ESLs (four samples). Therefore, soil vapor in OS5 does not represent a medium of potential ecological concern.

6.7.4 *Risk Characterization Summary*

The habitat within OS5 consists mainly of annual grassland with small areas of oak woodland and Freemont cottonwood–oak woodland habitat along the border, which would be preferred habitat for ecological receptors. No COPECs were identified requiring further evaluation in OS5. Therefore, the potential for adverse effects to ecological receptors as a result of exposure to soil or soil vapor in OS5 is not considered significant.

It should also be noted that future land use is likely to transform this area and its surroundings into high-density residential. This land use typically supports lawns and landscaped ornamental plants and do not, and are not intended to, support native plant communities and wildlife populations (i.e., ecological receptors of concern). Hence, no significant ecological risk is likely in the future.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendation
Soil: 12.6 acres	Good	None	Residential	Current – Medium Future - Low	None	No further action
Soil Vapor: 12.6 acres	Good	None	Residential	Current – Medium Future - Low	None	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.8 CHEMICAL PLANT 2

The SLERA for Chemical Plant 2, Dredge Pit, and Eastern Basin is presented below.

6.8.1 Chemical Plant 2

The SLERA for Chemical Plant 2 is presented below.

6.8.1.1 Habitat and Receptors of Potential Concern

Chemical Plant 2 is a complex area consisting of former and inactive facility buildings surrounded by ecologically significant terrestrial and seasonal aquatic habitats (Figure 6.8-1). Numerous elderberry shrubs occur throughout the Chemical Plant 2 area, and adjacent habitats support significant wildlife populations. On-site nesting birds (pigeons, doves, swallows, owls) and bats were present within and outside the abandoned buildings, which are providing shelter and/or food (small rodents, snakes) for resident populations.

The low-lying areas to the south and west of the paved plant area are slicken valleys within dredge tailings and were considered terrestrial habitat. Additional terrestrial low-lying slickens areas are present south of the facility and elderberry shrubs were abundant in these low-lying habitats. The low-lying area to the north of the facility is seasonally inundated and contiguous with a seasonally inundated waterbody identified by ECORP north of the low-lying area (ECORP, 2005).

In general, the topography of the facility at Chemical Plant 2 north of the railroad tracks slopes in a northerly direction toward the low-lying area to the north. A great blue heron was observed feeding on snakes from the shallow ponded water present in this area. Small tree frogs were observed breeding in this ponded water as well. Vegetation included dead and re-generating cattails; various species of rushes; and a mixture of facultative and upland grass and shrub species, including elderberry shrubs.

An abundant wildlife population was observed utilizing the habitats in and adjacent to Chemical Plant 2, including numerous birds (mourning dove, American goldfinch, house finch, starling, tree swallow, killdeer, western kingbird, acorn woodpecker, western scrub jay, bullock's oriole, spotted towhee, white-crown sparrow, Bewick's wren, ash-throated flycatcher, great blue heron, wild turkey); raptors (northern harrier, red-tailed hawk, turkey vulture); and mammals (jackrabbits). Additional common species of birds and mammals are also expected to be present.

6.8.1.2 *Constituents of Potential Ecological Concern*

Due to the presence of a seasonal wetland in the low-lying area north of Chemical Plant 2, consideration was made in regards to the evaluation of soil and sediment samples. Consistent with the SLERA for the Westlakes and Buffalo Creek MAs, the following screening was performed on the soil and sediment samples:

- Samples designated as sediment and collected from 0 to 1.5 feet bgs were screened against both soil and sediment ESLs.
- Samples designated as sediment collected from depths greater than 1.5 feet bgs were screened against soil ESLs.
- Soil samples were screened against soil ESLs, with the exception of soil samples collected 0 to 1.5 feet bgs from the low-lying area to the north. The samples were screened against both soil and sediment ESLs.

In addition, the soil and sediment samples collected from the dredger pits [Dredge Pit (Source Area 25F) and Eastern Basin] to the east were part of the consideration when identifying the Chemical Plant 2 COPECs. The methodology used for screening these samples is discussed in Section 6.8.2.2. Figure 6.8-1 provides a summary of screening against both terrestrial and sediment ESLs (sediment ESLs are for benthic macroinvertebrates, designated as "B" in the figure).

It should be noted that soil vapor samples were not collected from the Dredge Pit (Source Area 25F) and Eastern Basin during the RI due to the presence of shallow/standing water.

Soil. COPECs identified in pooled soil samples from Chemical Plant 2 and the dredger pits to the east are identified on Table 6.8-1 and summarized below. These COPECs are identified from samples collected within both the habitat and facility designated areas.

Detected Constituents > Screening Levels

- 4,4'-DDD
- 4,4'-DDE
- 4,4'-DDT
- Antimony
- Arsenic
- Barium
- Bis(2-ethylhexyl)phthalate
- Boron
- Cadmium
- Chromium
- Copper
- delta-BHC
- Dieldrin
- Di-n-butyl phthalate
- Endrin
- Endrin aldehyde
- Lithium
- Mercury
- Molybdenum
- Nickel
- PCB-1016
- PCB-1248
- PCB-1254
- Pendimethalin (Prowl)
- Pentachlorophenol
- Selenium
- Thallium
- Zinc

Detected Constituents Lacking Screening Levels

- 1,2-Dichloroethane
- Aluminum
- Strontium
- 2,4-Dichlorophenol
- Endrin ketone
- Titanium
- 2-Methylphenol
- Hexanedioic Acid dioctylester

It should be noted that soil comparisons to background for Chemical Plant 2 were based on both Xerorthent and RCRB soil types, as both exist at this MA (Appendix C).

Surface Water. This surface water COPEC evaluation included all surface water samples collected from within the Chemical Plant 2, Dredge Pit, and Eastern Basin. COPECs are identified on Table 6.8-2 and summarized below. Where total and dissolved metal analyses were performed, both analyses were included on this COPEC table.

Detected Constituents > Screening Levels

- Aluminum
- Copper
- Iron
- Manganese
- Pendimethalin (Prowl)
- Zinc
- Barium
- Heptachlor
- Lead
- Mercury
- Silver
- Boron
- Heptachlor epoxide
- Lithium
- Nickel
- Vanadium

Detected Constituents Lacking Screening Levels

- 4-Methylphenol
- Titanium

Sediment. COPECs identified in sediment samples from Chemical Plant 2 and the dredger pits to the east are identified on Table 6.8-3 and summarized below.

Detected Constituents > Screening Levels

- 4,4'-DDE
- Benzo(a)anthracene
- Copper
- Fluoranthene
- Manganese
- PCB-1248
- Phenanthrene
- 4,4'-DDT
- Chromium
- Dieldrin
- Indeno (1,2,3-cd) pyrene
- Mercury
- PCB-1254
- Phenol
- Aldrin
- Chrysene
- Endrin
- Lead
- Nickel
- Pendimethalin (Prowl)
- Pyrene

Detected Constituents Lacking Screening Levels

- 2-Methylnaphthalene
- Aluminum
- beta-BHC
- Cobalt
- Endrin aldehyde
- Lithium
- Strontium
- Vanadium
- 4,4'-DDD
- Barium
- Boron
- Dibenzofuran
- Endrin ketone
- Methoxychlor
- Thallium
- Acenaphthene
- Beryllium
- Chromium VI
- Endosulfan sulfate
- Fluorene
- Molybdenum
- Titanium

Soil Vapor. COPECs identified in soil vapor samples from Chemical Plant 2 are identified on Table 6.8-4 and summarized below.

Detected Constituents > Screening Levels

- Chloroform
- Toluene
- Vinyl chloride
- 1,2-Dichloroethane

COPECs identified on the basis of lacking ESLs (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.8.1.3 *SLERA Exposure Estimates*

To understand potential ecological exposures, only those Chemical Plant 2 soil samples collected outside facility boundaries (i.e., within potential ecological habitat) were compared to guild-specific ESLs. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Evaluation of the soil and sediment samples collected from the dredger pits (Dredge Pit and Eastern Basin) east of Chemical Plant 2 is presented in Section 6.8.2.3.

Potential Habitat Soil. Chemical Plant 2 soil samples collected outside facility boundaries were from various habitat areas (Figure 6.8-1). In the low-lying area to the north, the primary habitats are Fremont cottonwood-oak woodland and annual grassland. To the east of the former facility area, the habitats included coyote brush scrub, annual grassland, and annual grassland/dredger tailings. To the south, the habitats included coyote brush-willow scrub and annual grassland/dredger tailings.

Twenty-seven soil samples were collected from the surface interval and 20 from the subsurface interval. The number of analyses performed on each sample varied. Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat areas for the surface and subsurface soil intervals at Chemical Plant 2 are presented on Tables 6.8-5 and 6.8-6, respectively.

Habitat COPECs identified in the surface soil samples were 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, antimony, barium, B(2-EH)P, boron, cadmium, chromium, copper, delta-BHC, dieldrin, endrin, endrin aldehyde, lithium, mercury, nickel, PCB-1248, PCB-1254, pendimethalin (Prowl), selenium,

thallium, titanium, and zinc (Table 6.8-5). Surface soil COPECs identified at each sample location are presented in Figure 6.8-1. In general, the metals concentrations found in the habitat soil samples were less than or marginally greater than the Xerorthents and/or RCRB BTVs.[27] The exceptions are barium, boron, and zinc, which were detected above BTVs for both background soil types, and mercury which was detected above the Xerorthent BTV. In addition, background values are not available for titanium or strontium. The maximum detection of titanium marginally exceeds the soil invertebrate ESL (HQ <2).

The following COPECs were identified in the low-lying area north of the former facility:

- Multiple pesticides (DDD/DDE/DDT, delta-BHC, dieldrin, endrin, endrin ketone, and pendemethalin [prowl]) were detected above ESLs in several locations (59F-SB28, 59F-SB26, 59F-SB22, 59F-SD01, 59F-SBP02, 59F-SNS03) north of the former facility. HQs for these pesticides ranged from <2 to >10 when maximum concentrations are compared to avian ESLs, and from <2 to >10 when compared to mammalian ESLs. However, the soil samples north of these locations did not detect pesticides above ecological ESLs (OS1-F3-SD01, 59F-SB25, 59F-SB27, 59F-SD02, 59F-SD07) suggesting a limited spatial extent for these pesticides.
- PCB-1254 was detected at higher concentrations in soil samples close to the former facility (HQs >10) with concentrations decreasing in the soil samples further north into the habitat.
- The maximum detections of PCB-1248 and Prowl for all habitat samples were found in the sample collected at location 59F-SD01. For PCB-1248, the maximum HQ was >10 and for Prowl, the maximum HQ was >10. Although several samples were collected in the vicinity of 59F-SD01, none were analyzed for PCBs or Prowl.
- B(2-EH)P was the only other organic COPEC detected within the habitat samples above ESLs. It was detected at one sample in the low-lying area to the north at a concentration above the avian and mammalian ESLs (HQs of >10 and <2, respectively).

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[27] See Section 6.1.1.3 for further explanation on the use of both Xerothent and RCRB background values in the Chemical Plant 2 exposure estimate.

A drainage pathway runs from the northwestern side of the former facility through coyote brush scrub habitat to the west. The COPECs found in this area included:

- Pesticide constituents (4,4'-DDD, 4,4'-DDT, delta-BHC, endrin, and Prowl) were detected in the soil sample (59F-SB22) collected adjacent to the former facility at concentrations above ecological ESLs. These constituents decrease in concentration along this drainage pathway with distance from the facility. Sample locations OS1-F2-SB03 and OS1-F2-SB04 are located at the base of the drainage pathway. Pesticides were either not detected or detected below ecological ESLs at these two locations.
- Since PCBs were detected at concentrations greater than ecological ESLs in the facility samples and samples along the drainage pathway were not analyzed for PCBs, samples were collected at two locations (OS1-F2-SB03 and OS1-F2-SB04) in spring 2007 and analyzed for pesticides and PCBs. PCB-1254 was detected above the avian and mammalian ESLs at both locations.

A drainage pathway is also present from the former facility into the coyote brush-willow scrub habitat to the south. Two soil samples (61F-SB04 and 61F-SB05) were collected along this drainage pathway in 2007 and analyzed for organics, PAHs, pesticides, and mercury. The following COPECs were found:

- Soil sample 61F-SB05 was collected along the western portion of this drainage pathway. Constituents were not detected at concentrations above ESLs.
- 4,4'-DDE and 4,4'-DDT were detected at concentrations above mammalian ecological ESLs in soil sample 61F-SB04. Mercury was detected above the Xerorthents background value, but below the RCRB background value.

Habitat COPECs identified in the subsurface soil samples were 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, antimony, barium, boron, cadmium, copper, lithium, mercury, nickel, PCB-1254, selenium, thallium, titanium, and zinc (Table 6.8-6). Subsurface soil COPECs identified at each sample location are presented in Figure 6.8-2.

In general, concentrations of the metals in the habitat soil samples were less than or marginally greater than the Xerorthents and RCRB background values. The exceptions were antimony, barium, boron, lithium, and zinc, which were detected above background values for both

soil types. The maximum concentration of boron (225 mg/kg at 59F-SPB02) seems to be isolated, with other boron concentrations ranging from 4.2 to 29 mg/kg. In addition, background values are not available for strontium; the maximum detection of titanium exceeds the soil invertebrate ESL (HQ <2).

The following provides a discussion on the pesticide and PCB COPECs:

- PCB-1254 was detected above its ESL in the subsurface soil sample collected at location 59F-SD02 (HQs >10).
- 4,4'-DDE, 4,4'-DDD, and 4,4'-DDT were detected along the drainage pathway west of the former facility at concentrations greater than the mammalian ESL (HQs ranged from <2 to <5).

Surface Water. The two surface water samples collected from within the Chemical Plant 2 MA were evaluated separately from surface water samples collected from the Dredge Pit and Eastern Basin. This evaluation included examining the dissolved and total metal results separately. Table 6.8-7 presents the results of this screening. COPECs that exceeded ESLs include dissolved and total concentrations of aluminum, barium, boron, heptachlor epoxide, pendimethalin (Prowl), total copper, total iron, total lead, and total vanadium.

The Chemical Plant 2 surface water samples (59F-SW01 and 59F-SW02) were collected from the low-lying area to the north. These samples were co-located with sediment samples 59F-SD01 and 59F-SD02, respectively. The following points should be noted:

- HQs for inorganics COPECs ranged from <2 to >10.
- Heptachlor epoxide was detected at a concentration above the ESL (HQ >10). However, concentrations of heptachlor epoxide in the soil and sediment samples collected within that habitat were below soil and sediment ESLs.
- Prowl was detected in surface water sample 59F-SW01 at a concentration above the ESL (HQ <5), but at a concentration well below the ESL in surface water sample 59F-SW02. The maximum detection of Prowl in sediment was identified at location at 59F-SD01.

Sediment. To determine direct exposure to sediment aquatic receptors, sediment samples collected between 0 and 1 foot bgs were evaluated as part of the risk characterization. As seen on Table 6.8-8 and Figure 6.8-1, the following COPECs exceeded ESLs: 4,4'-DDE, 4,4'-DDT, aldrin, B(a)A,

chromium, chrysene, copper, dieldrin, endrin, fluoranthene, I(1,2,3-cd)P, lead, manganese, nickel, PCB-1248, PCB-1254, pendimethalin (Prowl), phenanthrene, phenol, and pyrene.

Ten sediment samples were designated within the low-lying area to the north of the former facility and the annual grassland habitat northwest of the former facility.

- The metals were detected at concentrations above the ESLs (HQs range from <2 to <10).
- PAH concentrations were detected above ESLs at one location (59F-SB26) (HQs <2).
- Phenol was detected at two sample locations (59F-SD01 and 59F-SD02) at concentrations above the ESL (maximum HQ >10).
- Prowl was detected in sediment at one location (59F-SD01) at a concentration above the ESL (HQ >10).
- Pesticides were detected above ESLs at three locations (59F-SNS03, 59F-SB26, and 59F-SB28) within close proximity to the facility (HQs range from <2 to <10). These pesticides were not detected above ESLs in the samples to the north or east.
- PCB-1254 was detected at four locations above the ESL (HQ >10) with the magnitudes of concentrations decreasing in the samples to the north and east with distance from the facility.
- PCB-1248 was detected in two samples (59F-SD01 and 59F-SD02) at concentrations above ESLs (maximum HQ >10). PCB-1248 was detected at 59F-SD02, but not in the soil samples to the north (59F-SB27) and east (59F-SD07).

Soil Vapor. Screening results for soil vapor samples collected at a depth of 10 feet bgs within potential habitat areas near Chemical Plant 2 are presented on Table 6.8-9. None of the detected soil vapor concentrations are above ESLs (13 samples). Therefore, soil vapor in Chemical Plant 2 does not represent a medium of potential ecological concern. For informational purposes, soil vapor sample locations in Chemical Plant 2 are shown in Volume I Figure 6.1-2.

6.8.1.4 *Risk Characterization Summary*

Exposure potential in the low-lying area to the north is expected to be significant due to the presence of suitable resources necessary to support

aquatic and terrestrial receptors. Elevated PAHs, PCBs, pesticides, and metals were present. In addition, there are several elderberry shrubs also present in this area. Elderberry shrubs may provide potential habitat for the VELB, a federally listed threatened species. As seen in Figures 6.8-1 and 6.8-2, there are a limited number of COPECs (metals) that exceed plant and invertebrate ESLs across the area.

The drainage pathway that extends west into the coyote brush scrub habitat presented COPECs at concentrations that would pose a risk to ecological receptors including pesticides, PCBs, and metals. In the low-lying areas to the south of the former facility, 4,4'-DDE and 4,4'-DDT were present. Due to their ability to bioaccumulate in the aquatic food chain, PCBs and pesticides pose a risk to ecological receptors that merits further evaluation in these areas.

There is no current planned future land use for the Chemical Plant 2 MA. Whether further evaluation is warranted will depend on whether future land use/development of this MA will support ecological receptors of concern.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendations
Soil 14.1 acres	Good	VELB habitat	Not currently planned	Current – High Future – High	Phthalates Pesticides PCBs Inorganics	SMDP to determine if further action necessary
Surface Water: Dependent on season	Fair (intermittent)	None	Not currently planned	Current – High Future – High	Pesticides Inorganics	SMDP to determine if further action necessary
Sediment: Dependent on season	Fair (intermittent)	None	Not currently planned	Current – High Future – High	Misc. Organics PAHs Pesticides PCBs Inorganics	SMDP to determine if further action necessary
Soil Vapor: 14.1 acres	Good	None	Not currently planned	Current – Low Future – Low	None	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.8.2 *Dredge Pit and Eastern Basin*

The SLERA for the Dredge Pit (Source Area 25F) and Eastern Basin is presented below.

6.8.2.1 *Habitat and Receptors of Potential Concern*

The Dredge Pit and Eastern Basin are dredger pits located east of Chemical Plant 2 in coyote brush scrub and grassland habitats, with no facility structures nearby (Figure 6.8-3). At the time of the May 2006 site visit, the pits had several feet of standing water due to recent heavy rainfall. However, the presence of water is intermittent and dependent on rainfall. Topographically, the depth of the pits would preclude any migration of constituents present at the bottom of the pits to areas adjacent to the site.

Abundant wildlife usage of the dredger pits themselves was observed during the site visit. Songbirds were seen drinking and bathing in the standing water present. Bird species noted in the area of the dredger pits include American goldfinch, lesser goldfinch, house finch, western bluebird, lark sparrow, California towhee, red-tailed hawk, and turkey vulture. Numerous elderberry shrubs occur in the vicinity of the dredger pits, but none are located directly within dredger pits. A variety of other common avian and mammalian wildlife species are also expected to utilize the terrestrial and aquatic habitats within the dredger pits and its surrounding area. Aquatic receptors (benthic and aquatic invertebrates, amphibians and small fish) are expected to utilize the aquatic habitats only during periods when sufficient water levels are present.

6.8.2.2 *Constituents of Potential Ecological Concern*

Soil, sediment, and surface water samples were collected from the Dredge Pit and Eastern Basin. The soil and sediment samples were evaluated in the following manner:

- Sediment samples collected from a depth interval of 0 to 1.5 feet bgs were screened against sediment ESLs;
- Intermittently inundated soil samples collected from a depth interval of 0 to 1.5 feet bgs were screened against sediment ESLs, with the exception of soil samples collected from the steep walls of the dredger pits; and

- Samples collected from depths deeper than 1.5 feet bgs were screened against soil ESLs.

Figure 6.8-3 provides a summary of screening against both terrestrial and sediment ESLs (sediment ESLs are for benthic macroinvertebrates, designated as "B" in the figure). The soil, sediment, and surface water results from the Dredge Pit and Eastern Basin were included as part of the Chemical Plant 2 COPEC identification and are presented in Section 6.8.1.2. It should be noted that soil vapor samples were not collected from the Dredge Pit (Source Area 25F) and Eastern Basin during the RI due to the presence of shallow/standing water. The Pits are only seasonally inundated; however, groundwater is very shallow (<10 feet bgs), therefore soil vapor samples could not be collected at any time during the investigation (see page 6-101 of Section 6.3.1.5 in the RI).

It should be noted that soil comparisons to background for the Dredge Pit and Eastern Basin were based on both Xerorthent and RCRB soil types, as both exist at this MA.

6.8.2.3 *SLERA Exposure Estimates*

All soil samples were collected within the boundary of the Dredge Pit and Eastern Basin where exposure to potential ecological receptors is present. Therefore, all soil samples are considered to be collected within habitat and were evaluated for potential ecological exposures. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

<u>Dredge Pit</u>

Potential Habitat Soil. Twelve soil samples were collected from the surface interval and 10 from the subsurface interval. The number of analyses performed on each sample varied. Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat areas for the surface and subsurface soil intervals in the Dredge Pit are presented on Tables 6.8-10 and 6.8-11, respectively.

Habitat COPECs identified in the surface soil samples wereboron, cadmium, chromium, copper, mercury, molybdenum, nickel, pendimethalin (Prowl), titanium, and zinc (Table 6.8-10). COPECs identified at each sample location are presented in Figure 6.8-3. The following points should be noted with respect to these results:

- Inorganic COPECs were generally detected at concentrations marginally above the Xerorthents and/or RCRB background values.[28] However, molybdenum and mercury were detected at concentrations significantly above BTVs. Molybdenum was detected at one location (25F-HA01) above the plant, avian, and mammalian ESLs (HQs of >10, <5, and >10, respectively). The maximum mercury concentration in surface soil was greater than avian and mammalian ESLs (HQs >10).
- Prowl was detected at 7 of 12 surface soil locations at concentrations above the avian and mammalian ESLs (HQs of >10).
- Background values are not available for titanium, which was detected marginally above the soil invertebrate screening level (HQ <2) at one location (25F-SB04).

Habitat COPECs identified in the subsurface soil samples were cadmium, di-n-butyl phthalate, mercury, pendimethalin (Prowl), thallium, titanium, and zinc (Table 6.8-11). As shown in Figure 6.8-4, the following were identified:

- One organic COPEC, di-n-butyl phthalate, was detected in a subsurface soil sample (25F-SPB03) at a concentration above the avian ESL, but below the mammalian ESL. Organic COPECs were not detected in the surficial soil samples.
- Prowl was detected in 4 of 10 subsurface soil samples locations at concentrations above the avian and mammalian ESLs (HQs >10).
- Inorganic COPECs were detected at concentrations below or marginally above the Xerorthents and/or RCRB background values,[29] with the exception of mercury. The maximum mercury concentration in subsurface soil was greater than avian and mammalian ESLs (HQs >10).
- Background values are not available for titanium, which was detected above the soil invertebrate ESL at three locations (maximum HQ <2).

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[28] See Section 6.1.1.3 for further explanation on the use of both Xerothent and RCRB background values in the Dredge Pit and Eastern Basin exposure estimate.

[29] See Section 6.1.1.3 for further explanation on the use of both Xerothent and RCRB background values in the Dredge Pit and Eastern Basin exposure estimate.

Surface Water. The surface water sample collected from the Dredge Pit was evaluated separately from those collected at Chemical Plant 2. The evaluation included examination of the dissolved and total metals concentrations separately. Table 6.8-12 presents the results of this screening. Chemicals detected at concentrations above ESLs included heptachlor, heptachlor epoxide, pendimethalin (Prowl), total copper, total iron, total lead, total manganese, and total vanadium. In addition, dissolved and total concentrations of aluminum, barium, and mercury exceeded ESLs.

The Dredge Pit surface water sample (25F-SW01) was collected from the central portion of the dredger pond and co-located with the sediment sample (25F-SD01). The following should be noted:

- HQs for inorganic COPECs ranged from <2 to >10.
- Heptachlor and heptachlor epoxide concentrations were detected above the ESL (HQs <5). However, heptachlor and heptachlor epoxide in the soil and sediment samples collected from the dredger pond were below ecological screening levels.
- Prowl was detected above the ESL (HQ <2). It was also detected above ESLs in soil and sediment samples collected from the Dredge Pit.

Sediment. To determine direct exposure to sediment aquatic receptors, sediment samples collected from 0 to 1 foot bgs were evaluated as part of the risk characterization. As seen on Table 6.8-13 and Figure 6.8-3, the following constituents exceeded ESLs: chromium, copper, manganese, mercury, nickel, pendimethalin (Prowl), and phenol.

- Mercury and Prowl were detected at concentrations above the ESL at four locations (maximum HQs >10).
- Nickel was detected at concentrations above the ESL at six locations (HQs < 5).
- One organic COPEC, phenol, was detected at one location at a concentration above the ESL (HQ <5).

<u>Eastern Basin</u>

Potential Habitat Soil. Eight soil samples were collected from the surface interval and eight from the subsurface interval. The number of analyses performed on each sample varied. Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat

areas for the surface and subsurface soil intervals in the Eastern Basin are presented on Tables 6.8-14 and 6.8-15, respectively.

Habitat COPECs identified in the surface soil samples were cadmium, selenium, thallium, and titanium (Table 6.8-14). COPECs identified at each sample location are presented in Figure 6.8-3. Concentrations of cadmium, selenium, and thallium were comparable to background. Titanium was detected marginally above the soil invertebrate ESL at one location (HQ <2). Background values for titanium and strontium have not been established.

Habitat COPECs identified in the subsurface soil samples were cadmium, selenium, and titanium (Table 6.8-15). COPECs identified at each sample location are presented in Figure 6.8-4. Similar to the surficial soil samples, cadmium and selenium were marginally above BTVs in 1 of 8 samples. Titanium was detected above the soil invertebrate ESL at two locations (maximum HQ <2).

Surface Water. The Eastern Basin and Dredge Pit are not hydrologically connected and, therefore, the surface water sample (25F-SW02) collected from the Eastern Basin was evaluated separately. Dissolved metal analyses were not performed on the surface water sample.

The Eastern Basin surface water sample was collected from the central portion the dredger pond and co-located with the sediment sample 25F-SD02. As presented on Table 6.8-16, constituents exceeding ESLs included total aluminum, barium, boron, copper, iron, lead, lithium, manganese, nickel, silver, vanadium, and zinc (HQs ranged from <2 to >10).

Sediment. To determine direct exposure to sediment aquatic receptors, sediment samples collected from 0 to 1 foot bgs were evaluated as part of the risk characterization. As seen on Table 6.8-17 and Figure 6.8-3, chromium, copper, manganese, nickel, and phenol were detected at concentrations above ESLs at four locations. HQs for the inorganic COPECs ranged from <2 to <5. The maximum concentration of phenol produced an HQ >10.

6.8.2.4 *Risk Characterization Summary*

Exposure potential in the Dredge Pit and Eastern Basin is expected to be significant due to the presence of suitable resources necessary to support ecological receptors. Several metals are present in soil, sediment, and

surface water above ESLs. Most notably, mercury levels are greater than ESLs in all media and greater than background concentrations in soil—elevated mercury is of particular concern because it is a bioaccumulative contaminant in wildlife. In addition, the presence of Prowl in the Dredge Pit and phenol in the Eastern Basin present a risk to ecological receptors utilizing these ponds. Therefore, further evaluation of potential ecological risk in these ponds is indicated.

Future land use has not been identified for the Dredge Pit and Eastern Basin. Whether further evaluation is warranted will depend on whether future land use/development of this MA will support ecological receptors of concern.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendations
Soil: 5.7 acres	Good	None	Not currently planned	High	Phthalate Pesticides Inorganics	SMDP to determine if further action necessary
Surface Water: 5.7 acres	Fair (intermittent)	None	Not currently planned	High	Pesticides Inorganics	SMDP to determine if further action necessary
Sediment: 5.7 acres	Fair (intermittent)	None	Not currently planned	High	Misc. Organic Pesticides Inorganics	SMDP to determine if further action necessary

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use ; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.9 *MAGAZINE AREA*

The SLERA for the Magazine Area, including OS3, is presented below.

6.9.1 *Habitat and Receptors of Potential Concern*

Habitat in the Magazine Area consists primarily of ruderal disturbed areas with sparsely vegetated, large cobble tailing piles (Figure 6.9-1). It should be noted that due to the close proximity of OS3 and OS4, OS4 is

shown on Section 6.9 figures, although OS4 is discussed in Section 6.10, along with OS1 and OS2.

A ditch runs in a north-south direction through the center of the area, which is heavily vegetated with terrestrial grasses and shrubs, including coyote brush and elderberry. There was no aquatic habitat observed in the ditch. However, two small seasonally inundated depressions are present in the Magazine Area (ECORP, 2005).

Occasional raptors were observed flying overhead during the May 2006 site visit and elderberry shrubs are present in and around the Magazine Area. No other wildlife usage was observed during the May 2006 site visit. Given the marginal habitat, transient use by common/introduced avian and mammalian wildlife species that are tolerant of human activity/disturbance is expected in the terrestrial habitats in the Magazine Area.

6.9.2 *Constituents of Potential Ecological Concern*

The Magazine Area consists of terrestrial habitats; therefore, analytical results of soil and soil vapor samples collected from the Magazine Area were evaluated as part of this SLERA.

Soil. COPECs identified in pooled soil samples from the Magazine Area are identified on Table 6.9-1 and summarized below.

Detected Constituents > Screening Levels

- Antimony
- Boron
- Lithium
- Molybdenum
- Titanium

Detected Constituents Lacking Screening Levels

- Strontium

Soil Vapor. Only toluene was identified as a COPEC in soil vapor samples from the Magazine Area (Table 6.9-2).

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.9.3 *Screening Level Ecological Risk Assessment Exposure Estimates*

To understand potential ecological exposures, a comparison of Magazine Area soil samples collected within potential ecological habitat and habitat-like facility areas (e.g., vegetated bunkers) were compared to guild-specific ESLs. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Potential Habitat Soil. One soil sample was collected from the surface habitat interval, two soil surfaces were collected from the surface habitat-like facility interval, and five were collected from the subsurface interval within the Magazine Area. The number of analyses performed on each sample varied. Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat and habitat-like facility areas for the surface and subsurface soil intervals in the Magazine Area are presented on Figures 6.9-1 and 6.9-2, respectively. Maximum detected concentrations are compared with ESLs on Tables 6.9-3 (for habitat samples) and 6.9-4 (for habitat and habitat-like facility samples), for surface and subsurface, respectively.

Within the habitat areas, boron was detected at a concentration that greater than ESLs, but was only marginally greater than the BTV (by a factor of 1.1) in surficial soil. Antimony and boron were also detected in one subsurface soil location also marginally above BTVs, both by a factor of 1.2. Within the habitat-like facility area soil samples, concentrations did not exceed ESLs or background (Figures 6.9-1 and 6.9-2).

Soil Vapor. Screening results for soil vapor samples collected from the shallowest depth within the Magazine Area are presented on Table 6.9-5. None of the detected soil vapor concentrations are above ESLs (seven samples). Therefore, soil vapor in the Magazine Area does not represent a medium of potential ecological concern.

6.9.4 *Risk Characterization Summary*

The habitat within the Magazine Area is likely to support transient use by common and/or introduced terrestrial wildlife species that are tolerant of human activity/disturbance is expected due to lack of significant forage or cover habitat. Antimony and boron were identified as soil COPECs; however, these concentrations are unlikely the result of anthropogenic activity at the Magazine Area given that:

- Inorganics in soil are known to vary naturally with localized soil type (Aerojet, 2007c);
- There is an overall absence of COPECs in soil at this MA;
- Both were detected marginally above their respective BTVs; and
- Antimony and boron are not commonly associated with activities conducted at this MA.

Soil vapor concentrations are below levels of ecological concern.

There are several elderberry shrubs also present within the Magazine Area. Elderberry shrubs may provide potential habitat for the VELB, a federally listed threatened species. However, as discussed above, there are no exceedances of the plant and invertebrate ESLs in surface soil. There is no current planned future use of the Magazine Area.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendations
Soil: 101 acres	Fair	VELB Habitat	Not currently planned	Current – Low Future – Low	Inorganics	No further action
Soil Vapor: 101 acres	Fair	None	Not currently planned	Current – Low Future – Low	None	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.10 *OPEN SPACE AREAS 1, 2, AND 4*

The SLERA for OS Areas 1, 2, and 4 is presented below. OS Areas 1 and 2 are located west and east of Chemical Plant 2, respectively. OS Area 4 is east of OS Area 3.

6.10.1 *Habitat and Receptors of Potential Concern*

The habitat within OS Areas 1, 2, and 4 primarily consists of annual grassland/dredger tailings and dredge tailings with the following habitats

interspersed: oak woodland, Fremont cottonwood-oak woodland, Fremont cottonwood woodland, willow scrub, coyote brush-willow scrub, coyote brush scrub and annual grassland, ruderal/disturbed, and facility (Figures 6.9-1 and 6.10-1). In addition, elderberry bushes have been mapped throughout OS Areas 1, 2, and 4.

No wildlife usage was observed during the May 2006 site visit, but it is likely that wildlife observed in the Magazine Area, Chemical Plant 2, Dredge Pit, and Eastern Basin habitat areas would also use the habitat in OS Areas 1, 2, and 4. This would include raptors, songbirds, woodpeckers, wild turkey, and other common species of birds and small mammals.

6.10.2 *Constituents of Potential Ecological Concern*

OS Areas 1, 2, and 4 consists of terrestrial habitat; therefore, analytical results of soil and soil vapor samples were evaluated as part of this SLERA. Soil and soil vapor samples were collected from OS Areas 1 and 2. Since no areas of potential concern were identified in OS Area 4, soil samples were not collected (Aerojet 2006b). However, three soil vapor samples were collected from OS Area 4.

Soil. COPECs identified in pooled soil samples from OS Areas 1 and 2 are identified on Table 6.10-1 and summarized below.

Detected Constituents > Screening Levels

- Antimony
- Boron
- Lithium
- Titanium

Detected Constituents Lacking Screening Levels

- Strontium

Soil Vapor. Only toluene was identified as a COPECs in soil vapor samples from OS Areas 1, 2, and 4 (Table 6.10-2).

COPECs identified on the basis of lacking ESLs (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.10.3 *SLERA Exposure Estimates*

To understand potential ecological exposures, a comparison of only those OS Areas 1 and 2 soil samples collected within potential ecological habitat

were compared to guild-specific ESLs. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Potential Habitat Soil. Three soil samples were collected from the surface and subsurface intervals. Comparison of guild-specific ESLs to COPEC concentrations identified in soil collected from potential habitat areas for the surface and subsurface soil intervals in OS Areas 1 and 2 are presented on Tables 6.10-3 and 6.10-4 and Figures 6.10-1 and 6.10-2, respectively. Note that no soil samples were collected at OS4.

Within the habitat areas, two COPECs (antimony and titanium) were identified in the surficial soil and no COPECs were detected in the subsurface soil. Antimony was detected above the BTV at one location by a factor of 1.1 and titanium was detected above the soil invertebrate ESL at two locations (HQs <2). A background value for titanium has not been established.

Soil Vapor. Screening results for soil vapor samples collected from the shallowest depth within OS Areas 1, 2, and 4 are presented in Table 6.10-5. Toluene was detected at two locations at concentrations that exceeded the ESL (HQ >10). The ESL for toluene is considered to be very conservative (see also Sections 6.2.1.3 and 7.3). These isolated exceedances of toluene do not represent widespread contamination, and as such, are not considered to pose an ecological risk. Due to the finding that only toluene showed an ESL exceedance (with the maximum detected concentration of 1000 µg/m3 at soil vapor sample OS4-F1-SP03-10; Table 6.10-5), no figure showing soil vapor exceedances was prepared. For informational purposes, the locations of soil vapor samples collected within OS Areas 1, 2, and 4 are shown in Volume I Figure 6.4-1.

6.10.4 Risk Characterization Summary

Antimony was detected at a concentration marginally above the BTV. A background value for titanium has not been established. Antimony was identified as a soil COPEC; however, antimony concentrations are unlikely the result of anthropogenic activity at OS Areas 1, 2, and 4 given that:

- Inorganics in soil are known to vary naturally with localized soil type (Aerojet, 2007c);
- There is an overall absence of COPECs in soil at this MA;
- Antimony was detected marginally above its respective BTV; and

- OS Areas 1, 2, and 4 were identified based on the absence of anthropogenic activities within the BOU.

The ESL for toluene is considered to be very conservative (see also Sections 6.2.1.3 and 7.3). These isolated exceedances of toluene do not represent widespread contamination, and as such, are not considered to pose an ecological risk.

There are several elderberry shrubs also present within OS Areas 1 and 2. Elderberry shrubs may provide potential habitat for the VELB, a federally listed threatened species. However, as discussed above, constituents detected in surface soil are consistent with background levels. Future land use is currently not planned for OS Areas 1, 2, and 4.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendations
Soil: 269 acres	Fair	VELB Habitat	Not currently planned	Current – Medium Future – Medium	Inorganics	No further action
Soil Vapor: 269 acres	Fair	None	Not currently planned	Current – Medium Future – Medium	Toluene	No further action

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas for current land use; does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.11 AREA 39

The SLERA for Area 39 is presented below.

6.11.1 Habitat and Receptors of Potential Concern

ERM reviewed the ecological studies performed at Area 39 for the State of California related to use of the area as an Off Highway Vehicle Park. The studies do provide valuable information as to the types of ecological habitat and wildlife species expected to be present in Area 39; however, they were not focused on the source areas under investigation by Aerojet. Area 39 is an area highly disturbed by off-road vehicular traffic; however,

it also contains numerous areas with sensitive ecological habitat (Figure 6.11-1). During the May 2006 site visit, the two ponds downstream of the firing range below Source Area 29B (Test Stand Burn Area) were observed to support a variety of aquatic life (green heron, bullfrogs, songbirds). Additionally, a pond/seasonally inundated depression and drainages are present north of Source Areas 32B (oxidizer burn area) and 33B (lab supply burn area). These features could potentially receive surface water runoff from those source areas. Area 39 Source Areas are shown in Figure 3.4-1.

Numerous elderberries occur adjacent to and in the vicinity of Area 39. A green heron was observed in the first pond, and numerous bullfrogs were observed in both ponds, downstream of the Test Stand Burn Area and associated firing range. Other bird species noted include western meadowlark, swallows, lark sparrow, red-tailed hawk, and turkey vulture. A variety of other common avian and mammalian wildlife species are also expected to utilize the terrestrial and aquatic habitats within Area 39. Aquatic receptors (benthic and aquatic invertebrates, amphibians, and small fish) are also expected to utilize the aquatic habitats within Area 39.

6.11.2 *Constituents of Potential Ecological Concern*

Area 39 consists of terrestrial and aquatic habitats (ponds); therefore, analytical results of soil, soil vapor, surface water, and sediment samples collected from Area 39 were evaluated as part of this SLERA.

Soil. COPECs identified in pooled soil samples from Area 39 are identified on Table 6.11-1 and summarized below.

Detected Constituents > Screening Levels

- 2,3,7,8-TCDD TEQ
- Barium
- Bis(2-ethylhexyl)phthalate
- Boron
- Cadmium
- Di-n-butyl phthalate
- Lithium
- Perchlorate
- Thallium
- Titanium
- Vanadium

Detected Constituents Lacking Screening Levels

- Strontium
- Nitroguanidine

Surface Water. This surface water COPEC evaluation included all surface water samples within Area 39. COPECs are identified on Table 6.11-2 and summarized below. Where total and dissolved metals analyses were performed, both analyses were included in this COPEC table.

Detected Constituents > Screening Levels

- Aluminum
- Copper
- Manganese
- Barium
- Iron
- Vanadium
- Boron
- Lead

Detected Constituents Lacking Screening Levels

- Nitrate as NO3
- Titanium

Sediment. COPECs identified in sediment samples from Area 39 are identified on Table 6.11-3 and summarized below.

Detected Constituents > Screening Levels

- Manganese

Detected Constituents Lacking Screening Levels

- Aluminum
- Boron
- Molybdenum
- Titanium
- Barium
- Cobalt
- Strontium
- Vanadium
- Beryllium
- Lithium
- Thallium

Soil Vapor. COPECs identified in soil vapor samples from Area 39 are identified on Table 6.11-4 and summarized below.

Detected Constituents > Screening Levels

- Carbon disulfide
- Chloroform
- 1,1-Dichloroethene
- Toluene
- Trichloroethene

COPECs identified on the basis of lacking screening levels (as listed above) are not further discussed as part of the Risk Characterization for this MA. However, the potential impact to risk estimates from these constituents are considered further in the Uncertainty Analysis (Section 7.0).

6.11.3 SLERA Exposure Estimates

Since the habitat within Area 39 has not been formally surveyed and mapped, all samples were considered ecologically relevant and compared to guild-specific ESLs. Surface soil (0 to 1 foot bgs) and subsurface soil (1 to 6 feet bgs) samples were evaluated separately.

Potential Habitat Soil. Twenty-six soil samples were collected from the surface and 46 samples were collected from the subsurface intervals. The number of analyses performed on each sample varied. A comparison of guild-specific ESLs to COPEC concentrations identified in soil for the surface and subsurface intervals in Area 39 are presented on Tables 6.11-5 and 6.11-6, respectively.

It should be noted that mammalian and avian World Health Organization Toxic Equivalency Factors (Van den Berg et al., 2006) were applied to the dioxin and furan congeners to determine a TEQ, which was then compared to the 2,3,7,8-TCDD ESL. The following COPECs were identified in the surficial soil samples (Figure 6.11-1): B(2-EH)P; di-n-butyl phthalate; perchlorate; thallium; titanium; 2,3,7,8-TCDD Avian TEQ; and 2,3,7,8-TCDD Mammalian TEQ.

- B(2-EH)P was detected at concentrations above avian and mammalian ESLs in soil at two locations (maximum HQs of >10 and <5, respectively).
- Di-n-butyl phthalate was detected at a concentration above the avian ESL in 7 of 10 samples (maximum HQ >10), but was below the plant and mammalian ESLs. Di-n-butyl phthalate was the only constituent detected above screening levels at Source Area 33B.
- Perchlorate was detected above the soil invertebrate ESL in surface soil collected at one location (30B-SB02) at Source Area 30B (HQ <10).
- Although thallium exceeded plant and mammalian ESLs, it was detected only marginally above its BTV at one location (by a factor of 1.8). Titanium was detected marginally above the invertebrate ESL (HQ <2), and does not have a BTV.
- 2,3,7,8-TCDD Avian TEQ was above the ESL at multiple depths at six locations and 2,3,7,8-TCDD Mammalian TEQ was above the ecological ESL at multiple depths at seven locations. The majority of these exceedances were identified at Source Area 30B, in addition to one sample (34B-AH01) at Source Area 34B and one sample (29B-AH01) at Source Area 29B. It should be noted that Source Areas on the figures (including Figure 6.11-1) are indicated by Sample ID numbers. For example, Source Area 33B is depicted by Samples 33B-SB02, etc.

The following COPECs were identified in subsurface soil (Table 6.11-6 and Figure 6.11-2): di-n-butyl phthalate, barium, cadmium, perchlorate, thallium, titanium, and vanadium.

- Di-n-butyl phthalate was detected at concentrations above the avian ESL, but below the plant and mammalian ESLs at the same locations where that compound was detected in surface soil.
- Inorganics were detected above ESLs and BTVs in multiple samples in Source Areas 29B, 30B, 31B, 32B, and 33B.

- Perchlorate was detected above the soil invertebrate ESL in subsurface soil (HQ <5) at the same location (30B-SB02) at Source Area 30B where perchlorate was detected in the surface soil.

Surface Water. Evaluation of the surface water COPECs included examining the dissolved and total metals results separately. Table 6.11-7 presents the results of this screening. Two surface water samples were collected in Area 39; one (31B-SW01) from a pond north of Source Area 31B and one (31B-SW02) from a pond south of Source Area 31B. Constituents in the surface water samples at concentrations above ESLs included total aluminum, total and dissolved barium, total boron, total copper, total iron, total lead, total manganese, and total vanadium.

Sediment. To determine direct exposure to sediment aquatic receptors, the two sediment samples collected from 0 to 1 foot bgs were evaluated as part of the risk characterization. These sediment samples (31B-SD01 and 31B-SD02) were co-located with the surface water samples (31B-SW01 and 31B-SW02, respectively). As seen on Table 6.11-8 and Figure 6.11-1, manganese was detected above the ESL at one location (31B-SD02) (HQ <2). This was the only constituent detected above ESLs at this location, although ESLs were lacking for a number of additional inorganics detected.

Soil Vapor. Screening results for soil vapor samples collected from the shallowest depth within Area 39 are presented on Table 6.11-9 and Figure 6.11-3. Five VOCs (1,1-DCE, carbon disulfide, chloroform, toluene, and TCE) were detected in soil vapor at concentrations greater than ESLs. All except carbon disulfide were detected at the same location (33B-SP21-10), and produced an HQ range of <2 to >10. It should be noted that concentrations of 1,1-DCE, carbon disulfide, and chloroform exceeded ESLs in only 1 or 2 of 32 samples; however, concentrations of toluene and TCE exceeded ecological ESLs in 9 and 4 of 32 samples, respectively. The ESL for toluene is considered to be very conservative (see also Sections 6.2.1.3 and 7.3).

6.11.4 Risk Characterization Summary

The 2,3,7,8-TCDD avian and mammalian TEQs were greater than ESLs at multiple depths. Other COPECs (metals, perchlorate, and phthalates) were also detected above ESLs in soil. There are several elderberry shrubs present within Area 39 that may provide potential habitat for the VELB, a federally listed threatened invertebrate species. Only perchlorate (at one location) and titanium (at two locations) were detected in surface soils at

concentrations that were greater than soil invertebrate ESLs (Figure 6.11-1).

Soil vapor had concentrations of five VOCs that were greater than ESLs—toluene and TCE in particular. However, the ESL for toluene is considered to be very conservative (Section 7.3) and exceedances of soil vapor ESLs for the other VOCs may be localized and are not expected to pose a widespread potential for ecological risk (Figure 6.11-3). Sample location 32B-SP11 is located on a ridge. Similar elevation samples could not be collected south or east of this location. Aerojet feels sufficient delineation is provided to north and west of this location for evaluation in the SLERA.

Only two sediment and surface water samples were collected from aquatic habitats within Area 39. Surface water sample results show numerous exceedances of water quality ESLs; however, manganese only marginally exceeded its ESL in sediment. It is difficult to characterize potential risk due to the small sample size. Depending on future land use, further evaluation of potential ecological risk at Area 39 may be warranted.

In summary:

Habitat Size	Habitat Quality	T&E Spp	Future Land Use	Exposure Potential	Habitat COPECs	Recommendations
Soil: 90 acres	Fair (high human activity)	VELB Habitat	Not currently planned	Current – Medium Future – Medium	Phthalates Dioxins Furans Inorganics	SMDP to determine if further action necessary
Surface Water: Dependent on season	Good	None	Not currently planned	Current – High Future – High	Inorganics	SMDP to determine if further action necessary
Sediment: Dependent on season	Good	None	Not currently planned	Current – High Future – High	Inorganics	SMDP to determine if further action necessary
Soil Vapor: 90 acres	Fair (high human activity)	None	Not currently planned	Current – Medium Future – Medium	VOCs	SMDP to determine if further action necessary

Notes:
1. Future Land Use = Proposed future land use
2. T&E Spp = Presence of threatened/endangered species or critical habitat
3. Habitat COPECs = COPECs above guild-specific ESLs and/or BTVs in habitat areas ; for current land use does not include those constituents lacking screening levels
4. SMDP = Scientific/Management Decision Point
5. Habitat Size includes acreage of habitat at MA.

6.12 *SLERA SUMMARY*

In summary, the SLERA evaluated the potential ecological risks due to exposures to constituents in soil, soil vapor, sediment, and surface water at 12 MAs within the BOU (although Section 6.1.1.1 lists 14 MAs, Open Space Areas 1, 2, and 4 were subsequently combined into one MA). For each MA, the following were characterized:

- Potentially exposed aquatic and terrestrial habitat and receptors (biota) of concern;
- Potentially harmful, site-related constituents (COPECs);
- Potentially complete exposure pathways through which receptors of concern may be exposed to COPECs;
- Findings of comparisons of MA-specific COPEC concentrations to ESLs that are protective of receptors of concern; and
- Potential ecological risks based on consideration of relevant MA-specific conditions (e.g., distribution of COPECs) and multiple pertinent land use planning, ecological, and ecotoxicological factors.

Though elderberry bushes, an obligatory plant for the threatened VELB, were observed at Line 2, Westlakes, Buffalo Creek, Chemical Plant 2, Magazine Area, Open Space Areas 1,2,4, and Area 39 MAs, no threatened or endangered species or designated critical habitat were observed at any MA within the BOU.

The results of the SLERA for each of these MAs are summarized on Table 6.12-1. No/negligible ecological risks were identified at five of the MAs, for the following reasons:

- No COPECs exceeding ESLs were identified in habitat areas at two of the MAs (Line 05 North, and Open Space Areas 5 and 7); and
- The COPECs and their exceedances of ESLs identified in habitat areas were considered to be limited in magnitude, number, and areal extent at three of the MAs (Line 02, Magazine Area, and Open Space Areas 1, 2, and 4).

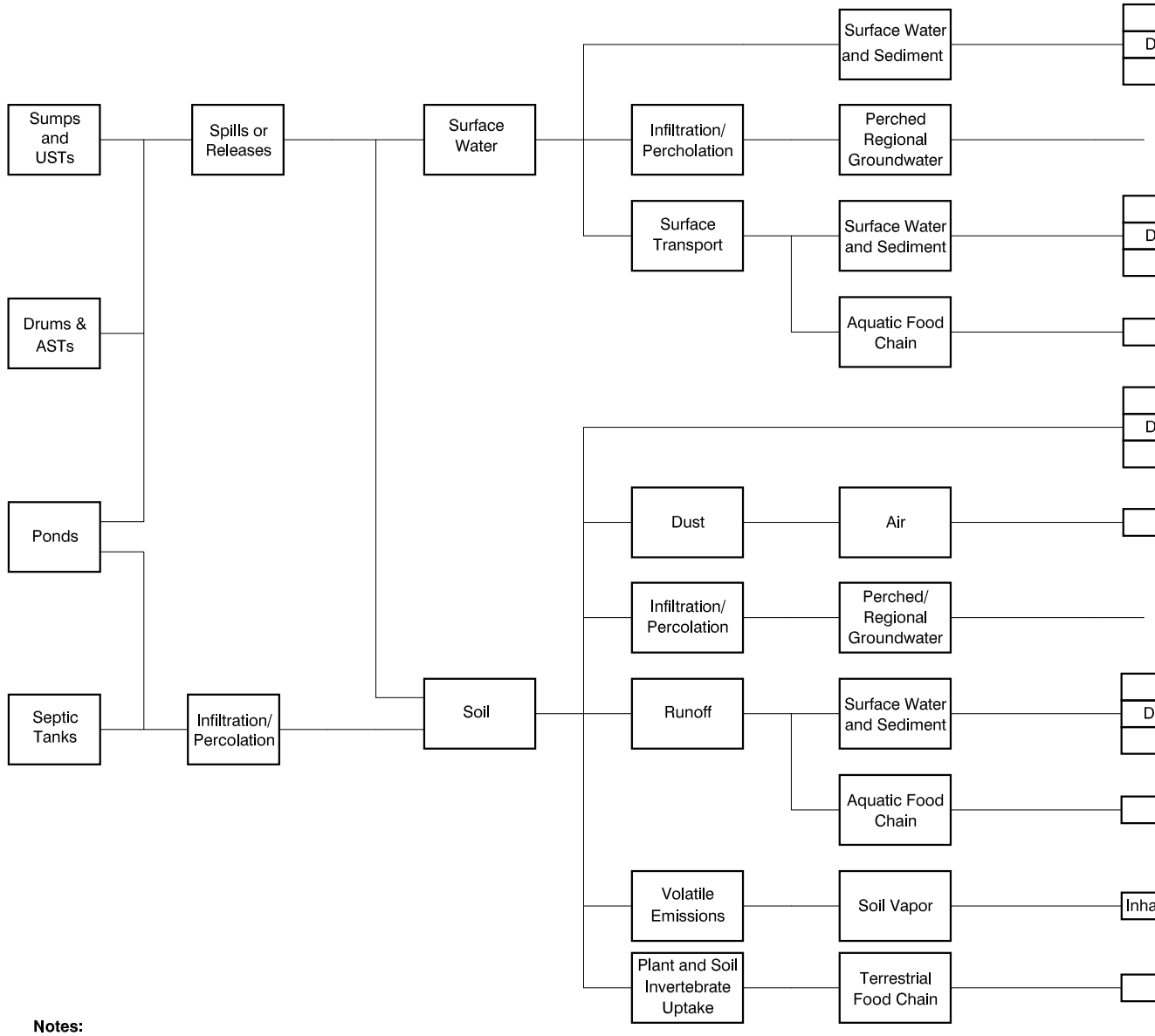
For the remaining MAs, the following conclusions were reached:

- For the Administration Area (Administration Area East and Administration Area West), no significant ecological risk within the MA was identified under current or future land use due to the presence of poor quality habitat. However, COPECs were identified in

drainage ditches leading from these MAs with the potential for migration to downgradient habitats.

- For the Westlakes MA, potential ecological risks under current conditions were identified based on multiple COPECs occurring within habitat areas. However, these areas may undergo residential development in the future, which is expected to mitigate or eliminate ecological risk as a result of removal of existing habitat.
- For the remaining MAs (Buffalo Creek, Chemical Plant 2, Dredge Pit and Eastern Basin, and Area 39), potential ecological risks under current conditions were identified based on multiple COPECs occurring within habitat areas, and future development is unplanned or unknown.

Risk management decisions may consider no further action, further investigation, and/or implementing risk management action(s). MAs where soil vapor poses an unacceptable risk to ecological receptors likely also pose an unacceptable risk to human health and will be further evaluated in the FS. However, to make risk management decisions specific to each of these MAs is beyond the scope of the SLERA, and will require a SMDP discussion among risk managers at the Agencies and Aerojet. Appropriate actions at each MA will be further evaluated in the FS.



Trophic Level	Ecological Receptors																	
	Producers			Primary Consumers				Secondary Consumer							Tertiary Consumers			
Functional Group/Feeding Guild / Exposure Route	Aquatic Vegetation	Trees/ Shrubs	Forbs/ Grasses	Soil Invertibrates/ Herbaceous Insects	Benthic and Aquatic Invertibrates	Herbivorous Mammals	Herbivorous/ Granivorous Birds	Snakes & Lizards	Turtles	Amphibians	Fish	Omnivorous/ Insectivorous Mammals	Omnivorous/ Insectivorous Birds	Water Fowl	Raptors	Piscivorous Mammals	Carnivorous Mammals	Piscivorous Birds
Ingestion	NE	I	I	I	NE	C(Q)	C(Q)	Q	Q	Q	NE	C(Q)	C(Q)	C(Q)	C(Q)	C(Q)	I	C(Q)
Dermal Contact	NE	I	I	I	NE	N	N	N	N	N	NE	N	N	N	N	N	N	N
Uptake [a]	C	I	I	I	C	-	-	-	-	-	C	-	-	-	-	-	-	-
See Figure 6.6-1b for Ecological Exposure Routes related to Treated and Untreated Groundwater																		
Ingestion	NE	I	I	I	NE	C(Q)	C(Q)	Q	Q	Q	NE	C(Q)	C(Q)	C(Q)	C(Q)	C(Q)	I	C(Q)
Dermal Contact	NE	I	I	I	NE	N	N	N	N	N	NE	N	N	N	N	N	N	N
Uptake [a]	C	I	I	I	C	-	-	-	-	-	C	-	-	-	-	-	-	-
Ingestion	NE	-	-	-	NE	-	-	I	I	I	NE	I	I	I	I	I	-	I
Ingestion	I	NE	NE	NE	I	C	C	Q	Q	Q	I	C	C	I	C	I	C	I
Dermal Contact	I	NE	NE	NE	I	C	C	N	N	N	I	C	C	I	C	I	C	I
Uptake [a]	I	C	C	C	I	-	-	-	-	-	-	-	-	-	-	-	-	-
Inhalation	-	NE	NE	NE	I	N	N	N	N	N	I	N	N	N	N	N	N	N
See Figure 6.1-1b for Ecological Exposure Routes related to Treated and Untreated Groundwater																		
Ingestion	NE	I	I	I	NE	C(Q)	C(Q)	Q	Q	Q	NE	C(Q)	C(Q)	C(Q)	C(Q)	C(Q)	I	C(Q)
Dermal Contact	NE	I	I	I	NE	N	N	N	N	N	NE	N	N	N	N	N	N	N
Uptake [a]	C	I	I	I	C	-	-	-	-	-	C	-	-	-	-	-	-	-
Ingestion	NE	-	-	-	NE	-	-	I	I	I	NE	I	I	I	I	C(Q)	-	C(Q)
Inhalation[b](Outdoor)[c]	-	N	N	N	I	C	I	Q	I	Q	I	C	I	I	C	I	C	I
Ingestion	-	NE	NE	NE	-	C	C	Q	I	Q	-	C	C	I	C	I	C	I

Notes:

a	Uptake applies only to plants, invertebrates, and fish and includes respiration, dermal uptake, and ingestion by these receptors.
b	Inhalation includes vapor uptake by plants and respiration by invertebrates, and burrow-dwelling birds and mammals
c	Only appropriate burrow-dwelling mammals and birds evaluated quantitatively
ASTs	Above-ground Storage Tank
USTs	Underground Storage Tank

Designations:

C	Complete exposure pathway evaluated quantitatively
I	Incomplete exposure pathway
N	Negligible or insignificant (though hypothetically potentially complete) pathway that will not be evaluated
NE	Exposure route is evaluated as part of the uptake pathway
Q	Qualitative (not quantitative) evaluation conducted for this potentially complete exposure pathway
-	Not applicable

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FIGURE 6.1-1a

Conceptual Site Model for the Boundary Operable Unit Soil and Sediment Exposure Pathways for Ecological Receptors

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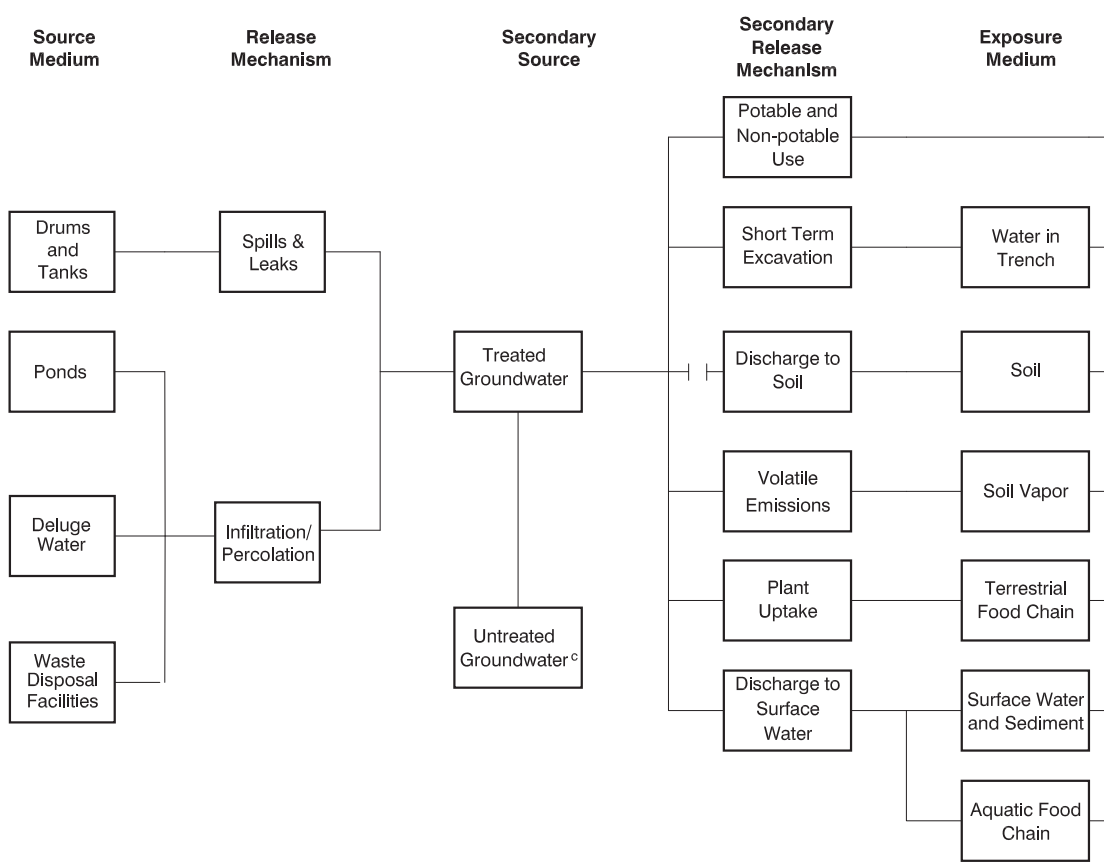

Trophic Level	Ecological Receptors																	
	Producers			Primary Consumers				Secondary Consumer							Tertiary Consumers			
Functional Group/Feeding Guild	Aquatic Vegetation	Trees/ Shrubs	Forbs/ Grasses	Soil Invertibrates/ Herbaceous Insects	Benthic and Aquatic Invertibrates	Herbaceous Mammals	Herbivorous/ Granivorous Birds	Snakes & Lizards	Turtles	Amphibians	Fish	Omnivorous/ Insectivorous Mammals	Omnivorous/ Insectivorous Birds	Water Fowl	Raptors	Piscivorous Mammals	Carnivorous Mammals	Piscivorous Birds
Exposure Route																		
Ingestion	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Dermal Contact	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Uptake [d]	I	N	N	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ingestion	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Dermal Contact	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Uptake [a]	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ingestion	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Dermal Contact	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Uptake [a]	I	I	I	I	I	-	-	-	-	-	-	-	-	-	-	-	-	-
Inhalation[b](Outdoor)	-	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ingestion	-	NE	NE	I	-	I	I	I	I	I	-	I	I	I	I	I	I	I
Ingestion	NE	I	I	I	NE	C(Q)	C(Q)	N	N	N	NE	C(Q)	C(Q)	C(Q)	C(Q)	C(Q)	I	C(Q)
Dermal Contact	NE	I	I	I	NE	N	N	N	N	N	NE	N	N	N	N	N	N	N
Uptake [a]	C	I	I	I	C	-	-	-	-	-	C	-	-	-	-	-	-	-
Ingestion	NE	-	-	-	NE	-	-	I	Q	Q	NE	N	N	N	N	C(Q)	-	C(Q)

Notes:

a Uptake applies only to plants, invertebrates, and fish and includes respiration, dermal uptake, and ingestion by these receptors.

b Inhalation includes vapor uptake by plants and respiration by invertebrates.

c Untreated groundwater does not discharge to surface water within the Boundary Operable Unit.

Designations:

C Complete exposure pathway evaluated quantitatively

I Incomplete exposure pathway

N Negligible or insignificant (though hypothetically potentially complete) pathway that will not be evaluated

NE Exposure route is evaluated as part of the uptake pathway

Q Qualitative (not quantitative) evaluation conducted for this potentially complete exposure pathway

\- Not applicable

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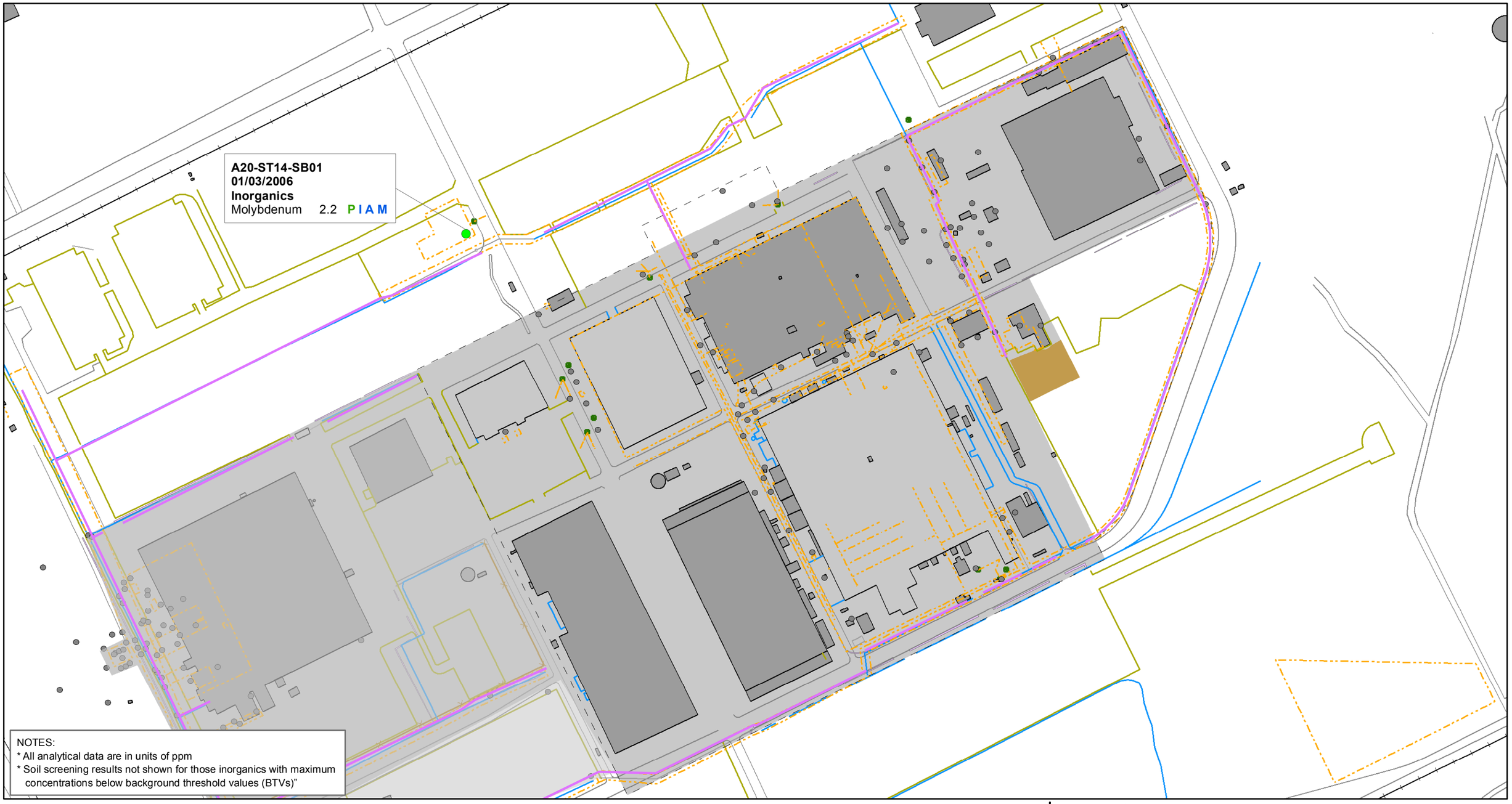
FIGURE 6.1-1b
Conceptual Site Model for the Boundary Operable Unit Groundwater and Surface Water
Exposure Pathways for Ecological Receptors



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

Scale: 1" = 300'

0 150 300

AEROJET
Environmental Remediation

FIGURE 6.2-1
Administration Area East
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil Samples
Aerojet Boundary Operable Unit

07/10/08-rev 06/30/10 SML SRXXXXXX

Vegetation Type
- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features
- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL
- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

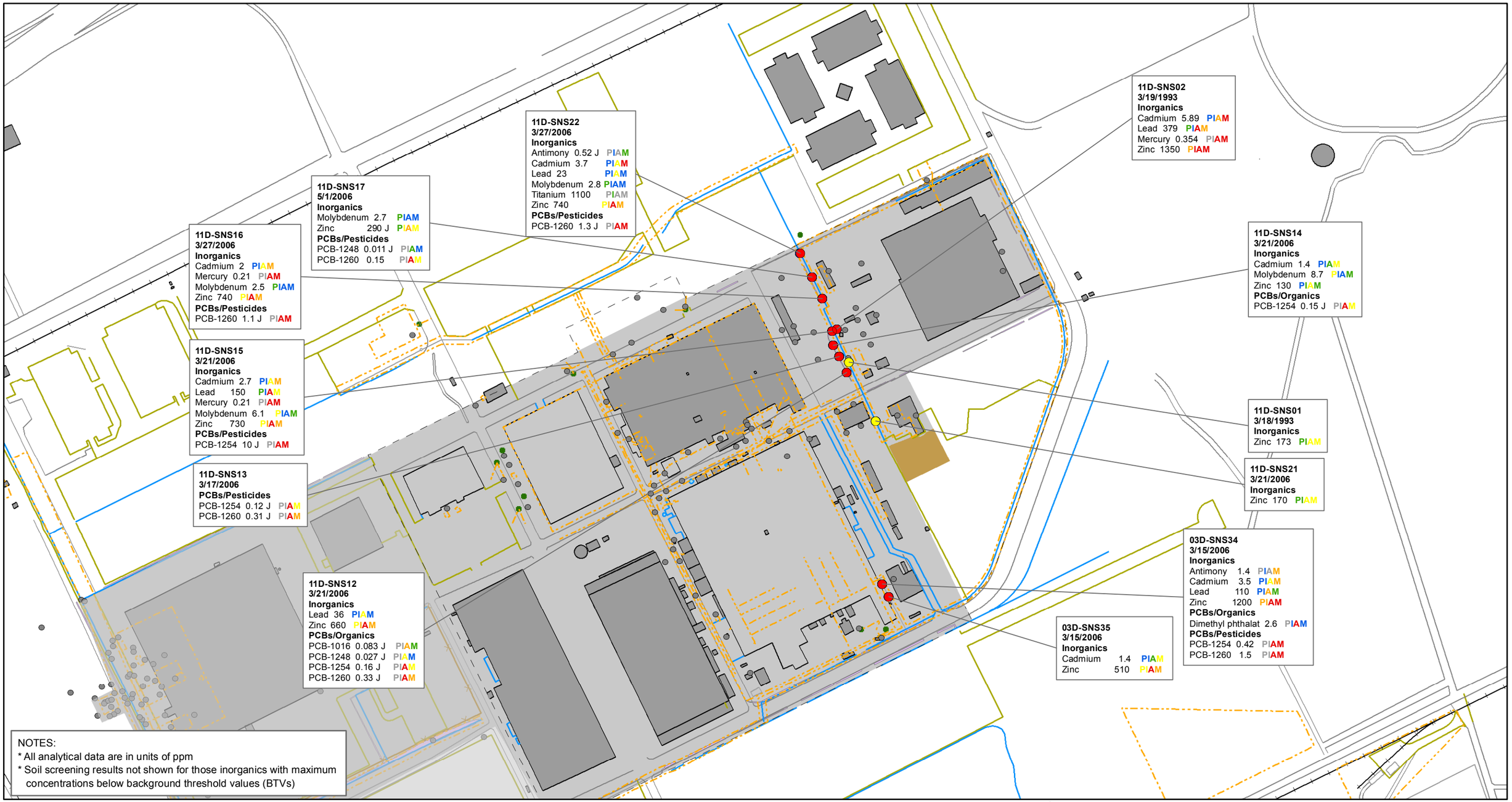
Scale: 1" = 300'

0 150 300

AEROJET
Environmental Remediation

FIGURE 6.2-2
Administration Area East
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil Samples
Aerojet Boundary Operable Unit

07/10/08-rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

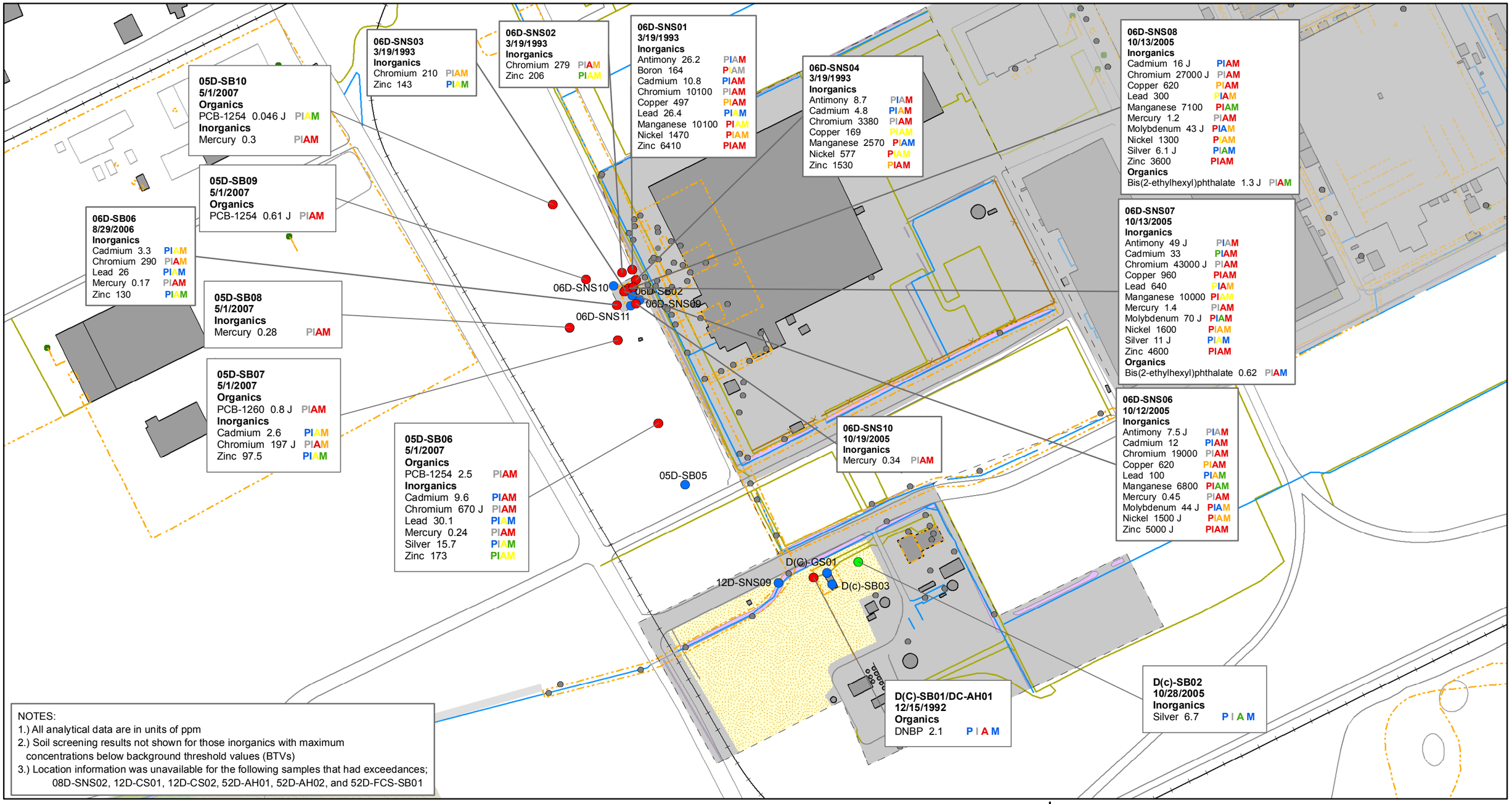
Scale: 1" = 300'

0 150 300

AEROJET
Environmental Remediation

FIGURE 6.2-3
Administration Area East
Exceedances of Risk Characterization
Ditch Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



NOTES:
1.) All analytical data are in units of ppm
2.) Soil screening results not shown for those inorganics with maximum concentrations below background threshold values (BTVs)
3.) Location information was unavailable for the following samples that had exceedances; 08D-SNS02, 12D-CS01, 12D-CS02, 52D-AH01, 52D-AH02, and 52D-FCS-SB01

Vegetation Type
- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features
- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL
- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

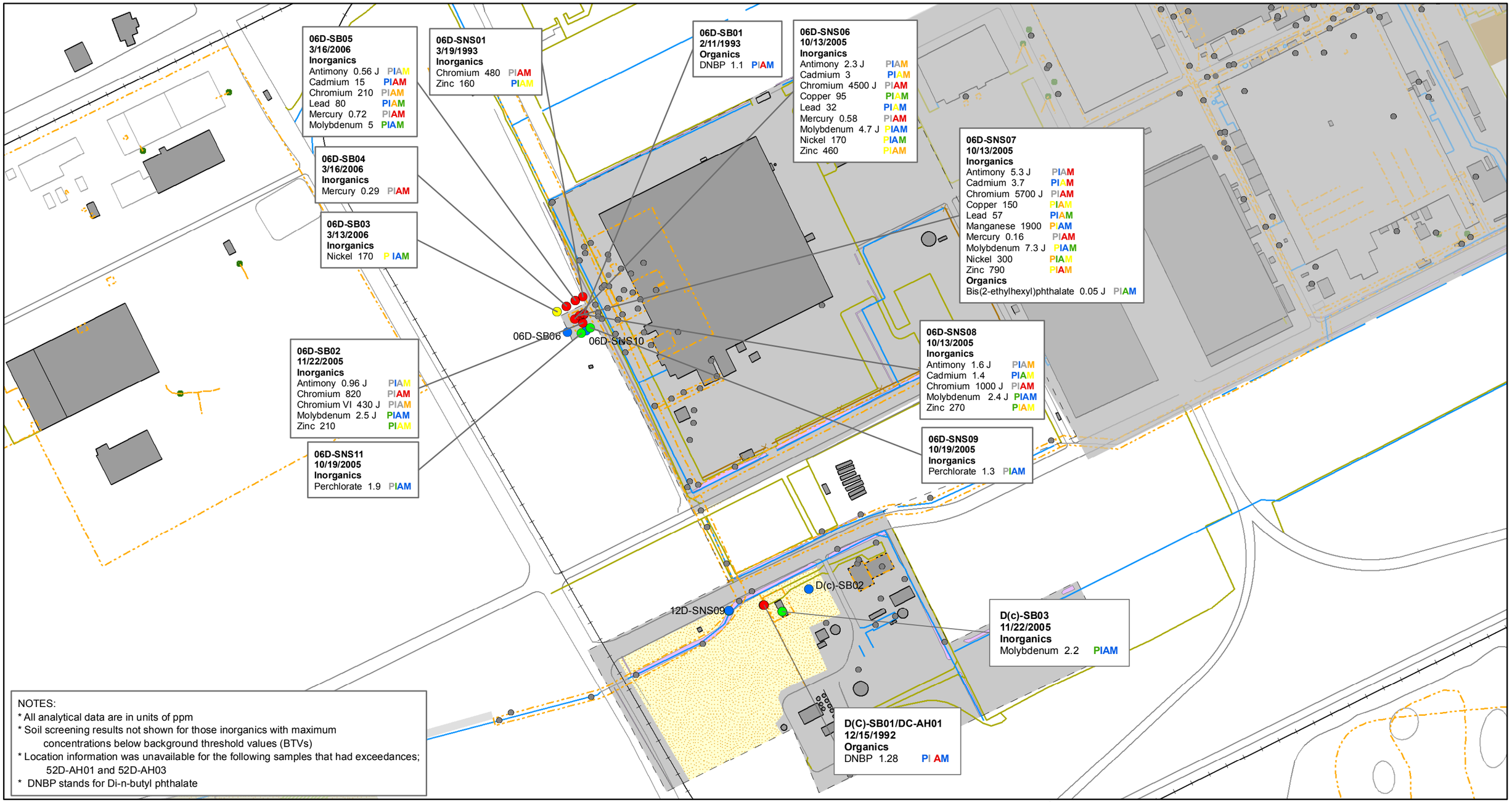
P = Plant
I = Invertebrate
A = Avian
M = Mammal

N
Scale: 1" = 300'
0 150 300

AEROJET
Environmental Remediation

FIGURE 6.2-4
Administration Area West
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



NOTES:
* All analytical data are in units of ppm
* Soil screening results not shown for those inorganics with maximum concentrations below background threshold values (BTVs)
* Location information was unavailable for the following samples that had exceedances; 52D-AH01 and 52D-AH03
* DNBP stands for Di-n-butyl phthalate

Vegetation Type
- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features
- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL
- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

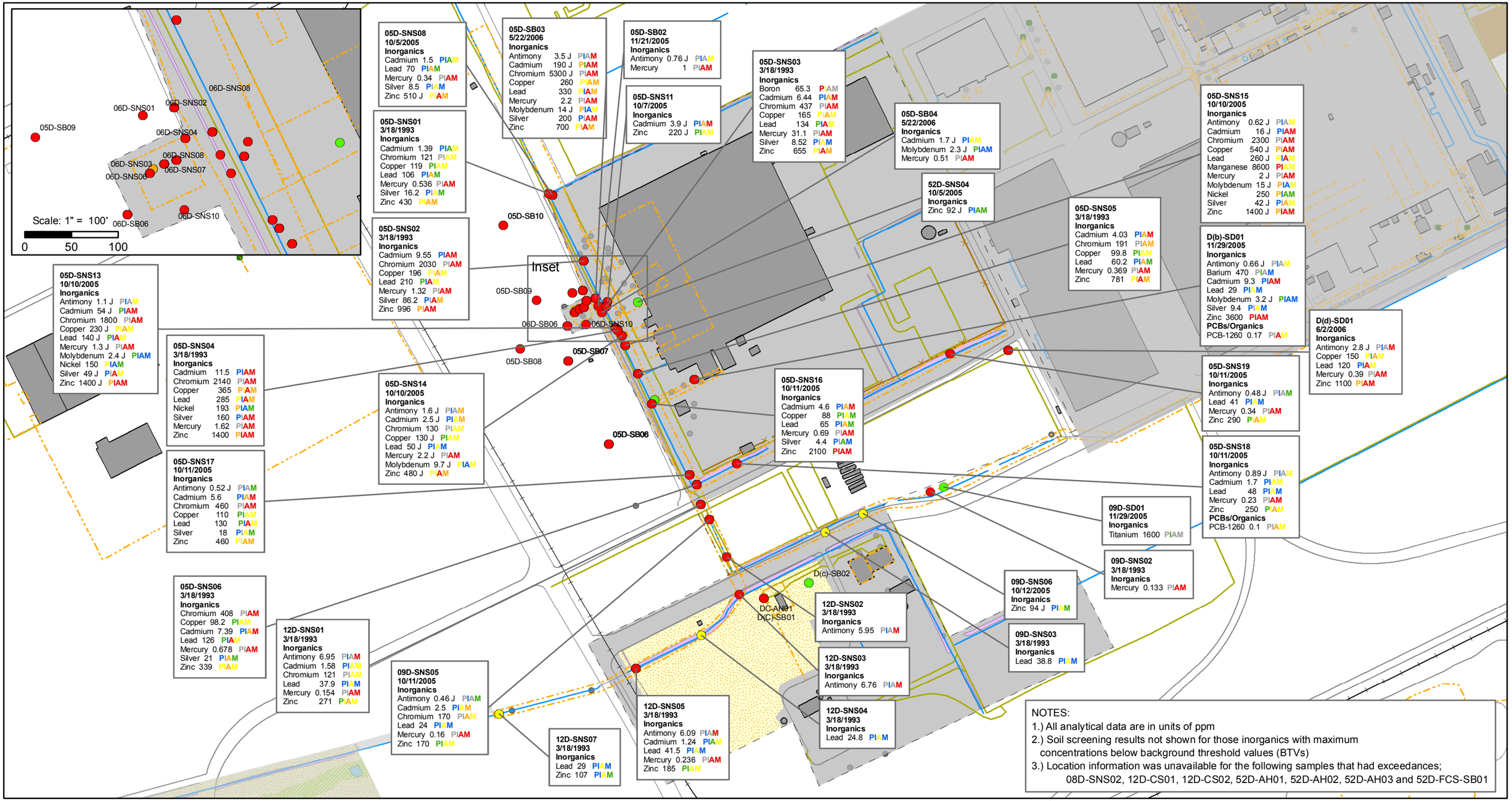
P = Plant
I = Invertebrate
A = Avian
M = Mammal

N
Scale: 1" = 300'
0 150 300

AEROJET
Environmental Remediation

FIGURE 6.2-5
Administration Area West
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Samples
Aerojet Boundary Operable Unit

03/19/0 -rev 06/30/10 SML SRXXXXXX



NOTES:
1.) All analytical data are in units of ppm
2.) Soil screening results not shown for those inorganics with maximum concentrations below background threshold values (BTVs)
3.) Location information was unavailable for the following samples that had exceedances;
08D-SNS02, 12D-CS01, 12D-CS02, 52D-AH01, 52D-AH02, 52D-AH03 and 52D-FCS-SB01

Vegetation Type
- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features
- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL
- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

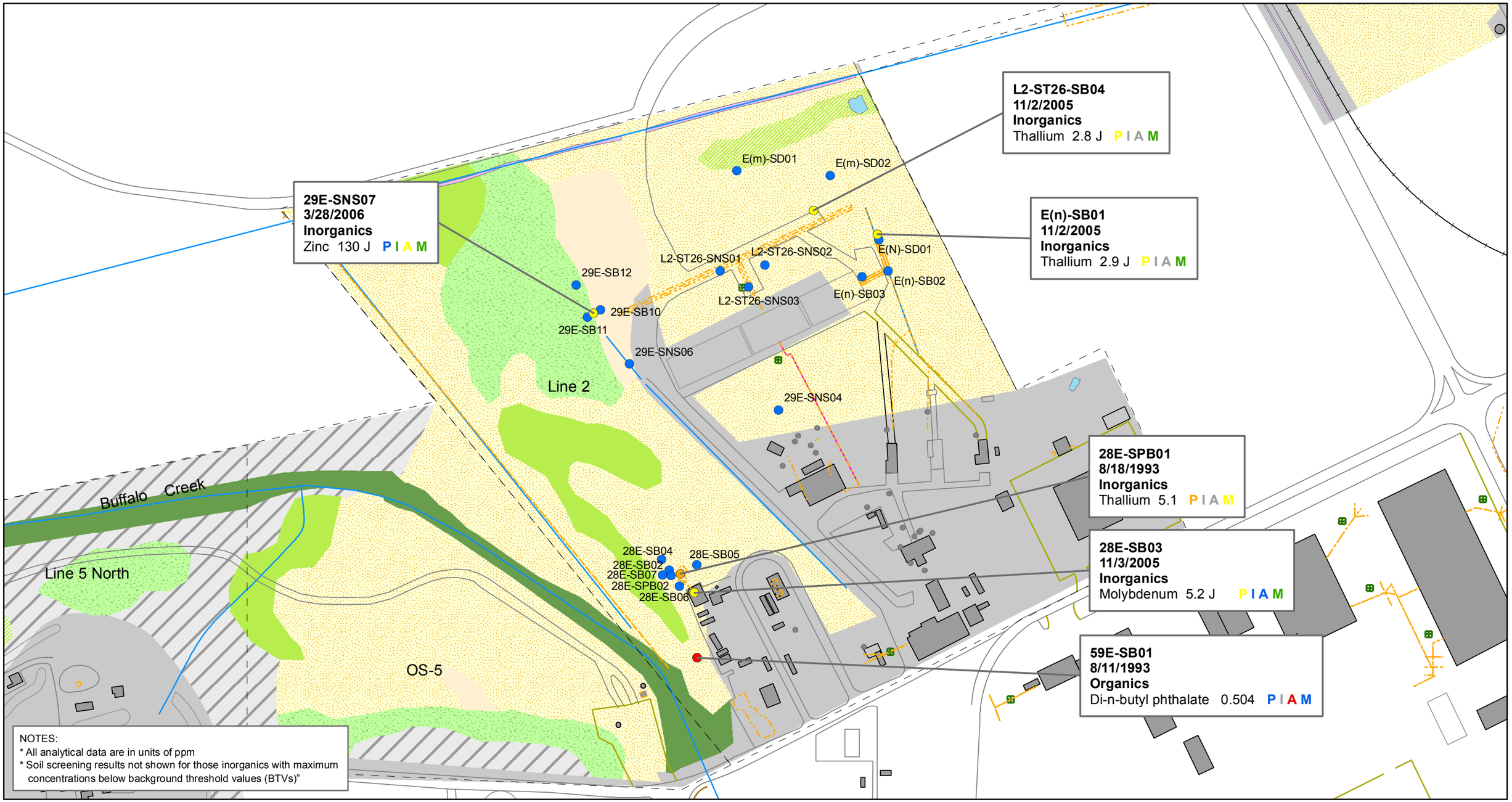
N

Scale: 1" = 300'
0 150 300

AEROJET
Environmental Remediation

FIGURE 6.2-6
Administration Area West
Exceedances of Risk Characterization
Ditch Samples
Aerojet Boundary Operable Unit

03/19/08 -rev06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

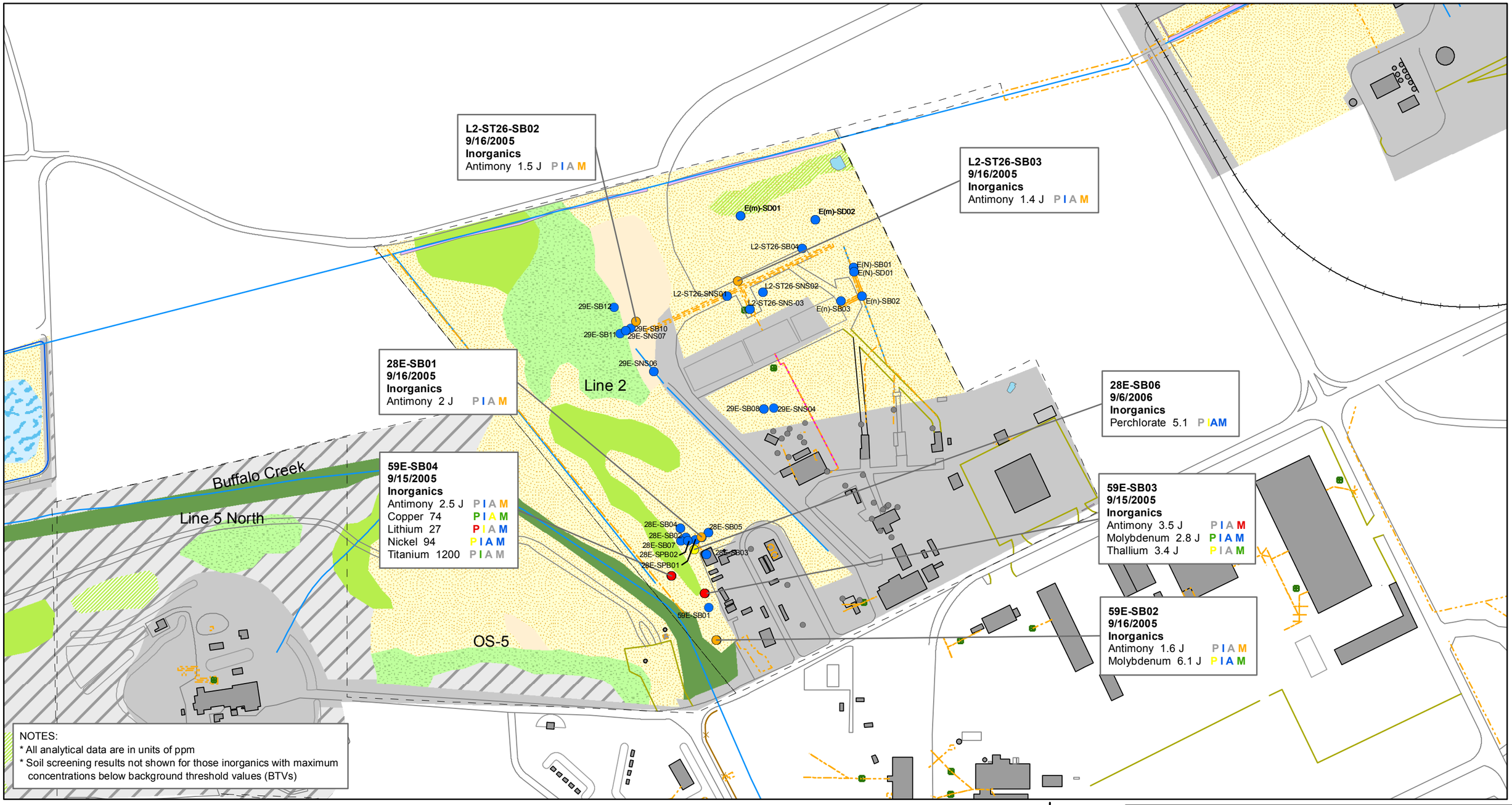
Scale: 1" = 200'

0 100 200

AEROJET
Environmental Remediation

FIGURE 6.3-1
Line 2 Area
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

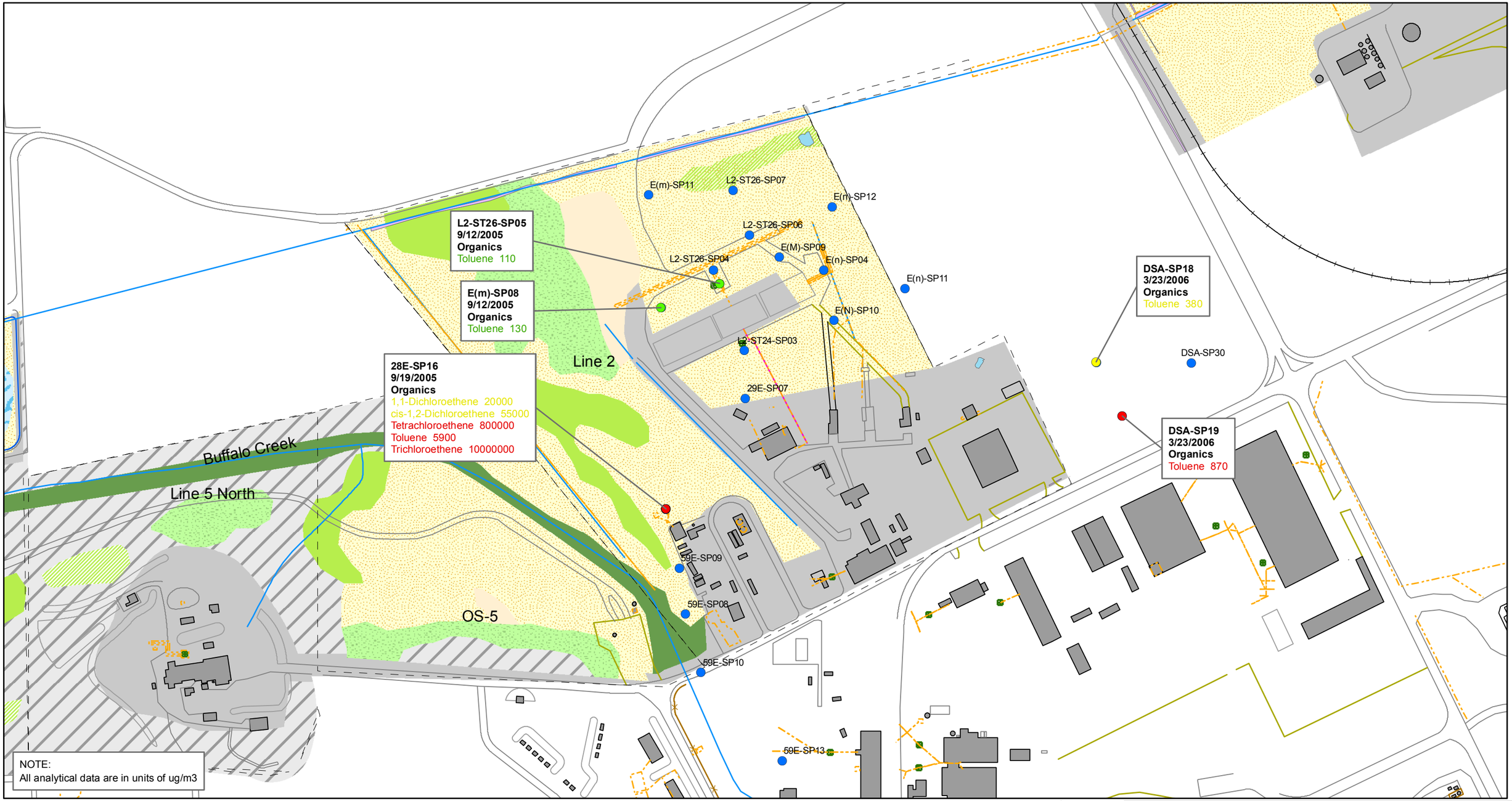
Scale: 1" = 250'

0 125 250

AEROJET
Environmental Remediation

FIGURE 6.3-2
Line 2 Area
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not exceed ESL
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

N

Scale: 1" = 250'

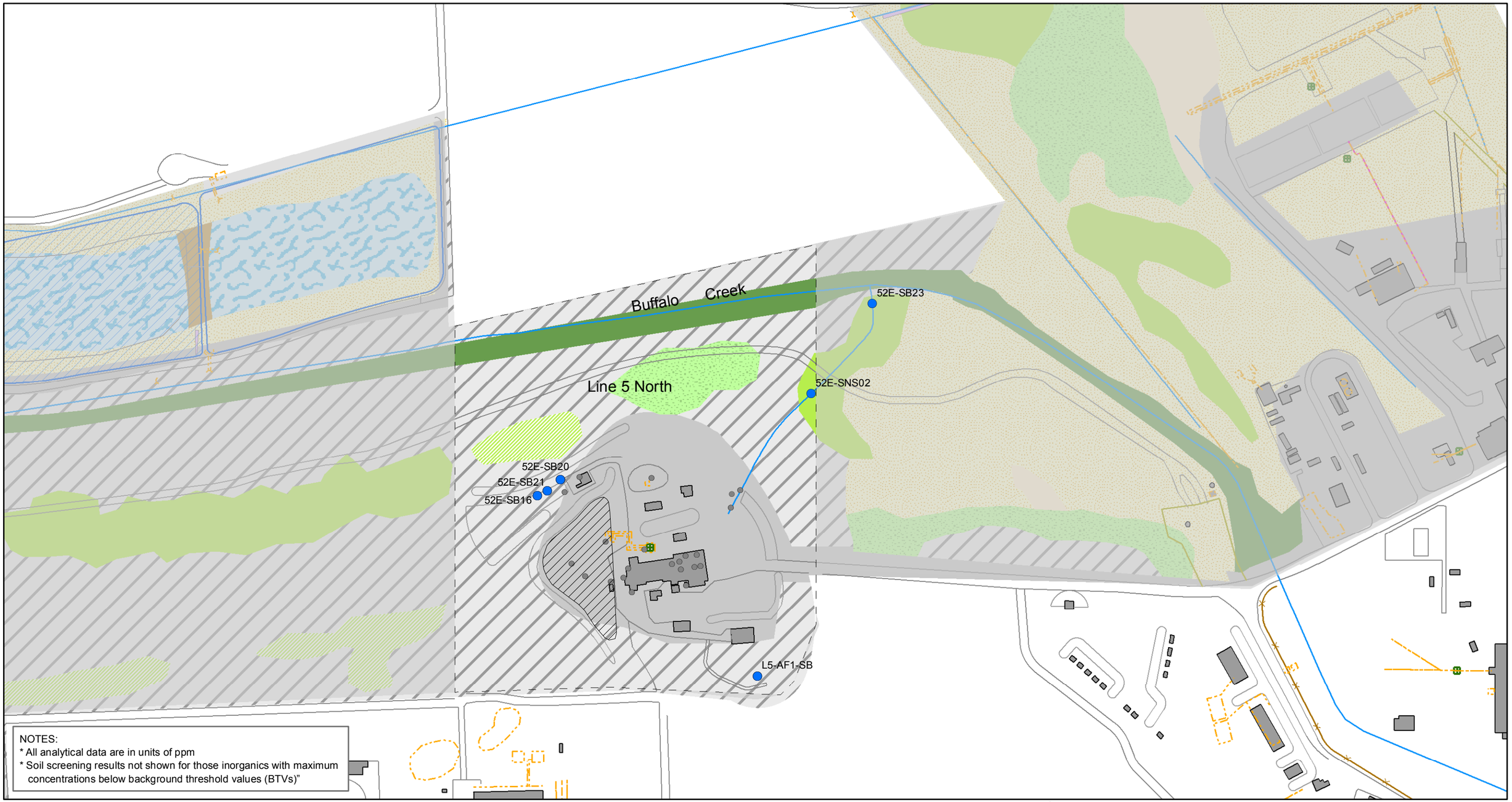
0 125 250

AEROJET

Environmental Remediation

FIGURE 6.3-3
Line 2 Area
Exceedances of Risk Characterization
Habitat Soil Vapor Samples (Shallowest Sample Depth)
Aerojet Boundary Operable Unit

05/1/10-rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond
- Low Lying Area

- Locations not used in Risk Characterization

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

N

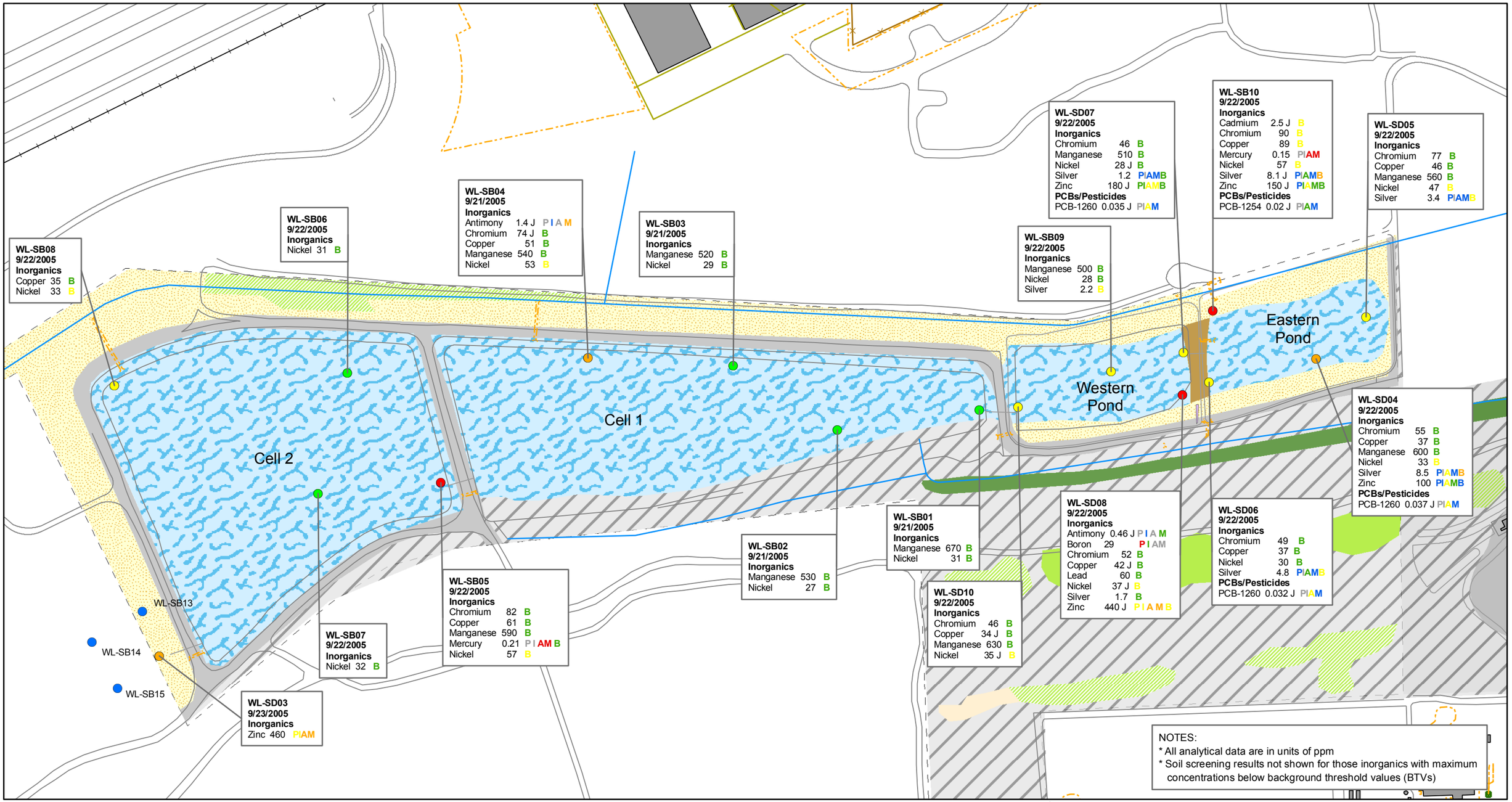
Scale: 1" = 200'

0 100 200

AEROJET
Environmental Remediation

FIGURE 6.4-1
Line 5 Area
Exceedances of Risk Characterization
Habitat Surface and Subsurface (0-6') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal
B = Benthic Macroinvertebrate

N

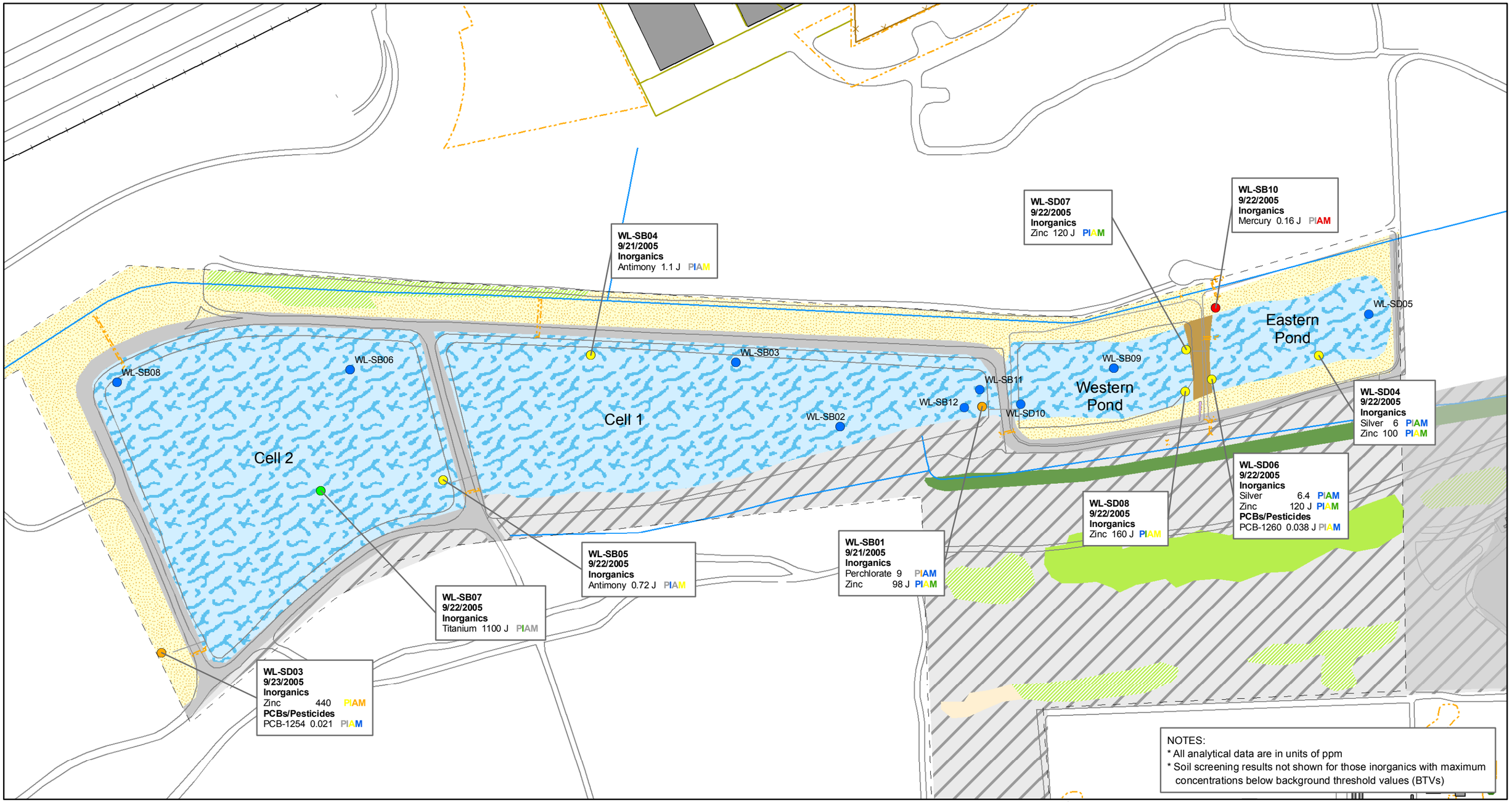
Scale: 1" = 250'

0 125 250

AEROJET
Environmental Remediation

FIGURE 6.5-1
Westlakes Area
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil and Sediment Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

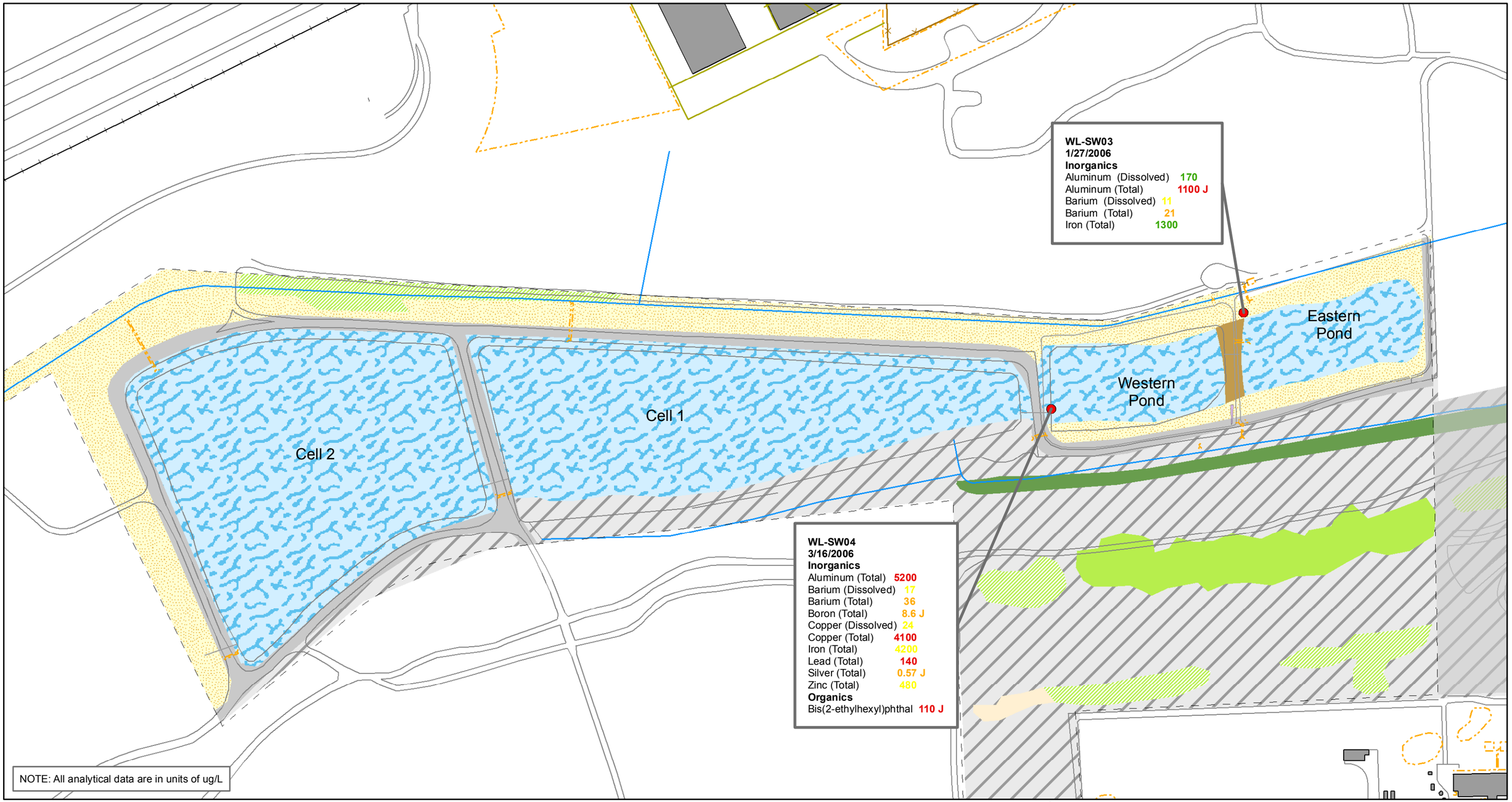
Scale: 1" = 250'

0 125 250

AEROJET
Environmental Remediation

FIGURE 6.5-2
Westlakes Area
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev06/30/10 SML SRXXXXXX



Legend

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

N

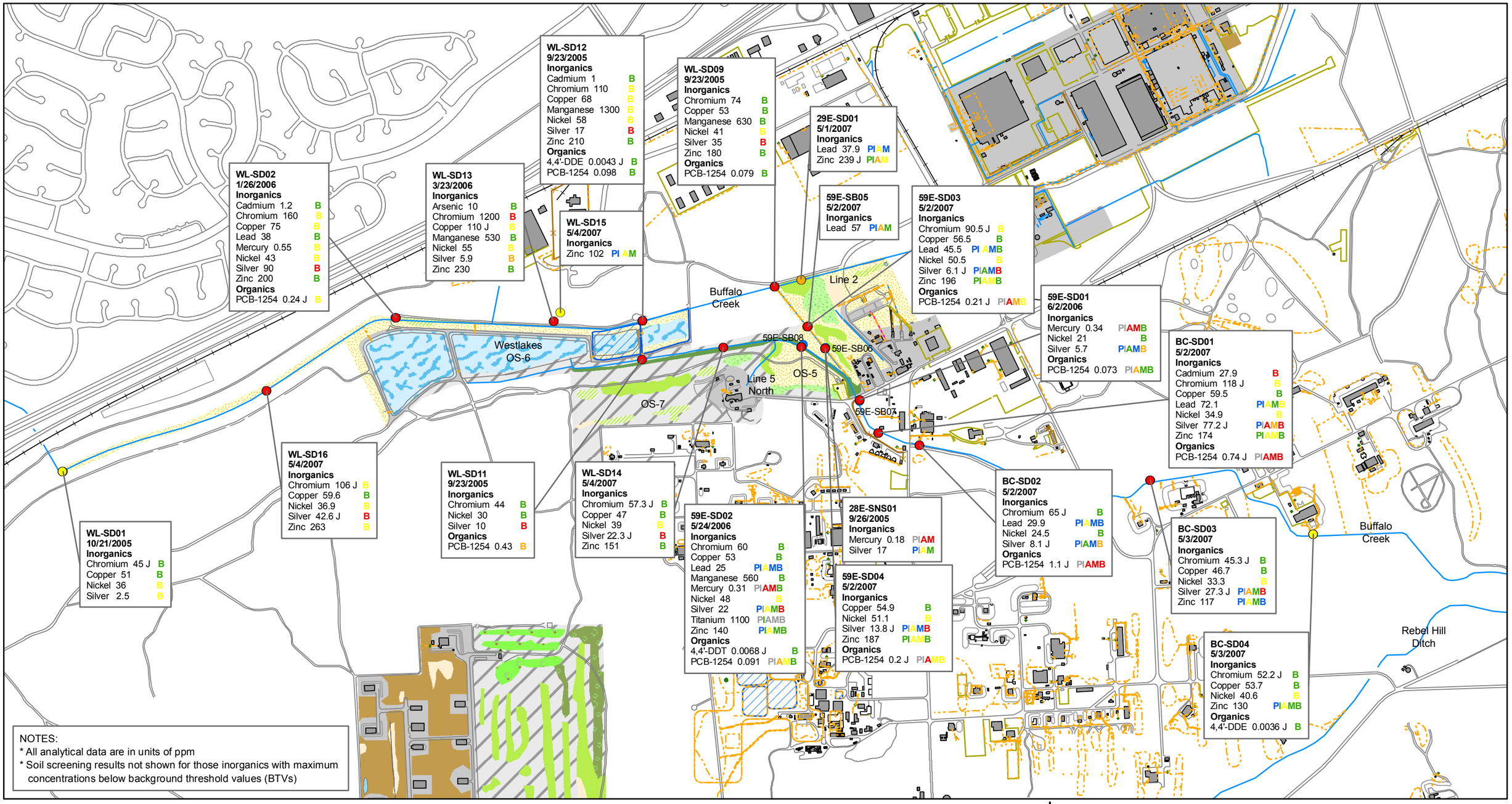
Scale: 1" = 550'

0 125 250

AEROJET
Environmental Remediation

FIGURE 6.5-3
Westlakes Area
Exceedances of Risk Characterization
WLLO Surface Water Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Legend

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal
B = Benthic Macroinvertebrate

N

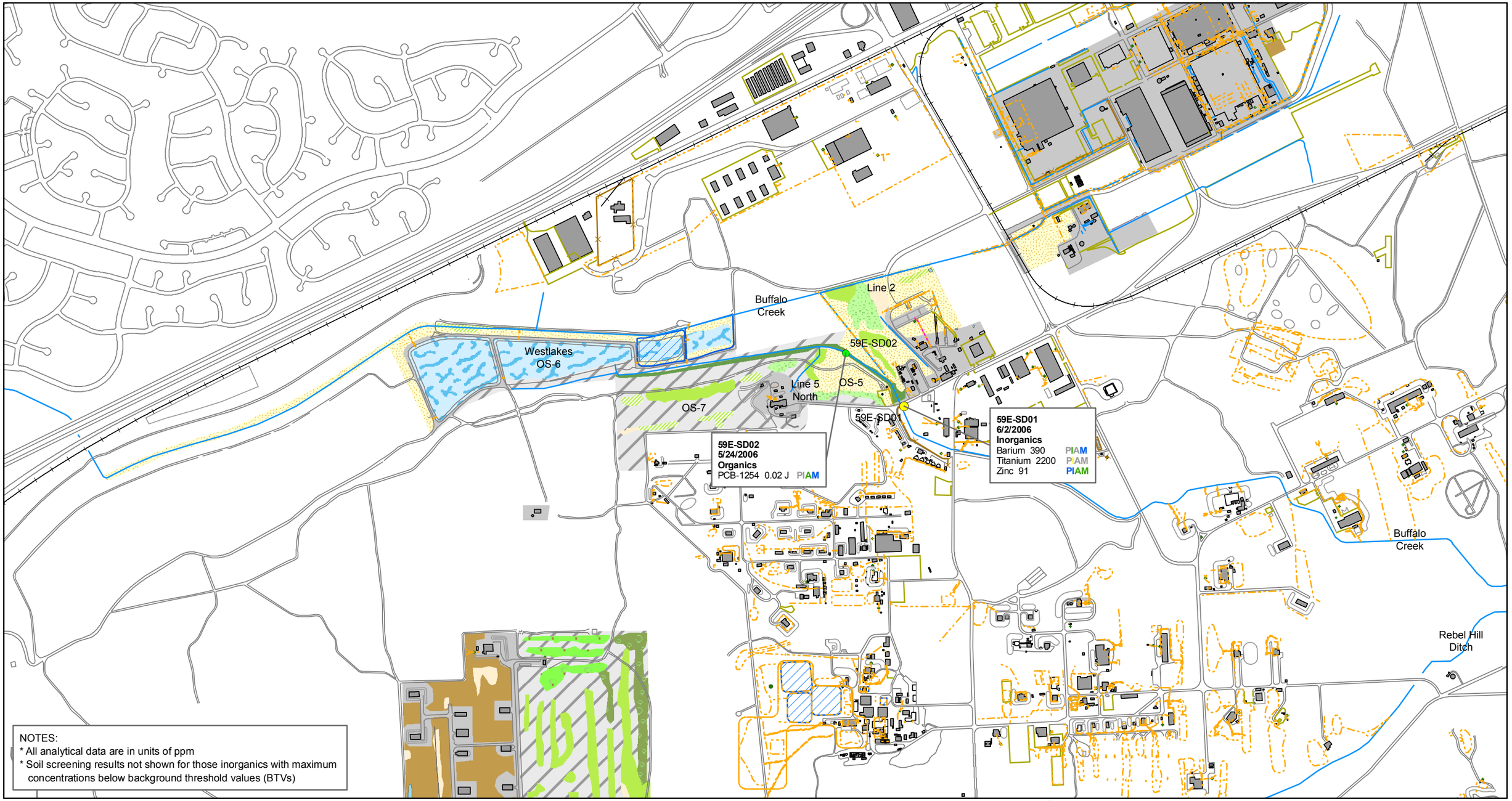
Scale: 1" = 1,000'

0 500 1,000

AEROJET
Environmental Remediation

FIGURE 6.6-1
Buffalo Creek
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil and Sediment Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/11 SML SR10131603



Legend

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

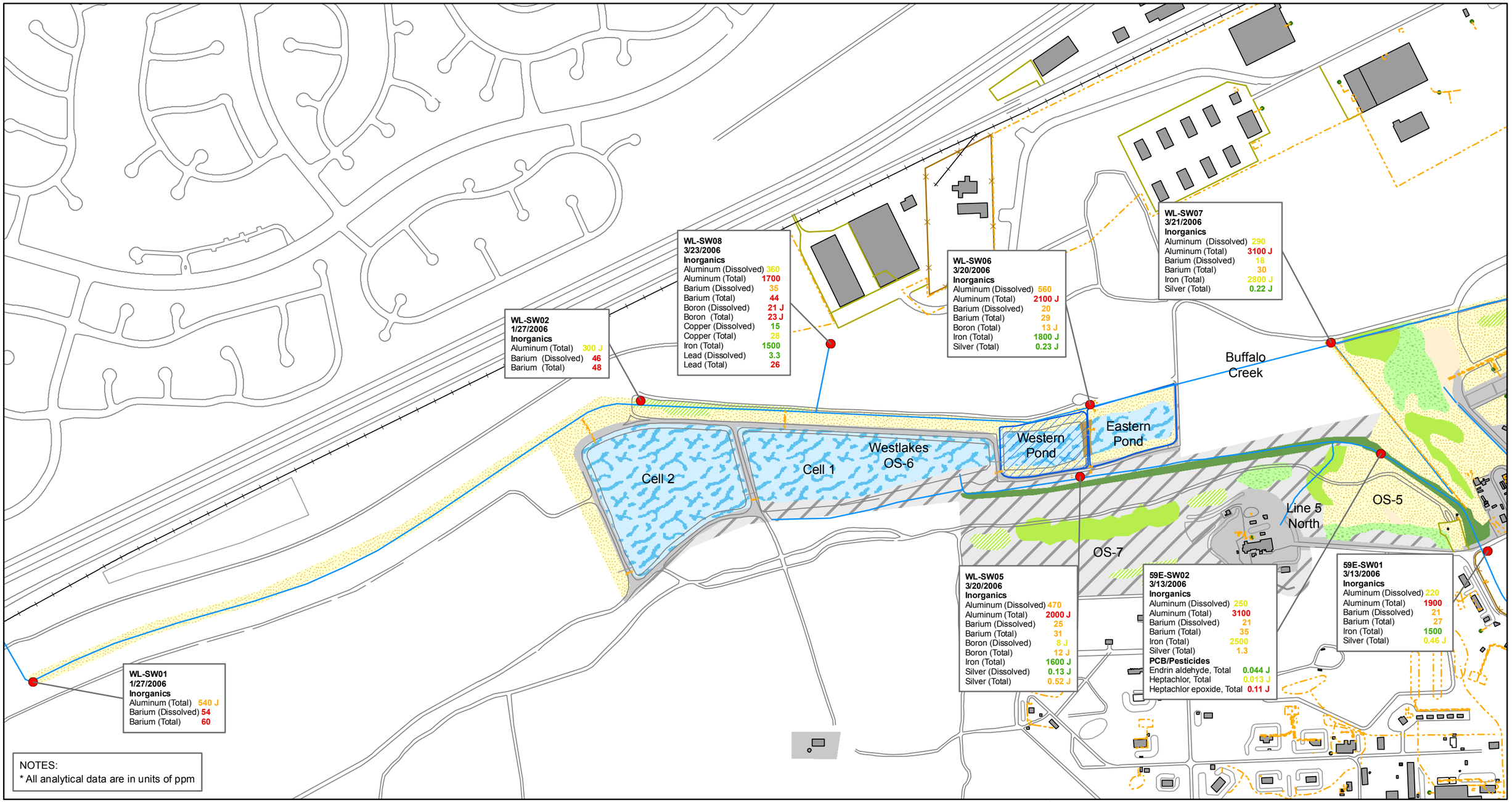
Scale: 1" = 1,000'

0 500 1,000

AEROJET
Environmental Remediation

FIGURE 6.6-2
Buffalo Creek
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/11 SML SR10131603



Legend

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

N

Scale: 1" = 550'

0 275 550

AEROJET
Environmental Remediation

FIGURE 6.6-3
Buffalo Creek
Exceedances of Risk Characterization
WLLO Surface Water Samples
Aerojet Boundary Operable Unit

07/10/08 -rev06/30/11 SML SR10131603

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
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- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
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- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

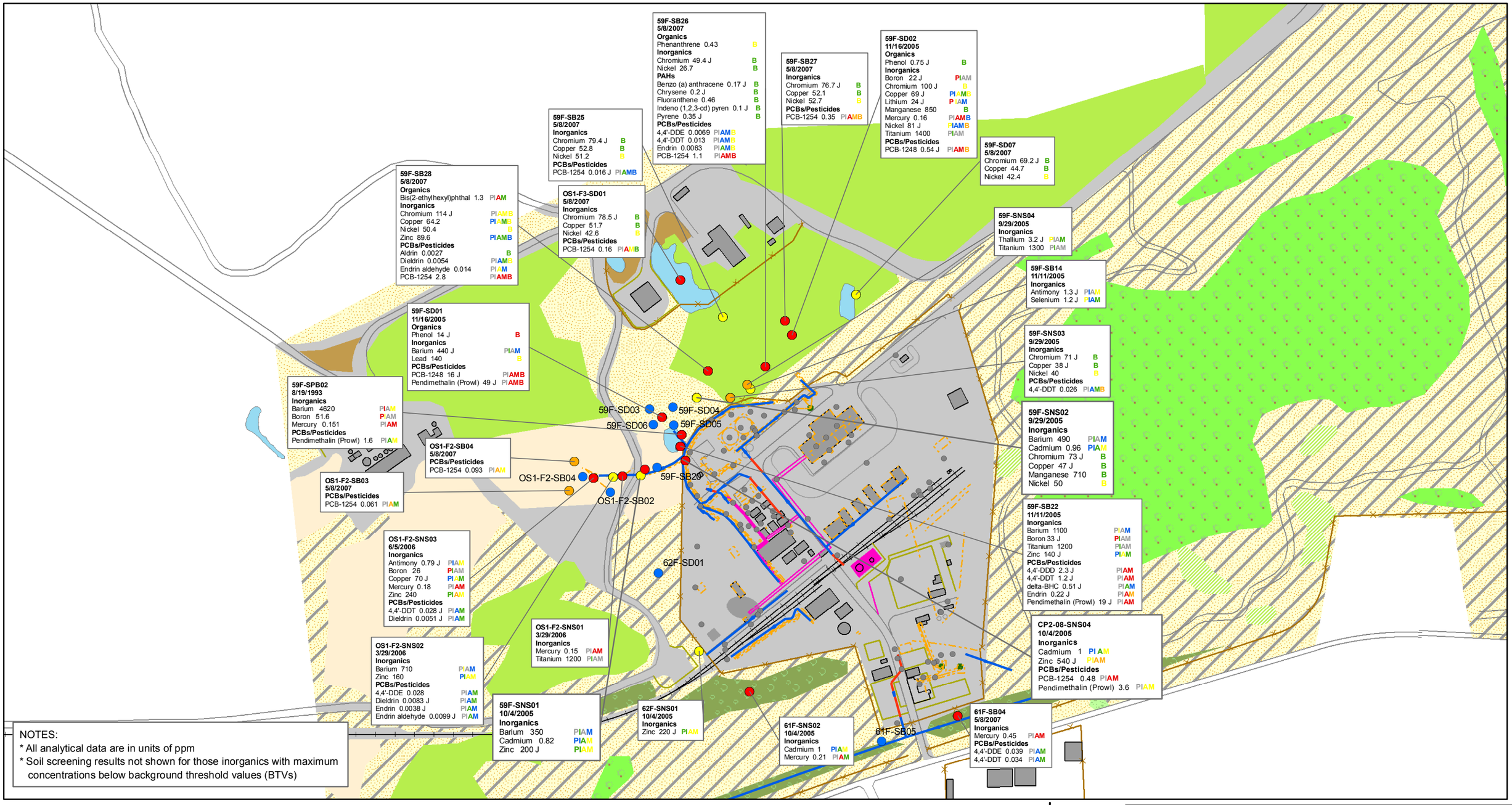
Scale: 1" = 200'

0 100 200

AEROJET
Environmental Remediation

FIGURE 6.7-1
Open Space 5 & 7
Exceedances of Risk Characterization
Habitat Surface (0-1') Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



NOTES:
* All analytical data are in units of ppm
* Soil screening results not shown for those inorganics with maximum concentrations below background threshold values (BTVs)

Vegetation Type
- RD - Rudural / Disturbed
- OW - Oak Woodland
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- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features
- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drain closed
- Drain open
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL
- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal
B = Benthic Macroinvertebrate

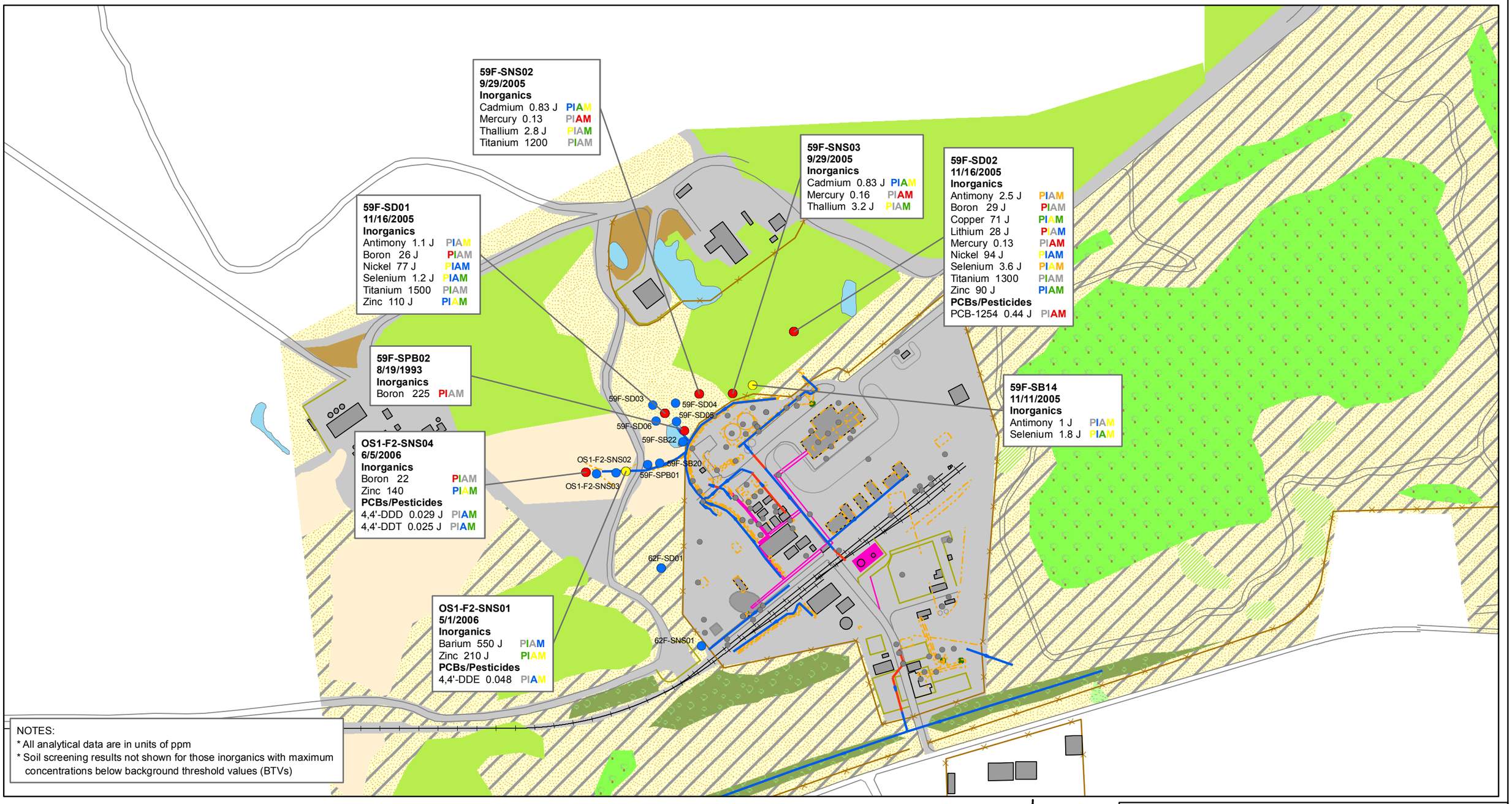
N

Scale: 1" = 300'
0 150 300 Feet

AEROJET
Environmental Remediation

FIGURE 6.8-1
Chem Plant Area
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil and Sediment Samples
Aerojet Boundary Operable Unit

06/3/08 -rev06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
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- CBS - Coyote Brush Scrub
- AG - Annual Grassland
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Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drain closed
- Drain open
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

- Locations not used in Risk Characterization

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

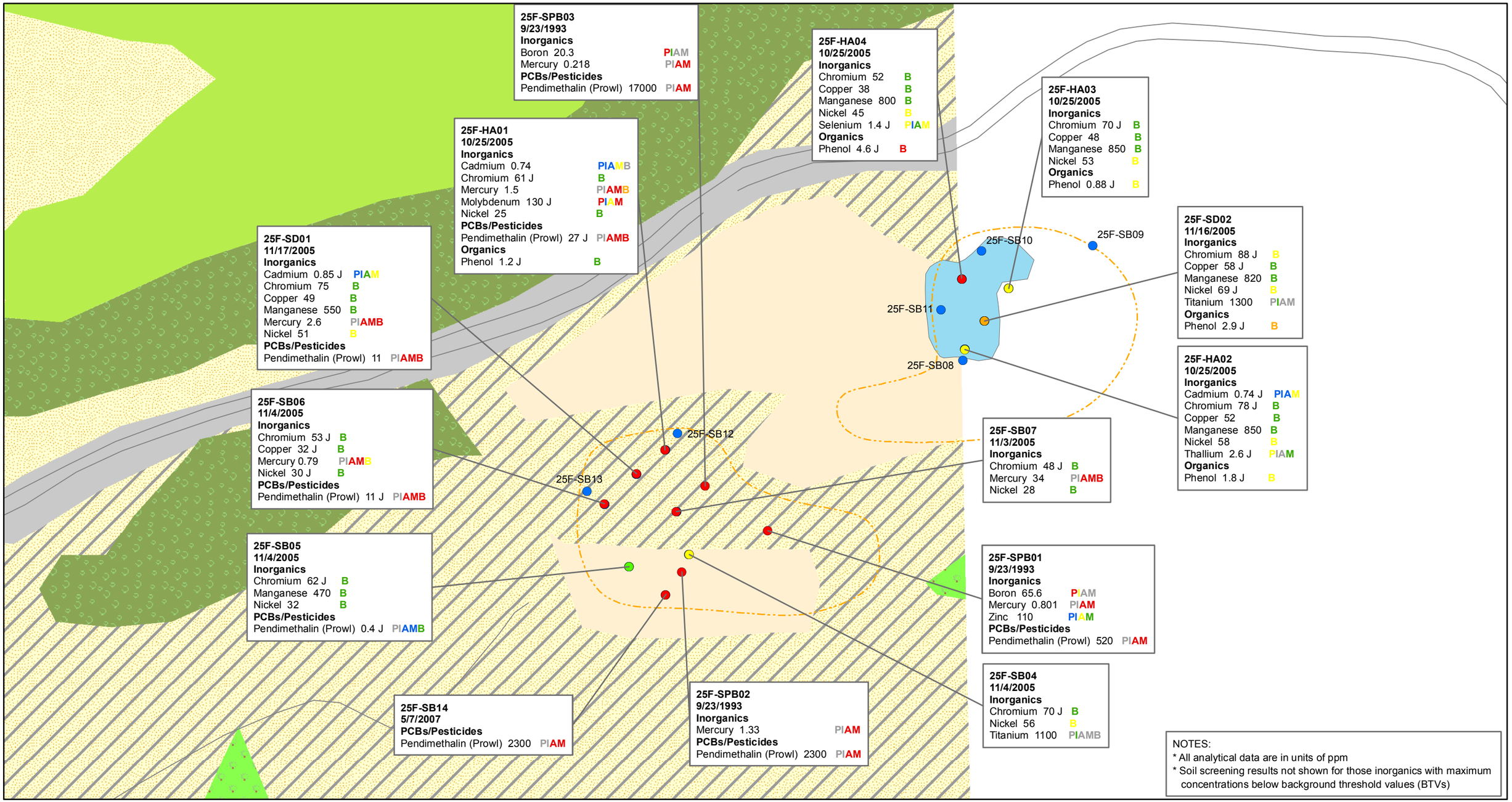
Scale: 1" = 300'

0 150 300 Feet

AEROJET
Environmental Remediation

FIGURE 6.8-2
Chem Plant Area
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil and Sediment Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Legend

Vegetation Type
- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features
- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL
- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal
B = Benthic Macroinvertebrate

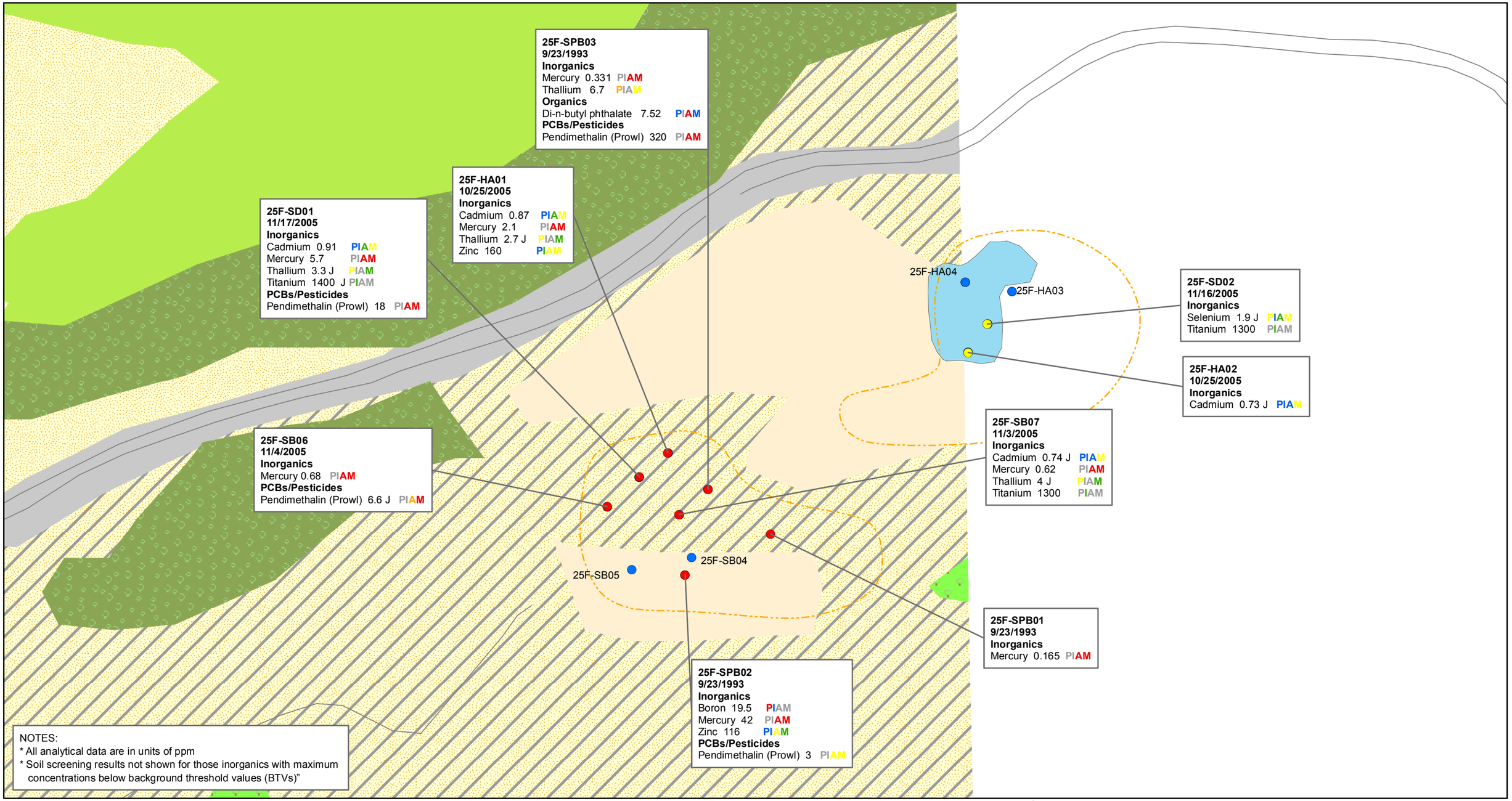
N

Scale: 1" = 100'
0 50 100 Feet

AEROJET
Environmental Remediation

FIGURE 6.8-3
Dredge Pit Area
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil and Sediment Samples
Aerojet Boundary Operable Unit

06/3/08 -rev 06/30/11 SML SR10131603



Legend

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
- VFR - Valley Foothill Riparian
- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

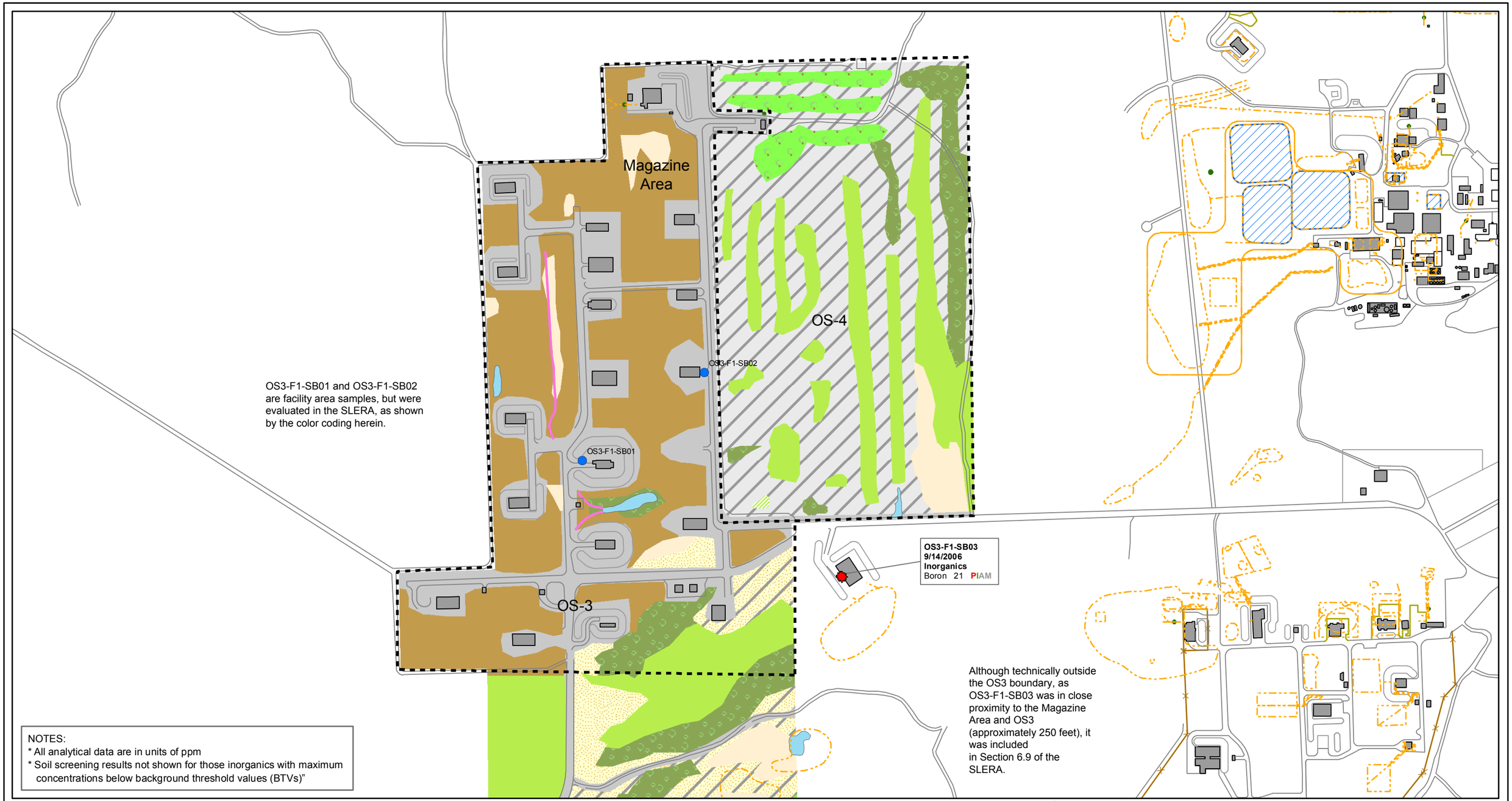
Scale: 1" = 100'

0 50 100 Feet

AEROJET
Environmental Remediation

FIGURE 6.8-4
Dredge Pit Area
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil and Sediment Samples
Aerojet Boundary Operable Unit

06/3/08 -rev 06/30/11 SML SR10131603



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
- CT - Fremont Cottonwood Woodland
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- WS - Willow Scrub
- CWS - Coyote Brush-Willow Scrub
- CBS - Coyote Brush Scrub
- AG - Annual Grassland
- AG/DT - Annual Grassland / Dredger Tailings

Other Features

- DT - Dredger Tailings
- F - Facility
- DB - Detention Basin
- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

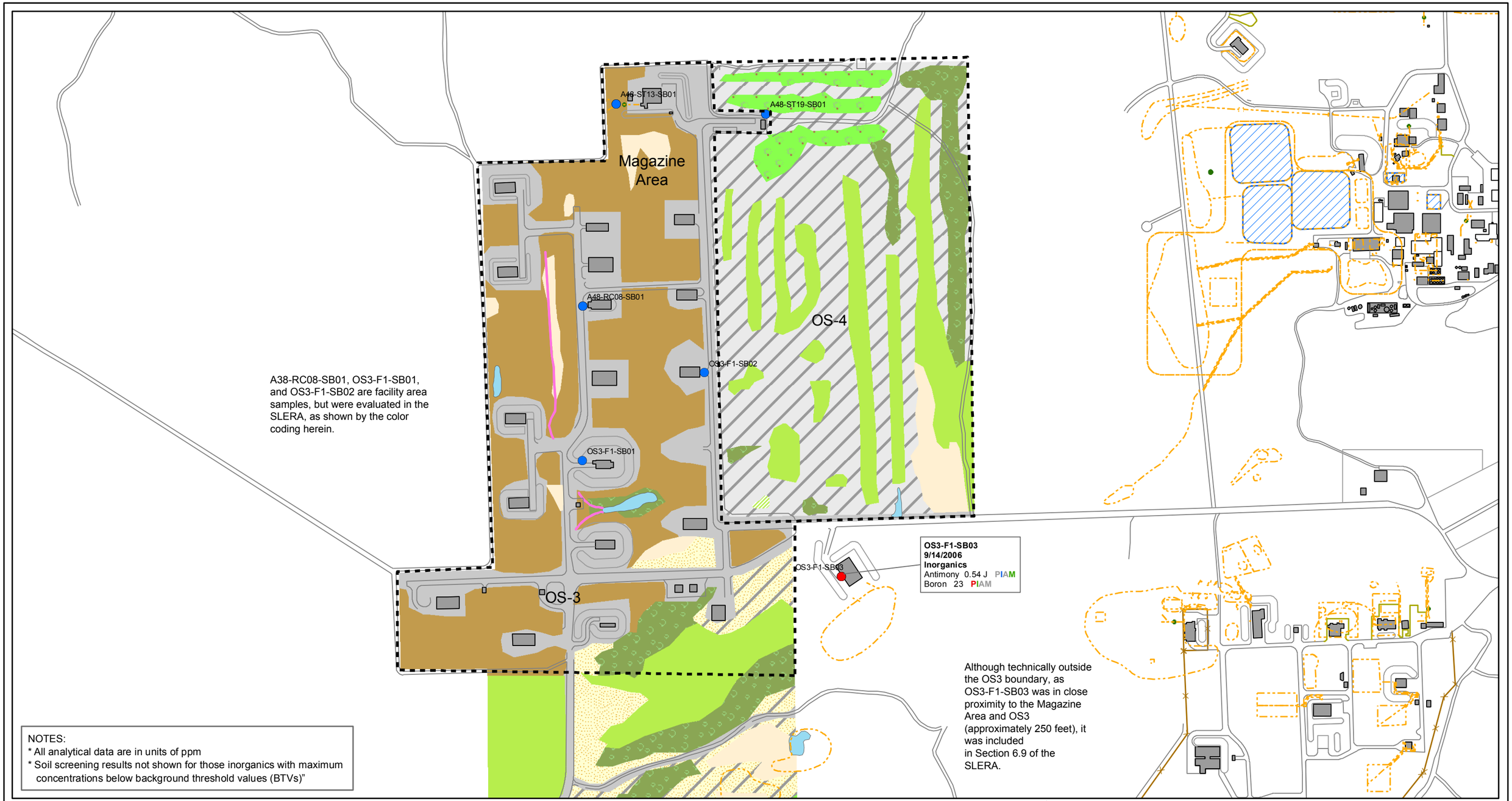
Scale: 1" = 500'

0 250 500

AEROJET
Environmental Remediation

FIGURE 6.9-1
Magazine Area and Open Spaces 3 and 4
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/11 SML SR10131603



Vegetation Type

- RD - Rudural / Disturbed
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Other Features

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- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

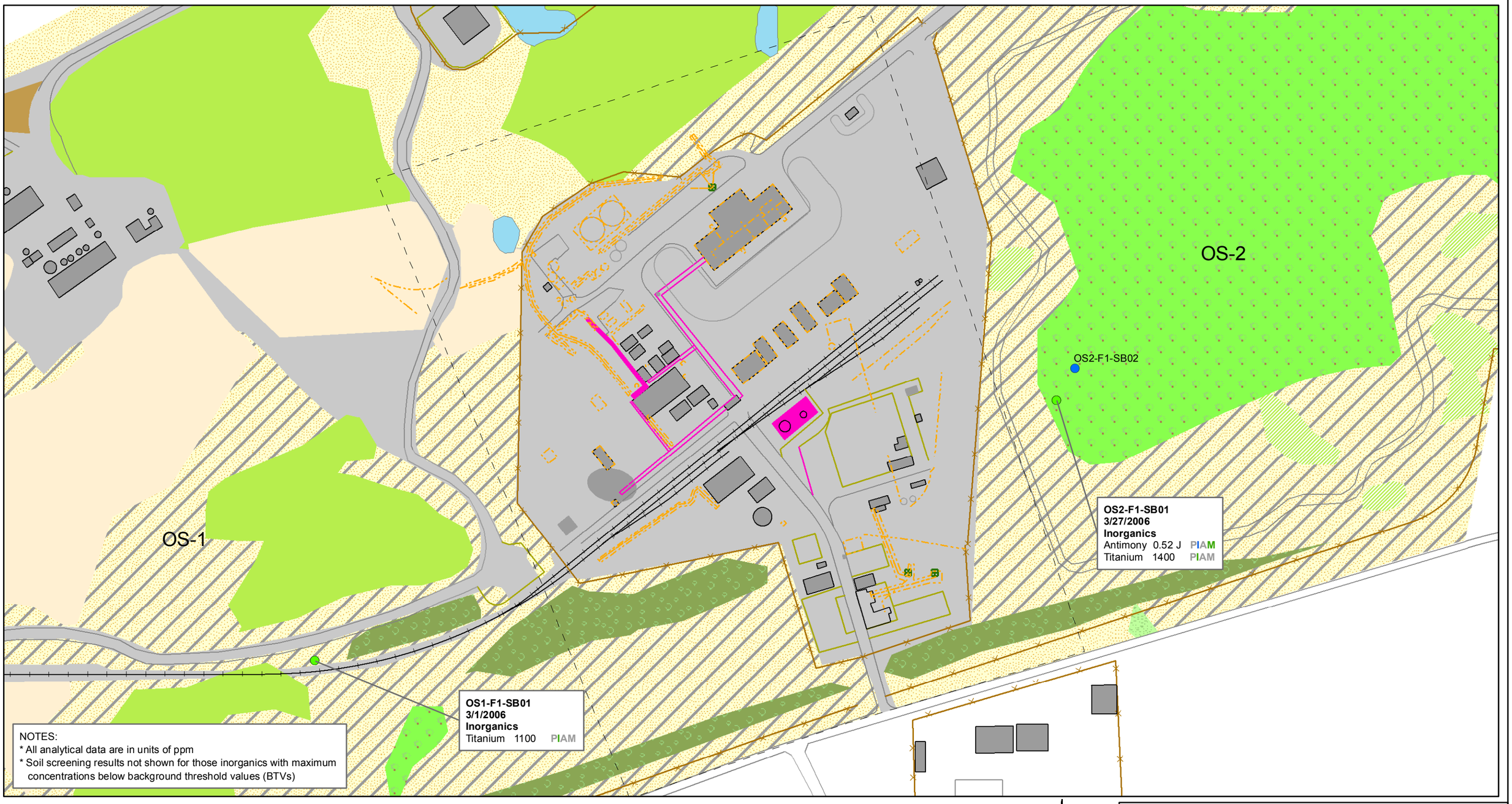
Scale: 1" = 500'

0 250 500

AEROJET
Environmental Remediation

FIGURE 6.9-2
Magazine Area and Open Spaces 3 and 4
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/11 SML SR10131603



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
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- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

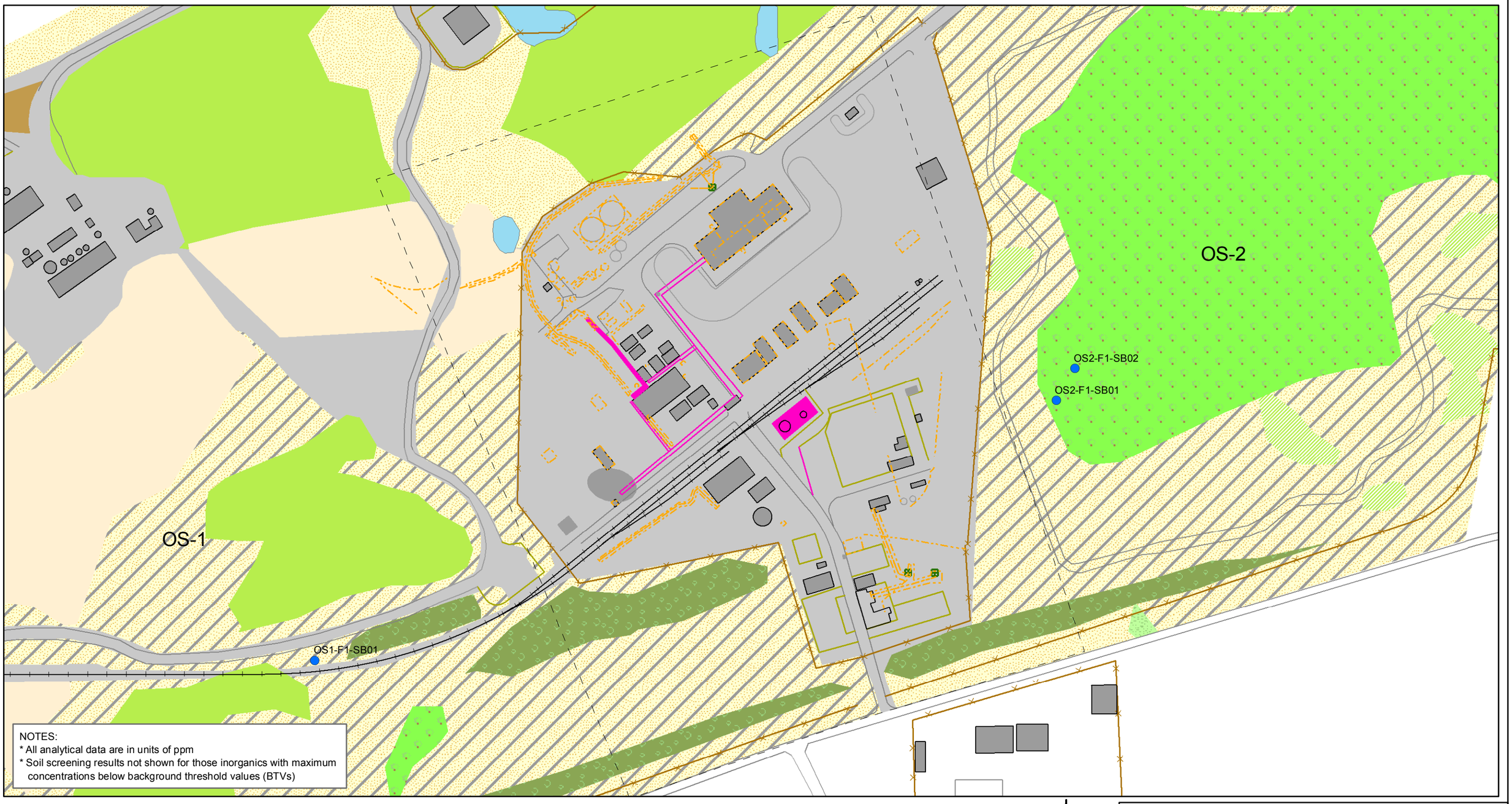
Scale: 1" = 200'

0 100 200

AEROJET
Environmental Remediation

FIGURE 6.10-1
Open Spaces 1 and 2
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
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- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal

N

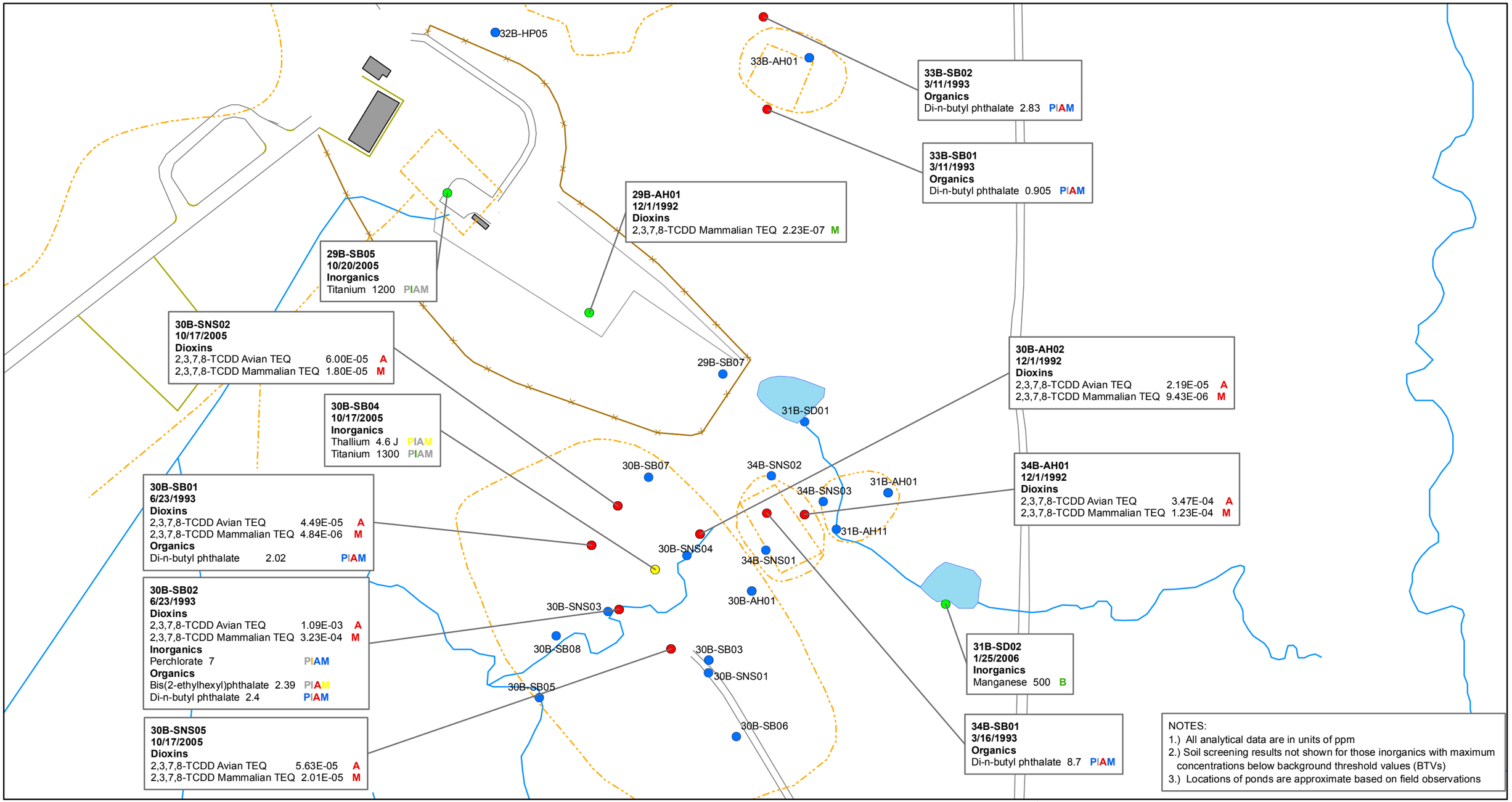
Scale: 1" = 200'

0 100 200

AEROJET
Environmental Remediation

FIGURE 6.10-2
Open Spaces 1 and 2
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Legend

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
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- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal
B = Benthic Macroinvertebrate

N

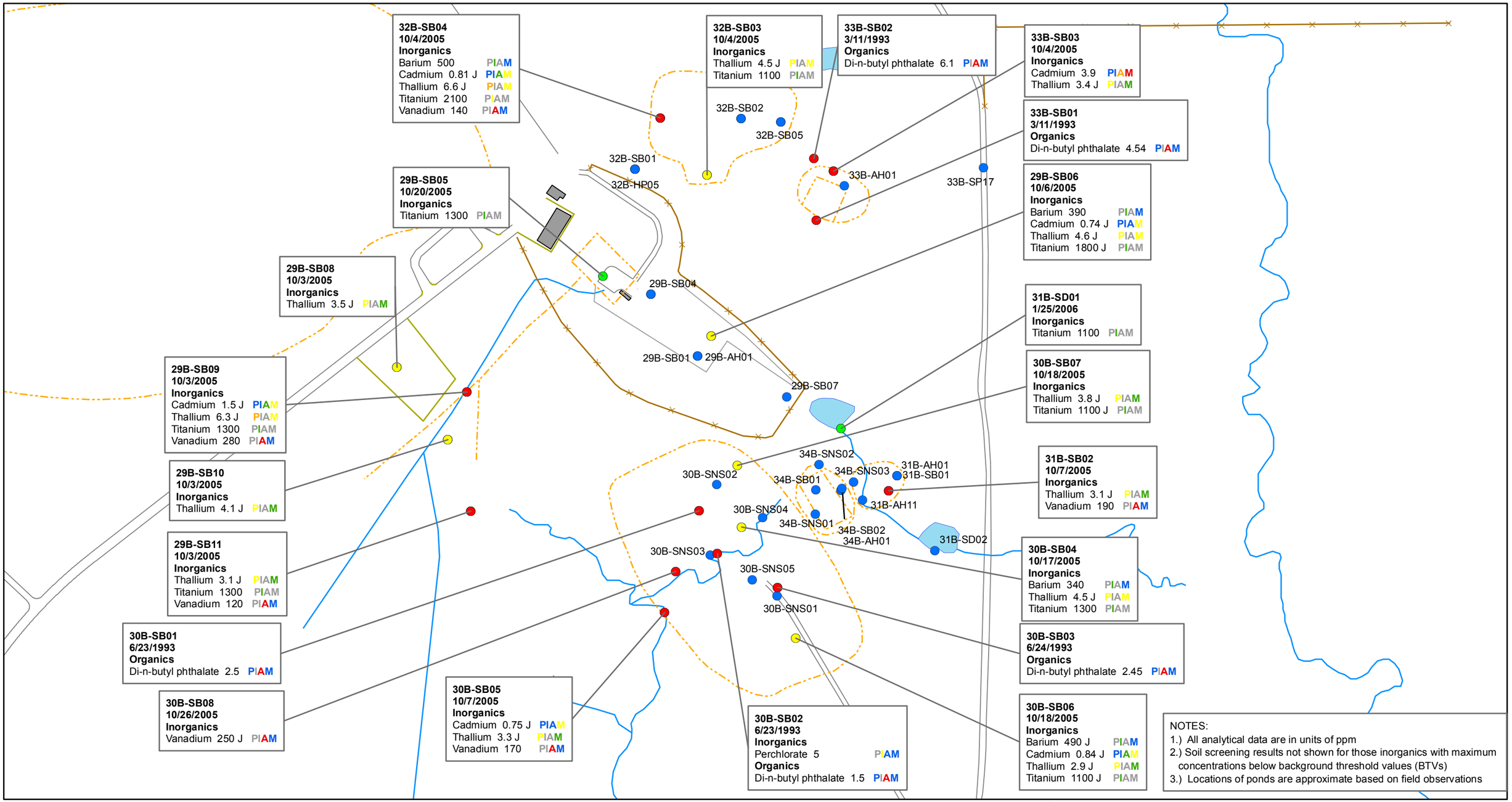
Scale: 1" = 200'

0 100 200 Feet

AEROJET
Environmental Remediation

FIGURE 6.11-1
Area 39
Exceedances of Risk Characterization
Habitat Surface (0-1') Soil and Sediment Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Legend

Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
- CO - Fremont Cottonwood-Oak Woodland
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- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not Exceed ESL and/or BTV
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

P = Plant
I = Invertebrate
A = Avian
M = Mammal
B = Benthic Macroinvertebrate

N

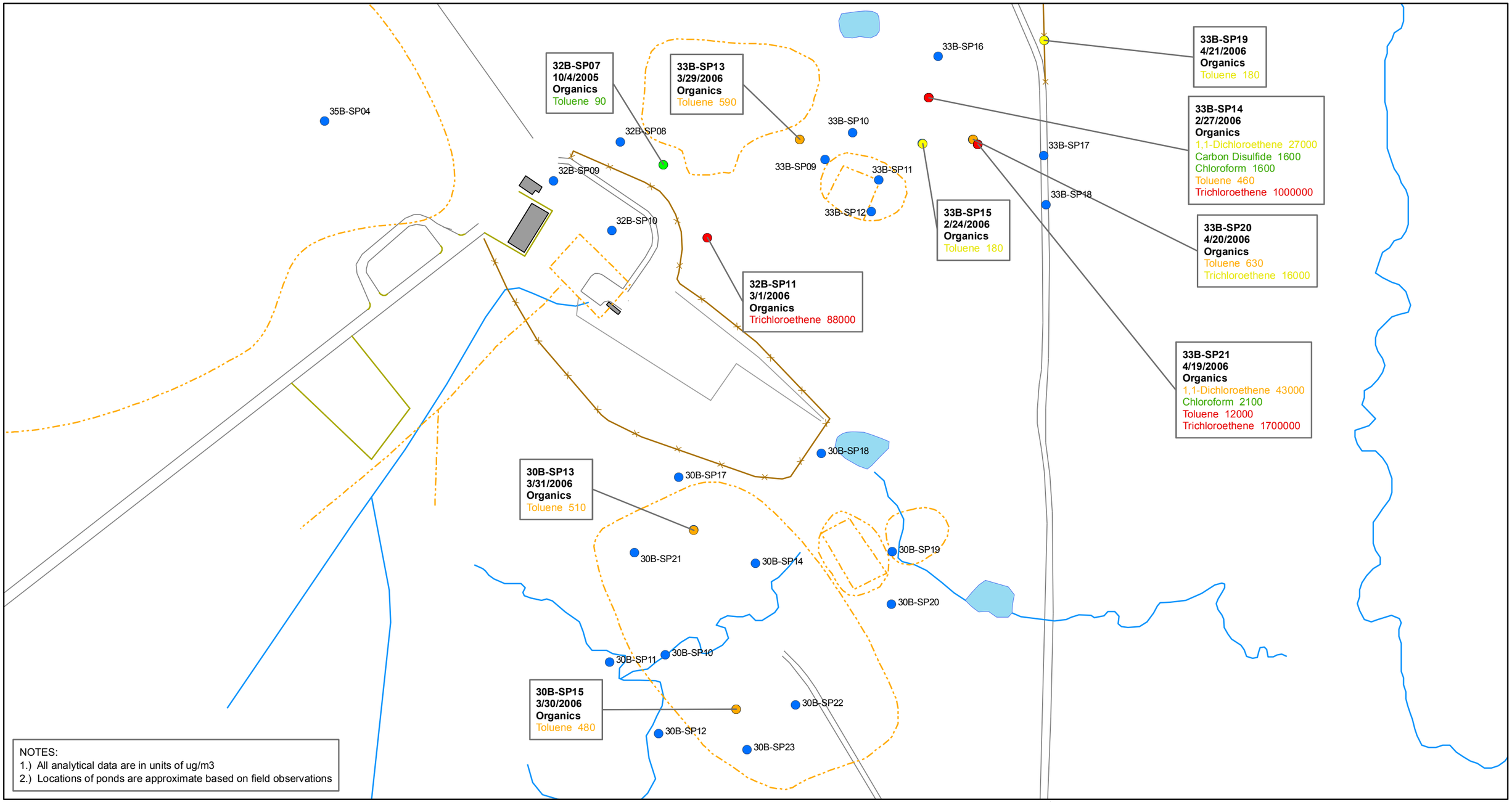
Scale: 1" = 300'

0 150 300 Feet

AEROJET
Environmental Remediation

FIGURE 6.11-2
Area 39
Exceedances of Risk Characterization
Habitat Subsurface (1-6') Soil and Sediment Samples
Aerojet Boundary Operable Unit

07/10/08 -rev 06/30/10 SML SRXXXXXX



Vegetation Type

- RD - Rudural / Disturbed
- OW - Oak Woodland
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Other Features

- DT - Dredger Tailings
- F - Facility
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- Soil Source Areas
- Septic Tank
- Drainage Ditch / Trench
- Pads / Lots
- Pipes
- Structures
- Waterbody / Seasonally Inundated
- Sump / Pond

Locations Exceeding ESL

- No Screening Level Available
- Does not exceed ESL
- 1x the ESL
- 2x the ESL
- 5x the ESL
- 10x the ESL

N

Scale: 1" = 250'

0 125 250 Feet

AEROJET
Environmental Remediation

FIGURE 6.11-3
Area 39
Exceedances of Risk Characterization
Habitat Soil Vapor Samples (Shallowest Sample Depth)
Aerojet Boundary Operable Unit

05/1/10 -rev06/30/10 SML SRXXXXXX

Table 6.1-1 *Summary of Inorganic Soil Screening Levels*
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source	Receptor
Inorganics (mg/kg)			
Antimony	0.27	a	MW
Arsenic	18	a	Plants
Barium	330	a	SI
Beryllium	21	a	MW
Boron	0.5	c	
Cadmium	0.36	a	MW
Chromium	26	a, e	AW
Chromium VI	81	a	MW
Cobalt	13	a	Plants
Copper	28	a	AW
Lead	11	a	AW
Lithium	2	c	Plants
Manganese	220	a	Plants
Mercury	0.00051	c	AW
Molybdenum	2	c	Plants
Nickel	38	a	Plants
Perchlorate	1.17	d	SI
Selenium	0.52	a	Plants
Silver	4.2	a	AW
Thallium	1	c	Plants
Titanium	-	-	
Vanadium	7.8	a	AW
Zinc	46	b	AW

Source Notes:

a - USEPA Ecological Soil Screening Levels (Eco-SSL). http://www.epa.gov/ecotox/ecossl/index.html

b - Benchmark derived based on USEPA Eco-SSL methodology and model equations presented in Attachment 4-1 from Guidance for Developing Ecological Soil Screening Levels (Eco-SSLs) (revised April 2007). http://www.epa.gov/ecotox/ecossl/SOPs.htm

c - Preliminary Remediation Goals for Ecological Endpoints (Efroymson et al., 1997) http://www.esd.ornl.gov/programs/ecorisk/documents/tm162r2.pdf

d - Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization. External Review Draft (January 2002). http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=24002

e - The EcoSSL value of 81 mg/kg for Cr VI is from USEPA (2005) for mammals; however this EcoSSL was revised in USEPA (2008) to 130 mg/kg. As the Eco While Paper was prepared prior to 2008, the original EcoSSL for Cr VI was conservatively used in the BOU SLERA.

Receptor Notes:

SI = Soil Invertebrate
MW = Mammalian Wildlife
AW = Avian Wildlife

ESLs were sought from readily-available sources for detected chemicals; however, if no readily-available ESL was found, the chemical is not listed. A further evaluation of those chemicals without ESLs is presented in the Uncertainty Section (Section 7.3).

Table 6.1-2 Summary of Organic Soil Screening Levels
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source	Receptor
Organics (µg/kg)			
2-Methylnaphthalene	29000	c, 5	SI
4,4'-DDD	21	c	MC
4,4'-DDE	21	c	MC
4,4'-DDT	21	c	MC
Acenaphthene	29000	c, 5	SI
Acenaphthylene	29000	c, 5	SI
Aldrin	8.247	a	MI
alpha-BHC	356	a	AI
Anthracene	29000	c, 5	SI
Aroclor 1016	10.1	a, 1	AI
Aroclor 1221	10.1	a, 1	AI
Aroclor 1232	10.1	a, 1	AI
Aroclor 1242	10.1	a, 1	AI
Aroclor 1248	10.1	a, 1	AI
Aroclor 1254	10.1	a, 1	AI
Aroclor 1260	10.1	a, 1	AI
Benzo (a) anthracene	1100	c, 6	MI
Benzo (a) pyrene	1100	c, 6	MI
Benzo (b & k) fluoranthene (total)	1100	c, 6	MI
Benzo (b) fluoranthene	1100	c, 6	MI
Benzo (ghi) perylene	1100	c, 6	MI
Benzo (k) fluoranthene	1100	c, 6	MI
Benzyl butyl phthalate	12.5	a, 2	AI
beta-BHC	315	a	MI
Bis(2-ethylhexyl)phthalate	40	a	AI
Chrysene	1100	c, 6	MI
delta-BHC	346	a	AI
Dibenz (a,h) anthracene	1100	c, 6	MI
Dieldrin	4.9	c	MI
Dimethyl phthalate	12.5	a, 2	AI
Di-n-butyl phthalate	12.5	a	AI
Di-n-octyl phthalate	12.5	a, 2	AI
Endosulfan I	63.3	a	MI
Endosulfan II	63.3	a	MI
Endosulfan sulfate	63.3	a, 3	MI
Endrin	3.163	a	AI
Endrin aldehyde	5.284	a	AI
Fluoranthene	1100	c, 6	MI
Fluorene	29000	c, 5	SI
gamma-BHC (Lindane)	29.281	a	MI
Heptachlor	3.394	a	MI

Table 6.1-2 Summary of Organic Soil Screening Levels
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source	Receptor
Heptachlor epoxide	363	a, 4	MI
Indeno (1,2,3-cd) pyrene	1100	c, 6	MI
Methoxychlor	5742	a	MI
Naphthalene	29000	c, 5	SI
PCBs	10.1	a, 1	AI
Pendimethalin (Prowl)	624	a	MI
Pentachlorophenol	2100	c	AI
Phenanthrene	29000	c, 5	SI
Phenol	30000	b	SI
Pyrene	1100	c, 6	MI
2,3,7,8-TCDD	0.00014	a	MI

Source Notes:

See Appendix A Risk Assessment White Papers

a - Benchmark derived based on USEPA Eco-SSL methodology and model equations presented in Attachment 4-1 from *Guidance for Developing Ecological Soil Screening Levels (Eco-SSLs)* (revised April 2007). http://www.epa.gov/ecotox/ecossl/SOPs.htm

1 - The PCB screening level was used as a surrogate for all PCBs/Aroclors.

2 - The di-n-butylphthalate screening level was used as a surrogate for all phthalates for which TRVs were not available.

3 - The endosulfan screening level was used as a surrogate for endosulfan sulfate.

4 - The heptachlor screening level was used as a surrogate for heptachlor epoxide.

b - Toxicological Benchmarks for Contaminants of Potential Concern for Effects on Soil and Litter Invertebrates and Heterotrophic Process: 1997 Revision (Efroymson et al., 1997). http://www.hsrd.ornl.gov/ecorisk/tm126r21.pdf

c - USEPA Ecological Soil Screening Levels (Eco-SSL). http://www.epa.gov/ecotox/ecossl/index.html.

5 - Eco-SSL for low molecular weight PAHs

6 - Eco-SSL for high molecular weight PAHs

Receptor Notes:

MI = Mammalian Insectivore (Short-tailed Shrew)

MC = Mammalian Carnivore (Long-tailed Weasel)

AI = Avian Insectivore (Am Woodcock)

AC = Avian Carnivore (Red-tailed Hawk)

SI = Soil Invertebrate

ESLs were sought from readily-available sources for detected chemicals; however, if no readily-available ESL was found, the chemical is not listed. A further evaluation of those chemicals without ESLs is presented in the Uncertainty Section (Section 7.3).

Table 6.1-3 *Summary of Soil Vapor Screening Levels*
Aerojet Superfund Site
Sacramento County, California

Constituent	(mg/m^3)	(µg/m^3)
2-Butanone (MEK)	860	860,000
2-Hexanone	4.9	4,880
Acetone	1305	1,305,000
Benzene	0.57	571
Carbon Disulfide	1.2	1,200
Carbon Tetrachloride	6.3	6,290
Chloroethane	992	992,050
Chloroform	1.2	1,200
Cumene	23	23,232
Dichloroethane, 1,1-	181	180,500
Dichloroethane, 1,2-	42	42,167
Dichloroethene, 1,1-	6.0	5,950
Dichloroethene, cis-1,2-	19	18,880
Dichloroethene, trans-1,2-	19	18,880
Ethylbenzene	23	23,232
Freon 11	88	88,400
Freon 12	88	88,400
Freon 113	88	88,400
Methyl tert-butyl ether (MTBE)	258	257,500
Methylene Chloride	8.7	8,700
Styrene	192	191,650
Tetrachloroethene	24	24,250
Toluene	0.084	84
Trichloroethane, 1,1,1-	191	191,000
Trichloroethane, 1,1,2-	5.7	5,675
Trichloroethene	6.4	6,429
Trimethylbenzene, 1,2,4-	16	15,500
Trimethylbenzene, 1,3,5-	16	15,500
Vinyl Chloride	0.56	557
Xylene, o-	16	15,500
Xylenes, m,p-	16	15,500
Xylenes, total	16	15,500

Source Notes:

See Appendix A Risk Assessment White Papers

Source : DTSC soil vapor ESLs for Edwards Air Force Base

ESLs were sought from readily-available sources for detected chemicals; however, if no readily-available ESL was found, the chemical is not listed. A further evaluation of those chemicals without ESLs is presented in the Uncertainty Section (Section 7.3).

Table 6.1-4 Summary of Surface Water Screening Levels
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source
Organics (µg/L)		
4-Methylphenol	not available	
Aldrin	3.0	c
alpha-BHC	2.2	f, 7
Bis(2-ethylhexyl)phthalate	3.0	d
Bromodichloromethane	not available	
Bromoform	not available	
Chloroform	1240	c
delta-BHC	2.2	f, 7
Dibromochloromethane	not available	
Diesel Range Organics (C10-C28)	not available	
Endrin aldehyde	0.036	e
gamma-BHC (Lindane)	0.08	c
Heptachlor	0.0038	a
Heptachlor epoxide	0.0038	a
Hexadecanoic acid	not available	
Methoxychlor	0.03	b
Methylene chloride	2200	f
Motor Oil Range Organics (C16-C36)	not available	
Nitroguanidine-DISS	not available	
N-Nitrosodimethylamine	40	g
Pendimethalin (Prowl)	5.2	i
Tetrachloroethene	840	c
Trichlorofluoromethane	not available	
Inorganics (mg/L)		
Aluminum	0.087	b, 4
Antimony	0.61	c
Arsenic	0.15	a, 1
Barium	0.004	d
Beryllium	0.0053	c
Bicarbonate Alkalinity	not available	
Boron	0.0016	f
Cadmium	0.0022	a, 1, 2
Calcium	not available	
Carbonate Alkalinity	not available	
Chloride	230	b
Chromium	0.18	a, 1, 2
Cobalt	0.023	f
Copper	0.009	a, 1, 2
Dissolved Organic Carbon	not available	
Fluoride	not available	
Hexavalent Chromium	0.011	a, 1
Iron	1.0	b
Lead	0.0025	a, 1, 2
Lithium	0.014	f
Magnesium	not available	
Manganese	0.12	f
Mercury	0.00077	b, 5, 6
Molybdenum	0.37	f
Nickel	0.052	a, 1, 2
Nitrate as NO3	not available	
Nitrite as NO2	not available	
Perchlorate	9.3	h
Phosphate	not available	
Potassium	not available	
Selenium	0.005	a, 3
Silver	0.00012	d

Table 6.1-4 Summary of Surface Water Screening Levels
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source
Sodium	not available	
Strontium	1.5	f
Sulfate as SO4	not available	
Thallium	0.02	c
Titanium	not available	
Total Alkalinity	not available	
Total Cyanide	0.0052	a
Vanadium	0.02	f
Zinc	0.12	a, 1, 2

Source Notes:

See Appendix A Risk Assessment White Papers

a - California Toxic Rule (CTR) Water Quality Standards, Federal Register 40 CFR Part 131, May 18, 2000.
1 - dissolved value used
2 - hardness dependant - A hardness of 100 mg/L was assumed
3 - total recoverable metal

b - USEPA National Recommended Water Quality Criteria. 2006.
http://www.epa.gov/waterscience/criteria/wqcriteria.html
Freshwater Criterion Continuous Concentration (CCC) values used
4 - pH dependant
5 - hardness dependant - A hardness of 100 mg/L was assumed
6 - inorganic mercury II value used

c - California Environmental Protection Agency. Central Valley Regional Water Quality Control Board.
Recommended Numerical Limits to Translate Water Quality Objectives. 9 July 2007.
http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_standards_limits/index.html
Aquatic life values used

d - USEPA Region 6. Toxicity Reference Values. Screening Level Ecological Risk Assessment Protocol. August 1999.
http://www.epa.gov/earth1r6/6pd/rcra_c/protocol/appe-all.pdf
Table E-1, TRV values used

e - Buchman, M. F., 1999. NOAA Screening Quick Reference Tables, NOAA HAZMAT Report 99-1, Seattle WA,
Coastal Protection and Restoration Division, National Oceanic and Atmospheric Administration, 12 pages.
http://response.restoration.noaa.gov/book_shelf/122_squirt_cards.pdf
Freshwater CCC Endrin value used

f - Suter, G.W. II, and C.L. Tsao. 1996. Toxicological Benchmarks for Screening of Potential Contaminants of Concern for
Effects on Aquatic Biota on Oak Ridge Reservation: 1996 Revision. Oak Ridge National Laboratory, Oak Ridge, TN.
104 pp. ES/ER/TM-96/R2.
http://www.esd.ornl.gov/programs/ecorisk/documents/tm96r2.pdf
Tier II Chronic values used
7 - BHC (other) value used

g - World Health Organization, Geneva, 2002. Concise International Chemical Assessment (CICADS) Document 38.
http://www.inchem.org/documents/cicads/cicads/cicad38.htm
Estimated No-Effects value used

h - Development of Freshwater Water-Quality Criteria for Perchlorate. Dean et al.
Environmental Toxicology and Chemistry, Vol. 23, No. 6, pp. 1441-1451, 2004.
CCC value used

i - See Table A-7 for derivation and calculation of screening level.

ESLs were sought from readily-available sources for detected chemicals; however, if no readily-available ESL was found, the chemical is not listed. A further evaluation of those chemicals without ESLs is presented in the Uncertainty Section (Section 7.3).

Table 6.1-5 Summary of Sediment Screening Levels
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source
Organics (µg/kg)		
4,4'-DDE	3.16	a, 1
4,4'-DDT	4.16	a, 1
Aldrin	2.0	b
alpha-BHC	6.0	b
Anthracene	57.2	a, 1
Benzo (a) anthracene	108	a, 1
Benzo (a) pyrene	150	a, 1
Benzo (b & k) fluoranthene (total)	240	b
Benzo (ghi) perylene	170	b
Benzyl butyl phthalate	11000	c, 4
Bis(2-ethylhexyl)phthalate	890000	c, 4
Chrysene	166	a, 1
delta-BHC	3.0	b
Dibenz (a,h) anthracene	33	a, 1
Dieldrin	1.9	a, 1
Endosulfan I	2.9	d
Endosulfan II	14	d
Endrin	2.22	a, 1
Fluoranthene	423	a, 1
gamma-BHC (Lindane)	2.37	a, 1
Heptachlor	2.47	a, 1, 3
Heptachlor epoxide	2.47	a, 1
Indeno (1,2,3-cd) pyrene	78	c, 5
Methylene chloride	1316	c, 4
PCB-1248	59.8	a, 1
PCB-1254	59.8	a, 1
PCB-1260	59.8	a, 1
Pendimethalin (Prowl)	370	h
Pentachlorophenol	360	c, 6
Phenanthrene	204	a, 1
Phenol	420	c, 6
Pyrene	195	a, 1
Toluene	53	c, 4
Inorganics (mg/kg)		
Antimony	2.0	f
Arsenic	9.79	a, 1
Cadmium	0.99	a, 1
Chromium	43.4	a, 1
Copper	31.6	a, 1
Lead	35.8	a, 1
Manganese	460	b

Table 6.1-5 Summary of Sediment Screening Levels
Aerojet Superfund Site
Sacramento County, California

Constituent	Screening Level	Source
Mercury	0.18	a, 1
Nickel	16	b
Selenium	2.0	g
Silver	1.0	f
Zinc	121	a, 1

Source Notes:

See Appendix A Risk Assessment White Papers

a - MacDonald, D.D., C.G. Ingersoll, and T.A. Berger. 2000. "Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems." Archives of Environmental Contamination and Toxicology. Volume 39. Pages 20 through 31.

1 - Value shown is a Threshold Effect Concentration

2 - Value shown is a Probable Effect Concentration (not used)

3 - Heptachlor epoxide was used as a toxicological surrogate for heptachlor.

b - Persaud, D., Jaagumagi, R., and Hayton, A. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. ISBN 0-7729-9248-7. Ontario Ministry of the Environment, Ottawa, Ontario.

c - Jones, D.S., G.W. Suter II, and R.N. Hull. 1997. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision.

4 - Equilibrium Partitioning (EqP)-derived screening level based on a secondary chronic value (Table 3).

5 - Assessment and Remediation of Contaminated Sediments (ARCS) Program Threshold Effect Concentration (TEC) (Table 4).

6 - Washington State sediment quality standards for ionizable organic compounds (Table 2).

d - Sediment Quality Advisory Levels/Sediment Quality Criteria (values are lower limit of 95% confidence limit). USEPA, 1997.

e - Apparent Effects Threshold-High (Barrick et al., 1988) (not used).

f - Long, E.R., MacDonald, D.D., Smith, S.L., and Calder, F.D. 1995. "Incidence of Adverse Biological Effects within ranges of Chemical Concentrations in marine and estuarine Sediments". Environmental Management Vol. 19, No. 1. pp.81-97.

g - Lemley, A.D. 2002. Selenium assessment in aquatic ecosystems. US Forest Service, Blacksburg, VA.

h - See Table A-7 for derivation and calculation of screening level.

ESLs were sought from readily-available sources for detected chemicals; however, if no readily-available ESL was found, the chemical is not listed. A further evaluation of those chemicals without ESLs is presented in the Uncertainty Section (Section 7.3).

Table 6.1-6 Cross-Reference Table for Remedial Investigation, Human Health Risk Assessment, and Screening Level Ecological Risk Assessment Sections
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Management Area	RI Section	RI Figures	HHRA Section	SLERA Section
Administration Area (East and West)	4.0	4.2-9 to 4.2-14 4.3-7 to 4.3-12	5.2	6.2
Line 02 Region	5.1, 5.6, 5.7	5.1-11, 5.1-12, 5-1-14	5.3, 5.12	6.3
Line 05 North Area	5.2, 5.6, 5.7	5.2-10, 5.2-11, 5.2-12, 5.2-13	5.4, 5.12	6.4
Westlakes/Open Space 6	5.3, 5.6, 5.7	5.3-2, 5.3-3, 5.3-6, 5.3-7	5.5, 5.12	6.5
Ditch/Buffalo Creek	5.4, 5.6, 5.7	5.4-3	5.11, 5.12	6.6
Open Space Areas 5 and 7	5.5, 5.6, 5.7	NA	5.9, 5.12	6.7
Chemical Plant 2 Region	6.1, 6.5	6.1-9, 6.1-10, 6.1-11, 6.1-12, 6.1-13, 6.1-14	5.6, 5.13	6.8
Magazine Area	6.2, 6.5	6.2-3	5.7, 5.13	6.9
Dredge Pit and Eastern Basin	6.3, 6.5	6.3-4, 6.3-5	5.6, 5.13	6.8
Open Space Areas 1, 2, 4	6.4, 6.5	NA	5.8, 5.13	6.10
Area 39	7.0	7.2-8	5.10	6.11

RI = Remedial Investigation
HHRA = Human Health Risk Assessment
SLERA = Screening Level Ecological Risk Assessment
NA = Not Applicable

Table 6.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area East	79-34-5	1,1,2,2-Tetrachloroethane	0.40	3.00	mg/kg	51D-SB04	1	7	6	85.7%	0.21 - 0.21	NA	Y	
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND*
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 130	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.51 - 67	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	91-57-6	2-Methylnaphthalene	2.50	2.50	mg/kg	03D-AH01	3	175	1	0.6%	0.2 - 13	2.9E+01	N	BSL
	95-48-7	2-Methylphenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 67	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	NA		171	0	0.0%	0.51 - 27	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 67	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 67	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	NA		174	0	0.0%	0.2 - 13.3	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	NA		174	0	0.0%	0.2 - 13.3	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	NA		175	0	0.0%	0.51 - 67	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 67	NA	N	ND
	83-32-9	Acenaphthene	0.00	21.00	mg/kg	03D-AH01	3	175	6	3.4%	0.0067 - 1.7	2.9E+01	N	ND
	208-96-8	Acenaphthylene	0.01	0.13	mg/kg	03D-SB46-5	5	175	3	1.7%	0.0067 - 13	2.9E+01	N	BSL
	7429-90-5	Aluminum	5,750.00	71,000.00	mg/kg	A20-ST20-SB01-5.0	5	185	182	98.4%	9100 - 17000	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	120-12-7	Anthracene	0.00	53.00	mg/kg	03D-AH01	3	175	7	4.0%	0.0067 - 1.7	2.9E+01	Y	
	7440-36-0	Antimony	0.06	2.00	mg/kg	03D-SB32-5.0	5	184	118	64.1%	1 - 8.9	2.7E-01	N	BG
	12674-11-2	PCB-1016	0.01	0.08	mg/kg	11D-SNS12-0.5	0.5	165	3	1.8%	0.02 - 1.1	1.0E-02	Y	
	11104-28-2	PCB-1221	ND	ND	mg/kg	NA		165	0	0.0%	0.02 - 1.1	1.0E-02	N	ND*
	11141-16-5	PCB-1232	ND	ND	mg/kg	NA		165	0	0.0%	0.02 - 1.1	1.0E-02	N	ND*
	53469-21-9	PCB-1242	ND	ND	mg/kg	NA		165	0	0.0%	0.02 - 1.1	1.0E-02	N	ND*
	12672-29-6	PCB-1248	0.01	0.03	mg/kg	11D-SNS12-0.5	0.5	165	2	1.2%	0.02 - 1.1	1.0E-02	Y	
	11097-69-1	PCB-1254	0.01	47.00	mg/kg	03D-SB33-5-T	5	165	32	19.4%	0.02 - 0.57	1.0E-02	Y	
	11096-82-5	PCB-1260	0.01	1.60	mg/kg	11D-SB06-1.0	1	165	18	10.9%	0.02 - 1.1	1.0E-02	Y	
	7440-38-2	Arsenic	1.80	29.00	mg/kg	A20-ST01-SB02-5.0	5	185	155	83.8%	0.94 - 7.5	1.8E+01	N	BG
	103-33-3	Azobenzene	ND	ND	mg/kg	NA		146	0	0.0%	0.2 - 1	NA	N	ND

Table 6.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area East	7440-39-3	Barium	36.00	320.00	mg/kg	03D-SB55-5.0	5	185	182	98.4%	35 - 110	3.3E+02	N	BSL
	922-87-5	Benzidine	ND	ND	mg/kg	NA		146	0	0.0%	0.36 - 1.8	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.00	110.00	mg/kg	03D-AH02	3	175	24	13.7%	0.0067 - 1.7	1.1E+00	Y	
	50-32-8	Benzo (a) pyrene	0.01	67.00	mg/kg	03D-AH02	3	174	13	7.5%	0.0067 - 1.7	1.1E+00	Y	
	205-99-2	Benzo (b & k) fluoranthene (total)	0.01	0.09	mg/kg	03D-SNS34-0.25	0.25	145	15	10.3%	0.013 - 0.46	1.1E+00	N	BSL
	205-99-2	Benzo (b) fluoranthene	48.00	60.00	mg/kg	03D-AH02	3	29	2	6.9%	0.33 - 1.7	1.1E+00	Y	
	191-24-2	Benzo (ghi) perylene	0.01	18.30	mg/kg	03D-AH01	3	174	5	2.9%	0.0067 - 13	1.1E+00	Y	
	207-08-9	Benzo (k) fluoranthene	56.00	63.00	mg/kg	03D-AH02	3	29	2	6.9%	0.33 - 1.7	1.1E+00	Y	
	65-85-0	Benzoic acid	ND	ND	mg/kg	NA		175	0	0.0%	0.51 - 67	NA	N	ND
	100-51-6	Benzyl alcohol	0.12	37.00	mg/kg	03D-SB40-3.75	3.75	175	2	1.1%	0.2 - 13	NA	Y	
	7440-41-7	Beryllium	0.13	1.30	mg/kg	A20-ST20-SB01-5.0	5	185	142	76.8%	0.22 - 0.5	2.1E+01	N	BSL
	AER-001-412	Bis(2-Chloroethoxy)methane	ND	ND	mg/kg	NA		177	0	0.0%	0.2 - 13.3	NA	N	ND
	111-44-4	Bis(2-Chloroethyl)ether	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	AER-001-413	Bis(2-Chloroisopropyl)ether	ND	ND	mg/kg	NA		177	0	0.0%	0.2 - 13.3	NA	N	ND
	AER-001-414	Bis(2-Ethylhexyl)phthalate	0.05	0.05	mg/kg	03D-SB42-1	1	176	1	0.6%	0.51 - 13.3	4.0E-02	Y	
	7440-42-8	Boron	2.50	23.00	mg/kg	A20-ST20-SB01-5.0	5	185	96	51.9%	4.1 - 50	5.0E-01	Y	
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	1.3E-02	N	ND*
	7440-43-9	Cadmium	0.05	5.89	mg/kg	11D-SNS02	0.01	185	75	40.5%	0.41 - 1.3	3.6E-01	N	BG
	7440-70-2	Calcium	1,270.00	14,000.00	mg/kg	03D-SB01	1	39	39	100.0%	0 - 0	NA	N	EN
	86-74-8	Carbazole	ND	ND	mg/kg	NA		146	0	0.0%	0.2 - 1	NA	N	ND
	7440-47-3	Chromium	23.00	268.00	mg/kg	03D-AH02	3	185	182	98.4%	14 - 36	2.6E+01	N	BG
	1333-82-0	Chromium VI	0.07	4.00	mg/kg	03D-SNS34	0.25	145	132	91.0%	0.21 - 0.31	8.1E+01	N	BSL
	218-01-9	Chrysene	0.00	110.00	mg/kg	03D-AH02	3	175	30	17.1%	0.0067 - 1.7	1.1E+00	Y	
	7440-48-4	Cobalt	4.90	50.00	mg/kg	03D-SB40-3.75	3.75	185	182	98.4%	5 - 17	1.3E+01	N	BG
	7440-50-8	Copper	12.00	163.00	mg/kg	03D-SB01	1	185	182	98.4%	24 - 30	2.8E+01	N	BG
	53-70-3	Dibenz (a,h) anthracene	6.44	6.44	mg/kg	03D-AH01	3	174	1	0.6%	0.0067 - 13	1.1E+00	Y	
	132-64-9	Dibenzofuran	0.06	7.80	mg/kg	03D-AH01	3	175	2	1.1%	0.2 - 13	NA	Y	
	68334-30-5	Diesel Range Organics (C10-C28)	0.77	1,400.00	mg/kg	11D-SB05-1.0	1	169	113	66.9%	1.7 - 77	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	131-11-3	Dimethyl phthalate	2.60	2.60	mg/kg	03D-SNS34-0.25	0.25	175	1	0.6%	0.2 - 13	1.3E-02	Y	
	84-74-2	Di-n-butyl phthalate	0.80	38.50	mg/kg	51D-SB04	5	177	26	14.7%	0.41 - 13	1.3E-02	Y	
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	1.3E-02	N	ND*
	206-44-0	Fluoranthene	0.00	170.00	mg/kg	03D-AH01 / 03D-AH02	3/ 0.01	175	25	14.3%	0.0067 - 1.7	1.1E+00	Y	
	86-73-7	Fluorene	0.00	21.00	mg/kg	03D-AH02	3	175	6	3.4%	0.0067 - 1.7	2.9E+01	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	NA		175	0	0.0%	0.67 - 13	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	AER-001-224	Hexadecanoic Acid	NA	NA	mg/kg	NA		NA	NA	NA	NA	NA	NA	NA
	AER-001-226	Hexadecanoic Acid, Dioctylester	NA	NA	mg/kg	NA		NA	NA	NA	NA	NA	NA	NA
	193-39-5	Indeno (1,2,3-cd) pyrene	0.01	22.00	mg/kg	03D-AH02 - 3	3	174	4	2.3%	0.0067 - 1.7	1.1E+00	Y	
	7439-89-6	Iron	9,310.00	36,700.00	mg/kg	03D-SB01	1	39	39	100.0%	0 - 0	NA	Y	
	78-59-1	Isophorone	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND

Table 6.2-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
NAdmin Area East	8008-20-6	Kerosene	ND	ND	mg/kg	NA		20	0	0.0%	1 - 12	NA	N	ITC
	7439-92-1	Lead	1.90	379.00	mg/kg	11D-SNS02	0.01	193	182	94.3%	3 - 7.7	1.1E+01	N	BG
	7439-92-1	Lithium	3.10	41.00	mg/kg	A20-ST01-SB02-5.0	5	146	142	97.3%	5.5 - 7.4	2.0E+00	Y	
	7439-95-4	Magnesium	2,560.00	7,370.00	mg/kg	03D-SB02	1	39	39	100.0%	0 - 0	NA	N	EN
	7439-96-5	Manganese	160.00	1,700.00	mg/kg	A20-ST20-SB01-5.0	5	185	182	98.4%	110 - 800	2.2E+02	N	BG
	7439-97-6	Mercury	0.00	1.25	mg/kg	03D-SB02	0.01	185	150	81.1%	0.021 - 0.1	5.1E-04	Y	
	7439-98-7	Molybdenum	0.15	100.00	mg/kg	A20-RB37-SB01-1.0	1	150	135	90.0%	1.1 - 2	2.0E+00	Y	
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.20	4,300.00	mg/kg	03D-SB17-1.0	1	143	114	79.7%	4.2 - 8.9	NA	N	ITC
	91-20-3	Naphthalene	0.00	2.20	mg/kg	03D-AH01	3	168	7	4.2%	0.0067 - 13	2.9E+01	N	BSL
	7440-02-0	Nickel	16.00	144.00	mg/kg	03D-AH02	3	185	182	98.4%	17 - 30	3.8E+01	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	0.0003	0.0003	mg/kg	03D-SB35-5.0	5	177	1	0.6%	0.0031 - 13	NA	Y	
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	NA		32	0	0.0%	0.21 - 13	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	NA		143	0	0.0%	0.2 - 1	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	NA		175	0	0.0%	0.2 - 13	NA	N	ND
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	98.00	469.00	mg/kg	03D-AH02	0.01	3	3	100.0%	0 - 0	NA	N	ITC
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	NA		175	0	0.0%	0.67 - 67	2.1E+00	N	ND*
	7601-90-3	Perchlorate	0.01	0.03	mg/kg	11D-SB09-1.0	1	113	2	1.8%	0.0063 - 43	1.2E+00	Y	
	AER-001-248	Petroleum Hydrocarbons	26.00	2,100.00	mg/kg	03D-SB07	1	22	15	68.2%	20 - 20	NA	N	ITC
	85-01-8	Phenanthrene	0.00	140.00	mg/kg	03D-AH01	3	175	36	20.6%	0.0067 - 1.7	2.9E+01	Y	
	108-95-2	Phenol	0.06	7.30	mg/kg	11D-SB05-1.0	1	175	49	28.0%	0.21 - 13	3.0E+01	N	BSL
	1336-36-3	Polychlorinated biphenyl	ND	ND	mg/kg	NA		17	0	0.0%	0.033 - 0.167	1.0E-02	N	ND*
	9/7/7440	Potassium	729.00	2,250.00	mg/kg	11D-SNS02	0.01	39	39	100.0%	0 - 0	NA	N	EN
	129-00-0	Pyrene	0.01	180.00	mg/kg	03D-AH02	3	175	23	13.1%	0.0067 - 1.7	1.1E+00	Y	
	7782-49-2	Selenium	0.22	3.30	mg/kg	03D-SB32-5.0-T	5	185	57	30.8%	1 - 7.5	5.2E-01	N	BG
	7440-22-4	Silver	0.05	3.49	mg/kg	11D-SNS02	0.01	185	25	13.5%	0.54 - 2.1	4.2E+00	N	BSL
	7440-23-5	Sodium	117.00	480.00	mg/kg	03D-SB04	5	39	38	97.4%	100 - 100	NA	N	EN
	7440-24-6	Strontium	12.00	64.00	mg/kg	A20-ST01-SB02-5.0	5	146	143	97.9%	13 - 26	NA	Y	
	7440-28-0	Thallium	0.11	7.80	mg/kg	03D-SB03	1	185	99	53.5%	0.53 - 8.6	1.0E+00	N	BG
	7440-31-5	Tin	ND	ND	mg/kg	NA		4	0	0.0%	50 - 50	NA	N	ND
	7440-32-6	Titanium	270.00	1,500.00	mg/kg	03D-SB51-5.0	5	150	147	98.0%	490 - 810	1.0E+03	Y	
		Total Cyanide	0.76	1.80	mg/kg	11D-SNS21-0.5-T	0.5	100	2	2.0%	0.49 - 0.79	4.0E-02	Y	
	AER-001-090	Total Recov. Petroleum Hydrocarbons	26.00	2,100.00	mg/kg	03D-SB07	1	23	15	65.2%	20 - 20	NA	N	ITC
	7440-62-2	Vanadium	23.00	160.00	mg/kg	A20-ST01-SB02-5.0	5	185	182	98.4%	30 - 83	7.8E+00	N	BG
	7440-66-6	Zinc	18.20	1,350.00	mg/kg	11D-SNS02	0.01	185	182	98.4%	69 - 220	4.6E+01	Y	

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture as assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not applicable / Not available

Table 6.2-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area East	71-55-6	1,1,1-Trichloroethane	8	7,600	$\mu g/m^3$	03D-SP104	20	197	70	35.5%	5.4 - 33000	1.9E+05	N	BSL
	79-00-5	1,1,2-Trichloroethane	0	0	$\mu g/m^3$			197	0	0.0%	5.4 - 33000	5.7E+03	N	BSL
	75-34-3	1,1-Dichloroethane	5.2	9800	$\mu g/m^3$	03D-SP122	30	197	33	16.8%	4 - 24000	1.8E+05	N	BSL
	75-35-4	1,1-Dichloroethene	4.8	120000	$\mu g/m^3$	03D-SP106	25	197	67	34.0%	3.9 - 13000	6.0E+03	Y	
	95-63-6	1,2,4-Trimethylbenzene	5.7	84	$\mu g/m^3$	03D-SP128	30	197	37	18.8%	4.8 - 30000	1.6E+04	N	BSL
	107-06-2	1,2-Dichloroethane	11	100	$\mu g/m^3$	A20-ST05-SP01	30	197	3	1.5%	4 - 24000	4.2E+04	N	BSL
	108-67-8	1,3,5-Trimethylbenzene	6.3	22	$\mu g/m^3$	03D-SP96	10	197	8	4.1%	4.8 - 30000	1.6E+04	N	BSL
	106-99-0	1,3-Butadiene	3.1	260	$\mu g/m^3$	03D-SP132	30	197	129	65.5%	2.2 - 13000		UA	
	123-91-1	1,4-Dioxane	16	88	$\mu g/m^3$	03D-SP118	20	197	9	4.6%	14 - 87000		UA	
	540-84-1	2,2,4-Trimethylpentane	5.8	18000	$\mu g/m^3$	03D-SP85	25	197	58	29.4%	4.6 - 28000		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.5	420	$\mu g/m^3$	03D-SP85	30	197	70	35.5%	2.9 - 18000	8.6E+05	N	BSL
	591-78-6	2-Hexanone	18	34	$\mu g/m^3$	03D-SP109	30	197	3	1.5%	16 - 99000	4.9E+03	N	BSL
	67-63-0	2-Propanol	11	210000	$\mu g/m^3$	03D-SP119	29	197	52	26.4%	9.7 - 59000		UA	
	622-96-8	4-Ethyltoluene	5.9	100	$\mu g/m^3$	03D-SP128	30	197	41	20.8%	4.8 - 30000		UA	
	108-10-1	4-Methyl-2-pentanone	4.7	20	$\mu g/m^3$	03D-SP109	30	197	17	8.6%	4 - 25000		UA	
	67-64-1	Acetone	30	2600	$\mu g/m^3$	03D-SP138	30	197	111	56.3%	10 - 57000		UA	
	71-43-2	Benzene	3.5	2300	$\mu g/m^3$	03D-SP85	25	197	133	67.5%	3.1 - 19000	5.7E+02	Y	
	75-27-4	Bromodichloromethane	14	14	$\mu g/m^3$	03D-SP145	10	197	1	0.5%	6.6 - 40000		UA	
	75-15-0	Carbon Disulfide	3.7	31000	$\mu g/m^3$	03D-SP109	20	197	123	62.4%	3.1 - 19000	1.2E+03	Y	
	56-23-5	Carbon Tetrachloride	13	46	$\mu g/m^3$	A20-B34-SP03	29	197	4	2.0%	6.2 - 38000	6.3E+03	N	BSL
	75-00-3	Chloroethane	13	16	$\mu g/m^3$	03D-SP106	15	197	2	1.0%	2.6 - 16000	9.9E+05	N	BSL
	67-66-3	Chloroform	5.6	1700	$\mu g/m^3$	A20-ST05-SP01	20	197	64	32.5%	4.8 - 30000	1.2E+03	Y	
	156-59-2	cis-1,2-Dichloroethene	4.7	73000	$\mu g/m^3$	03D-SP85	25	197	64	32.5%	3.9 - 24000	1.9E+04	Y	
	98-82-8	Cumene	5.5	2600	$\mu g/m^3$	03D-SP85	25	197	20	10.2%	4.8 - 30000	2.3E+04	N	BSL
	110-82-7	Cyclohexane	4.6	60000	$\mu g/m^3$	03D-SP85	25	197	73	37.1%	3.4 - 11000		UA	
	124-48-1	Dibromochloromethane	0	0	$\mu g/m^3$			197	0	0.0%	8.4 - 52000		UA	
	64-17-5	Ethanol	8.9	150	$\mu g/m^3$	03D-SP87	10	197	84	42.6%	7.4 - 46000		UA	
	100-41-4	Ethyl Benzene	5.6	960	$\mu g/m^3$	03D-SP134	20	197	76	38.6%	4.3 - 26000	2.3E+04	N	BSL
	75-69-4	Freon 11	9.2	790	$\mu g/m^3$	03D-SP142	30	197	11	5.6%	5.5 - 34000	8.8E+04	N	BSL
	76-13-1	Freon 113	9.2	64000000	$\mu g/m^3$	03D-SP106	25	197	138	70.1%	7.5 - 560	8.8E+04	Y	
	75-71-8	Freon 12	7.2	30000	$\mu g/m^3$	03D-SP119	29	197	18	9.1%	4.9 - 30000	8.8E+04	N	BSL
	142-82-5	Heptane	4.9	9500	$\mu g/m^3$	03D-SP85	25	197	119	60.4%	4 - 25000		UA	
	87-68-3	Hexachlorobutadiene	0	0	$\mu g/m^3$			197	0	0.0%	42 - 260000		UA	
	110-54-3	Hexane	4.3	64000	$\mu g/m^3$	03D-SP85	25	197	152	77.2%	3.5 - 21000		UA	
	136777-61-2	m,p-Xylene	5.3	7800	$\mu g/m^3$	03D-SP119	29	197	129	65.5%	4.3 - 26000	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	0	0	$\mu g/m^3$			197	0	0.0%	3.6 - 22000	2.6E+05	N	BSL
	75-09-2	Methylene Chloride	160	160	$\mu g/m^3$	03D-SP143	30	197	1	0.5%	3.4 - 21000	8.7E+03	N	BSL

Table 6.2-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area East	95-47-6	o-Xylene	5.4000	960.000	$\mu g/m^3$	03D-SP85	25	197	70	35.5%	4.3 - 26000	1.6E+04	N	BSL
	103-65-1	Propylbenzene	6.4	530	$\mu g/m^3$	03D-SP85	25	197	17	8.6%	4.8 - 30000		UA	
	100-42-5	Styrene	5.3	61	$\mu g/m^3$	03D-SP125	20	197	24	12.2%	4.2 - 26000	1.9E+05	N	BSL
	127-18-4	Tetrachloroethene	11	30000000	$\mu g/m^3$	03D-SP102	10	197	168	85.3%	6.7 - 1800	2.4E+04	Y	
	109-99-9	Tetrahydrofuran	3.4	60	$\mu g/m^3$	03D-SP138	30	197	63	32.0%	2.9 - 18000		UA	
	108-88-3	Toluene	5.8	7300	$\mu g/m^3$	03D-SP119	29	197	159	80.7%	3.7 - 23000	8.4E+01	Y	
	156-60-5	trans-1,2-Dichloroethene	21	15000	$\mu g/m^3$	03D-SP119	20	197	13	6.6%	3.9 - 24000	1.9E+04	N	BSL
	79-01-6	Trichloroethene	6.6	700000	$\mu g/m^3$	A20-ST05-SP01	20	196	145	74.0%	5.3 - 17000	6.4E+03	Y	
	75-01-4	Vinyl Chloride	6.1	170000	$\mu g/m^3$	03D-SP85	25	197	36	18.3%	2.5 - 8200	5.6E+02	Y	

Footnotes:

(1) See Table ?

(2) Rationale for Deletion

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.2-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Administration Area East and West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area East and West	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	103-33-3	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	ND	ND	15	0	0%	200 - 200	--	N	ND
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	ND	ND	15	0	0%	20 - 20	--	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	95-57-8	2-Chlorophenol	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	95-48-7	2-Methylphenol	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	88-74-4	2-Nitroaniline	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	88-75-5	2-Nitrophenol	ND	ND	µg/L	ND	ND	15	0	0%	20 - 20	--	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	99-09-2	3-Nitroaniline	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	ND	ND	15	0	0%	20 - 20	--	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND

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Admin Area East and West	106-47-8	4-Chloroaniline	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	106-44-5	4-Methylphenol	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	100-01-6	4-Nitroaniline	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	100-02-7	4-Nitrophenol	ND	ND	µg/L	ND	ND	15	0	0%	20 - 20	--	N	ND
	83-32-9	Acenaphthene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	208-96-8	Acenaphthylene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	7429-90-5	Aluminum	65	11,000	µg/L	09D-SW02-1.0	1	15	13	87%	50 - 50	8.7E+01	**Y**	
	62-53-3	Aniline	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	120-12-7	Anthracene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	7440-36-0	Antimony	0.57	3.2	µg/L	11D-SW01-1.0	1	15	3	20%	2 - 2	6.1E+02	N	BSL
	7440-38-2	Arsenic	0.86	1.3	µg/L	12D-SW01-2.0	2	15	6	40%	1 - 1	1.5E+02	N	BSL
	103-33-3	Azobenzene	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	7440-39-3	Barium	8.2	90	µg/L	09D-SW02-1.0	1	15	14	93%	10 - 10	4.0E+00	**Y**	
	71-43-2	Benzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	92-87-5	Benzidine	ND	ND	µg/L	ND	ND	15	0	0%	50 - 50	--	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	205-99-2	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	ND	ND	15	0	0%	0.4 - 0.4	--	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	ND	ND	15	0	0%	0.4 - 0.4	--	N	ND
	65-85-0	Benzoic acid	ND	ND	µg/L	ND	ND	15	0	0%	20 - 20	--	N	ND
	100-51-6	Benzyl alcohol	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	7440-41-7	Beryllium	0.08	0.11	µg/L	08D-SW01-1.5	1.5	15	3	20%	0.5 - 0.5	5.3E+00	N	BSL
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	108-61-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	3.0E+00	N	ND
	7440-42-8	Boron	20	20	µg/L	09D-SW01-3.0	3	15	1	7%	50 - 50	1.6E+00	**Y**	
	106-86-1	Bromobenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	74-97-5	Bromochloromethane	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	75-27-4	Bromodichloromethane	1.2	1.2	µg/L	03D-SW04-1.0	1	15	1	7%	0.5 - 0.5	--	**Y**	
	75-25-2	Bromoform	0.92	0.92	µg/L	03D-SW04-1.0	1	15	1	7%	0.5 - 0.5	--	**Y**	
	74-83-9	Bromomethane	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	7440-43-9	Cadmium	0.052	1.1	µg/L	11D-SW01-1.0	1	15	11	73%	1 - 1	2.2E+00	N	BSL
		Calcium	1300	8,100	µg/L	03D-SW02-4.5	4.5	15	15	100%	0 - 0	--	N	EN
	86-74-8	Carbazole	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	108-90-7	Chlorobenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND

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Admin Area East and West	75-00-3	Chloroethane	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	67-66-3	Chloroform	15	15	µg/L	03D-SW04-1.0	1	15	1	7%	0.5 - 3.1	1.2E+03	N	BSL
	74-87-3	Chloromethane	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	16065-83-1	Chromium	0.61	16	µg/L	12D-SW01-2.0	2	15	13	87%	2 - 2	1.8E+02	N	BSL
	218-01-9	Chrysene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	7440-48-4	Cobalt	0.037	9	µg/L	09D-SW02-1.0	1	15	15	100%	0 - 0	2.3E+01	N	BSL
	7440-50-8	Copper	3.9	140	µg/L	03D-SW04-1.0	1	15	15	100%	0 - 0	9.0E+00	**Y**	
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	ND	ND	15	0	0%	0.4 - 0.4	--	N	ND
	132-64-9	Dibenzofuran	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	124-48-1	Dibromochloromethane	0.25	0	µg/L	03D-SW04-1.0	1	15	1	7%	0.5 - 0.5	--	**Y**	
	74-95-3	Dibromomethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
		Diesel Range Organics (C10-C28)	36	55	µg/L	09D-SW01-3.0	3	8	3	38%	50 - 160	--	N	PM
	84-66-2	Diethyl phthalate	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	100-41-4	Ethylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	206-44-0	Fluoranthene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	86-73-7	Fluorene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	ND	ND	15	0	0%	20 - 20	--	N	ND
	67-72-1	Hexachloroethane	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	18540-29-9	Hexavalent Chromium	5.6	6	µg/L	03D-SW01-1.5	1.5	15	1	7%	5 - 5	1.1E+01	N	BSL
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	ND	ND	15	0	0%	0.4 - 0.4	--	N	ND
	7439-89-6	Iron	48	12,000	µg/L	09D-SW02-1.0	1	15	14	93%	40 - 40	1.0E+03	**Y**	
	78-59-1	Isophorone	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	98-82-8	Isopropylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	7439-92-1	Lead	0.2	14	µg/L	09D-SW02-1.0	1	15	15	100%	0 - 0	2.5E+00	**Y**	
	7469-93-2	Lithium	9.9	10	µg/L	03D-SW04-1.0	1	15	1	7%	50 - 50	1.4E+01	N	BSL
	7439-95-4	Magnesium	250	3,200	µg/L	12D-SW01-2.0	2	15	15	100%	0 - 0	--	N	EN
	7439-96-5	Manganese	7.4	370	µg/L	09D-SW02-1.0	1	15	12	80%	20 - 20	1.2E+02	**Y**	
	7439-97-6	Mercury	0.062	0.062	µg/L	08D-SW01-1.5	1.5	15	1	7%	0.2 - 0.2	7.7E-01	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	75-09-2	Methylene chloride	ND	ND	µg/L	ND	ND	15	0	0%	1 - 5.4	2.2E+03	N	ND
	7439-98-7	Molybdenum	0.3	1.5	µg/L	05D-SW05-1.0	1	15	4	27%	2 - 2	3.7E+02	N	BSL
		Motor Oil Range Organics (C16-C36)	100	250	µg/L	11D-SW01-1.0	1	8	5	63%	100 - 100	--	N	PM

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Admin Area East and West	91-20-3	Naphthalene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	104-51-48	n-Butylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	7440-02-0	Nickel	0.49	11	µg/L	09D-SW02-1.0 12D-SW01-2.0	1 2	15	15	100%	0 - 0	5.2E+01	N	BSL
		Nitrate as NO3	390	5,700	µg/L	12D-SW01-2.0	2	15	14	93%	100 - 100	--	**Y**	
		Nitrite as NO2	16	28	µg/L	03D-SW01-1.5 05D-SW05-1.0	1.5 1	14	5	36%	100 - 5000	--	**Y**	
	98-95-3	Nitrobenzene	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	µg/L	ND	ND	15	0	0%	0.0019 - 5	4.0E+01	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	ND	ND	15	0	0%	10 - 10	--	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	103-65-1	n-Propylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	12674-11-2	PCB-1016	ND	ND	µg/L	ND	ND	12	0	0%	1 - 1	--	N	ND
	11104-28-2	PCB-1221	ND	ND	µg/L	ND	ND	12	0	0%	2 - 2	--	N	ND
	11141-16-5	PCB-1232	ND	ND	µg/L	ND	ND	12	0	0%	1 - 1	--	N	ND
	53469-21-9	PCB-1242	ND	ND	µg/L	ND	ND	12	0	0%	1 - 1	--	N	ND
	12672-29-6	PCB-1248	ND	ND	µg/L	ND	ND	12	0	0%	1 - 1	--	N	ND
	11097-69-1	PCB-1254	ND	ND	µg/L	ND	ND	12	0	0%	1 - 1	--	N	ND
	11096-82-5	PCB-1260	ND	ND	µg/L	ND	ND	12	0	0%	1 - 1	--	N	ND
	87-86-5	Pentachlorophenol	ND	ND	µg/L	ND	ND	15	0	0%	20 - 20	--	N	ND
		Perchlorate	ND	ND	µg/L	ND	ND	3	0	0%	1 - 1	9.3E+03	N	ND
	85-01-8	Phenanthrene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	108-95-2	Phenol	ND	ND	µg/L	ND	ND	15	0	0%	5 - 5	--	N	ND
	25155-15-1	p-Isopropyltoluene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	7440-09-7	Potassium	410	2,400	µg/L	09D-SW02-1.0	1	15	13	87%	500 - 500	--	N	EN
	129-00-0	Pyrene	ND	ND	µg/L	ND	ND	15	0	0%	0.2 - 0.2	--	N	ND
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	7782-49-2	Selenium	1.7	1.9	µg/L	09D-SW03-3.0	3	15	2	13%	2 - 2	5.0E+00	N	BSL
	7440-22-4	Silver	0.04	2.4	µg/L	05D-SW01-4	4	15	5	33%	1 - 1	1.2E-01	**Y**	
	7440-23-5	Sodium	520	7,800	µg/L	09D-SW01-3.0	3	15	14	93%	730 - 730	--	N	EN
	7440-24-6	Strontium	7.5	53	µg/L	12D-SW01-2.0	2	15	15	100%	0 - 0	1.5E+03	N	BSL
	100-42-5	Styrene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	127-18-4	Tetrachloroethene	0.21	0.21	µg/L	11D-SW01-1.0	1	15	1	7%	0.5 - 0.5	8.4E+02	N	BSL
	7440-28-0	Thallium	0.18	0.18	µg/L	05D-SW01-4	4	15	1	7%	1 - 1	2.0E+01	N	BSL
	7440-32-6	Titanium	3.6	410	µg/L	12D-SW01-2.0	2	15	12	80%	5 - 8.8	--	**Y**	
	108-88-3	Toluene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
		Total Cyanide	2.8	3	µg/L	09D-SW01-3.0	3	3	1	33%	5 - 5	5.2E+00	N	BSL
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	79-01-6	Trichloroethene	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND

Table 6.2-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Administration Area East and West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area East and West	75-69-4	Trichlorofluoromethane	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	7440-62-2	Vanadium	0.87	24	µg/L	09D-SW02-1.0 12D-SW01-2.0	1 2	15	10	67%	2 - 2	2.0E+01	**Y**	
	75-01-4	Vinyl chloride	ND	ND	µg/L	ND	ND	15	0	0%	0.5 - 0.5	--	N	ND
	1330-20-7	Xylenes (total)	ND	ND	µg/L	ND	ND	15	0	0%	1 - 1	--	N	ND
	7440-66-6	Zinc	18	2,100	µg/L	11D-SW01-1.0	1	15	15	100%	0 - 0	1.2E+02	**Y**	

Footnotes:

(1) See Table 2.

(2) Rationale for Deletion

BSL = Below screening level

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individually

Key:

COPEC = Chemical of potential ecological concern

µg/L = Micrograms per liter

ND = Not detected

Table 6.2-4 *Risk Characterization Summary Table*
Soil 0 to 1 foot
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
1,1,2,2-Tetrachloroethane	mg/kg	NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Benzyl alcohol	mg/kg	-	-	-	0/1	na	-	-	na	-	-	na	-	-	na	-	-			
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/1	na	-	-	na	-	-	0.04	-	-	0.69	-	-			
Dibenzofuran	mg/kg	-	-	-	0/1	na	-	-	na	-	-	na	-	-	na	-	-			
Dimethyl phthalate	mg/kg	-	-	-	0/1	na	-	-	200	-	-	0.01	-	-	64.45	-	-			
Di-n-butyl phthalate	mg/kg	-	-	-	0/1	200	-	-	na	-	-	0.01	-	-	64.45	-	-			
N-Nitrosodimethylamine	mg/kg	-	-	-	0/1	na	-	-	na	-	-	na	-	-	na	-	-			
Phenanthrene	mg/kg	-	-	-	0/1	na	-	-	29	-	-	na	-	-	100	-	-			
Polychlorinated Biphenyls																				
PCB-1016	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1248	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1254	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1260	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
Polycyclic Aromatic Hydrocarbons																				
Anthracene	mg/kg	-	-	-	0/1	na	-	-	29	-	-	na	-	-	100	-	-			
Benzo (a) anthracene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (a) pyrene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (b) fluoranthene	mg/kg	NA	NA	-	-	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (ghi) perylene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (k) fluoranthene	mg/kg	NA	NA	-	-	na	-	-	18	-	-	na	-	-	1.1	-	-			
Chrysene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Dibenz (a,h) anthracene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Fluoranthene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Indeno (1,2,3-cd) pyrene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Pyrene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Inorganics																				
Boron	mg/kg	5.4	5.4	A20-ST14-SB01-1	1/2	0.5	1/2	10.8	20	0/2	-	na	-	-	na	-	-	19^	0/2	
Iron	mg/kg	22400	22400	03D-SNS06-0.01	1/1	na	-	-	na	-	-	na	-	-	na	-	-			
Lithium	mg/kg	5.4 J	5.4 J	A20-ST14-SB01-1	1/1	2	1/1	2.7	10	0/1	-	na	-	-	390	0/1	-	23^	0/1	
Mercury	mg/kg	0.02 J	0.02 J	A20-ST14-SB01-1	1/2	na	-	-	na	-	-	0.000051	1/2	392	0.0013	1/2	15	0.13	0/2	
Molybdenum	mg/kg	2.2	2.2	A20-ST14-SB01-1	1/1	2	1/1	1.1	200	0/1	-	44	0/1	-	4.75	0/1	-	0.616	1/1	3.6
Strontium	mg/kg	26	26	A20-ST14-SB01-1	1/1	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	550	550	A20-ST14-SB01-1	1/1	na	-	-	1000	0/1	-	na	-	-	na	-	-			
Total Cyanide	mg/kg	NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Zinc	mg/kg	24	44.9	03D-SNS06-0.01	2/2	160	0/2	-	120	0/2	-	46	0/2	-	79	0/2	-			

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value.
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.2-5 *Risk Characterization Summary Table*
Soil 1 to 6 feet
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
1,1,2,2-Tetrachloroethane	mg/kg	NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Benzyl alcohol	mg/kg	-	-	-	0/1	na	-	-	na	-	-	na	-	-	na	-	-			
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/1	na	-	-	na	-	-	0.04	-	-	0.69	-	-			
Dibenzofuran	mg/kg	-	-	-	0/1	na	-	-	na	-	-	na	-	-	na	-	-			
Dimethyl phthalate	mg/kg	-	-	-	0/1	na	-	-	200	-	-	0.01	-	-	64.45	-	-			
Di-n-butyl phthalate	mg/kg	-	-	-	0/1	200	-	-	na	-	-	0.01	-	-	64.45	-	-			
N-Nitrosodimethylamine	mg/kg	-	-	-	0/1	na	-	-	na	-	-	na	-	-	na	-	-			
Phenanthrene	mg/kg	-	-	-	0/1	na	-	-	29	-	-	na	-	-	100	-	-			
Pesticides & Polychlorinated Biphenyls																				
PCB-1016	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1248	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1254	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1260	mg/kg	NA	NA	-	-	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
Polycyclic Aromatic Hydrocarbons																				
Anthracene	mg/kg	-	-	-	0/1	na	-	-	29	-	-	na	-	-	100	-	-			
Benzo (a) anthracene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (a) pyrene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (b) fluoranthene	mg/kg	NA	NA	-	-	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (ghi) perylene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Benzo (k) fluoranthene	mg/kg	NA	NA	-	-	na	-	-	18	-	-	na	-	-	1.1	-	-			
Chrysene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Dibenz (a,h) anthracene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Fluoranthene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Indeno (1,2,3-cd) pyrene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Pyrene	mg/kg	-	-	-	0/1	na	-	-	18	-	-	na	-	-	1.1	-	-			
Inorganics																				
Boron	mg/kg	9.7	9.7	A20-ST14-SB01-5	1/1	0.5	1/1	19.4	20	0/1	-	na	-	-	na	-	-	19^	0/1	
Iron	mg/kg	NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Lithium	mg/kg	7.8 J	7.8 J	A20-ST14-SB01-5	1/1	2	1/1	3.9	10	0/1	-	na	-	-	390	0/1	-	23^	0/1	
Mercury	mg/kg	0.06	0.06	A20-ST14-SB01-5	1/1	na	-	-	na	-	-	0.000051	1/1	1176	0.0013	1/1	46.15	0.127	0/1	
Molybdenum	mg/kg	0.63 J	0.63 J	A20-ST14-SB01-5	1/1	2	0/1	-	200	0/1	-	44	0/1	-	4.75	0/1	-			
Perchlorate	mg/kg	NA	NA	-	-	na	-	-	1.17	-	-	20.3	-	-	24	-	-			
Strontium	mg/kg	32	32	A20-ST14-SB01-5	1/1	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	900	900	A20-ST14-SB01-5	1/1	na	-	-	1000	0/1	-	na	-	-	na	-	-			
Total Cyanide	mg/kg	NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Zinc	mg/kg	44	44	A20-ST14-SB01-5	1/1	160	0/1	-	120	0/1	-	46	0/1	-	79	0/1	-	89	0/1	

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value.
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.2-6 *Risk Characterization Summary Table*
Soil Ditch 0 to 1 foot
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
1,1,2,2-Tetrachloroethane		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Benzyl alcohol	mg/kg	0.12 J	0.12 J	03D-SNS34-0.25	1/9	na	-	-	na	-	-	na	-	-	na	-	-			
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/9	na	-	-	na	-	-	0.04	-	-	0.69	-	-			
Dibenzofuran	mg/kg	0.061 J	0.061 J	11D-SNS22-0.5	1/9	na	-	-	na	-	-	na	-	-	na	-	-			
Dimethyl phthalate	mg/kg	2.6	2.6	03D-SNS34-0.25	1/9	na	-	-	200	0/9	-	0.01	1/9	260	64.45	0/9	-			
Di-n-butyl phthalate	mg/kg	-	-	-	0/9	200	-	-	na	-	-	0.01	-	-	64.45	-	-			
N-Nitrosodimethylamine	mg/kg	-	-	-	0/9	na	-	-	na	-	-	na	-	-	na	-	-			
Phenanthrene	mg/kg	0.0042 J	0.21	03D-SNS34-0.25	6/9	na	-	-	29	0/9	-	na	-	-	100	0/9	-			
Pesticides & Polychlorinated Biphenyls											-									
PCB-1016	mg/kg	0.083 J	0.083 J	11D-SNS12-0.5	1/8	na	-	-	na	-	-	0.01	1/8	8.3	0.04	1/8	2.0			
PCB-1248	mg/kg	0.011 J	0.027 J	11D-SNS12-0.5	2/8	na	-	-	na	-	-	0.01	2/8	2.7	0.04	0/8	-			
PCB-1254	mg/kg	0.12 J	10 J	11D-SNS15-0.5	5/8	na	-	-	na	-	-	0.01	5/8	1000	0.04	5/8	240			
PCB-1260	mg/kg	0.15	1.5	03D-SNS34-0.25	6/8	na	-	-	na	-	-	0.01	6/8	150	0.04	6/8	36			
Polycyclic Aromatic Hydrocarbons																				
Anthracene	mg/kg	0.0055 J	0.0055 J	11D-SNS17-0.5	1/9	na	-	-	29	0/9	-	na	-	-	100	0/9	-			
Benzo (a) anthracene	mg/kg	0.0046 J	0.042	03D-SNS34-0.25	6/9	na	-	-	18	0/9	-	na	-	-	1.1	0/9	-			
Benzo (a) pyrene	mg/kg	0.007 J	0.041	11D-SNS17-0.5	5/9	na	-	-	18	0/9	-	na	-	-	1.1	0/9	-			
Benzo (b) fluoranthene		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Benzo (ghi) perylene	mg/kg	0.019	0.019	11D-SNS17-0.5	1/9	na	-	-	18	0/9	-	na	-	-	1.1	0/9	-			
Benzo (k) fluoranthene		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Chrysene	mg/kg	0.012 J	0.083	03D-SNS34-0.25	6/9	na	-	-	18	0/9	-	na	-	-	1.1	0/9	-			
Dibenz (a,h) anthracene	mg/kg	-	-	-	0/9	na	-	-	18	-	-	na	-	-	1.1	-	-			
Fluoranthene	mg/kg	0.0043 J	0.11	03D-SNS34-0.25	7/9	na	-	-	18	0/9	-	na	-	-	1.1	0/9	-			
Indeno (1,2,3-cd) pyrene	mg/kg	0.017	0.017	11D-SNS17-0.5	1/9	na	-	-	18	0/9	-	na	-	-	1.1	0/9	-			
Pyrene	mg/kg	0.0092	0.18	03D-SNS34-0.25	6/9	na	-	-	18	0/9	-	na	-	-	1.1	0/9	-			
Inorganics																				
Antimony	mg/kg	0.14 J	1.4	03D-SNS34-0.25	5/11	na	-	-	78	0/11	-	na	-	-	0.27	4/11	5.2	0.46	2/11	3.1
Boron	mg/kg	3.6 J	11	03D-SNS35-0.25	7/11	0.5	7/11	22	20	0/11	-	na	-	-	na	-	-	19^	0/11	
Cadmium	mg/kg	0.15 J	5.89	11D-SNS02-0.01	10/11	32	0/11	-	140	0/11	-	0.77	9/11	7.6	0.36	9/11	16	1.2	7/11	4.9
Iron	mg/kg	15100	30100	11D-SNS02-0.01	2/2	na	-	-	na	-	-	na	-	-	na	-	-			
Lead	mg/kg	5.8	379	11D-SNS02-0.01	11/11	120	2/11	3.2	1700	0/11	-	11	8/11	34	56	3/11	6.8	22.66	5/11	17
Lithium	mg/kg	5.1 J	19	11D-SNS22-0.5	9/9	2	9/9	9.5	10	3/9	1.9	na	-	-	390	0/9	-	23^	0/9	
Mercury	mg/kg	0.024	0.354	11D-SNS02-0.01	10/11	na	-	-	na	-	-	0.000051	10/11	6941	0.0013	10/11	272	0.127	3/11	2.8
Molybdenum	mg/kg	1.5	8.7	11D-SNS14-0.5	8/9	2	5/9	4.4	200	0/9	-	44	0/9	-	4.75	2/9	1.8	0.62	8/9	14
Perchlorate	mg/kg	-	-	-	0/8	na	-	-	1.17	-	-	20.3	-	-	24	-	-			
Strontium	mg/kg	19 J	27	11D-SNS22-0.5	9/9	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	530	1100	11D-SNS22-0.5	9/9	na	-	-	1000	1/9	1.1	na	-	-	na	-	-			
Total Cyanide	mg/kg	0.76	0.76	11D-SNS15-0.5	1/8	na	-	-	na	-	-	na	-	-	na	-	-			
Zinc	mg/kg	74	1350	11D-SNS02-0.01	11/11	160	9/11	8.4	120	10/11	11	46	11/11	29	79	10/11	17	89	10/11	15

Notes and Key:
Only samples that are located in areas of potential migration are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value.
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.2-7 Risk Characterization Summary Table
Soil Vapor Top Depth
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance	HQs
1,1,1-Trichloroethane	$\mu g/m^3$	191000	9.3	33	A20-ST14-SP01-10	3/13	0/13	-
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/13	-	-
1,1-Dichloroethane	$\mu g/m^3$	181000	74	74	A20-ST05-SP03-10	1/13	0/13	-
1,1-Dichloroethene	$\mu g/m^3$	6000	21	110	A20-ST05-SP03-10	2/13	0/13	-
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	15	15	A20-ST02-SP04-30	1/13	0/13	-
1,2-Dichloroethane	$\mu g/m^3$	42000	-	-	-	0/13	-	-
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/13	-	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	7.5	87	A20-ST02-SP04-30	6/13	0/13	-
2-Hexanone	$\mu g/m^3$	4880	-	-	-	0/13	-	-
Acetone	$\mu g/m^3$	1305000	42	650	A20-ST02-SP04-30	11/13	0/13	-
Benzene	$\mu g/m^3$	570	3.5	41	A20-ST02-SP04-30	11/13	0/13	-
Carbon Disulfide	$\mu g/m^3$	1200	3.8	77	A20-ST05-SP03-10	10/13	0/13	-
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/13	-	-
Chloroethane	$\mu g/m^3$	992000	-	-	-	0/13	-	-
Chloroform	$\mu g/m^3$	1200	33	58	A20-ST14-SP01-10	2/13	0/13	-
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	260	260	A20-ST05-SP03-10	1/13	0/13	-
Cumene	$\mu g/m^3$	23000	-	-	-	0/13	-	-
Ethyl Benzene	$\mu g/m^3$	23000	5.6	6.4	A20-ST02-SP03-20	2/13	0/13	-
Freon 11	$\mu g/m^3$	88000	9.2	9.2	A20-ST22-SP01-10	1/13	0/13	-
Freon 113	$\mu g/m^3$	88000	22	18000 J	A20-ST14-SP01-10	6/13	0/13	-
Freon 12	$\mu g/m^3$	88000	-	-	-	0/13	-	-
m,p-Xylene	$\mu g/m^3$	16000	5.8	19	A20-ST02-SP04-30	5/13	0/13	-
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/13	-	-
Methylene Chloride	$\mu g/m^3$	9000	-	-	-	0/13	-	-
o-Xylene	$\mu g/m^3$	16000	6.1	8.3	A20-ST02-SP04-30	2/13	0/13	-
Styrene	$\mu g/m^3$	192000	11	11	03D-SP144-10	1/13	0/13	-
Tetrachloroethene	$\mu g/m^3$	24000	12	1100	03D-SP144-10	10/13	0/13	-
Toluene	$\mu g/m^3$	84	5.8 J	100	A20-ST05-SP03-10	12/13	1/13	1.2
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/13	-	-
Trichloroethene	$\mu g/m^3$	6400	7.1	400	A20-ST14-SP01-10	6/13	0/13	-
Vinyl Chloride	$\mu g/m^3$	560	17	17	A20-ST05-SP03-10	1/13	0/13	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
J = Estimated value
$\mu g/m^3$ = Micrograms per cubic meter
na = Not available

Table 6.2-8 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area West	79-34-5	1,1,2,2-Tetrachloroethane	0.4	0.4	mg/kg	52D-AH03	5	1	1	100%	NA	NA	Y	
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	132	0	0%	0.2 - 13.3	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.51 - 6.67	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.7	2.9E+01	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.7	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.67	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 3.3	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	138	0	0%	0.51 - 5.4	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.67	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.67	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	130	0	0%	0.2 - 2.2	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	130	0	0%	0.2 - 6.67	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	138	0	0%	0.51 - 6.67	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.67	NA	N	ND
	83-32-9	Acenaphthene	0.0029	0.013	mg/kg	52D-SB07-5.0	5	130	5	4%	0.0067 - 1.33	2.9E+01	N	BSL
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	130	0	0%	0.0067 - 1.33	2.9E+01	N	ND
	7429-90-5	Aluminum	2670	50000	mg/kg	52D-SB17-5.0	5	215	215	100%	NA	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	132	0	0%	0.2 - 2.2	NA	N	ND
	120-12-7	Anthracene	0.0036	0.093	mg/kg	52D-SB07-5.0	5	130	8	6%	0.0067 - 1.33	2.9E+01	N	BSL
	7440-36-0	Antimony	0.045	49	mg/kg	06D-SNS07-0.5	0.5	211	129	61%	0.21 - 110	2.7E-01	Y	
	7440-38-2	Arsenic	0.87	33	mg/kg	06D-SNS08-0.5	0.5	208	163	78%	0.63 - 57	1.8E+01	N	BG
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	110	0	0%	0.2 - 2.2	NA	N	ND
	7440-39-3	Barium	37	470	mg/kg	D(b)-SD01-0	0	209	209	100%	NA	3.3E+02	Y	
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	110	0	0%	0.35 - 3.8	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.0049	0.33	mg/kg	52D-SB07-5.0	5	130	15	12%	0.0067 - 1.33	1.1E+00	N	BSL
	50-32-8	Benzo (a) pyrene	0.007	0.34	mg/kg	52D-SB07-5.0	5	130	13	10%	0.0067 - 1.33	1.1E+00	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.011	0.45	mg/kg	52D-SB07-5.0	5	102	16	16%	0.013 - 0.15	1.1E+00	N	BSL

Table 6.2-8 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area West	205-99-2	Benzo (b) fluoranthene	0.13	0.13	mg/kg	05D-SNS15-0.5	0.5	29	1	3%	0.33 - 1.33	1.1E+00	N	BSL
	191-24-2	Benzo (ghi) perylene	0.0076	0.093	mg/kg	52D-SB07-5.0	5	130	10	8%	0.0067 - 1.33	1.1E+00	N	BSL
	207-08-9	Benzo (k) fluoranthene	0.037	0.037	mg/kg	05D-SNS15-0.5	0.5	29	1	3%	0.33 - 1.33	1.1E+00	N	BSL
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	132	0	0%	0.51 - 6.67	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	132	0	0%	0.2 - 2.2	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	1.3E-02	N	ND*
	7440-41-7	Beryllium	0.093	1.1	mg/kg	52D-SB17-5.0	5	209	152	73%	0.22 - 11	2.1E+01	N	BSL
	AER-001-412	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	AER-001-413	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	AER-001-414	Bis(2-ethylhexyl)phthalate	0.05	1.3	mg/kg	06D-SNS08-0.5	0.5	138	3	2%	0.333 - 5.4	4.0E-02	Y	
	7440-42-8	Boron	1.7	164	mg/kg	06D-SNS01	0.01	209	55	26%	4 - 230	5.0E-01	Y	
	7440-43-9	Cadmium	0.084	190	mg/kg	05D-SB03-1.0	1	215	155	72%	0.41 - 1	3.6E-01	Y	
	7440-70-2	Calcium	710	165000	mg/kg	06D-SNS01	0.01	59	59	100%	NA	NA	N	EN
	86-74-8	Carbazole	0.0066	0.0066	mg/kg	05D-SNS15-0.5	0.5	110	1	1%	0.2 - 2.2	NA	Y	
	7440-47-3	Chromium	17	43000	mg/kg	06D-SNS07-0.5	0.5	215	215	100%	NA	2.6E+01	Y	
	18540-29-9	Chromium VI	0.022	430	mg/kg	06D-SB02-5	11	125	120	96%	0.23 - 0.27	8.1E+01	Y	
	218-01-9	Chrysene	0.0049	0.43	mg/kg	52D-SB07-5.0	5	130	24	18%	0.0067 - 1.33	1.1E+00	N	BSL
	7440-48-4	Cobalt	3.54	43	mg/kg	06D-SNS07-0.5	11	209	209	100%	NA	1.3E+01	N	BG
	7440-50-8	Copper	8.3	960	mg/kg	06D-SNS07-0.5	0.5	215	215	100%	NA	2.8E+01	Y	
	53-70-3	Dibenz (a,h) anthracene	0.0068	0.018	mg/kg	D(c)-SB05-1	1	130	2	2%	0.0067 - 1.33	1.1E+00	N	
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	68334-30-5	Diesel Range Organics (C10-C28)	0.94	250	mg/kg	05D-SNS16-0.5	0.5	98	78	80%	1.7 - 19	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	1.3E-02	N	ND*
	84-74-2	Di-n-butyl phthalate	0.758	20	mg/kg	52D-SA-SB03	5	138	20	14%	0.33 - 4.3	1.3E-02	Y	
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	1.3E-02	N	ND*
	206-44-0	Fluoranthene	0.0019	0.53	mg/kg	52D-SB07-5.0	5	130	31	24%	0.0067 - 6.7	1.1E+00	N	BSL
	86-73-7	Fluorene	0.0042	0.016	mg/kg	52D-SB07-5.0	5	130	2	2%	0.0067 - 6.7	2.9E+01	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.7	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.7	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	138	0	0%	0.33 - 7.6	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.7	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0073	0.059	mg/kg	52D-SB07-5.0 D(c)-SB05-1	5 1	130	8	6%	0.0067 - 6.7	1.1E+00	N	BSL
	7439-89-6	Iron	6330	47200	mg/kg	52D-SB01	5	59	59	100%	NA	NA	Y	
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.7	NA	N	ND
	7439-92-1	Lead	2	640	mg/kg	06D-SNS07-0.5	0.5	217	215	99%	2.4 - 5	1.1E+01	Y	
	7439-93-2	Lithium	3	25	mg/kg	52D-SB17-5.0	5	150	146	97%	32 - 280	2.0E+00	Y	
	7439-95-4	Magnesium	1250	20800	mg/kg	05D-SNS02	0.01	59	59	100%	NA	NA	N	EN
	7439-96-5	Manganese	77	10100	mg/kg	06D-SNS01	0.01	215	215	100%	NA	2.2E+02	Y	
	7439-97-6	Mercury	0.0038	31.1	mg/kg	05D-SNS03	0.01	214	153	71%	0.02 - 0.1	5.1E-04	Y	
	7439-98-7	Molybdenum	0.16	70	mg/kg	06D-SNS07-0.5	0.5	168	146	87%	1 - 2	2.0E+00	Y	

Table 6.2-8 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area West	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.5	850	mg/kg	05D-SNS16-0.5	0.5	91	84	92%	4.6 - 14	NA	N	ITC
	91-20-3	Naphthalene	0.0017	0.025	mg/kg	05D-SNS12-0.5	0.5	129	4	3%	0.0067 - 6.7	2.9E+01	N	BSL
	7440-02-0	Nickel	11	2090	mg/kg	52D-SB02	1	215	215	100%	NA	3.8E+01	Y	
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 2.2	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	131	0	0%	0.0031 - 6.7	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	138	0	0%	0.2 - 6.7	NA	N	ND
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	35	0	0%	0.2 - 6.7	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	1.6	1.6	mg/kg	52D-SB07-5.0	5	103	1	1%	0.2 - 2.2	NA	Y	
	GIS-130-310	Oil & Grease (E413.2-SM5520C Total)	ND	ND	mg/kg	ND	ND	14	0	0%	50 - 50	NA	N	ITC
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	44	0	0%	0.021 - 0.7	1.0E-02	N	ND*
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	47	0	0%	0.021 - 0.7	1.0E-02	N	ND*
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	47	0	0%	0.021 - 0.7	1.0E-02	N	ND*
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	47	0	0%	0.021 - 0.7	1.0E-02	N	ND*
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	47	0	0%	0.021 - 0.7	1.0E-02	N	ND*
	11097-69-1	PCB-1254	0.034	2.5	mg/kg	05D-SB06-1	1	47	6	13%	0.021 - 0.7	1.0E-02	Y	
	11096-82-5	PCB-1260	0.065	0.8	mg/kg	05D-SB07-1	1	47	4	9%	0.021 - 0.68	1.0E-02	Y	
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	138	0	0%	0.67 - 7.6	2.1E+00	N	ND*
	14797-73-0	Perchlorate	0.011	1.9	mg/kg	06D-SNS11-2.5	2.5	92	8	9%	0.0051 - 0.064	1.2E+00	Y	
	AER-001-248	Petroleum Hydrocarbons	129	129	mg/kg	08D-SNS02	0.01	3	1	33%	20 - 20	NA	N	ITC
	85-01-8	Phenanthrene	0.0024	0.44	mg/kg	52D-SB07-5.0	5	130	24	18%	0.0067 - 1.33	2.9E+01	N	BSL
	108-95-2	Phenol	0.11	4.5	mg/kg	D(b)-SB05-1.0	1	138	22	16%	0.2 - 2.2	3.0E+01	N	BSL
	AER-001-089	POLYCHLORINATED BIPHENYL	ND	ND	mg/kg	ND	ND	12	0	0%	0.033 - 0.0333	1.0E-02	N	ND*
	7440-09-7	Potassium	275	4000	mg/kg	12D-SNS03	3	59	59	100%	NA	NA	N	EN
	129-00-0	Pyrene	0.014	0.74	mg/kg	52D-SB07-5.0	5	130	17	13%	0.0067 - 1.33	1.1E+00	N	BSL
	7782-49-2	Selenium	0.21	10.5	mg/kg	D(C)-SB01 DC-AH01	5 5	209	33	16%	1 - 110	5.2E-01	N	BG
	7440-22-4	Silver	0.065	200	mg/kg	05D-SB03-1.0	1	215	97	45%	0.54 - 2.2	4.2E+00	Y	
	7440-23-5	Sodium	103	2410	mg/kg	06D-SNS01	0.01	59	39	66%	100 - 100	NA	N	EN
	7440-24-6	Strontium	9.9	200	mg/kg	06D-SNS08-0.5	0.5	150	150	100%	NA	NA	Y	
	7440-28-0	Thallium	0.086	16	mg/kg	06D-SNS06-0.5	0.5	215	129	60%	0.51 - 56	1.0E+00	N	BG
	7440-31-5	Tin	ND	ND	mg/kg	ND	ND	12	0	0%	50 - 50	NA	N	ND
	7440-32-6	Titanium	110	1600	mg/kg	09D-SD01-0.25 D(b)-SB02-1.0	0.25 1.0	162	162	100%	NA	1.0E+03	Y	
	57-12-5	Total Cyanide	0.5	25	mg/kg	06D-SNS06-0.5	0.5	75	13	17%	0.5 - 1.1	4.0E-02	Y	
	AER-001-090	Total Recov. Petroleum Hydrocarbons	114	1740	mg/kg	52D-SB01	1	5	2	40%	20 - 20	NA	N	ITC
	7440-62-2	Vanadium	15.3	170	mg/kg	AW-AF1-SB01-1.0	1	209	209	100%	NA	7.8E+00	N	BG
	7440-66-6	Zinc	20	6410	mg/kg	06D-SNS01	0.01	215	215	100%	NA	4.6E+01	Y	

Footnotes:
(1) See Table 2
(2) Rationale for Deletion
BSL = Below screening level
BG = Consistent with background concentrations
ITC = Individual toxic compounds associated with the mixture are assessed separately
EN = Essential Nutrient
ND = Not detected above the reporting limit
* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:
bgs = Below ground surface
COPEC = Chemical of potential ecological concern
mg/kg = Milligrams per kilogram
NA = Not available

Table 6.2-9 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area West	71-55-6	1,1,1-Trichloroethane	7.8	33000	$\mu g/m^3$	52D-SP32-20	20	81	41	51%	5.9 - 8.7	1.9E+05	N	BSL
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	5.9 - 140	5.7E+03	UA	
	75-34-3	1,1-Dichloroethane	4.7	170	$\mu g/m^3$	52D-SP32-20	20	81	20	25%	4.4 - 6.8	1.8E+05	N	BSL
	75-35-4	1,1-Dichloroethene	8.3	2100	$\mu g/m^3$	52D-SP36-30	30	81	33	41%	4.3 - 6.3	6.0E+03	N	BSL
	95-63-6	1,2,4-Trimethylbenzene	6.8	18	$\mu g/m^3$	52D-SP26-10	10	81	12	15%	5.3 - 120	1.6E+04	N	BSL
	107-06-2	1,2-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	4.4 - 100	4.2E+04	UA	
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	5.3 - 120	1.6E+04	UA	
	106-99-0	1,3-Butadiene	2.9	220	$\mu g/m^3$	08D-SP07-20 52D-SP44-40	20 40	81	57	70%	2.4 - 56		UA	
	123-91-1	1,4-Dioxane	17	70	$\mu g/m^3$	52D-SP35-30	30	81	5	6%	16 - 360		UA	
	540-84-1	2,2,4-Trimethylpentane	9.6	2500	$\mu g/m^3$	52D-SP27-30 52D-SP33-20	20 30	81	14	17%	5 - 120		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	20	340	$\mu g/m^3$	52D-SP28-20	20	81	26	32%	3.4 - 75	8.6E+05	N	BSL
	591-78-6	2-Hexanone	21	26	$\mu g/m^3$	52D-SP40-20	20	81	2	2%	18 - 410	4.9E+03	N	BSL
	67-63-0	2-Propanol	13	100	$\mu g/m^3$	52D-SP28-20	20	81	9	11%	11 - 250		UA	
	622-96-8	4-Ethyltoluene	6.2	17	$\mu g/m^3$	52D-SP27-30	30	81	12	15%	5.3 - 120		UA	
	108-10-1	4-Methyl-2-pentanone	4.8	160	$\mu g/m^3$	52D-SP44-30	30	81	13	16%	4.4 - 100		UA	
	67-64-1	Acetone	53	2000	$\mu g/m^3$	52D-SP28-20	20	81	52	64%	13 - 240		UA	
	71-43-2	Benzene	3.6	81	$\mu g/m^3$	52D-SP29-10	10	81	54	67%	3.6 - 81	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	16	16	$\mu g/m^3$	52D-SP35-30	30	81	1	1%	7.2 - 170		UA	
	75-15-0	Carbon Disulfide	3.6	360	$\mu g/m^3$	AW-08D-SP10-10	10	81	67	83%	3.6 - 79	1.2E+03	N	BSL
	56-23-5	Carbon Tetrachloride	21	41	$\mu g/m^3$	52D-SP28-20	20	81	3	4%	6.8 - 160	6.3E+03	N	BSL
	75-00-3	Chloroethane	4.3	5.9	$\mu g/m^3$	52D-SP44-40	40	81	3	4%	2.8 - 67	9.9E+05	N	BSL
	67-66-3	Chloroform	6.3	710	$\mu g/m^3$	D(c)-SP05-30	30	81	31	38%	5.3 - 120	1.2E+03	N	BSL
	156-59-2	cis-1,2-Dichloroethene	5.3	530	$\mu g/m^3$	52D-SP42-30	30	81	16	20%	4.3 - 100	1.9E+04	N	BSL
	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	5.3 - 120	2.3E+04	UA	
	110-82-7	Cyclohexane	4.3	64	$\mu g/m^3$	52D-SP43-20	20	81	20	25%	3.8 - 87		UA	

Table 6.2-9 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Admin Area West	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	9.2 - 220		UA	
	64-17-5	Ethanol	8.6	160	$\mu g/m^3$	52D-SP28-20	20	81	34	42%	8.1 - 190		UA	
	100-41-4	Ethyl Benzene	5.1	18	$\mu g/m^3$	52D-SP27-30	30	81	15	19%	4.8 - 110	2.3E+04	N	BSL
	75-69-4	Freon 11	7.6	110	$\mu g/m^3$	52D-SP36-30	30	81	10	12%	6.1 - 140	8.8E+04	N	BSL
	76-13-1	Freon 113	11	3400	$\mu g/m^3$	52D-SP36-20 52D-SP36-30	20 30	81	56	69%	8.4 - 10	8.8E+04	N	BSL
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	5.3 - 120	8.8E+04	UA	
	142-82-5	Heptane	5.2	85	$\mu g/m^3$	52D-SP44-30	30	81	47	58%	4.7 - 100		UA	
	87-68-3	Hexachlorobutadiene	110	110	$\mu g/m^3$	D(b)-SP04-10	10	81	1	1%	46 - 1100		UA	
	110-54-3	Hexane	4.6	220	$\mu g/m^3$	08D-SP07-20	20	81	67	83%	4 - 89		UA	
	136777-61-2	m,p-Xylene	5.2	68	$\mu g/m^3$	52D-SP27-30	30	81	33	41%	4.9 - 110	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	3.9 - 91	2.6E+05	UA	
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	3.8 - 88	8.7E+03	UA	
	95-47-6	o-Xylene	5.6	17	$\mu g/m^3$	52D-SP27-30 52D-SP29-10	30 10	81	14	17%	4.7 - 110	1.6E+04	N	BSL
	103-65-1	Propylbenzene	ND	ND	$\mu g/m^3$	ND	ND	81	0	0%	5.3 - 120		UA	
	100-42-5	Styrene	4.8	17	$\mu g/m^3$	52D-SP29-10	10	81	10	12%	4.6 - 110	1.9E+05	N	BSL
	127-18-4	Tetrachloroethene	7.9	560	$\mu g/m^3$	52D-SP42-30	30	81	51	63%	7.5 - 170	2.4E+04	N	**BSL**
	109-99-9	Tetrahydrofuran	3.4	85	$\mu g/m^3$	52D-SP42-30	30	81	36	44%	3.2 - 75		UA	
	108-88-3	Toluene	4.4	110	$\mu g/m^3$	52D-SP27-30	30	81	69	85%	4.3 - 95	8.4E+01	Y	
	156-60-5	trans-1,2-Dichloroethene	5.8	32	$\mu g/m^3$	52D-SP42-30	30	81	3	4%	4.3 - 100	1.9E+04	N	BSL
	79-01-6	Trichloroethene	6.9	8300	$\mu g/m^3$	52D-SP42-30	30	81	57	70%	5.8 - 7.8	6.4E+03	Y	
	75-01-4	Vinyl Chloride	3.4	6.0	$\mu g/m^3$	52D-SP36-30	30	81	4	5%	2.8 - 65	5.6E+02	N	BSL

Footnotes:

(1) See Table ?

(2) Rationale for Deletion

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.2-10 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
1,1,2,2-Tetrachloroethane		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Bis(2-ethylhexyl)phthalate	mg/kg	0.62	1.3 J	06D-SNS08-0.5	2/21	na	-	-	na	-	-	0.04	2/21	33	0.6929	1/21	1.9			
Carbazole	mg/kg	-	-	-	0/10	na	-	-	na	-	-	na	-	-	na	-	-			
Di-n-butyl phthalate	mg/kg	0.758	3.2	52D-AH02-1	5/21	200	0/21	-	na	-	-	0.0125	5/21	256	64.449	0/21	-			
N-Nitrosodiphenylamine (as Diphenylamine	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
Pesticides & Polychlorinated Biphenyls																				
PCB-1254	mg/kg	0.046 J	2.5	05D-SB06-1	3/12	na	-	-	na	-	-	0.01	3/12	250	0.04	3/12	60			
PCB-1260	mg/kg	0.8 J	0.8 J	05D-SB07-1	1/12	na	-	-	na	-	-	0.01	1/12	80	0.04	1/12	19			
Inorganics																				
Antimony	mg/kg	0.16 J	49 J	06D-SNS07-0.5	10/25	na	-	-	78	0/25	-	na	-	-	0.27	6/25	181	0.459	4/25	106.8
Barium	mg/kg	49.6	250	08D-SNS02-0.01	23/23	na	-	-	330	0/23	-	na	-	-	2000	0/23	-			
Boron	mg/kg	5.9	164	06D-SNS01-0.01	4/23	0.5	4/23	328	20	1/23	8.2	na	-	-	na	-	-	19^	1/23	8.6
Cadmium	mg/kg	0.15	33	06D-SNS07-0.5	21/29	32	1/29	1.031	140	0/29	-	0.77	11/29	43	0.36	16/29	92	1.2	9/29	28
Chromium	mg/kg	22.4	43000 J	06D-SNS07-0.5	29/29	na	-	-	na	-	-	26	27/29	1654	34	27/29	1265	117.7	10/29	365
Chromium VI	mg/kg	0.046 J	1.8	12D-SNS09-0.5	13/13	na	-	-	na	-	-	na	-	-	81	0/13	-			
Copper	mg/kg	13.9	960	06D-SNS07-0.5	29/29	70	6/29	13.7	80	5/29	12	28	23/29	34	49	8/29	20	76	5/29	12.63
Iron	mg/kg	10900	45200	08D-SNS02-0.01	12/12	na	-	-	na	-	-	na	-	-	na	-	-			
Lead	mg/kg	2.6 J	640	06D-SNS07-0.5	28/29	120	2/29	5.333	1700	0/29	-	11	18/29	58	56	3/29	11	22.66	8/29	28.2
Lithium	mg/kg	6.2	12	06D-SB06-1	8/11	2	8/11	6	10	1/11	1.2	na	-	-	390	0/11	-	23^	0/11	-
Manganese	mg/kg	88.7	10100	06D-SNS01-0.01	29/29	220	27/29	45.9	450	13/29	22.4	4300	4/29	2.3	4000	4/29	2.5	1500	5/29	6.7
Mercury	mg/kg	0.02 J	1.4	06D-SNS07-0.5	19/29	na	-	-	na	-	-	0.000051	19/29	27451	0.0013	19/29	1077	0.127	9/29	11.0
Molybdenum	mg/kg	0.23 J	70 J	06D-SNS07-0.5	16/20	2	3/20	35	200	0/20	-	44	1/20	1.6	4.75	3/20	15	0.616	6/20	114
Nickel	mg/kg	21.9	1600	06D-SNS07-0.5	29/29	38	18/29	42.1	280	5/29	5.714	210	5/29	7.6	130	5/29	12	140	5/29	11
Perchlorate	mg/kg	-	-	-	0/9	na	-	-	1.17	-	-	20.3	-	-	24	-	-			
Silver	mg/kg	0.33 J	15.7	05D-SB06-1	19/29	560	0/29	-	na	-	-	4.2	5/29	3.7	14	1/29	1.1	2.4	7/29	6.5
Strontium	mg/kg	15	200 J	06D-SNS08-0.5	11/11	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	110	1000	06D-SB06-1	14/14	na	-	-	1000	0/14	-	na	-	-	na	-	-			
Total Cyanide	mg/kg	0.6	25	06D-SNS06-0.5	4/13	na	-	-	na	-	-	na	-	-	na	-	-			
Zinc	mg/kg	25.2	6410	06D-SNS01-0.01	29/29	160	7/29	40.1	120	10/29	53.4	46	22/29	139	79	12/29	81	89	12/29	72

Notes and Key:

Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.2-11 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
1,1,2,2-Tetrachloroethane	mg/kg	0.4	0.4	52D-AH03-5	1/1	na	-	-	na	-	-	na	-	-	na	-	-			
Bis(2-ethylhexyl)phthalate	mg/kg	0.05 J	0.05 J	06D-SNS07-2.5	1/15	na	-	-	na	-	-	0.04	1/15	1.3	0.6929	0/15	-			
Carbazole	mg/kg	-	-	-	0/9	na	-	-	na	-	-	na	-	-	na	-	-			
Di-n-butyl phthalate	mg/kg	1.02	1.7	52D-AH01-5	5/15	200	0/15	-	na	-	-	0.0125	5/15	136	64.449	0/15	-			
N-Nitrosodiphenylamine (as Diphenylamine	mg/kg	-	-	-	0/6	na	-	-	na	-	-	na	-	-	na	-	-			
Pesticides & Polychlorinated Biphenyls																				
PCB-1254	mg/kg	-	-	-	0/7	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1260	mg/kg	-	-	-	0/7	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
Inorganics																				
Antimony	mg/kg	0.13 J	5.3 J	06D-SNS07-2.5	14/21	na	-	-	78	0/21	-	na	-	-	0.27	6/21	19.6	0.459	5/21	11.5
Barium	mg/kg	42 J	210 J	06D-SB04-1.5	21/21	na	-	-	330	0/21	-	na	-	-	2000	0/21				
Boron	mg/kg	3.6 J	11	06D-SB04-1.5	8/21	0.5	8/21	22	20	0/21	-	na	-	-	na	-	-	19^	0/21	-
Cadmium	mg/kg	0.084 J	15	06D-SB05-1.5	17/21	32	0/21	-	140	0/21	-	0.77	6/21	19.5	0.36	9/21	41.7	1.2	4/21	12.5
Chromium	mg/kg	23	5700 J	06D-SNS07-2.5	21/21	na	-	-	na	-	-	26	20/21	219.2	34	17/21	167.6	117.7	6/21	48.4
Chromium VI	mg/kg	0.05 J	430 J	06D-SB02-5	13/13	na	-	-	na	-	-	na	-	-	81	1/13	5.3			
Copper	mg/kg	20 J	150	06D-SNS07-2.5	21/21	70	2/21	2.14	80	2/21	1.88	28	15/21	5.4	49	6/21	3.1	76	2/21	2.0
Iron	mg/kg	14600	23000	D(C)-SB01-5	4/4	na	-	-	na	-	-	na	-	-	na	-	-			
Lead	mg/kg	2.9 J	80	06D-SB05-1.5	21/21	120	0/21	-	1700	0/21	-	11	10/21	7.3	56	2/21	1.4	22.66	3/21	3.5
Lithium	mg/kg	5.2 J	16 J	06D-SB04-1.5	17/17	2	17/17	8.0	10	2/17	1.6	na	-	-	390	0/17	-	23^	0/17	-
Manganese	mg/kg	190	1900	06D-SNS07-2.5	21/21	220	19/21	8.6	450	10/21	4.22	4300	0/21	-	4000	0/21	-	1500	1/21	1.3
Mercury	mg/kg	0.0038 J	0.72	06D-SB05-1.5	16/21	na	-	-	na	-	-	0.000051	16/21	14118	0.0013	16/21	554	0.127	4/21	5.7
Molybdenum	mg/kg	0.54 J	7.3 J	06D-SNS07-2.5	17/19	2	6/19	3.65	200	0/19	-	44	0/19	-	4.75	2/19	1.5	0.616	16/19	11.9
Nickel	mg/kg	18.1	300	06D-SNS07-2.5	21/21	38	11/21	7.9	280	1/21	1.07	210	1/21	1.4	130	3/21	2.3	140	3/21	2.1
Perchlorate	mg/kg	0.53	1.9	06D-SNS11-2.5	3/8	na	-	-	1.17	2/8	1.62	20.3	0/8	-	24	0/8	-			
Silver	mg/kg	0.068 J	2.6	12D-SNS09-2.5	13/21	560	0/21	-	na	-	-	4.2	0/21	-	14	0/21	-			
Strontium	mg/kg	17 J	54	06D-SNS07-2.5	17/17	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	370 J	860	06D-SB03-5	19/19	na	-	-	1000	0/19	-	na	-	-	na	-	-			
Total Cyanide	mg/kg	0.78	2.6	06D-SNS06-2.5	3/7	na	-	-	na	-	-	na	-	-	na	-	-			
Zinc	mg/kg	25 J	790	06D-SNS07-2.5	21/21	160	4/21	4.94	120	5/21	6.58	46	10/21	17.2	79	5/21	10.0	89	5/21	8.9

Notes and Key:
Only samples that are located in areas of potential migration are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.2-12 ***Risk Characterization Summary Table***
Soil Ditch 0 to 1 foot
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
1,1,2,2-Tetrachloroethane		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/19	na	-	-	na	-	-	0.04	-	-	0.6929	-	-			
Carbazole	mg/kg	0.0066 J	0.0066 J	05D-SNS15-0.5	1/19	na	-	-	na	-	-	na	-	-	na	-	-			
Di-n-butyl phthalate	mg/kg	-	-	-	0/19	200	-	-	na	-	-	0.0125	-	-	64.449	-	-			
N-Nitrosodiphenylamine (as Diphenylamine	mg/kg	-	-	-	0/19	na	-	-	na	-	-	na	-	-	na	-	-			
Pesticides & Polychlorinated Biphenyls																				
PCB-1254	mg/kg	-	-	-	0/5	na	-	-	na	-	-	0.01	-	-	0.04	-	-			
PCB-1260	mg/kg	0.1	0.17	D(b)-SD01-0	2/5	na	-	-	na	-	-	0.01	2/5	17	0.04	2/5	4			
Inorganics																				
Antimony	mg/kg	0.087 J	6.95	12D-SNS01-0.01	25/40	na	-	-	78	0/40	-	na	-	-	0.27	20/40	26	0.459	15/40	15.1
Barium	mg/kg	39	470	D(b)-SD01-0	40/40	na	-	-	330	1/40	1.4	na	-	-	2000	0/40	-	320	1/40	1.5
Boron	mg/kg	2.9 J	65.3	05D-SNS03-0.01	10/40	0.5	10/40	130.6	20	1/40	3.3	na	-	-	na	-	-	19^	1/40	3.4
Cadmium	mg/kg	0.35 J	190 J	05D-SB03-1	31/40	32	2/40	5.9	140	1/40	1.4	0.77	24/40	247	0.36	30/40	528	1.2	21/40	158
Chromium	mg/kg	28.1	5300 J	05D-SB03-1	40/40	na	-	-	na	-	-	26	40/40	204	34	34/40	156	117.7	14/40	45
Chromium VI	mg/kg	0.088 J	7.5	05D-SB02-1	18/19	na	-	-	na	-	-	na	-	-	81	0/19	-			
Copper	mg/kg	13.9	540 J	05D-SNS15-0.5	40/40	70	15/40	7.7	80	14/40	6.8	28	28/40	19	49	19/40	11	76	14/40	7.1053
Iron	mg/kg	12700	37000	09D-SNS01-0.01	18/18	na	-	-	na	-	-	na	-	-	na	-	-			
Lead	mg/kg	4.4	330	05D-SB03-1	40/40	120	8/40	2.8	1700	0/40	-	11	29/40	30	56	14/40	5.9	22.66	24/40	14.6
Lithium	mg/kg	4.5 J	15 J	05D-SB03-1	21/22	2	21/22	7.5	10	9/22	1.5	na	-	-	390	0/22	-	23^	0/22	-
Manganese	mg/kg	150	8600	05D-SNS15-0.5	40/40	220	35/40	39.1	450	17/40	19.1	4300	1/40	2	4000	1/40	2.2	1500	1/40	5.7
Mercury	mg/kg	0.01 J	31.1	05D-SNS03-0.01	30/40	na	-	-	na	-	-	0.000051	30/40	609804	0.0013	30/40	23923	0.127	22/40	245
Molybdenum	mg/kg	0.16 J	15 J	05D-SNS15-0.5	22/22	2	6/22	7.5	200	0/22	-	44	0/22	-	4.75	3/22	3.2	0.616	13/22	24.4
Nickel	mg/kg	15.8	250	05D-SNS15-0.5	40/40	38	18/40	6.6	280	0/40	-	210	1/40	1.2	130	3/40	1.9	140	3/40	1.8
Perchlorate	mg/kg	-	-	-	0/14	na	-	-	1.17	-	-	20.3	-	-	24	-	-			
Silver	mg/kg	0.27 J	200	05D-SB03-1	25/40	560	0/40	-	na	-	-	4.2	13/40	48	14	8/40	14	2.4	19/40	83.3
Strontium	mg/kg	11 J	78	D(b)-SD01-0	22/22	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	170 J	1600	09D-SD01-0.25	22/22	na	-	-	1000	1/22	1.6	na	-	-	na	-	-			
Total Cyanide	mg/kg	0.5 J	1.3	05D-SNS13-0.5	3/11	na	-	-	na	-	-	na	-	-	na	-	-			
Zinc	mg/kg	28	3600	D(b)-SD01-0	40/40	160	22/40	22.5	120	22/40	30	46	38/40	78	79	27/40	46	89	25/40	40.4

Notes and Key:
Only samples that are located in areas of potential migration are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.2-13 Risk Characterization Summary Table
Soil Vapor Top Depth
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance
1,1,1-Trichloroethane	$\mu g/m^3$	191000	11	12	52D-SP41-10	2/11	0/11
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/11	-
1,1-Dichloroethane	$\mu g/m^3$	181000	-	-	-	0/11	-
1,1-Dichloroethene	$\mu g/m^3$	6000	-	-	-	0/11	-
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/11	-
1,2-Dichloroethane	$\mu g/m^3$	42000	-	-	-	0/11	-
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/11	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	34	120	D(c)-SP05-10	2/11	0/11
2-Hexanone	$\mu g/m^3$	4880	-	-	-	0/11	-
Acetone	$\mu g/m^3$	1305000	53	620 J	D(c)-SP05-10	7/11	0/11
Benzene	$\mu g/m^3$	570	3.8	49	D(c)-SP05-10	8/11	0/11
Carbon Disulfide	$\mu g/m^3$	1200	3.8	80	D(c)-SP06-10	10/11	0/11
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/11	-
Chloroethane	$\mu g/m^3$	992000	-	-	-	0/11	-
Chloroform	$\mu g/m^3$	1200	11	560	D(c)-SP06-10	4/11	0/11
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/11	-
Cumene	$\mu g/m^3$	23000	-	-	-	0/11	-
Ethyl Benzene	$\mu g/m^3$	23000	7.1	7.1	D(c)-SP11-10	1/11	0/11
Freon 11	$\mu g/m^3$	88000	-	-	-	0/11	-
Freon 113	$\mu g/m^3$	88000	11	140	52D-SP42-10	6/11	0/11
Freon 12	$\mu g/m^3$	88000	-	-	-	0/11	-
m,p-Xylene	$\mu g/m^3$	16000	5.5	10	52D-SP39-10	3/11	0/11
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/11	-
Methylene Chloride	$\mu g/m^3$	9000	-	-	-	0/11	-
o-Xylene	$\mu g/m^3$	16000	-	-	-	0/11	-
Styrene	$\mu g/m^3$	192000	-	-	-	0/11	-
Tetrachloroethene	$\mu g/m^3$	24000	7.9	87	52D-SP41-10	6/11	0/11
Toluene	$\mu g/m^3$	84	5.8	45	D(c)-SP11-10	10/11	0/11
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/11	-
Trichloroethene	$\mu g/m^3$	6400	12	690	D(c)-SP06-10	5/11	0/11
Vinyl Chloride	$\mu g/m^3$	560	-	-	-	0/11	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
Location of Maximum = "52D-SP41" indicates the location and "-10" indicates the sample depth in feet.

$\mu g/m^3$ = Micrograms per cubic meter
na - not available

Table 6.3-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 2	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-6.67	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.5-3	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	86	0	0%	0.167-1.2	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	86	0	0%	0.167-1.2	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.33	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	86	0	0%	0.5-3	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.33	NA	N	ND
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	0.021	N	ND
	72-55-9	4,4'-DDE	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	0.021	N	ND
	50-29-3	4,4'-DDT	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	0.021	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.33	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	80	0	0%	0.2-1.2	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.33	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	80	0	0%	0.2-1.2	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	86	0	0%	0.5-3	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.33	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	90	0	0%	0.0066-0.333	29	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	90	0	0%	0.0066-0.333	29	N	ND
	309-00-2	Aldrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.008247	N	ND
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.356	N	ND
	7429-90-5	Aluminum	4800	48000	mg/kg	59E-SB04	2.5	92	92	100%	NA	NA	Y	
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	120-12-7	Anthracene	0.021	0.021	mg/kg	L2-ST26-SB01	2	90	1	1%	0.0066-0.333	29	N	BSL
	7440-36-0	Antimony	0.086	9	mg/kg	29E-SB05	2	89	62	70%	1-31	0.27	Y	
	AER-001-095	Arsenic	0.86	8.1	mg/kg	E(m)-SD01	1.5	89	84	94%	0.57-6.2	18	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	80	0	0%	0.2-1.2	NA	N	ND
	7440-39-3	Barium	27	464	mg/kg	28E-SPB02	3	89	89	100%	NA	330	N	BG
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	80	0	0%	0.35-2.1	NA	N	ND

Table 6.3-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 2	56-55-3	Benzo (a) anthracene	0.0041	0.41	mg/kg	L2-ST26-SB01	2	90	7	8%	0.0066-0.333	1.1	N	BSL
	50-32-8	Benzo (a) pyrene	0.0062	0.32	mg/kg	L2-ST26-SB01	2	90	6	7%	0.0066-0.333	1.1	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.012	0.74	mg/kg	L2-ST26-SB01	2	84	8	10%	0.013-0.076	1.1	N	BSL
	205-99-2	Benzo (b) fluoranthene	ND	ND	mg/kg	ND	ND	6	0	0%	0.167-0.333	1.1	N	ND
	191-24-2	Benzo (ghi) perylene	0.022	0.088	mg/kg	L2-ST26-SB01	2	90	5	6%	0.0066-0.333	1.1	N	BSL
	207-08-9	Benzo (k) fluoranthene	ND	ND	mg/kg	ND	ND	6	0	0%	0.167-0.333	1.1	N	ND
	65-85-0	Benzoic acid	0.27	0.27	mg/kg	L2-ST26-SB01	2	86	1	1%	0.5-3	NA	Y	
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	0.0125	N	ND*
	7440-41-7	Beryllium	0.11	1	mg/kg	L2-ST26-SB03	5	93	89	96%	0.11-0.78	21	N	BSL
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.315	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	86	0	0%	0.333-3	0.04	N	ND*
	7440-42-8	Boron	1.1	14	mg/kg	28E-SB03	1	89	26	29%	2.1-16	0.5	Y	
	7440-43-9	Cadmium	0.035	3.3	mg/kg	E(n)-SNS01	0.5	92	55	60%	0.1-1.6	0.36	N	BG
	7440-70-2	Calcium	2320	4300	mg/kg	28E-SPB02	3	5	5	100%	NA	NA	N	EN
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	80	0	0%	0.2-1.2	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	3	0	0%	0.021-0.022	NA	N	ND
	7440-47-3	Chromium	19	93	mg/kg	DSA-SB01	1	92	92	100%	NA	26	Y	
	18540-29-9	Chromium VI	0.072	0.097	mg/kg	29E-SB12	1	2	2	100%	NA	81	N	BSL
	218-01-9	Chrysene	0.0049	0.55	mg/kg	L2-ST26-SB01	2	90	15	17%	0.0066-0.333	1.1	N	BSL
	7440-48-4	Cobalt	4.1	36	mg/kg	59E-SB04	2.5	89	89	100%	NA	13	N	BG
	7440-50-8	Copper	2.8	74	mg/kg	59E-SB04	2.5	92	92	100%	NA	28	Y	
	319-86-8	delta-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.346	N	ND
	53-70-3	Dibenz (a,h) anthracene	0.031	0.031	mg/kg	L2-ST26-SB01	2	90	1	1%	0.0066-0.333	1.1	N	BSL
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	86	0	0%	0.167-1.2	NA	N	ND
	60-57-1	Dieldrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	0.0049	N	ND
	68334-30-5	Diesel Range Organics (C10-C28)	0.96	370	mg/kg	L2-ST24-SB01	2	63	47	75%	2-120	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	0.504	5.38	mg/kg	29E-SB01	5	86	5	6%	0.333-2.4	0.0125	Y	
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	0.0125	N	ND*
	959-98-8	Endosulfan I	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	0.0633	N	ND
	33213-65-9	Endosulfan II	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	0.0633	N	ND
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	0.0633	N	ND
	72-20-8	Endrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0021-0.0022	0.003163	N	ND
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	0.005284	N	ND
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	3	0	0%	0.0063-0.0065	NA	N	ND
	206-44-0	Fluoranthene	0.0017	0.82	mg/kg	L2-ST26-SB01	2	90	20	22%	0.0066-0.333	1.1	N	BSL
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	90	0	0%	0.0066-0.333	29	N	ND

Table 6.3-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 2	58-89-9	gamma-BHC (Lindane)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.029281	N	ND
	76-44-8	Heptachlor	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.003394	N	ND
	1024-57-3	Heptachlor epoxide	ND	ND	mg/kg	ND	ND	3	0	0%	0.0011-0.0011	0.363	N	ND
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	86	0	0%	0.21-4.2	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	0.012	0.085	mg/kg	L2-ST26-SB01	2	90	4	4%	0.0066-0.333	1.1	N	BSL
	7439-89-6	Iron	23600	43600	mg/kg	28E-SPB01	0	5	5	100%	NA	NA	N	EN
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	7439-92-1	Lead	3	240	mg/kg	29E-SB05	2	92	92	100%	NA	11	N	BG
	7439-93-2	Lithium	3	32	mg/kg	DSA-SB02	1.5	84	84	100%	NA	2	Y	
	7439-95-4	Magnesium	3040	7860	mg/kg	28E-SPB01	0	5	5	100%	NA	NA	N	EN
	7439-96-5	Manganese	130	2220	mg/kg	28E-SPB02	3	89	89	100%	NA	220	N	BG
	7439-97-6	Mercury	0.0074	18	mg/kg	29E-SB05	6	89	79	89%	0.02-0.42	0.00051	N	BG
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	3	0	0%	0.021-0.022	5.742	N	ND
	7439-98-7	Molybdenum	0.14	93	mg/kg	DSA-SB03	2	84	77	92%	1.1-6.2	2	Y	
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.1	1200	mg/kg	L2-ST24-SB01	2	63	56	89%	4.1-230	NA	N	ITC
	91-20-3	Naphthalene	0.0032	0.0032	mg/kg	29E-SNS07	0.5	90	1	1%	0.0066-0.333	29	N	BSL
	7440-02-0	Nickel	8.7	94	mg/kg	59E-SB04	2.5	92	92	100%	NA	38	Y	
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	93	0	0%	0.003-1.2	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	86	0	0%	0.2-1.2	NA	N	ND
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	6	0	0%	0.333-0.667	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	80	0	0%	0.2-1.2	NA	N	ND
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	3	0	0%	0.021-0.022	0.0101	N	ND*
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0667	0.0101	N	ND*
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0667	0.0101	N	ND*
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	0.0101	N	ND*
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	0.0101	N	ND*
	11097-69-1	PCB-1254	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	0.0101	N	ND*
	11096-82-5	PCB-1260	ND	ND	mg/kg	ND	ND	5	0	0%	0.021-0.0333	0.0101	N	ND*
	87-86-5	Pentachlorophenol	0.34	0.34	mg/kg	E(m)-SD02	0.25	86	1	1%	0.667-4.2	2.1	N	BSL
	14797-73-0	Perchlorate	0.006	5.1	mg/kg	28E-SB06	5	96	32	33%	0.0051-4	1.17	Y	
	S-PH	pH	ND	ND	mg/kg	ND	ND	9	0	0%	-	NA	N	ND
	85-01-8	Phenanthrene	0.0024	0.14	mg/kg	L2-ST26-SB01	2	90	13	14%	0.0066-0.333	29	N	BSL
	108-95-2	Phenol	0.17	1	mg/kg	L2-ST24-SB01	2	86	9	10%	0.2-1.2	30	N	BSL
	AER-001-089	Polychlorinated Biphenyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.0333-0.0333	0.01	N	ND*
	7440-09-7	Potassium	1130	3500	mg/kg	28E-SPB01	0	5	5	100%	NA	NA	N	EN
	129-00-0	Pyrene	0.006	1.1	mg/kg	L2-ST26-SB01	2	90	15	17%	0.0066-0.333	1.1	N	BSL
	7782-49-2	Selenium	0.21	2	mg/kg	DSA-SB01	1	89	14	16%	0.85-6.2	0.52	N	BG
	7440-22-4	Silver	0.051	2	mg/kg	29E-SNS06	0.5	92	11	12%	0.43-3.1	4.2	N	BSL

Table 6.3-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 2	AER-001-082	Sodium	155	199	mg/kg	28E-SPB01	3	5	2	40%	100-100	NA	N	EN
	7440-24-6	Strontium	4	48	mg/kg	59E-SB04	2.5	84	84	100%	NA	NA	Y	
	7440-28-0	Thallium	0.11	5.1	mg/kg	28E-SPB01	0	89	74	83%	0.51-16	1	Y	
	7440-32-6	Titanium	400	1200	mg/kg	59E-SB04	2.5	84	84	100%	NA	1000	Y	
	TOC	Total Organic Carbon	ND	ND	mg/kg	ND	ND	17	0	0%	5000-5700	NA	N	ND
	AER-001-090	Total Recov. Petroleum Hydrocarbons	2140	2140	mg/kg	E(E)-SB01	1	2	1	50%	20-20	NA	N	ITC
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	3	0	0%	0.084-0.087	NA	N	ND
	7440-62-2	Vanadium	15	129	mg/kg	28E-SPB01	0	89	89	100%	NA	7.8	N	BG
	7440-66-6	Zinc	17	2800	mg/kg	E(n)-SNS01	0.5	92	92	100%	NA	46	Y	

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.3-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 2	71-55-6	1,1,1-Trichloroethane	8.7	43000	$\mu g/m^3$	28E-SP16	10	126	9	7.1%	5.7-3200	1.9E+05	N	BSL
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	5.7-3200	5.7E+03	UA	
	75-34-3	1,1-Dichloroethane	13	210	$\mu g/m^3$	28E-SP16	40	126	5	4.0%	4.2-2400	1.8E+05	N	BSL
	75-35-4	1,1-Dichloroethene	4.4	20000	$\mu g/m^3$	28E-SP16	10	126	29	23.0%	4.1-2400	6.0E+03	Y	
	95-63-6	1,2,4-Trimethylbenzene	6	49	$\mu g/m^3$	DSA-SP19	10	126	20	15.9%	5.1-2900	1.6E+04	N	BSL
	107-06-2	1,2-Dichloroethane	5.3	190	$\mu g/m^3$	28E-SP16	30	126	7	5.6%	4.2-2400	4.2E+04	N	BSL
	108-67-8	1,3,5-Trimethylbenzene	6.2	14	$\mu g/m^3$	DSA-SP19	10	126	8	6.3%	5.1-2900	1.6E+04	N	BSL
	106-99-0	1,3-Butadiene	3	560	$\mu g/m^3$	DSA-SP10	20	126	83	65.9%	2.4-1300		UA	
	123-91-1	1,4-Dioxane	21	56	$\mu g/m^3$	29E-SP11	20	126	14	11.1%	15-8600		UA	
	540-84-1	2,2,4-Trimethylpentane	6.8	130	$\mu g/m^3$	DSA-SP24	30	126	23	18.3%	4.9-2800		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	11	520	$\mu g/m^3$	DSA-SP18	20	126	49	38.9%	3.1-1800	8.6E+05	N	BSL
	591-78-6	2-Hexanone	26	60	$\mu g/m^3$	DSA-SP18	20	126	3	2.4%	17-9700	4.9E+03	N	BSL
	67-63-0	2-Propanol	12	28000	$\mu g/m^3$	28E-SP16	20	126	22	17.5%	10-5800		UA	
	622-96-8	4-Ethyltoluene	5.7	75	$\mu g/m^3$	DSA-SP19	10	126	19	15.1%	5.1-2900		UA	
	108-10-1	4-Methyl-2-pentanone	5	44	$\mu g/m^3$	29E-SP11	10	126	19	15.1%	4.3-2400		UA	
	67-64-1	Acetone	54	3000	$\mu g/m^3$	L2-ST26-SP07	18	126	73	57.9%	10-11000		UA	
	71-43-2	Benzene	3.9	290	$\mu g/m^3$	DSA-SP32	20	126	91	72.2%	3.3-1900	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	41	41	$\mu g/m^3$	DSA-SP05	20	126	1	0.8%	7-4000		UA	
	75-15-0	Carbon Disulfide	3.8	8500	$\mu g/m^3$	28E-SP16	20	126	108	85.7%	3.2-1800	1.2E+03	Y	
	56-23-5	Carbon Tetrachloride	8.1	7000	$\mu g/m^3$	29E-SP09	20	126	22	17.5%	6.6-3700	6.3E+03	Y	
	75-00-3	Chloroethane	3.7	3.7	$\mu g/m^3$	DSA-SP31	10	126	1	0.8%	2.8-1600	9.9E+05	N	BSL
	67-66-3	Chloroform	5.4	2400	$\mu g/m^3$	29E-SP09	20	126	57	45.2%	5.1-2900	1.2E+03	Y	
	156-59-2	cis-1,2-Dichloroethene	4.8	55000	$\mu g/m^3$	28E-SP16	10	126	20	15.9%	4.1-2400	1.9E+04	Y	
	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	5.1-2900	2.3E+04	UA	
	110-82-7	Cyclohexane	4.1	100	$\mu g/m^3$	E(d)-SP03	10	126	53	42.1%	3.6-2000		UA	

Table 6.3-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 2	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	8.9-5100		UA	
	64-17-5	Ethanol	9.7	560	$\mu g/m^3$	E(n)-SP12	10	126	58	46.0%	8-4500		UA	
	100-41-4	Ethyl Benzene	5.2	160	$\mu g/m^3$	DSA-SP18	20	126	30	23.8%	4.5-2600	2.3E+04	N	BSL
	75-69-4	Freon 11	7.6	4200	$\mu g/m^3$	DSA-SP04	20	126	47	37.3%	5.9-3300	8.8E+04	N	BSL
	76-13-1	Freon 113	9.3	220000	$\mu g/m^3$	DSA-SP16	40	126	91	72.2%	8-4600	8.8E+04	Y	
	75-71-8	Freon 12	5.6	100	$\mu g/m^3$	29E-SP09	30	126	17	13.5%	5.2-2900	8.8E+04	N	BSL
	142-82-5	Heptane	5	2600	$\mu g/m^3$	28E-SP16	10	126	86	68.3%	4.3-2400		UA	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	44-25000		UA	
	110-54-3	Hexane	4	3600	$\mu g/m^3$	28E-SP16	20	126	112	88.9%	3.8-2100		UA	
	95-47-6	o-Xylene	5	120	$\mu g/m^3$	DSA-SP19	10	126	26	20.6%	4.5-2600	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	3.8-2100	2.6E+05	UA	
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	3.6-2700	8.7E+03	UA	
	103-65-1	Propylbenzene	8.2	16	$\mu g/m^3$	DSA-SP19	10	126	3	2.4%	5.1-2900		UA	
	100-42-5	Styrene	6.4	7.4	$\mu g/m^3$	DSA-SP19	10	126	2	1.6%	4.4-2500	1.9E+05	N	BSL
	127-18-4	Tetrachloroethene	7.8	800000	$\mu g/m^3$	28E-SP16	10	126	57	45.2%	7.1-4000	2.4E+04	Y	
	109-99-9	Tetrahydrofuran	3.6	170	$\mu g/m^3$	E(m)-SP08, E(M)-SP09		126	54	42.9%	3.1-1800		UA	
	108-88-3	Toluene	5	5900	$\mu g/m^3$	28E-SP16	10	126	103	81.7%	4-2200	8.4E+01	Y	
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	126	0	0.0%	4.1-2400	1.9E+04	UA	
	79-01-6	Trichloroethene	6.9	10000000	$\mu g/m^3$	28E-SP16	10	126	96	76.2%	5.6-16000	6.4E+03	Y	
	75-01-4	Vinyl Chloride	6.7	7.6	$\mu g/m^3$	29E-SP11	20	126	2	1.6%	2.7-1500	5.6E+02	N	BSL

Footnotes:

(1) See Table ?

(2) Rationale for Deletion

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.3-3 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
Benzoic acid	mg/kg	-	-	-	0/16	na	-	-	na	-	-	na	-	-	na	-	-			
Di-n-butyl phthalate	mg/kg	0.504	0.504	59E-SB01-1	1/16	200	0/16	-	na	-	-	0.01	1/16	40.3	64.45	0/16	-			
Inorganics																				
Aluminum	mg/kg	6990	41000	28E-SB03-1	18/18	na	-	-	na	-	-	na	-	-	na	-	-			
Antimony	mg/kg	0.23 J	0.75 J	E(m)-SD01-0.25	7/15	na	-	-	78	0/15	-	na	-	-	0.27	4/15	2.8	1.3	0/15	
Boron	mg/kg	1.3 J	14	28E-SB03-1	7/15	0.5	7/15	28	20	0/15	-	na	-	-	na	-	-	19^	0/15	
Chromium	mg/kg	32.6 J	91.2	28E-SPB01-0	18/18	na	-	-	na	-	-	26	18/18	3.5	34	17/18	2.7	110	0/18	
Copper	mg/kg	19	56.4	28E-SPB01-0	18/18	70	0/18	-	80	0/18	-	28	9/18	2.0	49	2/18	1.2	63	0/18	
Lithium	mg/kg	6.5	12 J	28E-SB03-1	12/12	2	12/12	6	10	3/12	1.2	na	-	-	390	0/12	-	23^	0/12	
Molybdenum	mg/kg	0.38 J	5.2 J	28E-SB03-1	11/12	2	1/12	2.6	200	0/12	-	44	0/12	-	4.75	1/12	1.1	0.52	8/12	10
Nickel	mg/kg	22 J	49.8	29E-SB12-1	18/18	38	4/18	1.3	280	0/18	-	210	0/18	-	130	0/18	-	75	0/18	
Perchlorate	mg/kg	0.026 J	0.67	28E-SB05-1	4/17	na	-	-	1.17	0/17	-	20.3	0/17	-	24	0/17	-			
Strontium	mg/kg	11	30 J	28E-SB03-1	12/12	na	-	-	na	-	-	na	-	-	na	-	-			
Thallium	mg/kg	0.13 J	5.1	28E-SPB01-0	12/15	1	6/15	5.1	na	-	-	na	-	-	2.1	3/15	2.4	2.5	3/15	2.0
Titanium	mg/kg	480	900	28E-SB03-1	12/12	na	-	-	1000	0/12	-	na	-	-	na	-	-			
Zinc	mg/kg	31	130 J	29E-SNS07-0.5	18/18	160	0/18	-	120	1/18	1.1	46	12/18	2.8	79	5/18	1.6	100	1/18	1.3

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.3-4 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
Benzoic acid	mg/kg	-	-	-	0/25	na	-	-	na	-	-	na	-	-	na	-	-			
Di-n-butyl phthalate	mg/kg	-	-	-	0/25	200	-	-	na	-	-	0.0125	-	-	64.449	-	-			
Inorganics																				
Aluminum	mg/kg	10000	48000	59E-SB04-2.5	30/30	na	-	-	na	-	-	na	-	-	na	-	-			
Antimony	mg/kg	0.086 J	3.5 J	59E-SB03-2	19/30	na	-	-	78	0/30	-	na	-	-	0.27	13/30	13	1.3	9/30	2.7
Boron	mg/kg	1.2 J	10	E(m)-SD02-5	8/30	0.5	8/30	20	20	0/30	-	na	-	-	na	-	-	19^	0/30	
Chromium	mg/kg	29	91.7	28E-SPB01-3	30/30	na	-	-	na	-	-	26	30/30	3.5	34	27/30	2.7	110	0/30	
Copper	mg/kg	13	74	59E-SB04-2.5	30/30	70	1/30	1.1	80	0/30	-	28	15/30	2.6	49	3/30	1.5	63	1/30	1.2
Lithium	mg/kg	4.8 J	27	59E-SB04-2.5	28/28	2	28/28	13.5	10	4/28	2.7	na	-	-	390	0/28	-	23^	1/28	1.2
Molybdenum	mg/kg	0.19 J	6.1 J	59E-SB02-2	25/28	2	2/28	3.1	200	0/28	-	44	0/28	-	4.75	1/28	1.3	0.522	12/28	11.7
Nickel	mg/kg	16 J	94	59E-SB04-2.5	30/30	38	11/30	2.5	280	0/30	-	210	0/30	-	130	0/30	-	75	1/30	1.3
Perchlorate	mg/kg	0.006	5.1	28E-SB06-5	7/30	na	-	-	1.17	1/30	4.4	20.3	0/30	-	24	0/30	-			
Strontium	mg/kg	15	48	59E-SB04-2.5	28/28	na	-	-	na	-	-	na	-	-	na	-	-			
Thallium	mg/kg	0.11 J	3.4 J	59E-SB03-2	22/30	1	10/30	3.4	na	-	-	na	-	-	2.1	2/30	1.6	2.5	1/30	1.4
Titanium	mg/kg	400	1200	59E-SB04-2.5	28/28	na	-	-	1000	1/28	1.2	na	-	-	na	-	-			
Zinc	mg/kg	26 J	88	E(N)-SD01-1.5	30/30	160	0/30	-	120	0/30	-	46	11/30	1.9	79	2/30	1.1	100	0/30	

Notes and Key:

Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.3-5 Risk Characterization Summary Table
Soil Vapor Top Depth
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening_Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance	HQs
1,1,1-Trichloroethane	$\mu g/m^3$	191000	43000	43000	28E-SP16-10	1/21	0/21	-
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/21	-	-
1,1-Dichloroethane	$\mu g/m^3$	181000	-	-	-	0/21	-	-
1,1-Dichloroethene	$\mu g/m^3$	6000	20000	20000	28E-SP16-10	1/21	1/21	3.3
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	11	49	DSA-SP19-10	4/21	0/21	-
1,2-Dichloroethane	$\mu g/m^3$	42000	-	-	-	0/21	-	-
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	14	14	DSA-SP19-10	1/21	0/21	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	22	320	DSA-SP18-10	9/21	0/21	-
2-Hexanone	$\mu g/m^3$	4880	-	-	-	0/21	-	-
Acetone	$\mu g/m^3$	1305000	54	3000 J	L2-ST26-SP07-18	15/21	0/21	-
Benzene	$\mu g/m^3$	570	4.1	100	L2-ST26-SP07-18	15/21	0/21	-
Carbon Disulfide	$\mu g/m^3$	1200	10	420	L2-ST26-SP05-10	15/21	0/21	-
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/21	-	-
Chloroethane	$\mu g/m^3$	992000	-	-	-	0/21	-	-
Chloroform	$\mu g/m^3$	1200	-	-	-	0/21	-	-
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	55000	55000	28E-SP16-10	1/21	1/21	2.9
Cumene	$\mu g/m^3$	23000	-	-	-	0/21	-	-
Ethyl Benzene	$\mu g/m^3$	23000	7.1	140	DSA-SP19-10	4/21	0/21	-
Freon 11	$\mu g/m^3$	88000	-	-	-	0/21	-	-
Freon 113	$\mu g/m^3$	88000	19	64	59E-SP10-20	4/21	0/21	-
Freon 12	$\mu g/m^3$	88000	-	-	-	0/21	-	-
m,p-Xylene	$\mu g/m^3$	16000	5.3	510	DSA-SP19-10	9/21	0/21	-
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/21	-	-
Methylene Chloride	$\mu g/m^3$	9000	-	-	-	0/21	-	-
o-Xylene	$\mu g/m^3$	16000	7.4	120	DSA-SP19-10	4/21	0/21	-
Styrene	$\mu g/m^3$	192000	7.4	7.4	DSA-SP19-10	1/21	0/21	-
Tetrachloroethene	$\mu g/m^3$	24000	9.9	800000	28E-SP16-10	11/21	1/21	33
Toluene	$\mu g/m^3$	84	5.5	5900	28E-SP16-10	18/21	5/21	70
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/21	-	-
Trichloroethene	$\mu g/m^3$	6400	6.9	10000000	28E-SP16-10	7/21	1/21	1563
Vinyl Chloride	$\mu g/m^3$	560	6.7	6.7	L2-ST26-SP07-18	1/21	0/21	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
HQ = Hazard quotient
$\mu g/m^3$ = Micrograms per cubic meter
na = Not available

Table 6.4-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 5	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	31	0	0%	0.2-6.1	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.51-15	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	32	0	0%	0.51-15	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.51-15	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	83-32-9	Acenaphthene	0.003	0.003	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	29	N	BSL
	208-96-8	Acenaphthylene	0.036	0.036	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	29	N	BSL
	7429-90-5	Aluminum	8300	51000	mg/kg	52E-SB11	5	44	44	100%	NA	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	31	0	0%	0.2-6.1	NA	N	ND
	120-12-7	Anthracene	0.021	0.021	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	29	N	BSL
	7440-36-0	Antimony	0.053	1.9	mg/kg	52E-SB05	1.5	42	28	67%	1-8.8	0.27	N	BG
	7440-38-2	Arsenic	2.1	8.3	mg/kg	52E-SB15	5	43	43	100%	NA	18	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	31	0	0%	0.2-6.1	NA	N	ND
	7440-39-3	Barium	53	340	mg/kg	52E-SB15	5	43	43	100%	NA	330	N	BG
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	31	0	0%	0.36-11	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.088	0.088	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	1.1	N	BSL
	50-32-8	Benzo (a) pyrene	0.13	0.13	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	1.1	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.18	0.35	mg/kg	52E-SNS01	0.5	32	2	6%	0.013-0.14	1.1	N	BSL
	205-99-2	Benzo (b) fluoranthene	ND	ND	mg/kg	ND	ND	1	0	0%	0.36-0.36	1.1	N	ND

Table 6.4-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 5	191-24-2	Benzo (ghi) perylene	0.058	0.058	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	1.1	N	BSL
	207-08-9	Benzo (k) fluoranthene	ND	ND	mg/kg	ND	ND	1	0	0%	0.36-0.36	1.1	N	ND
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	31	0	0%	0.51-15	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	31	0	0%	0.2-6.1	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	0.0125	N	ND*
	7440-41-7	Beryllium	0.15	0.88	mg/kg	51E-SB03	5	43	40	93%	0.2-0.51	21	N	BSL
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.36-15	0.04	N	ND*
	7440-42-8	Boron	1.3	12	mg/kg	52E-SB12	1	43	12	28%	4-9.8	0.5	Y	
	7440-43-9	Cadmium	0.17	4.8	mg/kg	52E-SNS01	0.5	46	36	78%	0.11-0.98	0.36	Y	
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	31	0	0%	0.2-6.1	NA	N	ND
	7440-47-3	Chromium	26	140	mg/kg	52E-SB12	1	44	44	100%	NA	26	N	BG
	18540-29-9	Chromium VI	0.19	1.6	mg/kg	52E-SB12	1	3	3	100%	NA	81	N	BSL
	218-01-9	Chrysene	0.0095	0.28	mg/kg	52E-SB05	1.5	33	6	18%	0.0067-0.36	1.1	N	BSL
	7440-48-4	Cobalt	5.4	35	mg/kg	52E-SB09	3.75	43	43	100%	NA	13	N	BG
	7440-50-8	Copper	22	640	mg/kg	52E-SNS01	0.5	44	44	100%	NA	28	N	BG
	53-70-3	Dibenz (a,h) anthracene	0.014	0.014	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	1.1	N	BSL
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	68334-30-5	Diesel Range Organics (C10-C28)	0.93	2200	mg/kg	52E-SB05	1.5	38	26	68%	2-400	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.36-12	0.0125	N	ND*
	117-84-0	Di-n-octyl phthalate	1.2	1.2	mg/kg	52E-SNS01	0.5	32	1	3%	0.2-6.1	0.0125	Y	
	206-44-0	Fluoranthene	0.0022	0.2	mg/kg	52E-SNS01	0.5	33	5	15%	0.0067-0.36	1.1	N	BSL
	86-73-7	Fluorene	0.003	0.003	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	29	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	32	0	0%	0.72-21	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	0.057	0.057	mg/kg	52E-SNS01	0.5	33	1	3%	0.0067-0.36	1.1	N	BSL
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	7439-92-1	Lead	2.3	170	mg/kg	52E-SNS01	0.5	44	44	100%	NA	11	N	BG
	7439-93-2	Lithium	4.2	23	mg/kg	E(L)-SB01	5	43	43	100%	NA	2	Y	
	7439-96-5	Manganese	140	1600	mg/kg	52E-SB15	5	43	43	100%	NA	220	N	BG
	7439-97-6	Mercury	0.0073	2.4	mg/kg	52E-SNS01	0.5	44	42	95%	0.02-0.22	0.00051	N	BG
	7439-98-7	Molybdenum	0.11	4.4	mg/kg	E(L)-SB01	0.25	43	38	88%	1-3.9	2	Y	
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.3	5700	mg/kg	52E-SB05	1.5	40	31	78%	4.1-810	NA	N	ITC
	91-20-3	Naphthalene	0.013	0.015	mg/kg	52E-SB12	1	33	2	6%	0.0067-0.36	29	N	BSL
	7440-02-0	Nickel	24	77	mg/kg	52E-SB15	5	44	44	100%	NA	38	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND

Table 6.4-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 5	556887	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	36	0	0%	0.032-0.25	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	32	0	0%	0.0031-0.74	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-6.1	NA	N	ND
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	1	0	0%	0.36-0.36	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	31	0	0%	0.2-6.1	NA	N	ND
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.72-21	2.1	N	ND*
	14797-73-0	Perchlorate	0.0077	0.52	mg/kg	52E-SB14	5	46	14	30%	0.005-0.088	1.17	N	BSL
	S-PH	pH	8.15	8.67	mg/kg	52E-SB12	1	2	2	100%	NA	NA	N	
	85-01-8	Phenanthrene	0.0036	0.14	mg/kg	52E-SB04	1	33	7	21%	0.0067-0.36	29	N	BSL
	108-95-2	Phenol	0.17	4.2	mg/kg	52E-SB06	5	32	9	28%	0.2-6.1	30	N	BSL
	129-00-0	Pyrene	0.0062	0.22	mg/kg	52E-SB05, 52E-SNS01	1.5 0.5	33	5	15%	0.0067-0.36	1.1	N	BSL
	7782-49-2	Selenium	0.21	1.9	mg/kg	52E-SB12	1	43	9	21%	1-2.7	0.52	N	BG
	7440-22-4	Silver	0.047	14	mg/kg	52E-SNS01	0.5	44	7	16%	0.52-2	4.2	N	BG
	7440-24-6	Strontium	14	87	mg/kg	52E-SB12	1	43	43	100%	NA	NA	Y	
	7440-28-0	Thallium	0.12	3.9	mg/kg	52E-SB14	5	43	34	79%	0.51-9.8	1	N	BG
	7440-32-6	Titanium	420	1800	mg/kg	52E-SB11	5	43	43	100%	NA	1000	Y	
	57-12-5	Total Cyanide	ND	ND	mg/kg	ND	ND	1	0	0%	0.54-0.54	NA	N	ND
	TOC	Total Organic Carbon	5600	5600	mg/kg	52E-SB23	1	3	1	33%	1000-5400	NA	N	
	7440-62-2	Vanadium	34	110	mg/kg	52E-SB15, E(L)-SB01	5 5	43	43	100%	NA	7.8	N	BG
	7440-66-6	Zinc	23	680	mg/kg	52E-SNS01	0.5	44	44	100%	NA	46	N	BG

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.4-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 5	71-55-6	1,1,1-Trichloroethane	14	14	$\mu g/m^3$	52E-SP04	10	29	1	3%	5.8-12	1.9E+05	N	BSL
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	5.8-12	5.7E+03	UA	
	75-34-3	1,1-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	4.3-8.9	1.8E+05	UA	
	75-35-4	1,1-Dichloroethene	15	15	$\mu g/m^3$	52E-SP07	20	29	1	3%	4.2-8.7	6.0E+03	N	BSL
	95-63-6	1,2,4-Trimethylbenzene	7.3	17	$\mu g/m^3$	52E-SP24	10	29	4	14%	5.2-11	1.6E+04	N	BSL
	107-06-2	1,2-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	4.3-8.9	4.2E+04	UA	
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	5.2-11	1.6E+04	UA	
	106-99-0	1,3-Butadiene	3.1	120	$\mu g/m^3$	51E-SP11	20	29	13	45%	2.4-4.9		UA	
	123-91-1	1,4-Dioxane	34	34	$\mu g/m^3$	51E-SP11	20	29	1	3%	15-32		UA	
	540-84-1	2,2,4-Trimethylpentane	5.5	580	$\mu g/m^3$	52E-SP12	10	29	2	7%	5-10		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	19	70	$\mu g/m^3$	52E-SP23	10	29	5	17%	3.4-16	8.6E+05	N	BSL
	591-78-6	2-Hexanone	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	17-36	4.9E+03	UA	
	67-63-0	2-Propanol	14	84	$\mu g/m^3$	51E-SP11	20	29	5	17%	10-22		UA	
	622-96-8	4-Ethyltoluene	7.7	8.8	$\mu g/m^3$	52E-SP24	10	29	2	7%	5.2-11		UA	
	108-10-1	4-Methyl-2-pentanone	5.7	8.6	$\mu g/m^3$	52E-SP21	20	29	3	10%	4.4-9		UA	
	67-64-1	Acetone	56	890	$\mu g/m^3$	52E-SP19	30	29	19	66%	11-49		UA	
	71-43-2	Benzene	4.9	34	$\mu g/m^3$	51E-SP11	20	29	13	45%	3.4-7	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	7.1-15		UA	
	75-15-0	Carbon Disulfide	3.7	93	$\mu g/m^3$	51E-SP11	20	29	20	69%	3.3-6.8	1.2E+03	N	BSL
	56-23-5	Carbon Tetrachloride	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	6.7-14	6.3E+03	UA	
	75-00-3	Chloroethane	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	2.8-5.8	9.9E+05	UA	
	67-66-3	Chloroform	6	48	$\mu g/m^3$	52E-SP14	10	29	6	21%	5.2-11	1.2E+03	N	BSL

Table 6.4-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Line 5	156-59-2	cis-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	4.2-8.7	1.9E+04	UA	
	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	5.2-11	2.3E+04	UA	
	110-82-7	Cyclohexane	5.4	44	$\mu g/m^3$	52E-SP12	10	29	3	10%	3.7-7.6		UA	
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	9.1-19		UA	
	64-17-5	Ethanol	9.1	52	$\mu g/m^3$	52E-SP19	30	29	15	52%	8.4-16		UA	
	100-41-4	Ethyl Benzene	6.6	6.6	$\mu g/m^3$	51E-SP11	20	29	1	3%	4.6-9.6	2.3E+04	N	BSL
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	6-12	8.8E+04	UA	
	76-13-1	Freon 113	9.5	73	$\mu g/m^3$	52E-SP19	30	29	2	7%	8.2-17	8.8E+04	N	BSL
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	5.3-11	8.8E+04	UA	
	142-82-5	Heptane	5.7	51	$\mu g/m^3$	51E-SP11	20	29	8	28%	4.4-9		UA	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	45-94		UA	
	110-54-3	Hexane	4.5	150	$\mu g/m^3$	51E-SP11	20	29	16	55%	3.8-7.8		UA	
	95-47-6	o-Xylene	5.9	5.9	$\mu g/m^3$	52E-SP24	10	29	1	3%	4.6-9.6	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	29	0	NA	3.8-7.9	2.6E+05	UA	
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	3.7-7.6	8.7E+03	UA	
	103-65-1	Propylbenzene	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	5.2-11		UA	
	100-42-5	Styrene	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	4.5-9.4	1.9E+05	UA	
	127-18-4	Tetrachloroethene	12	2300	$\mu g/m^3$	52E-SP07	20	29	10	34%	7.2-15	2.4E+04	N	BSL
	109-99-9	Tetrahydrofuran	4.4	93	$\mu g/m^3$	51E-SP11	20	29	10	34%	3.3-6.5		UA	
	108-88-3	Toluene	5.3	56	$\mu g/m^3$	51E-SP11	20	29	16	55%	4-21	8.4E+01	N	BSL
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	4.2-8.7	1.9E+04	UA	
	79-01-6	Trichloroethene	6.6	27000	$\mu g/m^3$	52E-SP07	20	29	26	90%	5.7-120	6.4E+03	Y	
	75-01-4	Vinyl Chloride	ND	ND	$\mu g/m^3$	ND	ND	29	0	0%	2.7-5.6	5.6E+02	UA	

Footnotes:

(1) See Table ?

(2) Rationale for Deletion

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.4-3 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
Di-n-octyl phthalate	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.01	-	-	64.45	-	-			
Inorganics																				
Boron	mg/kg	-	-	-	-	0.5	-	-	20	-	-	na	-	-	na	-	-			
Cadmium	mg/kg	0.18	1.1	52E-SNS02-0.5	4/4	32	0/4	-	140	0/4	-	0.77	1/4	1.4	0.36	3/4	3.1	1.2	0/4	
Lithium	mg/kg	4.2 J	10	52E-SNS02-0.5	3/3	2	3/3	5.0	10	0/3	-	na	0/3	-	390	0/3	-	23^	0/3	
Molybdenum	mg/kg	0.47 J	0.47 J	52E-SB16-1	1/3	2	0/3	-	200	0/3	-	44	0/3	-	4.75	0/3	-			
Strontium	mg/kg	19	48	52E-SNS02-0.5	3/3	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	610	850	52E-SNS02-0.5	3/3	na	-	-	1000	0/3	-	na	-	-	na	-	-			

Notes and Key:
Only samples that are located in areas of potential migration are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.4-4 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
Di-n-octyl phthalate	mg/kg	-	-	-	0/1	na	-	-	na	-	-	0.01	-	-	64.45	-	-			
Inorganics																				
Boron	mg/kg	5.1 J	5.1 J	52E-SB16-5	1/2	0.5	1/2	10.2	20	0/2	-	na	-	-	na	-	-	19^	0/2	
Cadmium	mg/kg	0.42 J	0.43 J	L5-AF1-SB01-5	2/2	32	0/2	-	140	0/2	-	0.77	0/2	-	0.36	2/2	1.2	1.2	0/2	
Lithium	mg/kg	8.4	8.7	L5-AF1-SB01-5	2/2	2	2/2	4.4	10	0/2	-	na	-	-	390	0/2	-	23^	0/2	
Molybdenum	mg/kg	0.26 J	0.88 J	52E-SB16-5	2/2	2	0/2	-	200	0/2	-	44	0/2	-	4.75	0/2	-			
Strontium	mg/kg	28	29	52E-SB16-5	2/2	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	770	790	L5-AF1-SB01-5	2/2	na	-	-	1000	0/2	-	na	-	-	na	-	-			

Notes and Key:
Only samples that are located in areas of potential migration are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.4-5 Risk Characterization Summary Table
Soil Vapor Top Depth
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance
1,1,1-Trichloroethane	$\mu g/m^3$	191000	-	-	-	0/11	-
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/11	-
1,1-Dichloroethane	$\mu g/m^3$	181000	-	-	-	0/11	-
1,1-Dichloroethene	$\mu g/m^3$	6000	-	-	-	0/11	-
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	7.3	17	52E-SP24-10	3/11	0/11
1,2-Dichloroethane	$\mu g/m^3$	42000	-	-	-	0/11	-
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/11	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	23	70	52E-SP23-10	2/11	0/11
2-Hexanone	$\mu g/m^3$	4880	-	-	-	0/11	-
Acetone	$\mu g/m^3$	1305000	60	250	52E-SP23-10	8/11	0/11
Benzene	$\mu g/m^3$	570	4.9	10	52E-SP23-10	5/11	0/11
Carbon Disulfide	$\mu g/m^3$	1200	5.1	48	52E-SP24-10	8/11	0/11
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/11	-
Chloroethane	$\mu g/m^3$	992000	-	-	-	0/11	-
Chloroform	$\mu g/m^3$	1200	6	6	52E-SP15-10	1/11	0/11
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/11	-
Cumene	$\mu g/m^3$	23000	-	-	-	0/11	-
Ethyl Benzene	$\mu g/m^3$	23000	-	-	-	0/11	-
Freon 11	$\mu g/m^3$	88000	-	-	-	0/11	-
Freon 113	$\mu g/m^3$	88000	-	-	-	0/11	-
Freon 12	$\mu g/m^3$	88000	-	-	-	0/11	-
m,p-Xylene	$\mu g/m^3$	16000	5.3	14	52E-SP24-10	4/11	0/11
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/11	-
Methylene Chloride	$\mu g/m^3$	9000	-	-	-	0/11	-
o-Xylene	$\mu g/m^3$	16000	5.9	5.9	52E-SP24-10	1/11	0/11
Styrene	$\mu g/m^3$	192000	-	-	-	0/11	-
Tetrachloroethene	$\mu g/m^3$	24000	13	25	52E-SP11-10	3/11	0/11
Toluene	$\mu g/m^3$	84	5.3	22	52E-SP09-10	4/11	0/11
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/11	-
Trichloroethene	$\mu g/m^3$	6400	6.6	260	52E-SP15-10	8/11	0/11
Vinyl Chloride	$\mu g/m^3$	560	-	-	-	0/11	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
$\mu g/m^3$ = Micrograms per cubic meter
na - Not available

Table 6.5-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.5-0.87	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	42	0	0%	0.5-0.87	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	44	0	0%	0.006-0.016	0.021	N	ND
	72-55-9	4,4'-DDE	0.00038	0.0013	mg/kg	WL-SD06	1.5	44	3	7%	0.002-0.0053	0.021	N	BSL
	50-29-3	4,4'-DDT	0.0014	0.0033	mg/kg	WL-SD08	0.5	44	4	9%	0.006-0.016	0.021	N	BSL
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	42	0	0%	0.5-0.87	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	42	0	0%	0.0066-0.27	29	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	42	0	0%	0.0066-0.27	29	N	ND
	309-00-2	Aldrin	0.00024	0.00024	mg/kg	WL-SB02	0.5	44	1	2%	0.001-0.0027	0.008247	N	BSL
	319-84-6	alpha-BHC	0.00023	0.00023	mg/kg	WL-SD04	0.5	44	1	2%	0.001-0.0027	0.356	N	BSL
	7429-90-5	Aluminum	7900	41000	mg/kg	WL-SB05, WL-SB10	1.5 1.5	43	43	100%	NA	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	42	0	0%	0.0066-0.27	29	N	ND
	7440-36-0	Antimony	0.13	1.4	mg/kg	WL-SB04	0.5	34	24	71%	1-16	0.27	Y	
	7440-38-2	Arsenic	2.4	8.4	mg/kg	WL-SB05	0.5	43	43	100%	NA	18	N	BSL
	86-50-0	Azinphos methyl	ND	ND	mg/kg	ND	ND	24	0	0%	0.041-0.051	NA	N	ND
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND

Table 6.5-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	7440-39-3	Barium	46	310	mg/kg	WL-SB05	1.5	43	43	100%	NA	330	N	BSL
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	42	0	0%	0.35-0.61	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.0072	0.0072	mg/kg	WL-SD08	0.5	42	1	2%	0.0066-0.27	1.1	N	BSL
	50-32-8	Benzo (a) pyrene	0.0092	0.0092	mg/kg	WL-SD08	0.5	42	1	2%	0.0066-0.27	1.1	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.013	0.029	mg/kg	WL-SD08	0.5	42	3	7%	0.013-0.54	1.1	N	BSL
	191-24-2	Benzo (ghi) perylene	0.012	0.012	mg/kg	WL-SD08	0.5	42	1	2%	0.0066-0.54	1.1	N	BSL
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	41	0	0%	0.5-0.67	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	0.0125	N	ND*
	7440-41-7	Beryllium	0.15	1.2	mg/kg	WL-SB05	0.5	43	43	100%	NA	21	N	BSL
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	44	0	0%	0.001-0.0027	0.315	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	42	0	0%	0.5-0.87	0.04	N	ND*
	35400-43-2	Bolstar	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7440-42-8	Boron	4.4	29	mg/kg	WL-SD08	0.5	34	11	32%	4-11	0.5	Y	
	7440-43-9	Cadmium	0.17	2.5	mg/kg	WL-SB10	0.5	43	12	28%	0.4-1.1	0.36	N	BG
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	44	0	0%	0.02-0.053	NA	N	ND
	2921-88-2	Chlorpyrifos	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7440-47-3	Chromium	17	90	mg/kg	WL-SB10, WL-SD05	0.5 1.5	43	43	100%	NA	26	N	BG
	18540-29-9	Chromium VI	0.036	1.6	mg/kg	WL-SD08	1.5	42	40	95%	0.2-1	81	N	BSL
	218-01-9	Chrysene	0.0068	0.014	mg/kg	WL-SD08	0.5	42	2	5%	0.0066-0.27	1.1	N	BSL
	7440-48-4	Cobalt	4.4	28	mg/kg	WL-SB10	1.5	43	43	100%	NA	13	N	BG
	7440-50-8	Copper	12	89	mg/kg	WL-SB10	0.5	43	43	100%	NA	28	N	BG
	56-72-4	Coumaphos	ND	ND	mg/kg	ND	ND	24	0	0%	0.041-0.051	NA	N	ND
	319-86-8	delta-BHC	0.00045	0.0011	mg/kg	WL-SD08	0.5	44	3	7%	0.001-0.0027	0.346	N	BSL
	8065-48-3	Demeton	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	333-41-5	Diazinon	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	42	0	0%	0.0066-0.54	1.1	N	ND
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	62-73-7	Dichlorvos	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	60-57-1	Dieldrin	0.00045	0.0013	mg/kg	WL-SD06	1.5	44	3	7%	0.002-0.0053	0.0049	N	BSL
	68334-30-5	Diesel Range Organics (C10-C28)	1.4	41	mg/kg	WL-SD08	0.5	14	14	100%	NA	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	60-51-5	Dimethoate	ND	ND	mg/kg	ND	ND	24	0	0%	0.041-0.051	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	42	0	0%	0.4-0.7	0.0125	N	ND*
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	0.0125	N	ND*
	298-04-4	Disulfoton	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND

Table 6.5-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	959-98-8	Endosulfan I	ND	ND	mg/kg	ND	ND	44	0	0%	0.002-0.0053	0.0633	N	ND
	33213-65-9	Endosulfan II	0.00052	0.00052	mg/kg	WL-SD04	0.5	44	1	2%	0.002-0.0053	0.0633	N	BSL
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	44	0	0%	0.006-0.016	0.0633	N	ND
	72-20-8	Endrin	ND	ND	mg/kg	ND	ND	44	0	0%	0.002-0.0053	0.003163	N	ND
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	44	0	0%	0.006-0.016	0.005284	N	ND*
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	44	0	0%	0.006-0.016	NA	N	ND
	2104-64-5	EPN	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	563-12-2	Ethion	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	13194-48-4	Ethoprop	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	115-90-2	Fensulfothion	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	55-38-9	Fenthion	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	206-44-0	Fluoranthene	0.0021	0.018	mg/kg	WL-SD08	0.5	42	11	26%	0.0066-0.27	1.1	N	BSL
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	42	0	0%	0.0066-0.27	29	N	ND
	58-89-9	gamma-BHC (Lindane)	0.00026	0.00026	mg/kg	WL-SD05	0.5	44	1	2%	0.001-0.0027	0.029281	N	BSL
	76-44-8	Heptachlor	ND	ND	mg/kg	ND	ND	44	0	0%	0.001-0.0027	0.003394	N	ND
	1024-57-3	Heptachlor epoxide	0.00031	0.0014	mg/kg	WL-SB02	0.5	44	3	7%	0.001-0.0027	0.363	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-1.2	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0078	0.0078	mg/kg	WL-SD08	0.5	42	1	2%	0.0066-0.54	1.1	N	BSL
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	7439-92-1	Lead	2.1	60	mg/kg	WL-SD08	0.5	43	43	100%	NA	11	N	BG
	7439-93-2	Lithium	4.1	19	mg/kg	WL-SB05	1.5	43	43	100%	NA	2	Y	
	121-75-5	Malathion	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7439-96-5	Manganese	170	900	mg/kg	WL-SB05	1.5	43	43	100%	NA	220	N	BG
	7439-97-6	Mercury	0.0059	0.21	mg/kg	WL-SB05	0.5	43	42	98%	0.02-0.04	0.00051	Y	
	150-50-5	Merphos	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	44	0	0%	0.02-0.053	5.742	N	ND
	7786-34-7	Mevinphos	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7439-98-7	Molybdenum	0.16	1.2	mg/kg	WL-SB08	1.5	43	34	79%	1-4.3	2	N	BSL
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	4.6	110	mg/kg	WL-SD03, WL-SD08	0.5 0.5	14	14	100%	NA	NA	N	ITC
	300-76-5	Naled	ND	ND	mg/kg	ND	ND	23	0	0%	0.041-0.051	NA	N	ND
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	42	0	0%	0.0066-0.27	29	N	ND
	7440-02-0	Nickel	15	64	mg/kg	WL-SB10	1.5	43	43	100%	NA	38	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	556887	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	39	0	0%	0.25-0.25	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	42	0	0%	0.0031-0.35	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	42	0	0%	0.2-0.35	NA	N	ND
	56-38-2	Parathion, ethyl	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	298-00-0	Parathion, methyl	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND

Table 6.5-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	39	0	0%	0.02-0.027	0.0101	N	ND*
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	39	0	0%	0.02-0.027	0.0101	N	ND*
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	39	0	0%	0.02-0.027	0.0101	N	ND*
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	39	0	0%	0.02-0.027	0.0101	N	ND*
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	39	0	0%	0.02-0.027	0.0101	N	ND*
	11097-69-1	PCB-1254	0.02	0.021	mg/kg	WL-SD03	1.5	39	2	5%	0.02-0.027	0.0101	Y	
	11096-82-5	PCB-1260	0.032	0.038	mg/kg	WL-SD06	1.5	39	4	10%	0.02-0.027	0.0101	Y	
	40487-42-1	Pendimethalin (Prowl)	ND	ND	mg/kg	ND	ND	44	0	0%	0.002-0.0053	0.624	N	ND
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	42	0	0%	0.7-1.2	2.1	N	ND
	14797-73-0	Perchlorate	9	9	mg/kg	WL-SB01	5	41	1	2%	0.005-1.6	1.17	Y	
	S-PH	pH	5.43	9.53	mg/kg	WL-SD08	1.5	44	44	100%	NA	NA	N	
	85-01-8	Phenanthrene	0.0024	0.0068	mg/kg	WL-SD08	0.5	42	5	12%	0.0066-0.27	29	N	BSL
	108-95-2	Phenol	0.43	0.43	mg/kg	WL-SB08	1.5	42	1	2%	0.2-0.35	30	N	BSL
	298-02-2	Phorate	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	129-00-0	Pyrene	0.0061	0.023	mg/kg	WL-SD08	0.5	42	3	7%	0.0066-0.27	1.1	N	BSL
	299-84-3	Ronnel	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7782-49-2	Selenium	0.22	0.27	mg/kg	WL-SB08	1.5	43	2	5%	1-3.3	0.52	N	BSL
	7440-22-4	Silver	0.38	8.5	mg/kg	WL-SD04	0.5	43	13	30%	0.8-2.2	4.2	Y	
	22248-79-9	Stirophos	ND	ND	mg/kg	ND	ND	24	0	0%	0.041-0.051	NA	N	ND
	7440-24-6	Strontium	12	63	mg/kg	WL-SB05	1.5	43	43	100%	NA	NA	Y	
	3689-24-5	Sulfotep	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7440-28-0	Thallium	0.13	4.3	mg/kg	WL-SD04	1.5	43	34	79%	0.51-11	1	N	BSL
	297-97-2	Thionazin	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7440-32-6	Titanium	340	1100	mg/kg	WL-SB07	5	43	43	100%	NA	1000	Y	
	34643-46-4	Tokuthion (Prothiofos)	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	TOC	Total Organic Carbon	ND	ND	mg/kg	ND	ND	4	0	0%	5100-5500	NA	N	ND
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	44	0	0%	0.08-0.21	NA	N	ND
	327-98-0	Trichloronate	ND	ND	mg/kg	ND	ND	24	0	0%	0.02-0.025	NA	N	ND
	7440-62-2	Vanadium	37	120	mg/kg	WL-SB10	1.5	43	43	100%	NA	7.8	N	BG
	7440-66-6	Zinc	23	460	mg/kg	WL-SD03	0.5	46	46	100%	NA	46	Y	

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.5-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Westlakes Management Area
Boundary Operable Unit Risk Assessment Example
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bws)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	ND	ND	10	0	0%	200-200	NA	N	ND
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	ND	ND	10	0	0%	20-20	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	95-48-7	2-Methylphenol	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	µg/L	ND	ND	10	0	0%	20-20	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	72-54-8	4,4'-DDD	ND	ND	µg/L	ND	ND	8	0	0%	0.14-0.14	NA	N	ND
	72-55-9	4,4'-DDE	ND	ND	µg/L	ND	ND	8	0	0%	0.047-0.047	NA	N	ND
	50-29-3	4,4'-DDT	ND	ND	µg/L	ND	ND	8	0	0%	0.14-0.14	NA	N	ND

Table 6.5-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Westlakes Management Area
Boundary Operable Unit Risk Assessment Example
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bws)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	ND	ND	10	0	0%	20-20	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	µg/L	ND	ND	10	0	0%	20-20	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	208-96-8	Acenaphthylene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	309-00-2	Aldrin	0.01	0.010	µg/L	59E-SW02-2.0	2	8	1	13%	0.024-0.024	3.0E+00	N	BSL
	319-84-6	alpha-BHC	0.013	0.013	µg/L	59E-SW02-2.0	2	8	1	13%	0.024-0.024	2.2E+00	N	BSL
	7429-90-5	Aluminum	48	5,200	µg/L	WL-SW04-1.0	1	20	20	100%	0-0	8.7E+01	Y	
	62-53-3	Aniline	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	120-12-7	Anthracene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	7440-36-0	Antimony	0.071	2	µg/L	WL-SW08-1.0	1	20	11	55%	2-2	6.1E+02	N	BSL
	7440-38-2	Arsenic	0.52	1	µg/L	WL-SW08-1.0-T	1	20	5	25%	1-1.1	1.5E+02	N	BSL
	103-33-3	Azobenzene	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	7440-39-3	Barium	11	60	µg/L	WL-SW01-1	1	20	20	100%	0-0	4.0E+00	Y	
	71-43-2	Benzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	92-87-5	Benzidine	ND	ND	µg/L	ND	ND	10	0	0%	50-50	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	ND	ND	10	0	0%	0.4-0.44	NA	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	ND	ND	10	0	0%	0.4-0.44	NA	N	ND
	65-85-0	Benzoic acid	ND	ND	µg/L	ND	ND	10	0	0%	20-20	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	7440-41-7	Beryllium	0.087	0	µg/L	WL-SW04-1.0	1	20	2	10%	0.5-0.5	5.3E+00	N	BSL
	319-85-7	beta-BHC	ND	ND	µg/L	ND	ND	8	0	0%	0.024-0.024	NA	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	110	110	µg/L	WL-SW04-1.0-T	1	10	1	10%	5-5	3.0E+00	Y	
	7440-42-8	Boron	8	23	µg/L	WL-SW08-1.0	1	20	6	30%	50-50	1.6E+00	Y	
	108-86-1	Bromobenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	74-97-5	Bromochloromethane	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	75-27-4	Bromodichloromethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	75-25-2	Bromoform	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND

Table 6.5-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Westlakes Management Area
Boundary Operable Unit Risk Assessment Example
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bws)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	74-83-9	Bromomethane	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	7440-43-9	Cadmium	0.027	0	µg/L	WL-SW08-1.0-T	1	20	12	60%	1-1	2.2E+00	N	BSL
	7440-70-2	Calcium	1600	22,000	µg/L	WL-SW01-1	1	20	20	100%	0-0	NA	N	EN
	86-74-8	Carbazole	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	µg/L	ND	ND	8	0	0%	0.47-0.47	NA	N	ND
	16887-00-6	Chloride	820	9,000	µg/L	WL-SW01-1	1	10	10	100%	0-0	2.3E+05	N	BSL
	108-90-7	Chlorobenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	75-00-3	Chloroethane	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	67-66-3	Chloroform	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	1.2E+03	N	ND
	74-87-3	Chloromethane	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	7440-47-3	Chromium	1.6	6	µg/L	WL-SW04-1.0-T	1	20	14	70%	2-5	1.8E+02	N	BSL
	218-01-9	Chrysene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	7440-48-4	Cobalt	0.035	1	µg/L	WL-SW08-1.0	1	20	19	95%	1-1	2.3E+01	N	BSL
	7440-50-8	Copper	0.25	4,100	µg/L	WL-SW04-1.0	1	20	15	75%	10-10	9.0E+00	Y	
	319-86-8	delta-BHC	0.018	0	µg/L	WL-SW06-9.0-T	9	8	1	13%	0.024-0.024	2.2E+00	N	BSL
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	ND	ND	10	0	0%	0.4-0.44	NA	N	ND
	132-64-9	Dibenzofuran	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	124-48-1	Dibromochloromethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	74-95-3	Dibromomethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	60-57-1	Dieldrin	ND	ND	µg/L	ND	ND	8	0	0%	0.047-0.047	NA	N	ND
	68334-30-5	Diesel Range Organics (C10-C28)	300	300	µg/L	WL-SW08-1.0	1	1	1	100%	0-0	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	959-98-8	Endosulfan I	ND	ND	µg/L	ND	ND	8	0	0%	0.047-0.047	NA	N	ND
	33213-65-9	Endosulfan II	ND	ND	µg/L	ND	ND	8	0	0%	0.047-0.047	NA	N	ND
	1031-07-8	Endosulfan sulfate	ND	ND	µg/L	ND	ND	8	0	0%	0.14-0.14	NA	N	ND
	72-20-8	Endrin	ND	ND	µg/L	ND	ND	8	0	0%	0.047-0.047	NA	N	ND
	7421-93-4	Endrin aldehyde	0.044	0	µg/L	59E-SW02-2.0	2	8	1	13%	0.14-0.14	3.6E-02	Y	
	53494-70-5	Endrin ketone	ND	ND	µg/L	ND	ND	8	0	0%	0.14-0.14	NA	N	ND
	100-41-4	Ethylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	206-44-0	Fluoranthene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	86-73-7	Fluorene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	58-89-9	gamma-BHC (Lindane)	0.019	0	µg/L	59E-SW02-2.0	2	8	1	13%	0.024-0.024	8.0E-02	N	BSL
	76-44-8	Heptachlor	0.013	0	µg/L	59E-SW02-2.0	2	8	1	13%	0.024-0.024	3.8E-03	Y	

Table 6.5-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Westlakes Management Area
Boundary Operable Unit Risk Assessment Example
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bws)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	1024-57-3	Heptachlor epoxide	0.11	0	µg/L	59E-SW02-2.0	2	8	1	13%	0.024-0.024	3.8E-03	Y	
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	ND	ND	10	0	0%	20-20	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	18540-29-9	Hexavalent Chromium	2.3	5	µg/L	WL-SW02-1	1	15	3	20%	5-5	1.1E+01	N	BSL
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	ND	ND	10	0	0%	0.4-0.44	NA	N	ND
	7439-89-6	Iron	82	4,200	µg/L	WL-SW04-1.0	1	20	18	90%	40-40	1.0E+03	Y	
	78-59-1	Isophorone	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	98-82-8	Isopropylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	7439-92-1	Lead	0.059	140	µg/L	WL-SW04-1.0	1	20	20	100%	0-0	2.5E+00	Y	
	7439-93-2	Lithium	ND	ND	µg/L	ND	ND	20	0	0%	50-50	1.4E+01	N	ND*
	7439-95-4	Magnesium	660	8,300	µg/L	WL-SW01-1	1	20	20	100%	0-0	NA	N	EN
	7439-96-5	Manganese	7.2	34	µg/L	WL-SW04-1.0	1	20	13	65%	20-20	1.2E+02	N	BSL
	7439-97-6	Mercury	0.05	0	µg/L	WL-SW08-1.0-T	1	20	1	5%	0.2-0.2	7.7E-01	N	BSL
	72-43-5	Methoxychlor	ND	ND	µg/L	ND	ND	8	0	0%	0.19-0.47	3.0E-02	N	ND*
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	75-09-2	Methylene chloride	ND	ND	µg/L	ND	ND	11	0	0%	1-1	2.2E+03	N	ND
	7439-98-7	Molybdenum	0.15	82	µg/L	WL-SW04-1.0-T	1	20	17	85%	2-2	3.7E+02	N	BSL
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	580	580	µg/L	WL-SW08-1.0-T	1	1	1	100%	0-0	NA	N	ITC
	91-20-3	Naphthalene	ND	ND	µg/L	ND	ND	11	0	0%	0.2-1	NA	N	ND
	104-51-8	n-Butylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	7440-02-0	Nickel	0.96	12	µg/L	WL-SW04-1.0	1	20	14	70%	10-10	5.2E+01	N	BSL
	S-NANO3	Nitrate as NO3	450	2,400	µg/L	WL-SW01-1	1	10	8	80%	100-100	NA	Y	
	S-NINO2	Nitrite as NO2	ND	ND	µg/L	ND	ND	10	0	0%	100-100	NA	N	ND
	98-95-3	Nitrobenzene	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	556887	Nitroguanidine-DISS	ND	ND	µg/L	ND	ND	7	0	0%	20-20	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	0.0046	0	µg/L	WL-SW03-0.5-T	0.5	10	2	20%	0.0019-5	4.0E+01	N	BSL
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	ND	ND	10	0	0%	10-10	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	103-65-1	n-Propylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	40487-42-1	Pendimethalin (Prowl)	ND	ND	µg/L	ND	ND	7	0	0%	0.12-0.12	5.2E+00	N	ND
	87-86-5	Pentachlorophenol	ND	ND	µg/L	ND	ND	10	0	0%	20-20	NA	N	ND
	14797-73-0	Perchlorate	1.7	3	µg/L	WL-SW07-1.5-T	1.5	9	7	78%	4-4	9.3E+03	N	BSL
	85-01-8	Phenanthrene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	108-95-2	Phenol	ND	ND	µg/L	ND	ND	10	0	0%	5-5	NA	N	ND
	99-87-6	p-Isopropyltoluene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	7440-09-7	Potassium	380	3,200	µg/L	WL-SW01-1	1	20	20	100%	0-0	NA	N	EN

Table 6.5-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Westlakes Management Area
Boundary Operable Unit Risk Assessment Example
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bws)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	129-00-0	Pyrene	ND	ND	µg/L	ND	ND	10	0	0%	0.2-0.22	NA	N	ND
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	7782-49-2	Selenium	ND	ND	µg/L	ND	ND	20	0	0%	2-10	5.0E+00	N	ND
	7440-22-4	Silver	0.031	1	µg/L	59E-SW02-2.0	2	20	14	70%	10-10	1.2E-01	Y	
	7440-23-5	Sodium	1100	11,000	µg/L	WL-SW01-1	1	20	19	95%	1200-1200	NA	N	EN
	7440-24-6	Strontium	14	240	µg/L	WL-SW01-1	1	20	20	100%	0-0	1.5E+03	N	BSL
	100-42-5	Styrene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	127-18-4	Tetrachloroethene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	8.4E+02	N	ND
	7440-28-0	Thallium	0.2	0	µg/L	WL-SW05-9.0-T	9	20	2	10%	1-1	2.0E+01	N	BSL
	7440-32-6	Titanium	4.2	170	µg/L	WL-SW04-1.0	1	20	18	90%	5-5	NA	Y	
	108-88-3	Toluene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	8001-35-2	Toxaphene	ND	ND	µg/L	ND	ND	8	0	0%	1.9-1.9	NA	N	ND
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	79-01-6	Trichloroethene	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	75-69-4	Trichlorofluoromethane	0.24	0	µg/L	WL-SW08-1.0-T	1	11	1	9%	0.5-0.5	NA	Y	
	7440-62-2	Vanadium	1	9	µg/L	59E-SW02-2.0	2	20	19	95%	2-2	2.0E+01	N	BSL
	75-01-4	Vinyl chloride	ND	ND	µg/L	ND	ND	11	0	0%	0.5-0.5	NA	N	ND
	1330-20-7	Xylenes (total)	ND	ND	µg/L	ND	ND	11	0	0%	1-1	NA	N	ND
	7440-66-6	Zinc	21	480	µg/L	WL-SW04-1.0	1	20	13	65%	20-20	1.2E+02	Y	

Footnotes:

(1) See Table 2.

(2) Rationale for Deletion

BSL = Below screening level

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ITC = Petroleum mixtures are complex and the toxic constituents are being evaluated individually

Key:

COPEC = Chemical of potential ecological concern

µg/L = Micrograms per liter

NA = Not available

Table 6.5-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.5-0.87	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	32	0	0%	0.5-0.87	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	32	0	0%	0.006-0.016	NA	N	ND
	72-55-9	4,4'-DDE	0.00038	0.0013	mg/kg	WL-SD06-1.5	1.5	32	3	9%	0.002-0.0053	3.2E-03	N	BSL
	50-29-3	4,4'-DDT	0.0014	0.0033	mg/kg	WL-SD08-0.5	0.5	32	4	13%	0.006-0.016	4.2E-03	N	BSL
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.5-0.87	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	32	0	0%	0.0066-0.0088	NA	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	32	0	0%	0.0066-0.0088	NA	N	ND
	309-00-2	Aldrin	0.00024	0.00024	mg/kg	WL-SB02-0.5	0.5	32	1	3%	0.001-0.0027	2.0E-03	N	BSL
	319-84-6	alpha-BHC	0.00023	0.00023	mg/kg	WL-SD04-0.5	0.5	32	1	3%	0.001-0.0027	6.0E-03	N	BSL
	7429-90-5	Aluminum	7900	41000	mg/kg	WL-SB05-1.5 WL-SB10-1.5	1.5 1.5	32	32	100%	NA	NA	Y	
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	32	0	0%	0.0066-0.0088	5.7E-02	N	ND
	7440-36-0	Antimony	0.13	1.4	mg/kg	WL-SB04-0.5	0.5	27	20	74%	1-8.2	2.0E+00	N	BSL
	7440-38-2	Arsenic	3.1	8.4	mg/kg	WL-SB05-0.5	1.5	32	32	100%	NA	9.8E+00	N	BSL
	86-50-0	Azinphos methyl	ND	ND	mg/kg	ND	ND	20	0	0%	0.041-0.051	NA	N	ND
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND

Table 6.5-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	7440-39-3	Barium	46	310	mg/kg	WL-SB05-1.5	1.5	32	32	100%	NA	NA	Y	
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	32	0	0%	0.35-0.61	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.0072	0.0072	mg/kg	WL-SD08-0.5	0.5	32	1	3%	0.0066-0.0088	1.1E-01	N	BSL
	50-32-8	Benzo (a) pyrene	0.0092	0.0092	mg/kg	WL-SD08-0.5	0.5	32	1	3%	0.0066-0.0088	1.5E-01	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.014	0.029	mg/kg	WL-SD08-0.5	0.5	32	2	6%	0.013-0.018	2.4E-01	N	BSL
	191-24-2	Benzo (ghi) perylene	0.012	0.012	mg/kg	WL-SD08-0.5	0.5	32	1	3%	0.0066-0.0088	1.7E-01	N	BSL
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	31	0	0%	0.5-0.66	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	1.1E+01	N	ND
	7440-41-7	Beryllium	0.15	1.2	mg/kg	WL-SB05-0.5	1.5	32	32	100%	NA	NA	Y	
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	32	0	0%	0.001-0.0027	NA	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.5-0.87	8.9E+02	N	ND
	35400-43-2	Bolstar	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7440-42-8	Boron	4.4	29	mg/kg	WL-SD08-0.5	0.5	28	10	36%	4-11	NA	Y	
	7440-43-9	Cadmium	0.17	2.5	mg/kg	WL-SB10-0.5	0.5	32	11	34%	0.4-1.1	9.9E-01	Y	
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	32	0	0%	0.02-0.053	NA	N	ND
	2921-88-2	Chlorpyrifos	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7440-47-3	Chromium	27	90	mg/kg	WL-SB05-1.5 WL-SB10-0.5	1.5 0.5	32	32	100%	NA	4.3E+01	Y	
	18540-29-9	Chromium VI	0.036	1.6	mg/kg	WL-SD08-1.5	1.5	32	32	100%	NA	NA	Y	
	218-01-9	Chrysene	0.0068	0.014	mg/kg	WL-SD08-0.5	0.5	32	2	6%	0.0066-0.0088	1.7E-01	N	BSL
	7440-48-4	Cobalt	4.4	28	mg/kg	WL-SB10-1.5	1.5	32	32	100%	NA	NA	Y	
	7440-50-8	Copper	12	89	mg/kg	WL-SB10-0.5	1.5	32	32	100%	NA	3.2E+01	Y	
	56-72-4	Coumaphos	ND	ND	mg/kg	ND	ND	20	0	0%	0.041-0.051	NA	N	ND
	319-86-8	delta-BHC	0.00045	0.0011	mg/kg	WL-SD08-0.5	0.5	32	3	9%	0.001-0.0027	3.0E-03	N	BSL
	8065-48-3	Demeton	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	333-41-5	Diazinon	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	32	0	0%	0.0066-0.0088	3.3E-02	N	ND
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	62-73-7	Dichlorvos	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	60-57-1	Dieldrin	0.00045	0.0013	mg/kg	WL-SD06-1.5	1.5	32	3	9%	0.002-0.0053	1.9E-03	N	BSL
	68334-30-5	Diesel Range Organics (C10-C28)	1.4	41	mg/kg	WL-SD08-0.5	0.5	12	12	100%	NA	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	60-51-5	Dimethoate	ND	ND	mg/kg	ND	ND	20	0	0%	0.041-0.051	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.4-0.7	NA	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	298-04-4	Disulfoton	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	959-98-8	Endosulfan I	ND	ND	mg/kg	ND	ND	32	0	0%	0.002-0.0053	2.9E-03	N	ND

Table 6.5-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	33213-65-9	Endosulfan II	0.00052	0.00052	mg/kg	WL-SD04-0.5	0.5	32	1	3%	0.002-0.0053	1.4E-02	N	BSL
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	32	0	0%	0.006-0.016	NA	N	ND
	72-20-8	Endrin	ND	ND	mg/kg	ND	ND	32	0	0%	0.002-0.0053	2.2E-03	N	ND*
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	32	0	0%	0.006-0.016	NA	N	ND
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	32	0	0%	0.006-0.016	NA	N	ND
	2104-64-5	EPN	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	563-12-2	Ethion	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	13194-48-4	Ethoprop	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	115-90-2	Fensulfothion	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	55-38-9	Fenthion	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	206-44-0	Fluoranthene	0.0027	0.018	mg/kg	WL-SD08-0.5	0.5	32	9	28%	0.0066-0.0088	4.2E-01	N	BSL
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	32	0	0%	0.0066-0.0088	NA	N	ND
	58-89-9	gamma-BHC (Lindane)	0.00026	0.00026	mg/kg	WL-SD05-0.5	0.5	32	1	3%	0.001-0.0027	2.4E-03	N	BSL
	76-44-8	Heptachlor	ND	ND	mg/kg	ND	ND	32	0	0%	0.001-0.0027	2.5E-03	N	ND
	1024-57-3	Heptachlor epoxide	0.00031	0.0014	mg/kg	WL-SB02-0.5	1.5	32	3	9%	0.001-0.0027	2.5E-03	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	32	0	0%	0.21-1.2	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0078	0.0078	mg/kg	WL-SD08-0.5	0.5	32	1	3%	0.0066-0.0088	7.8E-02	N	BSL
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	7439-92-1	Lead	2.1	60	mg/kg	WL-SD08-0.5	0.5	32	32	100%	NA	3.6E+01	Y	
	7439-93-2	Lithium	7	19	mg/kg	WL-SB05-1.5	1.5	32	32	100%	NA	NA	Y	
	121-75-5	Malathion	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7439-96-5	Manganese	170	900	mg/kg	WL-SB05-1.5	1.5	32	32	100%	NA	4.6E+02	Y	
	7439-97-6	Mercury	0.0088	0.21	mg/kg	WL-SB05-0.5	0.5	32	31	97%	0.04-0.04	1.8E-01	Y	
	150-50-5	Merphos	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	32	0	0%	0.02-0.053	NA	N	ND
	7786-34-7	Mevinphos	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7439-98-7	Molybdenum	0.16	1.2	mg/kg	WL-SB08-1.5	0.5	32	23	72%	1.2-1.7	NA	Y	
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	4.6	110	mg/kg	WL-SD08-0.5	0.5	12	12	100%	NA	NA	N	ITC
	300-76-5	Naled	ND	ND	mg/kg	ND	ND	19	0	0%	0.041-0.051	NA	N	ND
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	32	0	0%	0.0066-0.0088	NA	N	ND
	7440-02-0	Nickel	17	64	mg/kg	WL-SB10-1.5	1.5	32	32	100%	NA	1.6E+01	Y	
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	556887	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	32	0	0%	0.25-0.25	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	32	0	0%	0.0031-0.35	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	32	0	0%	0.2-0.35	NA	N	ND
	56-38-2	Parathion, ethyl	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	298-00-0	Parathion, methyl	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	32	0	0%	0.02-0.027	NA	N	ND
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	32	0	0%	0.02-0.027	NA	N	ND
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	32	0	0%	0.02-0.027	NA	N	ND

Table 6.5-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Westlakes	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	32	0	0%	0.02-0.027	NA	N	ND
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	32	0	0%	0.02-0.027	6.0E-02	N	ND
	11097-69-1	PCB-1254	0.02	0.02	mg/kg	WL-SB10-0.5	ND	32	1	3%	0.02-0.027	6.0E-02	N	BSL
	11096-82-5	PCB-1260	0.032	0.038	mg/kg	WL-SD06-1.5	1.5	32	4	13%	0.02-0.027	6.0E-02	N	BSL
	40487-42-1	Pendimethalin (Prowl)	ND	ND	mg/kg	ND	ND	32	0	0%	0.002-0.0053	3.7E-01	N	ND
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	32	0	0%	0.7-1.2	3.6E-01	N	ND*
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	29	0	0%	0.005-0.013	NA	N	ND
	S-PH	pH	5.43	9.53	mg/kg	WL-SD08-1.5	1.5	32	32	100%	NA	NA	N	
	85-01-8	Phenanthrene	0.0027	0.0068	mg/kg	WL-SD08-0.5	0.5	32	4	13%	0.0066-0.0088	2.0E-01	N	BSL
	108-95-2	Phenol	0.43	0.43	mg/kg	0	ND	32	1	3%	0.2-0.35	4.2E-01	Y	
	298-02-2	Phorate	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	129-00-0	Pyrene	0.0061	0.023	mg/kg	WL-SD08-0.5	0.5	32	3	9%	0.0066-0.0088	2.0E-01	N	BSL
	299-84-3	Ronnel	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7782-49-2	Selenium	0.22	0.27	mg/kg	WL-SB08-1.5	0.5	32	2	6%	1-3.3	2.0E+00	Y	
	7440-22-4	Silver	0.38	8.5	mg/kg	WL-SD04-0.5	0.5	32	13	41%	0.8-2.1	1.0E+00	Y	
	22248-79-9	Stirophos	ND	ND	mg/kg	ND	ND	20	0	0%	0.041-0.051	NA	N	ND
	7440-24-6	Strontium	12	63	mg/kg	WL-SB05-1.5	1.5	32	32	100%	NA	NA	Y	
	3689-24-5	Sulfotep	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7440-28-0	Thallium	0.13	4.3	mg/kg	WL-SD04-1.5	1.5	32	26	81%	4.1-8.2	NA	Y	
	297-97-2	Thionazin	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7440-32-6	Titanium	340	1000	mg/kg	WL-SB10-1.5	1.5	32	32	100%	NA	NA	Y	
	34643-46-4	Tokuthion (Prothiofos)	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	TOC	Total Organic Carbon	ND	ND	mg/kg	ND	ND	4	0	0%	5100-5500	NA	N	ND
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	32	0	0%	0.08-0.21	NA	N	ND
	327-98-0	Trichloronate	ND	ND	mg/kg	ND	ND	20	0	0%	0.02-0.025	NA	N	ND
	7440-62-2	Vanadium	39	120	mg/kg	WL-SB10-1.5	0.5	32	32	100%	NA	NA	Y	
	7440-66-6	Zinc	28	440	mg/kg	WL-SD08-0.5	0.5	32	32	100%	NA	1.2E+02	Y	

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.5-4 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Pesticides & Polychlorinated Biphenyls																				
PCB-1254	mg/kg	0.02 J	0.02 J	WL-SB10-0.5	1/17	na	-	-	na	-	-	0.01	1/17	2.0	0.04	0/17	-			
PCB-1260	mg/kg	0.032 J	0.037 J	WL-SD04-0.5	3/17	na	-	-	na	-	-	0.01	3/17	3.7	0.04	0/17	-			
Inorganics																				
Antimony	mg/kg	0.17 J	1.4 J	WL-SB04-0.5	10/15	na	-	-	78	0/15	-	na	-	-	0.27	5/15	5.2	0.459	2/15	3.1
Boron	mg/kg	8.9	29	WL-SD08-0.5	5/15	0.5	5/15	58	20	1/15	1.5	na	-	-	na	-	-	19^	1/15	1.5
Lithium	mg/kg	7.5	18 J	WL-SB05-0.5	17/17	2	17/17	9.0	10	5/17	1.8	na	-	-	390	0/17	-	23^	0/17	-
Mercury	mg/kg	0.012 J	0.21	WL-SB05-0.5	17/17	na	-	-	na	-	-	0.000051	17/17	4118	0.0013	17/17	162	0.127	1/17	1.7
Perchlorate	mg/kg	-	-	-	0/16	na	-	-	1.17	-	-	20.3	-	-	24	-	-			
Silver	mg/kg	0.38 J	8.5	WL-SD04-0.5	9/17	560	0/17	-	na	-	-	4.2	3/17	2.0	14	0/17	-	2.4	4/17	3.5
Strontium	mg/kg	15	62 J	WL-SB05-0.5	17/17	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	340	860	WL-SB10-0.5	17/17	na	-	-	1000	0/17	-	na	-	-	na	-	-			
Zinc	mg/kg	39 J	460	WL-SD03-0.5	20/20	160	3/20	2.9	120	4/20	3.8	46	16/20	10	79	7/20	5.8	89	5/20	5.2

Notes and Key:
Only samples that are located in areas of potential migration are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.5-5 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Pesticides & Polychlorinated Biphenyls																				
PCB-1254	mg/kg	0.021	0.021	WL-SD03-1.5	1/22	na	-	-	na	-	-	0.01	1/22	2.1	0.04	0/22	-			
PCB-1260	mg/kg	0.038 J	0.038 J	WL-SD06-1.5	1/22	na	-	-	na	-	-	0.01	1/22	3.8	0.04	0/22	-			
Inorganics																				
Antimony	mg/kg	0.13 J	1.1 J	WL-SB04-1.5	14/19	na	-	-	78	0/19	-	na	-	-	0.27	4/19	4.1	0.459	2/19	2.4
Boron	mg/kg	4.4	13 J	WL-SB04-1.5	6/19	0.5	6/19	26	20	0/19	-	na	-	-	na	-	-	19^	0/19	
Lithium	mg/kg	4.1 J	19 J	WL-SB05-1.5	26/26	2	26/26	9.5	10	7/26	1.9	na	-	-	390	0/26	-	23^	0/26	
Mercury	mg/kg	0.0059 J	0.16 J	WL-SB10-5	25/26	na	-	-	na	-	-	0.000051	25/26	3137	0.0013	25/26	123	0.127	2/26	1.3
Perchlorate	mg/kg	9	9	WL-SB01-5	1/25	na	-	-	1.17	1/25	7.7	20.3	0/25	-	24	0/25	-			
Silver	mg/kg	0.54 J	6.4	WL-SD06-1.5	4/26	560	0/26	-	na	-	-	4.2	2/26	1.5	14	0/26	-	2.4	2/26	2.7
Strontium	mg/kg	12	63 J	WL-SB05-1.5	26/26	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	400 J	1100 J	WL-SB07-5	26/26	na	-	-	1000	1/26	1.1	na	-	-	na	-	-			
Zinc	mg/kg	23 J	440	WL-SD03-1.5	26/26	160	1/26	2.8	120	2/26	3.7	46	13/26	9.6	79	6/26	5.6	89	6/26	4.9

Notes and Key:
Only samples that are located in areas of potential migration are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.5-6 *Risk Characterization Summary Table*
Surface Water
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Total/Dissolved	Unit	Minimum Detection	Maximum Detection	Maximum Location	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics									
Bis(2-ethylhexyl)phthalate	Total	µg/L	110 J	110 J	WL-SW04-1	1/2	3	1/2	37
Trichlorofluoromethane	Total	µg/L	-	-	-	0/2	na	-	-
Pesticides & Polychlorinated Biphenyls									
Endrin aldehyde	Total	µg/L	-	-	-	0/2	0.036	-	-
Heptachlor	Total	µg/L	-	-	-	0/2	0.0038	-	-
Heptachlor epoxide	Total	µg/L	-	-	-	0/2	0.0038	-	-
Inorganics									
Aluminum	Dissolved	µg/L	67	170	WL-SW03-0.5	2/2	87	1/2	2.0
Aluminum	Total	µg/L	1100 J	5200	WL-SW04-1	2/2	87	2/2	60
Barium	Dissolved	µg/L	11	17	WL-SW04-1	2/2	4	2/2	4.3
Barium	Total	µg/L	21	36	WL-SW04-1	2/2	4	2/2	9.0
Boron	Dissolved	µg/L	-	-	-	0/2	1.6	-	-
Boron	Total	µg/L	8.6 J	8.6 J	WL-SW04-1	1/2	1.6	1/2	5.4
Copper	Dissolved	µg/L	24	24	WL-SW04-1	1/2	9	1/2	2.7
Copper	Total	µg/L	4100	4100	WL-SW04-1	1/2	9	1/2	456
Iron	Dissolved	µg/L	82	160	WL-SW03-0.5	2/2	1000	0/2	-
Iron	Total	µg/L	1300	4200	WL-SW04-1	2/2	1000	2/2	4.2
Lead	Dissolved	µg/L	0.36 J	2.4	WL-SW04-1	2/2	2.5	0/2	-
Lead	Total	µg/L	1.6	140	WL-SW04-1	2/2	2.5	1/2	56
Nitrate as NO3	Total	µg/L	950	950	WL-SW04-1	1/2	na	-	-
Silver	Dissolved	µg/L	0.036 J	0.036 J	WL-SW04-1	1/2	0.12	0/2	-
Silver	Total	µg/L	0.57 J	0.57 J	WL-SW04-1	1/2	0.12	1/2	4.8
Titanium	Dissolved	µg/L	4.2 J	4.3 J	WL-SW03-0.5	2/2	na	-	-
Titanium	Total	µg/L	46	170	WL-SW04-1	2/2	na	-	-
Zinc	Dissolved	µg/L	50	52	WL-SW04-1	2/2	120	0/2	-
Zinc	Total	µg/L	22	480	WL-SW04-1	2/2	120	1/2	4.0

Notes and Key:
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
µg/L = Micrograms per liter
na = Not available

Table 6.5-7 ***Risk Characterization Summary Table***
Sediment 0 to 1 foot
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics								
Phenol	mg/kg	-	-	-	0/16	0.42	-	-
Inorganics								
Aluminum	mg/kg	13000	39000	WL-SB04-0.5	16/16	na	-	-
Barium	mg/kg	85	240	WL-SB05-0.5	16/16	na	-	-
Beryllium	mg/kg	0.32	1.2	WL-SB05-0.5	16/16	na	-	-
Boron	mg/kg	8.9	29	WL-SD08-0.5	5/14	na	-	-
Cadmium	mg/kg	0.17 J	2.5 J	WL-SB10-0.5	7/16	0.99	1/16	2.5
Chromium	mg/kg	35	90	WL-SB10-0.5	16/16	43.4	9/16	2.1
Chromium VI	mg/kg	0.036 J	0.85 J	WL-SB10-0.5	16/16	na	-	-
Cobalt	mg/kg	8.8	18	WL-SB10-0.5	16/16	na	-	-
Copper	mg/kg	23	89	WL-SB10-0.5	16/16	31.6	9/16	2.8
Lead	mg/kg	4.5	60	WL-SD08-0.5	16/16	35.8	1/16	1.7
Lithium	mg/kg	7.5	18 J	WL-SB05-0.5	16/16	na	-	-
Manganese	mg/kg	300	670	WL-SB01-0.5	16/16	460	10/16	1.5
Mercury	mg/kg	0.012 J	0.21	WL-SB05-0.5	16/16	0.18	1/16	1.2
Molybdenum	mg/kg	0.16 J	0.67 J	WL-SB05-0.5	12/16	na	-	-
Nickel	mg/kg	27	57	WL-SB10-0.5	16/16	16	16/16	3.6
Selenium	mg/kg	0.22 J	0.22 J	WL-SD08-0.5	1/16	2	0/16	-
Silver	mg/kg	0.38 J	8.5	WL-SD04-0.5	9/16	1	7/16	8.5
Strontium	mg/kg	15	62 J	WL-SB05-0.5	16/16	na	-	-
Thallium	mg/kg	0.14 J	3.2 J	WL-SD06-0.5	14/16	na	-	-
Titanium	mg/kg	340	860	WL-SB10-0.5	16/16	na	-	-
Vanadium	mg/kg	48 J	110 J	WL-SB04-0.5	16/16	na	-	-
Zinc	mg/kg	39 J	440 J	WL-SD08-0.5	16/16	121	3/16	3.6

Notes and Key:
Sediment samples collected 0-1′ are included in this summary.
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.6-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	72-54-8	4,4'-DDD	0.0042	0.0042	mg/kg	59E-SD01	5	11	1	9%	0.0068-0.098	0.021	N	BSL
	72-55-9	4,4'-DDE	0.00045	0.0036	mg/kg	BC-SD04	0.25	11	4	36%	0.0023-0.098	0.021	N	BSL
	50-29-3	4,4'-DDT	0.0029	0.0068	mg/kg	59E-SD02	0.25	11	3	27%	0.0068-0.098	0.021	N	BSL
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	29	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	29	N	ND
	AVS	Acid Volatile Sulfide	ND	ND	umole	ND	ND	8	0	0%	0-0	NA	N	ND
	309-00-2	Aldrin	0.0004	0.00098	mg/kg	59E-SD02	0.25	11	3	27%	0.0011-0.049	0.008247	N	BSL
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	11	0	0%	0.0011-0.049	0.356	N	ND
	5103-71-9	alpha-Chlordane	0.0018	0.016	mg/kg	BC-SD02	0.25	6	3	50%	0.0059-0.049	NA	Y	
	7429-90-5	Aluminum	8510	66000	mg/kg	59E-SD01	5	18	18	100%	NA	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	29	N	ND
	7440-36-0	Antimony	0.26	0.3	mg/kg	59E-SD02	0.25	6	2	33%	1-1.7	0.27	N	BG
	7440-38-2	Arsenic	2.4	4.5	mg/kg	59E-SD02	0.25	6	6	100%	NA	18	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND

Table 6.6-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	7440-39-3	Barium	86	390	mg/kg	59E-SD01	5	6	6	100%	NA	330	Y	
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	6	0	0%	0.36-0.59	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	1.1	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	1.1	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	6	0	0%	0.013-0.022	1.1	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	1.1	N	ND
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.0125	N	ND*
	7440-41-7	Beryllium	0.36	1.4	mg/kg	59E-SD01	5	6	6	100%	NA	21	N	BSL
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	11	0	0%	0.0011-0.049	0.315	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.51-0.84	0.04	N	ND*
	7440-42-8	Boron	3.9	9.4	mg/kg	59E-SD01	5	6	5	83%	4.1-13	0.5	Y	
	7440-43-9	Cadmium	0.096	27.9	mg/kg	BC-SD01	0.25	18	17	94%	0.11-0.85	0.36	N	BG
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	5	0	0%	0.023-0.034	NA	N	ND
	7440-47-3	Chromium	19.2	118	mg/kg	BC-SD01	0.25	18	18	100%	NA	26	N	BG
	18540-29-9	Chromium VI	0.063	0.66	mg/kg	29E-SD01	0.25	6	6	100%	NA	81	N	BSL
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	1.1	N	ND
	7440-48-4	Cobalt	8.6	33	mg/kg	59E-SD01	5	6	6	100%	NA	13	N	BG
	7440-50-8	Copper	16.2	59.5	mg/kg	BC-SD01	0.25	18	18	100%	NA	28	N	BG
	319-86-8	delta-BHC	0.00032	0.00032	mg/kg	59E-SD01	0.25	11	1	9%	0.0011-0.049	0.346	N	BSL
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	1.1	N	ND
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	60-57-1	Dieldrin	0.00094	0.00094	mg/kg	59E-SD01	0.25	11	1	9%	0.0023-0.098	0.0049	N	BSL
	68334-30-5	Diesel Range Organics (C10-C28)	0.84	5.9	mg/kg	28E-SNS01	0.5	6	6	100%	NA	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.41-0.67	0.0125	N	ND*
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	0.0125	N	ND*
	959-98-8	Endosulfan I	0.00053	0.00053	mg/kg	59E-SD01	0.25	11	1	9%	0.0023-0.049	0.0633	N	BSL
	33213-65-9	Endosulfan II	0.00062	0.00075	mg/kg	59E-SD01	5	11	3	27%	0.0023-0.098	0.0633	N	BSL
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	11	0	0%	0.0068-0.098	0.0633	N	ND
	72-20-8	Endrin	0.00046	0.00046	mg/kg	59E-SD01	0.25	11	1	9%	0.0023-0.098	0.003163	N	BSL
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	9	0	0%	0.0068-0.098	0.005284	N	ND*
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	11	0	0%	0.0068-0.098	NA	N	ND
	206-44-0	Fluoranthene	0.0045	0.0045	mg/kg	28E-SNS01	0.5	6	1	17%	0.0068-0.011	1.1	N	BSL
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	29	N	ND
	58-89-9	gamma-BHC (Lindane)	ND	ND	mg/kg	ND	ND	11	0	0%	0.0011-0.049	0.029281	N	ND

Table 6.6-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	5103-74-2	gamma-Chlordane	0.0046	0.013	mg/kg	BC-SD02	0.25	6	2	33%	0.0059-0.049	NA	Y	
	76-44-8	Heptachlor	0.00031	0.00041	mg/kg	59E-SD01	5	11	2	18%	0.0011-0.049	0.003394	N	BSL
	1024-57-3	Heptachlor epoxide	0.00079	0.0012	mg/kg	BC-SD03	0.25	11	2	18%	0.0011-0.049	0.363	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	6	0	0%	0.72-1.2	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	1.1	N	ND
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	7439-92-1	Lead	5.6	72.1	mg/kg	BC-SD01	0.25	18	18	100%	NA	11	Y	
	7439-93-2	Lithium	6	16	mg/kg	59E-SD02	0.25	6	6	100%	NA	2	Y	
	7439-96-5	Manganese	120	1600	mg/kg	59E-SD01	5	6	6	100%	NA	220	N	BG
	7439-97-6	Mercury	0.014	0.34	mg/kg	59E-SD01	0.25	6	6	100%	NA	0.00051	Y	
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	11	0	0%	0.0045-0.49	5.742	N	ND
	7439-98-7	Molybdenum	0.34	0.6	mg/kg	59E-SD01	1.5	6	6	100%	NA	2	N	BSL
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.5	23	mg/kg	28E-SNS01	0.5	6	4	67%	4.1-6.7	NA	N	ITC
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	29	N	ND
	7440-02-0	Nickel	14.7	51.1	mg/kg	59E-SD04	0.25	18	18	100%	NA	38	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	6	0	0%	0.0031-0.34	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	6	0	0%	0.2-0.34	NA	N	ND
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0101	N	ND*
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0101	N	ND*
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0101	N	ND*
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0101	N	ND*
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0101	N	ND*
	11097-69-1	PCB-1254	0.02	1.1	mg/kg	BC-SD02	0.25	11	7	64%	0.023-0.42	0.0101	Y	
	11096-82-5	PCB-1260	ND	ND	mg/kg	ND	ND	11	0	0%	0.023-0.42	0.0101	N	ND*
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	6	0	0%	0.72-1.2	2.1	N	ND
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	6	0	0%	0.02-0.068	1.17	N	ND
	S-PH	pH	6.89	8.59	mg/kg	59E-SD01	0.25	5	5	100%	NA	NA	N	
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	6	0	0%	0.0067-0.011	29	N	ND
	108-95-2	Phenol	0.37	0.37	mg/kg	59E-SD01	1.5	6	1	17%	0.2-0.34	30	N	BSL
	129-00-0	Pyrene	0.0069	0.0069	mg/kg	28E-SNS01	0.5	6	1	17%	0.0068-0.011	1.1	N	BSL
	7782-49-2	Selenium	0.46	0.46	mg/kg	59E-SD02	0.25	6	1	17%	1-1.7	0.52	N	BSL
	7440-22-4	Silver	0.14	77.2	mg/kg	BC-SD01	0.25	18	17	94%	0.53-1.3	4.2	Y	
	7440-24-6	Strontium	14	63	mg/kg	59E-SD01	5	6	6	100%	NA	NA	Y	
	7440-28-0	Thallium	0.12	0.82	mg/kg	28E-SNS01	0.5	6	5	83%	0.57-4.2	1	N	BSL
	7440-32-6	Titanium	470	2200	mg/kg	59E-SD01	5	6	6	100%	NA	1000	Y	
	TOC	Total Organic Carbon	11000	57000	mg/kg	59E-SD02	0.25	5	2	40%	5700-8500	NA	N	

Table 6.6-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	11	0	0%	0.091-1.9	NA	N	ND
	7440-62-2	Vanadium	48	110	mg/kg	59E-SD01	5	6	6	100%	NA	7.8	N	BG
	7440-66-6	Zinc	25	239	mg/kg	29E-SD01	0.25	18	18	100%	NA	46	Y	

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	71-55-6	1,1,1-Trichloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	96-18-4	1,2,3-Trichloropropane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.011-0.4	NA	N	ND
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.011-0.4	NA	N	ND
	107-06-2	1,2-Dichloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	78-87-5	1,2-Dichloropropane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.011-0.4	NA	N	ND
	142-28-9	1,3-Dichloropropane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.011-0.4	NA	N	ND
	594-20-7	2,2-Dichloropropane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.52-1	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	95-49-8	2-Chlorotoluene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	16	0	0%	0.52-1	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	20	0	0%	0.0064-0.098	NA	N	ND
	72-55-9	4,4'-DDE	0.00045	0.0043	mg/kg	WL-SD12-0.5	0.5	20	5	25%	0.0022-0.098	3.2E-03	Y	
	50-29-3	4,4'-DDT	0.0029	0.0068	mg/kg	59E-SD02-0.25	0.25	20	2	10%	0.0064-0.098	4.2E-03	Y	
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND

Table 6.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	106-43-4	4-Chlorotoluene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	16	0	0%	0.52-1	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	16	0	0%	0.0068-0.013	NA	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	16	0	0%	0.0068-0.013	NA	N	ND
	309-00-2	Aldrin	0.0004	0.00098	mg/kg	59E-SD02-0.25	0.25	20	3	15%	0.0011-0.049	2.0E-03	N	BSL
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	20	0	0%	0.0011-0.049	6.0E-03	N	ND*
	5103-71-9	alpha-Chlordane	0.0018	0.016	mg/kg	BC-SD02-.25	0.25	6	3	50%	0.0059-0.049	NA	Y	
	7429-90-5	Aluminum	12000	38000	mg/kg	WL-SD13-0.25	0.25	24	24	100%	NA	NA	Y	
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	16	0	0%	0.0068-0.013	5.7E-02	N	ND
	7440-36-0	Antimony	0.16	0.52	mg/kg	WL-SD12-0.5	0.5	16	9	56%	1-16	2.0E+00	N	BSL
	7440-38-2	Arsenic	2.7	10	mg/kg	WL-SD13-0.25	0.25	16	16	100%	NA	9.8E+00	Y	
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	7440-39-3	Barium	86	240	mg/kg	WL-SD12-0.5	0.5	16	16	100%	NA	NA	Y	
	71-43-2	Benzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	16	0	0%	0.36-0.7	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.0045	0.023	mg/kg	WL-SD11-0.5	0.5	16	3	19%	0.0069-0.013	1.1E-01	N	BSL
	50-32-8	Benzo (a) pyrene	0.0069	0.045	mg/kg	WL-SD11-0.5	0.5	16	3	19%	0.0069-0.013	1.5E-01	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.014	0.11	mg/kg	WL-SD11-0.5	0.5	16	5	31%	0.015-0.026	2.4E-01	N	BSL
	191-24-2	Benzo (ghi) perylene	0.0093	0.043	mg/kg	WL-SD11-0.5	0.5	16	3	19%	0.0069-0.013	1.7E-01	N	BSL
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	16	0	0%	0.52-1	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	1.1E+01	N	ND
	7440-41-7	Beryllium	0.24	0.94	mg/kg	WL-SD12-0.5	0.5	16	16	100%	NA	NA	N	BSL
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	20	0	0%	0.0011-0.049	NA	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	16	0	0%	0.52-1	8.9E+02	N	ND
	7440-42-8	Boron	2.3	12	mg/kg	WL-SD02-0.25 WL-SD02-1.5	0.25 1.5	16	9	56%	2.6-8.8	NA	Y	
	108-86-1	Bromobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	74-97-5	Bromochloromethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-27-4	Bromodichloromethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-25-2	Bromoform	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	74-83-9	Bromomethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7440-43-9	Cadmium	0.13	27.9	mg/kg	BC-SD01-.25	0.25	24	23	96%	0.43-0.43	9.9E-01	Y	

Table 6.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	56-23-5	Carbon tetrachloride	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	14	0	0%	0.021-0.042	NA	N	ND
	108-90-7	Chlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-00-3	Chloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	67-66-3	Chloroform	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	74-87-3	Chloromethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7440-47-3	Chromium	19.2	1200	mg/kg	WL-SD13-0.25	0.25	24	24	100%	NA	4.3E+01	Y	
	18540-29-9	Chromium VI	0.022	2.2	mg/kg	WL-SD13-0.25	0.25	14	9	64%	0.42-4	NA	Y	
	218-01-9	Chrysene	0.0066	0.054	mg/kg	WL-SD11-0.5	0.5	16	6	38%	0.0075-0.013	1.7E-01	N	BSL
	156-59-2	cis-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7440-48-4	Cobalt	6.4	34	mg/kg	WL-SD12-1.5	1.5	16	16	100%	NA	NA	Y	
	7440-50-8	Copper	20	110	mg/kg	WL-SD13-0.25	0.25	24	24	100%	NA	3.2E+01	Y	
	319-86-8	delta-BHC	0.00032	0.0013	mg/kg	WL-SD09-0.5	0.5	20	2	10%	0.0011-0.049	3.0E-03	N	BSL
	53-70-3	Dibenz (a,h) anthracene	0.0082	0.0082	mg/kg	WL-SD11-0.5	0.5	16	1	6%	0.0068-0.013	3.3E-02	N	BSL
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	124-48-1	Dibromochloromethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	74-95-3	Dibromomethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-71-8	Dichlorodifluoromethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	60-57-1	Dieldrin	0.00094	0.00094	mg/kg	59E-SD01-0.25	0.25	20	1	5%	0.0021-0.098	1.9E-03	N	BSL
	68334-30-5	Diesel Range Organics (C10-C28)	0.84	35	mg/kg	WL-SD13-0.25	0.25	12	11	92%	2.4-2.4	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	16	0	0%	0.41-0.8	NA	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	959-98-8	Endosulfan I	0.00053	0.00053	mg/kg	59E-SD01-0.25	0.25	20	1	5%	0.0021-0.049	2.9E-03	N	BSL
	33213-65-9	Endosulfan II	0.00062	0.00065	mg/kg	59E-SD01-0.25	0.25	20	2	10%	0.0021-0.098	1.4E-02	N	BSL
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	20	0	0%	0.0064-0.098	NA	N	ND
	72-20-8	Endrin	0.00046	0.00046	mg/kg	59E-SD01-0.25	0.25	20	1	5%	0.0021-0.098	2.2E-03	N	BSL
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	18	0	0%	0.0064-0.098	NA	N	ND
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	20	0	0%	0.0064-0.098	NA	N	ND
	100-41-4	Ethylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	206-44-0	Fluoranthene	0.0035	0.11	mg/kg	WL-SD11-0.5	0.5	16	7	44%	0.0075-0.013	4.2E-01	N	BSL
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	16	0	0%	0.0068-0.013	NA	N	ND
	Furan, tetrahydro-	Furan, tetrahydro-	0.0059	0.0059	mg/kg	WL-SD02-1.5	1.5	1	1	100%	NA	NA	Y	
	58-89-9	gamma-BHC (Lindane)	0.00053	0.0016	mg/kg	WL-SD09-0.5	0.5	20	3	15%	0.0011-0.049	2.4E-03	N	BSL
	5103-74-2	gamma-Chlordane	0.0046	0.013	mg/kg	BC-SD02-.25	0.25	6	2	33%	0.0059-0.049	NA	Y	
	76-44-8	Heptachlor	0.00031	0.00031	mg/kg	59E-SD01-0.25	0.25	20	1	5%	0.0011-0.049	2.5E-03	N	BSL
	1024-57-3	Heptachlor epoxide	0.00075	0.0014	mg/kg	WL-SD11-0.5	0.5	20	4	20%	0.0011-0.049	2.5E-03	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	20	0	0%	0.011-0.4	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	16	0	0%	0.73-1.4	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND

Table 6.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	193-39-5	Indeno (1,2,3-cd) pyrene	0.017	0.033	mg/kg	WL-SD11-0.5	0.5	16	2	13%	0.0068-0.013	7.8E-02	N	BSL
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	98-82-8	Isopropylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7439-92-1	Lead	5.6	72.1	mg/kg	BC-SD01-.25	0.25	24	24	100%	NA	3.6E+01	Y	
	7439-93-2	Lithium	6	16	mg/kg	59E-SD02-0.25 WL-SD12-0.5 WL-SD12-1.5 WL-SD13-0.25	0.25 0.5 1.5 0.25	16	16	100%	NA	NA	Y	
	7439-96-5	Manganese	120	1300	mg/kg	WL-SD12-0.5 WL-SD12-1.5	0.5 1.5	16	16	100%	NA	4.6E+02	Y	
	7439-97-6	Mercury	0.011	0.55	mg/kg	WL-SD02-0.25	0.25	16	16	100%	NA	1.8E-01	Y	
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	20	0	0%	0.0045-0.49	NA	N	ND
	1634-04-4	Methyl tert-butyl ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-09-2	Methylene chloride	ND	ND	mg/kg	ND	ND	4	0	0%	0.054-0.24	1.3E+00	N	ND
	7439-98-7	Molybdenum	0.11	0.71	mg/kg	WL-SD13-0.25	0.25	16	16	100%	NA	NA	Y	
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.5	170	mg/kg	WL-SD13-0.25	0.25	12	10	83%	4.6-4.8	NA	N	ITC
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	20	0	0%	0.0068-0.048	NA	N	ND
	104-51-8	n-Butylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7440-02-0	Nickel	20	60	mg/kg	WL-SD12-1.5	1.5	24	24	100%	NA	1.6E+01	Y	
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	556887	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	12	0	0%	0.25-0.25	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	20	0	0%	0.012-0.4	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	16	0	0%	0.21-0.4	NA	N	ND
	103-65-1	n-Propylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	22	0	0%	0.021-0.42	NA	N	ND
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	22	0	0%	0.021-0.42	NA	N	ND
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	22	0	0%	0.021-0.42	NA	N	ND
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	22	0	0%	0.021-0.42	NA	N	ND
	12672-29-6	PCB-1248	ND	ND	mg/kg	ND	ND	22	0	0%	0.021-0.42	6.0E-02	N	ND*
	11097-69-1	PCB-1254	0.02	1.1	mg/kg	BC-SD02-.25	0.25	22	16	73%	0.023-0.42	6.0E-02	Y	
	11096-82-5	PCB-1260	0.031	0.031	mg/kg	WL-SD01-0.5	0.5	22	1	5%	0.021-0.42	6.0E-02	N	BSL
	40487-42-1	Pendimethalin (Prowl)	ND	ND	mg/kg	ND	ND	10	0	0%	0.0021-0.01	3.7E-01	N	ND
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	16	0	0%	0.73-1.4	3.6E-01	N	ND*
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	12	0	0%	0.02-0.068	NA	N	ND
	S-PH	pH	5.68	8.77	mg/kg	WL-SD02-1.5	1.5	12	12	100%	NA	NA	N	
	85-01-8	Phenanthrene	0.0029	0.028	mg/kg	WL-SD11-0.5	0.5	16	6	38%	0.0075-0.013	2.0E-01	N	BSL
	108-95-2	Phenol	0.37	0.37	mg/kg	59E-SD01-1.5	1.5	16	1	6%	0.21-0.4	4.2E-01	N	BSL
	99-87-6	p-Isopropyltoluene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	129-00-0	Pyrene	0.0066	0.098	mg/kg	WL-SD11-0.5	0.5	16	6	38%	0.0075-0.013	2.0E-01	N	BSL
	135-98-8	sec-Butylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7782-49-2	Selenium	0.46	2.5	mg/kg	WL-SD02-1.5	1.5	16	2	13%	1-3.1	2.0E+00	Y	
	7440-22-4	Silver	0.1	90	mg/kg	WL-SD02-0.25	0.25	24	23	96%	1.3-1.3	1.0E+00	Y	

Table 6.6-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Buffalo Creek	7440-24-6	Strontium	14	65	mg/kg	WL-SD01-0.5	0.5	16	16	100%	NA	NA	Y	
	100-42-5	Styrene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	98-06-6	tert-Butylbenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	127-18-4	Tetrachloroethene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7440-28-0	Thallium	0.12	2.2	mg/kg	WL-SD09-0.5	0.5	16	14	88%	7.8-8	NA	Y	
	7440-32-6	Titanium	450	1100	mg/kg	59E-SD02-0.25	0.25	16	16	100%	NA	NA	Y	
	108-88-3	Toluene	0.00076	0.0065	mg/kg	WL-SD01-0.25	0.25	4	3	75%	0.019-0.019	5.3E-02	N	BSL
	TOC	Total Organic Carbon	2400	57000	mg/kg	59E-SD02-0.25	0.25	13	9	69%	5700-6700	NA	N	
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	20	0	0%	0.085-1.9	NA	N	ND
	156-60-5	trans-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	79-01-6	Trichloroethene	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	75-69-4	Trichlorofluoromethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7440-62-2	Vanadium	32	110	mg/kg	WL-SD12-0.5 WL-SD12-1.5	0.5 1.5	16	16	100%	NA	NA	Y	
	75-01-4	Vinyl chloride	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	1330-20-7	Xylenes (total)	ND	ND	mg/kg	ND	ND	4	0	0%	0.011-0.048	NA	N	ND
	7440-66-6	Zinc	25	263	mg/kg	WL-SD16-.25	0.25	24	24	100%	NA	1.2E+02	Y	

Footnotes:

(1) See Table 2

(2) Rational for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

µg/kg = Micrograms per kilogram

NA = Not available

Table 6.6-3 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Pesticides & Polychlorinated Biphenyls																				
alpha-Chlordane	mg/kg	0.0018 J	0.016 J	BC-SD02-0.25	3/6	na	-	-	na	-	-	na	-	-	na	-	-			
gamma-Chlordane	mg/kg	0.0046 J	0.013 J	BC-SD02-0.25	2/6	na	-	-	na	-	-	na	-	-	na	-	-			
PCB-1254	mg/kg	0.073	1.1 J	BC-SD02-0.25	6/8	na	-	-	na	-	-	0.01	6/8	109	0.04	6/8	26			
Inorganics																				
Barium	mg/kg	86	160	59E-SD02-0.25	3/3	na	-	-	330	0/3	-	na	-	-	2000	0/3	-			
Boron	mg/kg	4 J	7.5	59E-SD02-0.25	2/3	0.5	2/3	15	20	0/3	-	na	-	-	na	-	-	19^	0/3	
Lead	mg/kg	7.7	72.1	BC-SD01-0.25	15/15	120	0/15	-	1700	0/15	-	11	9/15	6.6	56	2/15	1.3	22.66	6/15	3.2
Lithium	mg/kg	6.8	16	59E-SD02-0.25	3/3	2	3/3	8	10	1/3	1.6	na	-	-	390	0/3	-	23^	0/3	
Mercury	mg/kg	0.18	0.34	59E-SD01-0.25	3/3	na	-	-	na	-	-	0.000051	3/3	6667	0.0013	3/3	262	0.127	3/3	2.7
Silver	mg/kg	0.14 J	77.2 J	BC-SD01-0.25	14/15	560	0/15	-	na	-	-	4.2	8/15	18	14	4/15	5.5	2.4	9/15	32
Strontium	mg/kg	16	58	59E-SD02-0.25	3/3	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	530	1100	59E-SD02-0.25	3/3	na	-	-	1000	1/3	1.1	na	-	-	na	-	-			
Zinc	mg/kg	29	239 J	29E-SD01-0.25	15/15	160	4/15	1.5	120	6/15	2.0	46	11/15	5.2	79	8/15	3.0	89	8/15	2.7

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.6-4 ***Risk Characterization Summary Table***
Soil Habitat 1 to 6 feet
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Pesticides & Polychlorinated Biphenyls																				
PCB-1254	mg/kg	0.02 J	0.02 J	59E-SD02-1.5	1/3	na	-	-	na	-	-	0.01	1/3	2.0	0.04	0/3	-			
alpha-Chlordane		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
gamma-Chlordane		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-			
Inorganics																				
Barium	mg/kg	87	390	59E-SD01-5	3/3	na	-	-	330	1/3	1.2	na	-	-	2000	0/3	-	320	1/3	1.2
Boron	mg/kg	3.9 J	9.4 J	59E-SD01-5	3/3	0.5	3/3	19	20	0/3	-	na	-	-	na	-	-	19^	0/3	
Lead	mg/kg	5.6	13	59E-SD01-5	3/3	120	0/3	-	1700	0/3	-	11	1/3	1.2	56	0/3	-	22.66	0/3	
Lithium	mg/kg	6	11 J	59E-SD01-5	3/3	2	3/3	5.5	10	1/3	1.1	na	-	-	390	0/3	-	23^	0/3	
Mercury	mg/kg	0.014 J	0.11	59E-SD01-1.5	3/3	na	-	-	na	-	-	0.000051	3/3	2157	0.0013	3/3	85	0.127	0/3	
Silver	mg/kg	0.15 J	0.46 J	59E-SD02-1.5	3/3	560	0/3	-	na	-	-	4.2	0/3	-	14	0/3	-			
Strontium	mg/kg	14	63	59E-SD01-5	3/3	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	470	2200	59E-SD01-5	3/3	na	-	-	1000	1/3	2.2	na	-	-	na	-	-			
Zinc	mg/kg	25	91	59E-SD01-5	3/3	160	0/3	-	120	0/3	-	46	2/3	2.0	79	1/3	1.2	89	1/3	1.0

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.6-5 *Risk Characterization Summary Table*
Surface Water
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Total/Dissolved	Unit	Minimum Detection	Maximum Detection	Maximum Location	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics									
Bis(2-ethylhexyl)phthalate	Total	µg/L	-	-	-	0/8	3	-	-
Trichlorofluoromethane	Total	µg/L	0.24 J	0.24 J	WL-SW08-1	1/9	na	-	-
Pesticides & Polychlorinated Biphenyls									
Endrin aldehyde	Total	µg/L	0.044 J	0.044 J	59E-SW02-2	1/6	0.036	1/6	1.2
Heptachlor	Total	µg/L	0.013 J	0.013 J	59E-SW02-2	1/6	0.0038	1/6	3.4
Heptachlor epoxide	Total	µg/L	0.11 J	0.11 J	59E-SW02-2	1/6	0.0038	1/6	29
Inorganics									
Aluminum	Dissolved	µg/L	48 J	560	WL-SW06-9	8/8	87	6/8	6.4
Aluminum	Total	µg/L	300 J	3100	59E-SW02-2	8/8	87	8/8	36
Barium	Dissolved	µg/L	18	54	WL-SW01-1	8/8	4	8/8	14
Barium	Total	µg/L	27	60	WL-SW01-1	8/8	4	8/8	15
Boron	Dissolved	µg/L	8 J	21 J	WL-SW08-1	2/8	1.6	2/8	13
Boron	Total	µg/L	12 J	23 J	WL-SW08-1	3/8	1.6	3/8	14
Copper	Dissolved	µg/L	0.25 J	15	WL-SW08-1	7/8	9	1/8	1.7
Copper	Total	µg/L	3.4	28	WL-SW08-1	6/8	9	1/8	3.1
Iron	Dissolved	µg/L	170	340	WL-SW06-9	6/8	1000	0/8	-
Iron	Total	µg/L	270	2800 J	WL-SW07-1.5	8/8	1000	6/8	2.8
Lead	Dissolved	µg/L	0.059 J	3.3	WL-SW08-1	8/8	2.5	1/8	1.3
Lead	Total	µg/L	0.49 J	26	WL-SW08-1	8/8	2.5	1/8	10
Nitrate as NO3	Total	µg/L	450	2400	WL-SW01-1	7/8	na	-	-
Silver	Dissolved	µg/L	0.031 J	0.13 J	WL-SW05-9	6/8	0.12	1/8	1.1
Silver	Total	µg/L	0.062 J	1.3	59E-SW02-2	6/8	0.12	5/8	11
Titanium	Dissolved	µg/L	7.3	18	WL-SW06-9	6/8	na	-	-
Titanium	Total	µg/L	12	91	WL-SW07-1.5	8/8	na	-	-
Zinc	Dissolved	µg/L	21	100	WL-SW07-1.5	5/8	120	0/8	-
Zinc	Total	µg/L	43	110	WL-SW08-1	4/8	120	0/8	-

Notes and Key:
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
µg/L = Micrograms per liter
na = Not available

Table 6.6-6 *Risk Characterization Summary Table*
Sediment 0 to 1 foot
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Pesticides & Polychlorinated Biphenyls								
4,4'-DDE	mg/kg	0.0012 J	0.0043 J	WL-SD12-0.5	4/13	0.00316	2/13	1.4
4,4'-DDT	mg/kg	0.0029 J	0.0068 J	59E-SD02-0.25	2/13	0.00416	1/13	1.6
alpha-Chlordane	mg/kg	0.0018 J	0.016 J	BC-SD02-0.25	3/6	na	-	-
gamma-Chlordane	mg/kg	0.0046 J	0.013 J	BC-SD02-0.25	2/6	na	-	-
PCB-1254	mg/kg	0.024 J	1.1 J	BC-SD02-0.25	11/14	0.0598	10/14	18.4
Inorganics								
Aluminum	mg/kg	12200	38000	WL-SD13-0.25	16/16	na	-	-
Arsenic	mg/kg	2.7	10	WL-SD13-0.25	8/8	9.79	1/8	1.0
Barium	mg/kg	86	240	WL-SD12-0.5	8/8	na	-	-
Boron	mg/kg	2.3 J	12	WL-SD02-0.25	5/8	na	-	-
Cadmium	mg/kg	0.16	27.9	BC-SD01-0.25	16/16	0.99	3/16	28
Chromium	mg/kg	19.2 J	1200	WL-SD13-0.25	16/16	43.4	14/16	28
Chromium VI	mg/kg	0.022 J	2.2 J	WL-SD13-0.25	5/8	na	-	-
Cobalt	mg/kg	9.3	33	WL-SD12-0.5	8/8	na	-	-
Copper	mg/kg	23	110 J	WL-SD13-0.25	16/16	31.6	13/16	3.5
Furan, tetrahydro-		NA	NA	-	-	na	-	-
Lead	mg/kg	8.1	72.1	BC-SD01-0.25	16/16	35.8	3/16	2.0
Lithium	mg/kg	6.8	16	59E-SD02-0.25	8/8	na	-	-
Manganese	mg/kg	120	1300	WL-SD12-0.5	8/8	460	4/8	2.8
Mercury	mg/kg	0.072	0.55	WL-SD02-0.25	8/8	0.18	3/8	3.1
Molybdenum	mg/kg	0.27 J	0.71 J	WL-SD13-0.25	8/8	na	-	-
Nickel	mg/kg	21	58	WL-SD12-0.5	16/16	16	16/16	3.6
Selenium	mg/kg	0.46 J	0.46 J	59E-SD02-0.25	1/8	2	0/8	-
Silver	mg/kg	2.5	90	WL-SD02-0.25	15/16	1	15/16	90
Strontium	mg/kg	16	65	WL-SD01-0.5	8/8	na	-	-
Thallium	mg/kg	0.12 J	2.2 J	WL-SD09-0.5	7/8	na	-	-
Titanium	mg/kg	530	1100	59E-SD02-0.25	8/8	na	-	-
Vanadium	mg/kg	45	110	WL-SD12-0.5	8/8	na	-	-
Zinc	mg/kg	34	263	WL-SD16-0.25	16/16	121	11/16	2.2

Notes and Key:
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available, NA = Not analyzed
HQ = Hazard quotient

Table 6.7-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 5 and 7	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.56-0.59	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	3	0	0%	0.56-0.59	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	3	0	0%	0.56-0.59	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	29	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	29	N	ND
	7429-90-5	Aluminum	19000	32000	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	29	N	ND
	7440-36-0	Antimony	0.2	0.2	mg/kg	OS5-F1-SB01	1	1	1	100%	NA	0.27	N	BSL
	7440-38-2	Arsenic	2.6	3.5	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	18	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	7440-39-3	Barium	140	150	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	330	N	BSL
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	3	0	0%	0.39-0.42	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	2	0	0%	0.015-0.015	1.1	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND

Table 6.7-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 5 and 7	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	3	0	0%	0.56-0.59	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	0.0125	N	ND*
	7440-41-7	Beryllium	0.55	0.71	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	21	N	BSL
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	3	0	0%	0.56-0.59	0.04	N	ND*
	7440-42-8	Boron	5.9	9.9	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	0.5	N**	
	7440-43-9	Cadmium	0.085	0.15	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	0.36	N	BSL
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	7440-47-3	Chromium	51	52	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	26	N	BG
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND
	7440-48-4	Cobalt	14	18	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	13	N	BG
	7440-50-8	Copper	26	28	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	28	N	BSL
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	68334-30-5	Diesel Range Organics (C10-C28)	2.9	3.1	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	3	0	0%	0.45-0.48	0.0125	N	ND*
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	0.0125	N	ND*
	206-44-0	Fluoranthene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	29	N	ND
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	3	0	0%	0.78-0.83	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	7439-92-1	Lead	10	13	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	11	N	BG
	7439-93-2	Lithium	7.6	10	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	2	N**	
	7439-96-5	Manganese	820	910	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	220	N	BG
	7439-97-6	Mercury	0.04	0.04	mg/kg	OS5-F2-SB01	1	2	1	50%	0.022-0.024	0.00051	N	BG
	7439-98-7	Molybdenum	0.18	0.76	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	2	N	BSL
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	4.9	9.9	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	NA	N	ITC
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	29	N	ND
	7440-02-0	Nickel	34	39	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	38	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	3	0	0%	0.22-0.24	NA	N	ND

Table 6.7-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 5 and 7	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	3	0	0%	0.78-0.83	2.1	N	ND*
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	2	0	0%	0.045-0.047	1.17	N	ND
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	29	N	ND
	108-95-2	Phenol	1.4	1.9	mg/kg	OS5-F2-SB01	5	3	2	67%	0.22-0.24	30	N	BSL
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0074-0.0077	1.1	N	ND
	7782-49-2	Selenium	ND	ND	mg/kg	ND	ND	2	0	0%	1.1-1.2	0.52	N	ND*
	7440-22-4	Silver	0.1	0.12	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	4.2	N	BSL
	7440-24-6	Strontium	19	20	mg/kg	OS5-F1-SB01	1	2	2	100%	NA	NA	Y	
	7440-28-0	Thallium	0.24	0.37	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	1	N	BSL
	7440-32-6	Titanium	680	710	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	1000	N	BSL
	7440-62-2	Vanadium	70	84	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	7.8	N	BG
	7440-66-6	Zinc	46	59	mg/kg	OS5-F2-SB01	1	2	2	100%	NA	46	N	BG

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

** = Did not exceed background as found in Kearny (1996)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.7-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 5, 7	71-55-6	1,1,1-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	6.2-7	1.9E+05	UA	
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	6.2-7	5.7E+03	UA	
	75-34-3	1,1-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	4.6-5.2	1.8E+05	UA	
	75-35-4	1,1-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	4.5-5.1	6.0E+03	UA	
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5.6-6.3	1.6E+04	UA	
	107-06-2	1,2-Dichloroethane	7.5	35	$\mu g/m^3$	28E-SP17	10	6	2	33%	4.6-5.2	4.2E+04	N	BSL
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5.6-6.3	1.6E+04	UA	
	106-99-0	1,3-Butadiene	14	200	$\mu g/m^3$	28E-SP19	20	6	4	67%	2.5-2.8		UA	
	123-91-1	1,4-Dioxane	18	20	$\mu g/m^3$	28E-SP19	20	6	2	33%	16-18		UA	
	540-84-1	2,2,4-Trimethylpentane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5.3-6		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	24	30	$\mu g/m^3$	28E-SP19	20	6	2	33%	3.6-14	8.6E+05	N	BSL
	591-78-6	2-Hexanone	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	19-21	4.9E+03	UA	
	67-63-0	2-Propanol	13	17	$\mu g/m^3$	28E-SP19	20	6	2	33%	11-13		UA	
	622-96-8	4-Ethyltoluene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5.6-6.3		UA	
	108-10-1	4-Methyl-2-pentanone	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	4.7-5.3		UA	
	67-64-1	Acetone	72	280	$\mu g/m^3$	28E-SP19	20	6	3	50%	11-24		UA	
	71-43-2	Benzene	6.4	40	$\mu g/m^3$	28E-SP17	10	6	4	67%	3.6-4.1	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	7.7-8.6		UA	
	75-15-0	Carbon Disulfide	20	330	$\mu g/m^3$	28E-SP19	20	6	6	100%	3.6-4	1.2E+03	N	BSL
	56-23-5	Carbon Tetrachloride	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	7.2-8.1	6.3E+03	UA	
	75-00-3	Chloroethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	3-3.4	9.9E+05	UA	
	67-66-3	Chloroform	24	24	$\mu g/m^3$	OS5-F2-SP01	10	6	1	17%	5.6-6.3	1.2E+03	N	BSL

Table 6.7-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 5, 7	156-59-2	cis-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	4.5-5.1	1.9E+04	UA	
	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5.6-6.3	2.3E+04	UA	
	110-82-7	Cyclohexane	8.7	17	$\mu g/m^3$	28E-SP17	10	6	4	67%	3.9-4.4		UA	
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	9.8-11		UA	
	64-17-5	Ethanol	15	28	$\mu g/m^3$	28E-SP19	20	6	2	33%	8.6-9.7		UA	
	100-41-4	Ethyl Benzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5-5.6	2.3E+04	UA	
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	6.4-7.2	8.8E+04	UA	
	76-13-1	Freon 113	19	19	$\mu g/m^3$	28E-SP19	20	6	1	17%	8.8-9.9	8.8E+04	N	BSL
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5.7-6.4	8.8E+04	UA	
	142-82-5	Heptane	15	130	$\mu g/m^3$	28E-SP17	10	6	4	67%	4.7-5.3		UA	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	49-55		UA	
	110-54-3	Hexane	13	620	$\mu g/m^3$	28E-SP17	10	6	5	83%	4-4.5		UA	
	95-47-6	o-Xylene	ND	ND	$\mu g/m^3$	ND	ND	6	0	NA	5-5.6	1.6E+04	UA	
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	4.1-4.6	2.6E+05	UA	
	75-09-2	Methylene Chloride	29	29	$\mu g/m^3$	OS5-F2-SP01	10	6	1	NA	4-4.5	8.7E+03	N	BSL
	103-65-1	Propylbenzene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	5.6-6.3		UA	
	100-42-5	Styrene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	4.9-5.5	1.9E+05	UA	
	127-18-4	Tetrachloroethene	15	15	$\mu g/m^3$	28E-SP17	10	6	1	17%	7.8-8.8	2.4E+04	N	BSL
	109-99-9	Tetrahydrofuran	4.1	62	$\mu g/m^3$	28E-SP19	20	6	3	50%	3.4-3.8		UA	
	108-88-3	Toluene	12	66	$\mu g/m^3$	28E-SP19	20	6	4	67%	4.3-4.9	8.4E+01	N	BSL
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	4.5-5.1	1.9E+04	UA	
	79-01-6	Trichloroethene	9.8	22	$\mu g/m^3$	28E-SP19	20	6	3	50%	6.2-6.9	6.4E+03	N	BSL
	75-01-4	Vinyl Chloride	ND	ND	$\mu g/m^3$	ND	ND	6	0	0%	2.9-3.3	5.6E+02	UA	

Footnotes:

(1) See Table ?

(2) Rationale for Deletion

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.7-3 *Risk Characterization Summary Table*
Soil Habitat 0 to 1 foot
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	**Unit**	**Minimum Detection**	**Maximum Detection**	**Location of Maximum**	**Frequency of Detection**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**BTV**	**Frequency of Exceedance**	**HQ**
Inorganics																				
Boron	mg/kg	5.9	9.9	OS5-F2-SB01-1	2/2	0.5	2/2	20	20	0/2	-	na	-	-	na	-	-	19^	0/2	
Lithium	mg/kg	7.6	10	OS5-F2-SB01-1	2/2	2	2/2	5.0	10	0/2	-	na	-	-	390	0/2	-	23^	0/2	
Strontium	mg/kg	19	20	OS5-F1-SB01-1	2/2	na	-	-	na	-	-	na	-	-	na	-	-			

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
mg/kg = Milligrams per kilogram
na = Not available

Table 6.7-4 Risk Characterization Summary Table
Soil Vapor Habitat - Top Depth
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance
1,1,1-Trichloroethane	$\mu g/m^3$	191000	-	-	-	0/4	-
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/4	-
1,1-Dichloroethane	$\mu g/m^3$	181000	-	-	-	0/4	-
1,1-Dichloroethene	$\mu g/m^3$	6000	-	-	-	0/4	-
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/4	-
1,2-Dichloroethane	$\mu g/m^3$	42000	35	35	28E-SP17-10	1/4	0/4
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/4	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	24	30	28E-SP19-20	2/4	0/4
2-Hexanone	$\mu g/m^3$	4880	-	-	-	0/4	-
Acetone	$\mu g/m^3$	1305000	110	280	28E-SP19-20	2/4	0/4
Benzene	$\mu g/m^3$	570	37	40	28E-SP17-10	2/4	0/4
Carbon Disulfide	$\mu g/m^3$	1200	20	330	28E-SP19-20	4/4	0/4
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/4	-
Chloroethane	$\mu g/m^3$	992000	-	-	-	0/4	-
Chloroform	$\mu g/m^3$	1200	24	24	OS5-F2-SP01-10	1/4	0/4
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/4	-
Cumene	$\mu g/m^3$	23000	-	-	-	0/4	-
Ethyl Benzene	$\mu g/m^3$	23000	-	-	-	0/4	-
Freon 11	$\mu g/m^3$	88000	-	-	-	0/4	-
Freon 113	$\mu g/m^3$	88000	19	19	28E-SP19-20	1/4	0/4
Freon 12	$\mu g/m^3$	88000	-	-	-	0/4	-
m,p-Xylene	$\mu g/m^3$	16000	6.7	6.7	28E-SP19-20	1/4	0/4
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/4	-
Methylene Chloride	$\mu g/m^3$	9000	29	29	OS5-F2-SP01-10	1/4	0/4
o-Xylene	$\mu g/m^3$	16000	-	-	-	0/4	-
Styrene	$\mu g/m^3$	192000	-	-	-	0/4	-
Tetrachloroethene	$\mu g/m^3$	24000	15	15	28E-SP17-10	1/4	0/4
Toluene	$\mu g/m^3$	84	12	66	28E-SP19-20	3/4	0/4
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/4	-
Trichloroethene	$\mu g/m^3$	6400	17	22	28E-SP19-20	2/4	0/4
Vinyl Chloride	$\mu g/m^3$	560	-	-	-	0/4	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
HQ = Hazard quotient
$\mu g/m^3$ = Micrograms per cubic meter

Table 6.8-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	71-55-6	1,1,1-Trichloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	96-18-4	1,2,3-Trichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	200	0	0%	0.0067-8.33	NA	N	ND
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	200	0	0%	0.0067-8.33	NA	N	ND
	107-06-2	1,2-Dichloroethane	0.0041	0.0041	mg/kg	25F-SD01-5.0	5	3	1	33%	0.0067-0.0068	NA	Y	
	78-87-5	1,2-Dichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	188	0	0%	0.2-83.3	NA	N	ND
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	200	0	0%	0.0067-8.33	NA	N	ND
	142-28-9	1,3-Dichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	200	0	0%	0.0067-8.33	NA	N	ND
	594-20-7	2,2-Dichloropropane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	120-83-2	2,4-Dichlorophenol	3.3	3.3	mg/kg	59F-SB11-5.0	5	200	1	1%	0.2-8.33	NA	Y	
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.51-16.7	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	200	0	0%	0.167-4.17	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	95-49-8	2-Chlorotoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	91-57-6	2-Methylnaphthalene	0.043	0.068	mg/kg	59F-SB26-1	1	200	2	1%	0.167-4.17	29	N	BSL
	95-48-7	2-Methylphenol	0.15	0.15	mg/kg	59F-SB11-5.0	5	200	1	1%	0.2-8.33	NA	Y	
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-16.7	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	200	0	0%	0.51-16.7	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-16.7	NA	N	ND
	72-54-8	4,4'-DDD	0.0024	2.3	mg/kg	59F-SB22-1.0	1	159	8	5%	0.004-0.38	0.021	Y	
	72-55-9	4,4'-DDE	0.00065	0.048	mg/kg	OS1-F2-SNS01-2.5	2.5	159	21	13%	0.002-0.12	0.021	Y	
	50-29-3	4,4'-DDT	0.0015	1.2	mg/kg	59F-SB22-1.0	1	159	28	18%	0.006-0.38	0.021	Y	
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-16.7	NA	N	ND

Table 6.8-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	166	0	0%	0.2-0.667	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-16.7	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	106-43-4	4-Chlorotoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	166	0	0%	0.2-0.667	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	200	0	0%	0.51-16.7	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-16.7	NA	N	ND
	83-32-9	Acenaphthene	0.0049	0.057	mg/kg	59F-SB26-1	1	205	3	1%	0.0067-4.17	29	N	BSL
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	205	0	0%	0.0067-4.17	29	N	ND
	309-00-2	Aldrin	0.00025	0.0074	mg/kg	CP2-08-SNS04-0.5	0.5	159	13	8%	0.001-0.062	0.008247	N	BSL
	319-84-6	alpha-BHC	0.00022	0.0023	mg/kg	CP2-08-SNS04-0.5	0.5	159	3	2%	0.001-0.062	0.356	N	BSL
	5103-71-9	alpha-Chlordane	ND	ND	mg/kg	ND	ND	2	0	0%	0.002-0.0046	NA	N	ND
	7429-90-5	Aluminum	1400	64000	mg/kg	59F-SD02-1.5	1.5	219	219	100%	NA	NA	Y	
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	188	0	0%	0.2-8.33	NA	N	ND
	120-12-7	Anthracene	0.0028	0.056	mg/kg	59F-SB26-1	1	205	8	4%	0.0067-4.17	29	N	BSL
	7440-36-0	Antimony	0.078	5.67	mg/kg	C208-SB03	1	212	142	67%	1-9	0.27	Y	
	AER-001-095	Arsenic	0.49	35	mg/kg	62F-SB10-1.0	1	213	212	100%	3-3	18	Y	
	86-50-0	Azinphos methyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	NA	N	ND
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	150	0	0%	0.2-0.31	NA	N	ND
	7440-39-3	Barium	10	4620	mg/kg	59F-SPB02	1	213	213	100%	NA	330	Y	
	71-43-2	Benzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	150	0	0%	0.36-0.54	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.0049	0.17	mg/kg	59F-SB26-1	1	205	22	11%	0.0067-4.17	1.1	N	BSL
	50-32-8	Benzo (a) pyrene	0.0068	0.15	mg/kg	59F-SB26-1	1	205	21	10%	0.0067-4.17	1.1	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.012	0.22	mg/kg	CP2-08-SNS04-0.5	0.5	155	25	16%	0.013-0.47	1.1	N	BSL
	205-99-2	Benzo (b) fluoranthene	0.23	0.23	mg/kg	59F-SB26-1	1	50	1	2%	0.167-4.17	1.1	N	BSL
	191-24-2	Benzo (ghi) perylene	0.0077	0.084	mg/kg	59F-SB26-1	1	205	13	6%	0.0067-4.17	1.1	N	BSL
	207-08-9	Benzo (k) fluoranthene	0.11	0.11	mg/kg	59F-SB26-1	1	50	1	2%	0.167-4.17	1.1	N	BSL
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	188	0	0%	0.51-16.7	NA	N	ND
	100-51-6	Benzyl alcohol	0.34	0.34	mg/kg	59F-SB11-5.0	5	188	1	1%	0.2-8.33	NA	N	BSL
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	0.0125	N	ND*
	7440-41-7	Beryllium	0.14	1.6	mg/kg	59F-SD02-1.5	1.5	213	176	83%	0.11-0.5	21	N	BSL
	319-85-7	beta-BHC	0.00021	0.0038	mg/kg	59F-SB23-1.0	1	159	5	3%	0.001-0.062	0.315	N	BSL
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	39638-32-9	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	1.09	1.3	mg/kg	59F-SB28-1	1	200	2	1%	0.333-8.33	0.04	Y	
	35400-43-2	Bolstar	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	7440-42-8	Boron	0.52	225	mg/kg	59F-SPB02	5	213	93	44%	4.1-11	0.5	Y	
	108-86-1	Bromobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND

Table 6.8-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
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Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	74-97-5	Bromochloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-27-4	Bromodichloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-25-2	Bromoform	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	74-83-9	Bromomethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	7440-43-9	Cadmium	0.062	1.6	mg/kg	61F-SNS01-0.5	0.5	219	119	54%	0.22-1.1	0.36	Y	
	7440-70-2	Calcium	1380	13100	mg/kg	59F-SPB02	5	35	35	100%	NA	NA	N	EN
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	150	0	0%	0.2-0.31	NA	N	ND
	56-23-5	Carbon tetrachloride	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	157	0	0%	0.02-1.2	NA	N	ND
	108-90-7	Chlorobenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-00-3	Chloroethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	67-66-3	Chloroform	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	74-87-3	Chloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	2921-88-2	Chlorpyrifos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	7440-47-3	Chromium	4.6	240	mg/kg	CP2-08-SB14-1.0	1	219	219	100%	NA	26	Y	
	18540-29-9	Chromium VI	0.39	0.5	mg/kg	59F-SB28-1	0.5	3	3	100%	NA	81	N	BSL
	218-01-9	Chrysene	0.0057	0.2	mg/kg	59F-SB26-1	1	205	30	15%	0.0067-4.17	1.1	N	BSL
	156-59-2	cis-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	7440-48-4	Cobalt	0.85	26	mg/kg	59F-SD02-0.25	0.25	213	213	100%	NA	13	N	BG
	7440-50-8	Copper	3.4	130	mg/kg	F(c)-SNS01-0.5	0.5	219	219	100%	NA	28	Y	
	56-72-4	Coumaphos	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	NA	N	ND
	319-86-8	delta-BHC	0.00068	0.51	mg/kg	59F-SB22-1.0	1	159	11	7%	0.001-0.062	0.346	Y	
	8065-48-3	Demeton	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	333-41-5	Diazinon	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	53-70-3	Dibenz (a,h) anthracene	0.0084	0.0084	mg/kg	CP2-08-SNS04-0.5	0.5	205	1	0%	0.0067-4.17	1.1	N	BSL
	132-64-9	Dibenzofuran	0.052	0.052	mg/kg	59F-SB26-1	1	200	1	1%	0.167-4.17	NA	N	BSL
	124-48-1	Dibromochloromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	74-95-3	Dibromomethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-71-8	Dichlorodifluoromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	62-73-7	Dichlorvos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	60-57-1	Dieldrin	0.00091	0.0083	mg/kg	OS1-F2-SNS02-0.5	0.5	159	8	5%	0.002-0.12	0.0049	Y	
	68334-30-5	Diesel Range Organics (C10-C28)	0.84	52	mg/kg	F(c)-SB04-1.0	1	16	14	88%	2.2-3.8	NA	N	ITC
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	60-51-5	Dimethoate	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	0.684	14.2	mg/kg	61F-SPB01	1	200	7	4%	0.38-8.33	0.0125	Y	
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	0.0125	N	ND*
	298-04-4	Disulfoton	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	959-98-8	Endosulfan I	0.00062	0.001	mg/kg	OS1-F3-SD01-.25	0.25	159	3	2%	0.002-0.12	0.0633	N	BSL
	33213-65-9	Endosulfan II	0.0008	0.0038	mg/kg	OS1-F2-SNS03-0.5	0.5	159	12	8%	0.002-0.12	0.0633	N	BSL
	1031-07-8	Endosulfan sulfate	0.012	0.012	mg/kg	59F-SB28-1	1	159	1	1%	0.004-0.38	0.0633	N	BSL
	72-20-8	Endrin	0.00052	0.22	mg/kg	59F-SB22-1.0	1	159	14	9%	0.002-0.12	0.003163	Y	
	7421-93-4	Endrin aldehyde	0.0014	0.014	mg/kg	59F-SB28-1	1	159	3	2%	0.004-0.38	0.005284	Y	

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Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	53494-70-5	Endrin ketone	0.0074	0.0074	mg/kg	59F-SB28-1	1	159	1	1%	0.004-0.38	NA	Y	
	2104-64-5	EPN	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	563-12-2	Ethion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	13194-48-4	Ethoprop	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	100-41-4	Ethylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	115-90-2	Fensulfothion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	55-38-9	Fenthion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	206-44-0	Fluoranthene	0.0018	0.46	mg/kg	59F-SB26-1	1	205	44	21%	0.0067-4.17	1.1	N	BSL
	86-73-7	Fluorene	0.0038	0.039	mg/kg	59F-SB26-1	1	205	3	1%	0.0067-4.17	29	N	BSL
	58-89-9	gamma-BHC (Lindane)	0.00069	0.00073	mg/kg	59F-SD07-.25	0.25	159	3	2%	0.001-0.062	0.029281	N	BSL
	5103-74-2	gamma-Chlordane	ND	ND	mg/kg	ND	ND	2	0	0%	0.002-0.0046	NA	N	ND
	76-44-8	Heptachlor	0.00022	0.0018	mg/kg	59F-SB23-1.0	1	159	6	4%	0.001-0.062	0.003394	N	BSL
	1024-57-3	Heptachlor epoxide	0.00049	0.041	mg/kg	61F-SB04-1	1	159	10	6%	0.001-0.062	0.363	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	200	0	0%	0.0067-8.33	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	200	0	0%	0.21-8.33	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	AER-001-226	Hexanedioic Acid, dioctylester	1	2	mg/kg	59F-SPB01	1	4	4	100%	NA	NA	Y	
	193-39-5	Indeno (1,2,3-cd) pyrene	0.0074	0.1	mg/kg	59F-SB26-1	1	205	10	5%	0.0067-4.17	1.1	N	BSL
	7439-89-6	Iron	15400	31600	mg/kg	59F-SPB08	5	35	35	100%	NA	NA	N	EN
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	98-82-8	Isopropylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	7439-92-1	Lead	0.51	295	mg/kg	59F-SPB02	1	227	227	100%	NA	11	N	BG
	7439-93-2	Lithium	0.5	28	mg/kg	59F-SD02-1.5	1.5	178	178	100%	NA	2	Y	
	7439-95-4	Magnesium	2640	9210	mg/kg	25F-SPB01	1	35	35	100%	NA	NA	N	EN
	121-75-5	Malathion	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	7439-96-5	Manganese	33	1200	mg/kg	59F-SB14-5.5 62F SB08-1.0-T	5.5 1.0	213	213	100%	NA	220	N	BG
	7439-97-6	Mercury	0.0034	42	mg/kg	25F-SPB02	5	222	179	81%	0.021-0.1	0.00051	Y	
	150-50-5	Merphos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	72-43-5	Methoxychlor	0.003	0.0033	mg/kg	OS1-F2-SB04-1	1	159	2	1%	0.0043-1.2	5.742	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-09-2	Methylene chloride	ND	ND	mg/kg	ND	ND	3	0	0%	0.034-0.038	NA	N	ND
	7786-34-7	Mevinphos	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	7439-98-7	Molybdenum	0.11	130	mg/kg	25F-HA01-1.0	1	181	164	91%	1.1-1.8	2	Y	
	Motor Oil Range Organics (C16-C36)	Motor Oil Range Organics (C16-C36)	2.4	140	mg/kg	F(c)-SB04-1.0	1	16	13	81%	4.3-4.8	NA	N	TIC
	91-20-3	Naphthalene	0.0021	0.003	mg/kg	59F-SB15-5.0	5	205	4	2%	0.0067-4.17	29	N	BSL
	104-51-8	n-Butylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	7440-02-0	Nickel	3.1	94	mg/kg	59F-SD02-1.5	1.5	219	219	100%	NA	38	Y	
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	188	0	0%	0.2-8.33	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	200	0	0%	0.2-8.33	NA	N	ND

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Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	50	0	0%	0.333-8.33	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	150	0	0%	0.2-0.31	NA	N	ND
	103-65-1	n-Propylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	AER-001-028	OBPA (WATER)	ND	ND	mg/kg	ND	ND	24	0	0%	0.2-100	NA	N	ND
	123-63-7	Paraldehyde	ND	ND	mg/kg	ND	ND	2	0	0%	3-5	NA	N	ND
	56-38-2	Parathion, ethyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	298-00-0	Parathion, methyl	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	12674-11-2	PCB-1016	0.011	0.011	mg/kg	CP2-08-SB11-5	5	43	1	2%	0.02-2.2	0.0101	Y	
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	60	0	0%	0.02-2.2	0.0101	N	ND*
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	60	0	0%	0.02-2.2	0.0101	N	ND*
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	60	0	0%	0.02-2.2	0.0101	N	ND*
	12672-29-6	PCB-1248	0.013	120	mg/kg	F(c)-SB04-1.0	1	60	10	17%	0.02-2.1	0.0101	Y	
	11097-69-1	PCB-1254	0.016	2.8	mg/kg	59F-SB28-1	1	60	23	38%	0.02-2.2	0.0101	Y	
	11096-82-5	PCB-1260	ND	ND	mg/kg	ND	ND	60	0	0%	0.02-2.2	0.0101	N	ND*
	AER-001-032	Pendimethalin (Prowl)	0.0018	17000	mg/kg	25F-SPB03	1	196	99	51%	0.0014-0.1	0.624	Y	
	87-86-5	Pentachlorophenol	2.8	2.8	mg/kg	61F-SNS01-0.5	0.5	200	1	1%	0.667-16.7	2.1	Y	
	14797-73-0	Perchlorate	0.011	0.095	mg/kg	59F-SB11-5.0	5	37	3	8%	0.022-0.052	1.17	N	BSL
	S-PH	pH	5.03	11.7	mg/kg	CP2-07-SB12-1.0	1	116	116	100%	NA	NA	N	
	85-01-8	Phenanthrene	0.0025	0.43	mg/kg	59F-SB26-1	1	205	36	18%	0.0067-4.17	29	N	BSL
	108-95-2	Phenol	0.093	14	mg/kg	59F-SD01-0.25	0.25	200	79	40%	0.2-8.33	30	N	BSL
	298-02-2	Phorate	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	99-87-6	p-Isopropyltoluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	AER-001-089	POLYCHLORINATED BIPHENYL	ND	ND	mg/kg	ND	ND	17	0	0%	0.0333-0.167	0.0101	N	ND*
	7440-09-7	Potassium	1150	3150	mg/kg	59F-SPB02	5	35	35	100%	NA	NA	N	EN
	129-00-0	Pyrene	0.006	0.35	mg/kg	59F-SB26-1 CP2-08-SNS04-0.5	1 0.5	205	34	17%	0.0067-4.17	1.1	N	BSL
	299-84-3	Ronnel	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	135-98-8	sec-Butylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	7782-49-2	Selenium	0.22	3.6	mg/kg	59F-SD02-1.5	1.5	214	49	23%	1-1.8	0.52	Y	
	7440-22-4	Silver	0.062	0.48	mg/kg	CP2-07-SB11-1.0	1	219	17	8%	0.43-2.2	4.2	N	BSL
	AER-001-082	Sodium	114	3640	mg/kg	25F-SPB03	6	35	34	97%	100-100	NA	N	EN
	22248-79-9	Stirophos	ND	ND	mg/kg	ND	ND	2	0	0%	0.042-0.045	NA	N	ND
	7440-24-6	Strontium	2.8	64	mg/kg	62F-SNS01-0.5	0.5	178	178	100%	NA	NA	Y	
	100-42-5	Styrene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	3689-24-5	Sulfotep	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	98-06-6	tert-Butylbenzene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	127-18-4	Tetrachloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	7440-28-0	Thallium	0.1	36	mg/kg	60F-SB01 C201-SPB01	1 1	213	150	70%	0.52-5	1	Y	
	297-97-2	Thionazin	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	7440-32-6	Titanium	140	1500	mg/kg	59F-SD01-1.5	1.5	178	178	100%	NA	NA	Y	
	34643-46-4	Tokuthion (Prothiofos)	ND	ND	mg/kg	ND	ND	2	0	0%	0.032-0.034	NA	N	ND

Table 6.8-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	108-88-3	Toluene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	TOC	Total Organic Carbon	2000	25100	mg/kg	61F-SB05-1	1	45	19	42%	5000-7600	NA	N	
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	159	0	0%	0.079-5	NA	N	ND
	156-60-5	trans-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	79-01-6	Trichloroethene	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	75-69-4	Trichlorofluoromethane	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	327-98-0	Trichloronate	ND	ND	mg/kg	ND	ND	2	0	0%	0.021-0.022	NA	N	ND
	7440-62-2	Vanadium	6.3	170	mg/kg	59F-SD02-1.5	1.5	213	213	100%	NA	7.8	N	BG
	75-01-4	Vinyl chloride	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	1330-20-7	Xylenes (total)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0067-0.0076	NA	N	ND
	7440-66-6	Zinc	4.2	540	mg/kg	CP2-08-SNS04-0.5	0.5	219	219	100%	NA	46	Y	

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Southwest	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	ND	ND	4	0	0%	200-200	NA	N	ND
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	ND	ND	4	0	0%	20-20	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	95-48-7	2-Methylphenol	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	µg/L	ND	ND	4	0	0%	20-20	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	72-54-8	4,4'-DDD	ND	ND	µg/L	ND	ND	4	0	0%	0.14-1.4	NA	N	ND
	72-55-9	4,4'-DDE	ND	ND	µg/L	ND	ND	4	0	0%	0.047-0.47	NA	N	ND
	50-29-3	4,4'-DDT	ND	ND	µg/L	ND	ND	4	0	0%	0.14-1.4	NA	N	ND

Table 6.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Southwest	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	ND	ND	4	0	0%	20-20	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	106-44-5	4-Methylphenol	6.0	6.0	µg/L	59F-SW01-6	6	4	1	25%	5-5	NA	Y	
	100-01-6	4-Nitroaniline	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	µg/L	ND	ND	4	0	0%	20-20	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	208-96-8	Acenaphthylene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	309-00-2	Aldrin	ND	ND	µg/L	ND	ND	4	0	0%	0.024-0.24	3.0E+00	N	ND
	319-84-6	alpha-BHC	0.12	0.12	µg/L	59F-SW01-6	6	4	1	25%	0.024-0.024	2.2E+00	N	BSL
	7429-90-5	Aluminum	300	110,000	µg/L	25F-SW02-2	2	7	7	100%	0-0	8.7E+01	Y	
	62-53-3	Aniline	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	120-12-7	Anthracene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	7440-36-0	Antimony	0.11	0.34	µg/L	59F-SW01-6-T	6	7	5	71%	2-2	6.1E+02	N	BSL
	7440-38-2	Arsenic	1.4	7.2	µg/L	25F-SW02-2	2	7	7	100%	0-0	1.5E+02	N	BSL
	103-33-3	Azobenzene	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	7440-39-3	Barium	19	420	µg/L	25F-SW02-2	2	7	7	100%	0-0	4.0E+00	Y	
	71-43-2	Benzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	92-87-5	Benzidine	ND	ND	µg/L	ND	ND	4	0	0%	50-50	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	ND	ND	4	0	0%	0.4-0.4	NA	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	ND	ND	4	0	0%	0.4-0.4	NA	N	ND
	65-85-0	Benzoic acid	ND	ND	µg/L	ND	ND	4	0	0%	20-20	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	7440-41-7	Beryllium	0.10	1.7	µg/L	25F-SW02-2	2	7	4	57%	0.5-0.5	5.3E+00	N	BSL
	319-85-7	beta-BHC	ND	ND	µg/L	ND	ND	4	0	0%	0.024-0.24	NA	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	µg/L	ND	ND	4	0	0%	5-5	3.0E+00	N	ND
	7440-42-8	Boron	23	110	µg/L	59F-SW01-6	6	7	5	71%	50-50	1.6E+00	Y	
	108-86-1	Bromobenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	74-97-5	Bromochloromethane	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	75-27-4	Bromodichloromethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	75-25-2	Bromoform	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND

Table 6.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Southwest	74-83-9	Bromomethane	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	7440-43-9	Cadmium	0.028	0.35	µg/L	59F-SW01-6	6	7	6	86%	1-1	2.2E+00	N	BSL
	7440-70-2	Calcium	1100	19,000	µg/L	59F-SW01-6	6	7	7	100%	0-0	NA	N	EN
	86-74-8	Carbazole	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	µg/L	ND	ND	4	0	0%	0.47-4.7	NA	N	ND
	16887-00-6	Chloride	1100	3,500	µg/L	25F-SW02-2	2	4	4	100%	0-0	2.3E+05	N	BSL
	108-90-7	Chlorobenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	75-00-3	Chloroethane	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	67-66-3	Chloroform	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	1.2E+03	N	ND
	74-87-3	Chloromethane	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	7440-47-3	Chromium	3.0	100	µg/L	25F-SW02-2	2	7	7	100%	0-0	1.8E+02	N	BSL
	218-01-9	Chrysene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	7440-48-4	Cobalt	1.0	19	µg/L	25F-SW02-2	2	7	7	100%	0-0	2.3E+01	N	BSL
	7440-50-8	Copper	4.8	71	µg/L	25F-SW02-2	2	7	7	100%	0-0	9.0E+00	Y	
	319-86-8	delta-BHC	0.0077	0.60	µg/L	59F-SW01-6	6	4	3	75%	0.024-0.024	2.2E+00	N	BSL
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	ND	ND	4	0	0%	0.4-0.4	NA	N	ND
	132-64-9	Dibenzofuran	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	124-48-1	Dibromochloromethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	74-95-3	Dibromomethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	60-57-1	Dieldrin	ND	ND	µg/L	ND	ND	4	0	0%	0.047-0.47	NA	N	ND
	84-66-2	Diethyl phthalate	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	959-98-8	Endosulfan I	ND	ND	µg/L	ND	ND	4	0	0%	0.047-0.47	NA	N	ND
	33213-65-9	Endosulfan II	ND	ND	µg/L	ND	ND	4	0	0%	0.047-0.47	NA	N	ND
	1031-07-8	Endosulfan sulfate	ND	ND	µg/L	ND	ND	4	0	0%	0.14-1.4	NA	N	ND
	72-20-8	Endrin	ND	ND	µg/L	ND	ND	4	0	0%	0.047-0.47	NA	N	ND
	7421-93-4	Endrin aldehyde	ND	ND	µg/L	ND	ND	4	0	0%	0.14-1.4	3.6E-02	N	ND*
	53494-70-5	Endrin ketone	ND	ND	µg/L	ND	ND	4	0	0%	0.14-1.4	NA	N	ND
	100-41-4	Ethylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	206-44-0	Fluoranthene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	86-73-7	Fluorene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	58-89-9	gamma-BHC (Lindane)	ND	ND	µg/L	ND	ND	4	0	0%	0.024-0.24	8.0E-02	N	ND*
	76-44-8	Heptachlor	0.0084	0.0084	µg/L	25F-SW01-2.0-T	2	4	1	25%	0.024-0.24	3.8E-03	Y	
	1024-57-3	Heptachlor epoxide	0.012	0.11	µg/L	59F-SW01-6	6	4	2	50%	0.024-0.024	3.8E-03	Y	

Table 6.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Southwest	118-74-1	Hexachlorobenzene	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	ND	ND	4	0	0%	20-20	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	ND	ND	4	0	0%	0.4-0.4	NA	N	ND
	7439-89-6	Iron	300	110,000	µg/L	25F-SW02-2	2	7	7	100%	0-0	1.0E+03	Y	
	78-59-1	Isophorone	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	98-82-8	Isopropylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	7439-92-1	Lead	0.18	28	µg/L	25F-SW02-2	2	7	7	100%	0-0	2.5E+00	Y	
	7439-93-2	Lithium	37	37	µg/L	25F-SW02-2	2	7	1	14%	50-50	1.4E+01	Y	
	7439-95-4	Magnesium	800	8,500	µg/L	25F-SW02-2	2	7	7	100%	0-0	NA	N	ND
	7439-96-5	Manganese	7.6	1,100	µg/L	25F-SW02-2	2	7	7	100%	0-0	1.2E+02	Y	
	7439-97-6	Mercury	0.080	2.8	µg/L	25F-SW01-2.0	2	7	3	43%	0.2-0.2	7.7E-01	Y	
	72-43-5	Methoxychlor	ND	ND	µg/L	ND	ND	4	0	0%	0.19-1.9	3.0E-02	N	ND*
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	75-09-2	Methylene chloride	ND	ND	µg/L	ND	ND	4	0	0%	1-1	2.2E+03	N	ND
	7439-98-7	Molybdenum	0.15	4.2	µg/L	25F-SW01-2.0	2	7	5	71%	2-2	3.7E+02	N	BSL
	91-20-3	Naphthalene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	104-51-8	n-Butylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	7440-02-0	Nickel	2.2	61	µg/L	25F-SW02-2	2	7	7	100%	0-0	5.2E+01	Y	
	S-NANO3	Nitrate as NO3	69	3,600	µg/L	59F-SW01-6	6	4	4	100%	0-0	NA	N	ND
	S-NINO2	Nitrite as NO2	21	170	µg/L	59F-SW01-6	6	4	3	75%	100-100	NA	N	ND
	98-95-3	Nitrobenzene	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	µg/L	ND	ND	4	0	0%	5-5	4.0E+01	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	ND	ND	4	0	0%	10-10	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	103-65-1	n-Propylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	40487-42-1	Pendimethalin (Prowl)	0.37	16	µg/L	59F-SW01-6	6	4	3	75%	0.12-0.12	5.2E+00	Y	
	87-86-5	Pentachlorophenol	ND	ND	µg/L	ND	ND	4	0	0%	20-20	NA	N	ND
	85-01-8	Phenanthrene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	108-95-2	Phenol	ND	ND	µg/L	ND	ND	4	0	0%	5-5	NA	N	ND
	99-87-6	p-Isopropyltoluene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	7440-09-7	Potassium	500	6,500	µg/L	59F-SW01-6	6	7	7	100%	0-0	NA	N	EN
	129-00-0	Pyrene	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	NA	N	ND
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	7782-49-2	Selenium	ND	ND	µg/L	ND	ND	7	0	0%	2-2	5.0E+00	N	ND
	7440-22-4	Silver	0.032	0.18	µg/L	25F-SW02-2	2	7	5	71%	1-1	1.2E-01	Y	
	7440-23-5	Sodium	10000	58,000	µg/L	25F-SW02-2	2	7	7	100%	0-0	NA	N	EN

Table 6.8-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Southwest	7440-24-6	Strontium	12	96	µg/L	59F-SW01-6	6	7	7	100%	0-0	1.5E+03	N	ND
	100-42-5	Styrene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	127-18-4	Tetrachloroethene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	8.4E+02	N	ND
	7440-28-0	Thallium	0.22	0.22	µg/L	25F-SW02-2	2	7	1	14%	1-1	2.0E+01	N	BSL
	7440-32-6	Titanium	4.9	2,800	µg/L	25F-SW02-2	2	7	7	100%	0-0	NA	Y	
	108-88-3	Toluene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	8001-35-2	Toxaphene	ND	ND	µg/L	ND	ND	4	0	0%	1.9-19	NA	N	ND
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	79-01-6	Trichloroethene	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	75-69-4	Trichlorofluoromethane	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	7440-62-2	Vanadium	4.6	160	µg/L	25F-SW02-2	2	7	7	100%	0-0	2.0E+01	Y	
	75-01-4	Vinyl chloride	ND	ND	µg/L	ND	ND	4	0	0%	0.5-0.5	NA	N	ND
	1330-20-7	Xylenes (total)	ND	ND	µg/L	ND	ND	4	0	0%	1-1	NA	N	ND
	7440-66-6	Zinc	20	150	µg/L	25F-SW02-2	2	7	4	57%	20-20	1.2E+02	Y	

Footnotes:

(1) See Table 2.

(2) Rationale for Deletion

BSL = Below screening level

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

COPEC = Chemical of potential ecological concern

µg/L = Micrograms per liter

NA = Not available

Table 6.8-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	71-55-6	1,1,1-Trichloroethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	96-18-4	1,2,3-Trichloropropane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0067-0.45	NA	N	ND
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0067-0.45	NA	N	ND
	107-06-2	1,2-Dichloroethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	78-87-5	1,2-Dichloropropane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	20	0	0%	0.21-0.27	NA	N	ND
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0067-0.45	NA	N	ND
	142-28-9	1,3-Dichloropropane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0067-0.45	NA	N	ND
Chem Plant 2	594-20-7	2,2-Dichloropropane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.51-2.2	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	95-49-8	2-Chlorotoluene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	91-57-6	2-Methylnaphthalene	0.068	0.068	mg/kg	59F-SB26-1	1	28	1	4%	0.21-0.45	NA	Y	
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-2.2	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	28	0	0%	0.51-2.2	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-2.2	NA	N	ND
	72-54-8	4,4'-DDD	0.0025	0.0035	mg/kg	59F-SB25-1	1	26	3	12%	0.0062-0.38	NA	Y	
	72-55-9	4,4'-DDE	0.00065	0.0069	mg/kg	59F-SB26-1	1	26	4	15%	0.0021-0.12	3.2E-03	Y	
	50-29-3	4,4'-DDT	0.0029	0.026	mg/kg	59F-SNS03-0.5	0.5	26	3	12%	0.0062-0.38	4.2E-03	Y	
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-2.2	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND

Table 6.8-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	106-43-4	4-Chlorotoluene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	28	0	0%	0.51-2.2	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-2.2	NA	N	ND
	83-32-9	Acenaphthene	0.057	0.057	mg/kg	59F-SB26-1	1	28	1	4%	0.0068-0.45	NA	Y	
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0068-0.45	NA	N	ND
	309-00-2	Aldrin	0.001	0.0027	mg/kg	59F-SB28-1	1	26	3	12%	0.001-0.062	2.0E-03	Y	
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	26	0	0%	0.001-0.062	6.0E-03	N	ND*
	7429-90-5	Aluminum	5400	51000	mg/kg	59F-SD02-0.25	0.25	26	26	100%	NA	NA	Y	
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	20	0	0%	0.21-0.27	NA	N	ND
	120-12-7	Anthracene	0.056	0.056	mg/kg	59F-SB26-1	1	28	1	4%	0.0068-0.45	5.7E-02	N	BSL
	7440-36-0	Antimony	0.14	0.37	mg/kg	59F-SD02-0.25	0.25	20	15	75%	1.1-1.2	2.0E+00	N	BSL
	7440-38-2	Arsenic	1	7.8	mg/kg	59F-SD02-0.25	0.25	20	20	100%	NA	9.8E+00	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.21-0.27	NA	N	ND
	7440-39-3	Barium	52	490	mg/kg	59F-SNS02-0.5	0.5	20	20	100%	NA	NA	Y	
	71-43-2	Benzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	20	0	0%	0.36-0.48	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.005	0.17	mg/kg	59F-SB26-1	1	28	5	18%	0.007-0.45	1.1E-01	Y	
	50-32-8	Benzo (a) pyrene	0.0068	0.15	mg/kg	59F-SB26-1	1	28	4	14%	0.007-0.45	1.5E-01	N	BSL
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	0.013	0.036	mg/kg	25F-SB06-1	1	20	4	20%	0.014-0.018	2.4E-01	N	BSL
	205-99-2	Benzo (b) fluoranthene	0.23	0.23	mg/kg	59F-SB26-1	1	8	1	13%	0.38-0.45	2.4E-01	N	BSL
	191-24-2	Benzo (ghi) perylene	0.015	0.084	mg/kg	59F-SB26-1	1	28	2	7%	0.0068-0.45	1.7E-01	N	BSL
	207-08-9	Benzo (k) fluoranthene	0.11	0.11	mg/kg	59F-SB26-1	1	8	1	13%	0.38-0.45	2.4E-01	N	BSL
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	20	0	0%	0.51-0.68	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	20	0	0%	0.21-0.27	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	1.1E+01	N	ND
	7440-41-7	Beryllium	0.14	1.2	mg/kg	25F-SD02-0.25	0.25	20	20	100%	NA	NA	Y	
	319-85-7	beta-BHC	0.0038	0.0038	mg/kg	59F-SB10-1.0	1	26	1	4%	0.001-0.062	NA	Y	
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	1.3	1.3	mg/kg	59F-SB28-1	1	28	1	4%	0.38-0.68	8.9E+02	N	BSL
	7440-42-8	Boron	3.7	22	mg/kg	59F-SD02-0.25	0.25	20	6	30%	4.1-11	NA	Y	
	108-86-1	Bromobenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	74-97-5	Bromochloromethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-27-4	Bromodichloromethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-25-2	Bromoform	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	74-83-9	Bromomethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7440-43-9	Cadmium	0.19	0.96	mg/kg	59F-SNS02-0.5	0.5	26	21	81%	0.25-1	9.9E-01	N	BSL

Table 6.8-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	20	0	0%	0.21-0.27	NA	N	ND
	56-23-5	Carbon tetrachloride	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	26	0	0%	0.021-1.2	NA	N	ND
	108-90-7	Chlorobenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-00-3	Chloroethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	67-66-3	Chloroform	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	74-87-3	Chloromethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7440-47-3	Chromium	18	114	mg/kg	59F-SB28-1	1	26	26	100%	NA	4.3E+01	Y	
	18540-29-9	Chromium VI	0.5	0.5	mg/kg	59F-SB28-1	1	1	1	100%	NA	NA	Y	
	218-01-9	Chrysene	0.0057	0.2	mg/kg	59F-SB26-1	1	28	6	21%	0.007-0.45	1.7E-01	Y	
	156-59-2	cis-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7440-48-4	Cobalt	2.1	26	mg/kg	59F-SD02-0.25	0.25	20	20	100%	NA	NA	Y	
	7440-50-8	Copper	14	69	mg/kg	59F-SD02-0.25	0.25	26	26	100%	NA	3.2E+01	Y	
	319-86-8	delta-BHC	ND	ND	mg/kg	ND	ND	26	0	0%	0.001-0.062	3.0E-03	N	ND*
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0068-0.45	3.3E-02	N	ND*
	132-64-9	Dibenzofuran	0.052	0.052	mg/kg	59F-SB26-1	1	28	1	4%	0.21-0.45	NA	Y	
	124-48-1	Dibromochloromethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	74-95-3	Dibromomethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-71-8	Dichlorodifluoromethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	60-57-1	Dieldrin	0.00091	0.0054	mg/kg	59F-SB28-1	1	26	4	15%	0.0021-0.12	1.9E-03	Y	
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	28	0	0%	0.38-0.55	NA	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	959-98-8	Endosulfan I	0.00062	0.001	mg/kg	OS1-F3-SD01-.25	0.25	26	3	12%	0.0021-0.12	2.9E-03	N	BSL
	33213-65-9	Endosulfan II	0.0011	0.0025	mg/kg	59F-SB26-1	1	26	3	12%	0.0021-0.12	1.4E-02	N	BSL
	1031-07-8	Endosulfan sulfate	0.012	0.012	mg/kg	59F-SB28-1	1	26	1	4%	0.0062-0.38	NA	Y	
	72-20-8	Endrin	0.00084	0.0063	mg/kg	59F-SB26-1	1	26	3	12%	0.0021-0.12	2.2E-03	Y	
	7421-93-4	Endrin aldehyde	0.014	0.014	mg/kg	59F-SB28-1	1	26	1	4%	0.0062-0.38	NA	Y	
	53494-70-5	Endrin ketone	0.0074	0.0074	mg/kg	59F-SB28-1	1	26	1	4%	0.0062-0.38	NA	Y	
	100-41-4	Ethylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	206-44-0	Fluoranthene	0.008	0.46	mg/kg	59F-SB26-1	1	28	7	25%	0.007-0.45	4.2E-01	Y	
	86-73-7	Fluorene	0.039	0.039	mg/kg	59F-SB26-1	1	28	1	4%	0.0068-0.45	NA	Y	
	58-89-9	gamma-BHC (Lindane)	0.00069	0.00073	mg/kg	59F-SD07-.25	0.25	26	3	12%	0.001-0.062	2.4E-03	N	BSL
	76-44-8	Heptachlor	0.0015	0.0018	mg/kg	59F-SB10-1.0	1	26	2	8%	0.001-0.062	2.5E-03	N	BSL
	1024-57-3	Heptachlor epoxide	0.00073	0.00073	mg/kg	59F-SD07-.25	0.25	26	1	4%	0.001-0.062	2.5E-03	N	BSL
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0067-0.45	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	28	0	0%	0.72-2.2	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	0.012	0.1	mg/kg	59F-SB26-1	1	28	2	7%	0.0068-0.45	7.8E-02	Y	
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	98-82-8	Isopropylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND

Table 6.8-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	7439-92-1	Lead	5	140	mg/kg	59F-SD01-0.25	0.25	30	30	100%	NA	3.6E+01	Y	
	7439-93-2	Lithium	2.4	24	mg/kg	59F-SD02-0.25	0.25	20	20	100%	NA	NA	Y	
	7439-96-5	Manganese	110	1000	mg/kg	25F-HA02-3.0	3	20	20	100%	NA	4.6E+02	Y	
	7439-97-6	Mercury	0.0071	34	mg/kg	25F-SB07-1.0	1	26	26	100%	NA	1.8E-01	Y	
	72-43-5	Methoxychlor	0.003	0.003	mg/kg	59F-SB27-1	1	26	1	4%	0.0047-1.2	NA	Y	
	1634-04-4	Methyl tert-butyl ether	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-09-2	Methylene chloride	ND	ND	mg/kg	ND	ND	2	0	0%	0.034-0.034	1.3E+00	N	ND
	7439-98-7	Molybdenum	0.11	130	mg/kg	25F-HA01-1.0	1	20	17	85%	1.1-1.2	NA	Y	
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	28	0	0%	0.0067-0.45	NA	N	ND
	104-51-8	n-Butylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7440-02-0	Nickel	11	81	mg/kg	59F-SD02-0.25	0.25	26	26	100%	NA	1.6E+01	Y	
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	20	0	0%	0.21-0.27	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	28	0	0%	0.21-0.45	NA	N	ND
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	8	0	0%	0.38-0.45	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	20	0	0%	0.21-0.27	NA	N	ND
	103-65-1	n-Propylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	12674-11-2	PCB-1016	ND	ND	mg/kg	ND	ND	8	0	0%	0.025-2.1	NA	N	ND
	11104-28-2	PCB-1221	ND	ND	mg/kg	ND	ND	8	0	0%	0.025-2.1	NA	N	ND
	11141-16-5	PCB-1232	ND	ND	mg/kg	ND	ND	8	0	0%	0.025-2.1	NA	N	ND
	53469-21-9	PCB-1242	ND	ND	mg/kg	ND	ND	8	0	0%	0.025-2.1	NA	N	ND
	12672-29-6	PCB-1248	0.54	16	mg/kg	59F-SD01-0.25	0.25	8	2	25%	0.037-2.1	6.0E-02	Y	
	11097-69-1	PCB-1254	0.016	2.8	mg/kg	59F-SB28-1	1	8	5	63%	0.025-0.5	6.0E-02	Y	
	11096-82-5	PCB-1260	ND	ND	mg/kg	ND	ND	8	0	0%	0.025-2.1	6.0E-02	N	ND*
	40487-42-1	Pendimethalin (Prowl)	0.0035	49	mg/kg	59F-SD01-0.25	0.25	26	18	69%	0.0056-0.0062	3.7E-01	Y	
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	28	0	0%	0.72-2.2	3.6E-01	N	ND*
	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	5	0	0%	0.023-0.042	NA	N	ND
	S-PH	pH	5.91	9.76		25F-SD01-1.5	1.5	20	20	100%	NA	NA	N	
	85-01-8	Phenanthrene	0.005	0.43	mg/kg	59F-SB26-1	1	28	7	25%	0.007-0.45	2.0E-01	Y	
	108-95-2	Phenol	0.5	14	mg/kg	59F-SD01-0.25	0.25	28	13	46%	0.21-0.45	4.2E-01	Y	
	99-87-6	p-Isopropyltoluene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	129-00-0	Pyrene	0.0083	0.35	mg/kg	59F-SB26-1	1	28	8	29%	0.007-0.45	2.0E-01	Y	
	135-98-8	sec-Butylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7782-49-2	Selenium	0.28	1.9	mg/kg	25F-SD02-1.5	1.5	20	8	40%	1-1.4	2.0E+00	N	BSL
	7440-22-4	Silver	0.12	0.17	mg/kg	59F-SB25-1	1	26	5	19%	0.5-2.2	1.0E+00	N	BSL
	7440-24-6	Strontium	18	43	mg/kg	59F-SD02-0.25	0.25	20	20	100%	NA	NA	Y	
	100-42-5	Styrene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	98-06-6	tert-Butylbenzene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	127-18-4	Tetrachloroethene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7440-28-0	Thallium	0.12	2.6	mg/kg	25F-HA02-1.0-T	1	20	17	85%	0.53-0.62	NA	Y	
	7440-32-6	Titanium	330	1400	mg/kg	59F-SD02-0.25	0.25	20	20	100%	NA	NA	Y	
	108-88-3	Toluene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	5.3E-02	N	ND

Table 6.8-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	TOC	Total Organic Carbon	2000	22100	mg/kg	59F-SD07-.25 OS1-F3-SD01-.25	0.25 0.25	15	8	53%	5000-6800	NA	N	
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	26	0	0%	0.082-5	NA	N	ND
	156-60-5	trans-1,2-Dichloroethene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	79-01-6	Trichloroethene	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	75-69-4	Trichlorofluoromethane	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7440-62-2	Vanadium	18	130	mg/kg	59F-SD02-0.25	0.25	20	20	100%	NA	NA	Y	
	75-01-4	Vinyl chloride	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	1330-20-7	Xylenes (total)	ND	ND	mg/kg	ND	ND	2	0	0%	0.0067-0.0068	NA	N	ND
	7440-66-6	Zinc	11	89.6	mg/kg	59F-SB28-1	1	26	26	100%	NA	1.2E+02	N	BSL

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.8-4 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	71-55-6	1,1,1-Trichloroethane	7.9	99	$\mu g/m^3$	CP2-07-SP06-10	10	104	2	1.9%	5.8-10000	1.9E+05	N	BSL
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	104	0	0.0%	5.8-10000	5.7E+03	UA	
	75-34-3	1,1-Dichloroethane	5.3	5	$\mu g/m^3$	59F-SP36-10	10	104	1	1.0%	4.3-7500	1.8E+05	N	BSL
	75-35-4	1,1-Dichloroethene	8.9	160	$\mu g/m^3$	CP2-07-SP01-10	10	104	6	5.8%	4.2-7400	6.0E+03	N	BSL
	95-63-6	1,2,4-Trimethylbenzene	9.3	1,000	$\mu g/m^3$	62F-SP05-10	10	104	19	18.3%	5.2-9200	1.6E+04	N	BSL
	107-06-2	1,2-Dichloroethane	5.6	8,600,000	$\mu g/m^3$	CP2-07-SP01-20	20	104	46	44.2%	4.3-58	4.2E+04	Y	
	108-67-8	1,3,5-Trimethylbenzene	5.5	380	$\mu g/m^3$	62F-SP05-20	20	104	9	8.7%	5.2-9200	1.6E+04	N	BSL
	106-99-0	1,3-Butadiene	2.5	700	$\mu g/m^3$	CP2-07-SP10-20	20	104	57	54.8%	2.4-4100		UA	
	123-91-1	1,4-Dioxane	20	37	$\mu g/m^3$	CP2-07-SP08-30	30	104	4	3.8%	15-27000		UA	
	540-84-1	2,2,4-Trimethylpentane	5	220	$\mu g/m^3$	62F-SP05-10	10	104	19	18.3%	5-8700		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	20	140	$\mu g/m^3$	59F-SP33-10	10	104	25	24.0%	3.2-5500	8.6E+05	N	BSL
	591-78-6	2-Hexanone	42	43	$\mu g/m^3$	62F-SP05-20	20	104	2	1.9%	17-30000	4.9E+03	N	BSL
	67-63-0	2-Propanol	12	1,400	$\mu g/m^3$	59F-SP34-15	15	104	38	36.5%	10-18000		UA	
	622-96-8	4-Ethyltoluene	6.3	1,100	$\mu g/m^3$	62F-SP05-20	20	104	19	18.3%	5.2-9200		UA	
	108-10-1	4-Methyl-2-pentanone	6	65	$\mu g/m^3$	59F-SP34-15	15	104	24	23.1%	4.4-7600		UA	
	67-64-1	Acetone	69	2,000	$\mu g/m^3$	59F-SP34-10-T	10	104	63	60.6%	11-18000		UA	
	71-43-2	Benzene	3.7	100	$\mu g/m^3$	CP2-07-SP01-10	10	104	49	47.1%	3.4-6000	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	17	17	$\mu g/m^3$	62F-SP07-10	10	104	1	1.0%	7.1-12000		UA	
	75-15-0	Carbon Disulfide	3.7	310	$\mu g/m^3$	CP2-07-SP04-20	20	104	78	75.0%	3.5-5800	1.2E+03	N	BSL
	56-23-5	Carbon Tetrachloride	14	1,500	$\mu g/m^3$	CP2-07-SP02-10	10	104	5	4.8%	6.7-12000	6.3E+03	N	BSL
	75-00-3	Chloroethane	38	270	$\mu g/m^3$	59F-SP35-10	10	104	3	2.9%	2.8-4900	9.9E+05	N	BSL
	67-66-3	Chloroform	6.7	120,000	$\mu g/m^3$	CP2-07-SP01-20	20	104	32	30.8%	5.2-70	1.2E+03	Y	

Table 6.8-4 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Chem Plant 2	156-59-2	cis-1,2-Dichloroethene	6.9	400	$\mu g/m^3$	59F-SP35-10	10	104	4	3.8%	4.2-7400	1.9E+04	N	BSL
	98-82-8	Cumene	7.7	52	$\mu g/m^3$	62F-SP05-20	20	104	6	5.8%	5.2-9200	2.3E+04	N	BSL
	110-82-7	Cyclohexane	4.5	66	$\mu g/m^3$	59F-SP35-10	10	104	30	28.8%	3.7-6400		UA	
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	104	0	0.0%	9.1-16000		UA	
	64-17-5	Ethanol	8.8	960	$\mu g/m^3$	CP2-07-SP01-10	10	104	61	58.7%	8.3-14000		UA	
	100-41-4	Ethyl Benzene	5.2	480	$\mu g/m^3$	62F-SP05-20	20	104	14	13.5%	4.7-8100	2.3E+04	N	BSL
	75-69-4	Freon 11	6.7	930	$\mu g/m^3$	59F-SP33-20	20	104	22	21.2%	6-10000	8.8E+04	N	BSL
	76-13-1	Freon 113	18	940	$\mu g/m^3$	CP2-RE05-SP02-40	40	104	9	8.7%	8.2-14000	8.8E+04	N	BSL
	75-71-8	Freon 12	7.3	8	$\mu g/m^3$	59F-SP36-10	10	104	2	1.9%	5.3-9200	8.8E+04	N	BSL
	142-82-5	Heptane	4.8	990	$\mu g/m^3$	59F-SP33-10	10	104	61	58.7%	4.4-7600		UA	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	104	0	0.0%	45-80000		UA	
	110-54-3	Hexane	4.5	2,400	$\mu g/m^3$	CP2-07-SP01-10	10	104	69	66.3%	3.8-6600		UA	
	95-47-6	o-Xylene	5.2	940	$\mu g/m^3$	62F-SP05-20	20	104	14	13.5%	4.7-8100	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	5.9	730	$\mu g/m^3$	CP2-07-SP06-20	20	104	13	12.5%	3.8-6700	2.6E+05	N	BSL
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	104	0	0.0%	3.7-6500	8.7E+03	UA	
	103-65-1	Propylbenzene	8.2	220	$\mu g/m^3$	62F-SP05-20	20	104	7	6.7%	5.2-9200		UA	
	100-42-5	Styrene	6.6	11	$\mu g/m^3$	CP2-08-SP11-10	10	104	4	3.8%	4.5-7900	1.9E+05	N	BSL
	127-18-4	Tetrachloroethene	8.7	510	$\mu g/m^3$	59F-SP38-10-T	10	104	26	25.0%	7.3-13000	2.4E+04	N	BSL
	109-99-9	Tetrahydrofuran	5.7	2,800	$\mu g/m^3$	CP2-07-SP01-10	10	104	61	58.7%	3.2-5500		UA	
	108-88-3	Toluene	4	840	$\mu g/m^3$	62F-SP05-10	10	104	80	76.9%	4.1-7000	8.4E+01	Y	
	156-60-5	trans-1,2-Dichloroethene	81	150	$\mu g/m^3$	59F-SP35-10	10	104	2	1.9%	4.2-7400	1.9E+04	N	BSL
	79-01-6	Trichloroethene	7	450	$\mu g/m^3$	CP2-RE05-SP02-40	40	104	30	28.8%	5.7-10000	6.4E+03	N	BSL
	75-01-4	Vinyl Chloride	14	120,000	$\mu g/m^3$	CP2-07-SP01-20	20	104	10	9.6%	2.7-4800	5.6E+02	Y	

Footnotes:

(1) See Table ?

(2) Rationale for Deletion

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.8-5 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV Xero	Frequency of Exceedance	Xero HQ	BTV RCRB	Frequency of Exceedance	RCRB HQ
Organics																							
1,2-Dichloroethane	mg/kg	NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
2,4-Dichlorophenol	mg/kg	-	-	-	0/27	na	-	-	na	-	-	na	-	-	na	-	-						
2-Methylphenol	mg/kg	-	-	-	0/27	na	-	-	na	-	-	na	-	-	na	-	-						
Bis(2-ethylhexyl)phthalate	mg/kg	1.3	1.3	59F-SB28-1	1/27	na	-	-	na	-	-	0.04	1/27	33	0.693	1/27	1.9						
Di-n-butyl phthalate	mg/kg	-	-	-	0/27	200	-	-	na	-	-	0.013	-	-	64.4	-	-						
Hexanedioic Acid, dioctylester	mg/kg	1	2	59F-SPB01-1	2/2	na	-	-	na	-	-	na	-	-	na	-	-						
Pentachlorophenol	mg/kg	-	-	-	0/27	5	-	-	31	-	-	2.1	-	-	2.8	-	-						
Pesticides & Polychlorinated Biphenyls																							
4,4'-DDD	mg/kg	0.0024 J	2.3 J	59F-SB22-1	7/27	na	-	-	na	-	-	0.093	1/27	25	0.021	1/27	110						
4,4'-DDE	mg/kg	0.00065	0.039	61F-SB04-1	11/27	na	-	-	na	-	-	0.093	0/27	-	0.021	2/27	1.9						
4,4'-DDT	mg/kg	0.0029 J	1.2 J	59F-SB22-1	11/27	na	-	-	na	-	-	0.093	1/27	13	0.021	4/27	57						
delta-BHC	mg/kg	0.00068 J	0.51 J	59F-SB22-1	4/27	na	-	-	na	-	-	0.346	1/27	1.5	1.032	0/27	-						
Dieldrin	mg/kg	0.00091	0.0083 J	OS1-F2-SNS02-0.5	6/27	na	-	-	na	-	-	0.022	0/27	-	0.005	3/27	1.7						
Endrin	mg/kg	0.00084	0.22 J	59F-SB22-1	8/27	na	-	-	na	-	-	0.003	3/27	70	0.030	1/27	7.3						
Endrin aldehyde	mg/kg	0.0099 J	0.014	59F-SB28-1	2/27	na	-	-	na	-	-	0.005	2/27	2.6	0.051	0/27	-						
Endrin ketone	mg/kg	0.0074	0.0074	59F-SB28-1	1/27	na	-	-	na	-	-	na	-	-	na	-	-						
PCB-1016	mg/kg	-	-	-	0/12	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1248	mg/kg	0.54 J	16 J	59F-SD01-0.25	2/12	na	-	-	na	-	-	0.010	2/12	1581	0.042	2/12	385						
PCB-1254	mg/kg	0.016 J	2.8	59F-SB28-1	8/12	na	-	-	na	-	-	0.010	8/12	277	0.042	7/12	67						
Pendimethalin (Prowl)	mg/kg	0.002	49 J	59F-SD01-0.25	20/27	na	-	-	na	-	-	0.865	4/27	56.6	0.624	4/27	79						
Inorganics																							
Aluminum	mg/kg	5400	51000	59F-SD02-0.25	24/24	na	-	-	na	-	-	na	-	-	na	-	-	54000	0/24		40976	2/24	1.2
Antimony	mg/kg	0.21 J	1.3 J	59F-SB14-1	9/18	na	-	-	78	0/18	-	na	-	-	0.27	8/18	4.8	0.459	2/18	2.8	1.3	0/18	
Arsenic	mg/kg	1 J	16	OS1-F2-SNS02-0.5	18/18	18	0/18	-	na	-	-	43	0/18	-	46	0/18	-						
Barium	mg/kg	99	4620	59F-SPB02-1	18/18	na	-	-	330	6/18	14	na	-	-	2000	1/18	2.3	320	6/18	14	274.3	7/18	17
Boron	mg/kg	3.7 J	51.6	59F-SPB02-1	12/18	0.5	12/18	103	20	4/18	2.6	na	-	-	na	-	-	19^	4/18	2.7	19^	4/18	2.7
Cadmium	mg/kg	0.062 J	1	61F-SNS02-0.5	18/24	32	0/24	-	140	0/24	-	0.77	4/24	1.3	0.36	9/24	2.8	1.2	0/24		0.723	4/24	1.4
Chromium	mg/kg	18 J	114 J	59F-SB28-1	24/24	na	-	-	na	-	-	26	23/24	4.4	34	22/24	3.4	117.7	0/24		110	1/24	1.0
Copper	mg/kg	14 J	70 J	OS1-F2-SNS03-0.5	24/24	70	0/24	-	80	0/24	-	28	20/24	2.5	49	10/24	1.4	76	0/24		63	3/24	1.1
Lithium	mg/kg	2.4 J	24 J	59F-SD02-0.25	16/16	2	16/16	12	10	10/16	2.4	na	-	-	390	0/16	-	23^	1/16	1.04	23^	1/16	1.0
Mercury	mg/kg	0.015 J	0.45	61F-SB04-1	26/26	na	-	-	na	-	-	0.000051	26/26	8824	0.0013	26/26	346	0.127	7/26	3.5	0.866	0/26	
Molybdenum	mg/kg	0.11 J	0.99 J	59F-SNS01-0.5	13/16	2	0/16	-	200	0/16	-	44	0/16	-	4.75	0/16	-						
Nickel	mg/kg	11 J	81 J	59F-SD02-0.25	24/24	38	15/24	2.1	280	0/24	-	210	0/24	-	130	0/24	-	140	0/24		75	1/24	1.1
Selenium	mg/kg	0.28 J	1.2 J	59F-SB14-1	6/18	0.52	1/18	2.3	4.1	0/18	-	1.2	0/18	-	0.63	1/18	1.9	25.78	0/18		1.116	1/18	1.1
Strontium	mg/kg	16 J	64 J	62F-SNS01-0.5	16/16	na	-	-	na	-	-	na	-	-	na	-	-						
Thallium	mg/kg	0.14 J	3.2 J	59F-SNS04-0.5	13/18	1	4/18	3.2	na	-	-	na	-	-	2.1	1/18	1.5	3.3	0/18		2.5	1/18	1.3
Titanium	mg/kg	350	1400	59F-SD02-0.25	16/16	na	-	-	1000	4/16	1.4	na	-	-	na	-	-						
Zinc	mg/kg	11 J	540 J	CP2-08-SN504-0.5	24/24	160	4/24	3.4	120	4/24	4.5	46	20/24	11.7	79	8/24	6.8	89	5/24	6.1	100	4/24	5.4

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.8-6 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV Xero	Frequency of Exceedance	Xero HQ	BTV RCRB	Frequency of Exceedance	RCRB HQ
Organics																							
2,4-Dichlorophenol	mg/kg	-	-	-	0/20	na	-	-	na	-	-	na	-	-	na	-	-						
2-Methylphenol	mg/kg	-	-	-	0/20	na	-	-	na	-	-	na	-	-	na	-	-						
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/20	na	-	-	na	-	-	0.04	-	-	0.693	-	-						
Di-n-butyl phthalate	mg/kg	-	-	-	0/20	200	-	-	na	-	-	0.013	-	-	64.4	-	-						
Hexanedioic Acid, dioctylester	mg/kg	1	1	59F-SPB02-5	2/2	na	-	-	na	-	-	na	-	-	na	-	-						
Pentachlorophenol	mg/kg	-	-	-	0/20	5	-	-	31	-	-	2.1	-	-	2.8	-	-						
Pesticides & Polychlorinated Biphenyls					-																		
4,4'-DDD	mg/kg	0.029 J	0.029 J	OS1-F2-SNS04-2.5	1/16	na	-	-	na	-	-	0.093	0/16	-	0.021	1/16	1.4						
4,4'-DDE	mg/kg	0.0056 J	0.048	OS1-F2-SNS01-2.5	2/16	na	-	-	na	-	-	0.093	0/16	-	0.021	1/16	2.3						
4,4'-DDT	mg/kg	0.0053 J	0.025 J	OS1-F2-SNS04-2.5	4/16	na	-	-	na	-	-	0.093	0/16	-	0.021	1/16	1.2						
delta-BHC	mg/kg	0.00091 J	0.0026 J	OS1-F2-SNS04-2.5	4/16	na	-	-	na	-	-	0.346	0/16	-	1.032	0/16	-						
Dieldrin	mg/kg	0.0029 J	0.0029 J	OS1-F2-SNS04-2.5	1/16	na	-	-	na	-	-	0.022	0/16	-	0.005	0/16	-						
Endrin	mg/kg	0.0018 J	0.0019 J	OS1-F2-SNS02-2.5	2/16	na	-	-	na	-	-	0.003	0/16	-	0.030	0/16	-						
Endrin aldehyde	mg/kg	-	-	-	0/16	na	-	-	na	-	-	0.005	-	-	0.051	-	-						
Endrin ketone	mg/kg	-	-	-	0/16	na	-	-	na	-	-	na	-	-	na	-	-						
PCB-1016	mg/kg	-	-	-	0/5	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1248	mg/kg	-	-	-	0/5	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1254	mg/kg	0.32 J	0.44 J	59F-SD02-5	2/5	na	-	-	na	-	-	0.010	2/5	43	0.042	2/5	10.6						
Pendimethalin (Prowl)	mg/kg	0.0039 J	0.46	OS1-F2-SNS01-2.5	8/18	na	-	-	na	-	-	0.865	0/18	-	0.624	0/18	-						
Inorganics																							
Aluminum	mg/kg	14000	64000	59F-SD02-1.5	17/17	na	-	-	na	-	-	na	-	-	na	-	-	54000	1/17		40976	5/17	
Antimony	mg/kg	0.21 J	2.5 J	59F-SD02-1.5	9/17	na	-	-	78	0/17	-	na	-	-	0.27	7/17	9.3	0.459	3/17	5.4	1.3	1/17	1.9
Arsenic	mg/kg	3.5 J	17 J	59F-SNS01-2.5	17/17	18	0/17	-	na	-	-	43	0/17	-	46	0/17	-						
Barium	mg/kg	98	550 J	OS1-F2-SNS01-2.5	17/17	na	-	-	330	1/17	1.7	na	-	-	2000	0/17	-	320	1/17	1.7	274.3	2/17	2.0
Boron	mg/kg	4.2 J	225	59F-SPB02-5	13/17	0.5	13/17	450	20	5/17	11.3	na	-	-	na	-	-	19	5/17	12	19	5/17	12
Cadmium	mg/kg	0.065 J	0.83 J	59F-SNS03-2.5	10/17	32	0/17	-	140	0/17	-	0.77	2/17	1.1	0.36	6/17	2.3	1.2	0/17		0.723	2/17	1.1
Chromium	mg/kg	35	100 J	59F-SD02-1.5	17/17	na	-	-	na	-	-	26	17/17	3.8	34	17/17	2.9	117.7	0/17		110	0/17	
Copper	mg/kg	22	71 J	59F-SD02-1.5	17/17	70	1/17	1.0	80	0/17	-	28	10/17	2.5	49	7/17	1.4	76	0/17		63	1/17	1.1
Lithium	mg/kg	4.9 J	28 J	59F-SD02-1.5	16/16	2	16/16	14	10	11/16	2.8	na	-	-	390	0/16	-	23	1/16	1.2	23	1/16	1.2
Mercury	mg/kg	0.014 J	0.16	59F-SNS03-2.5	16/17	na	-	-	na	-	-	0.000051	16/17	3137	0.0013	16/17	123	0.127	3/17	1.3	0.866	0/17	
Molybdenum	mg/kg	0.15 J	1.1 J	59F-SD02-1.5	11/16	2	0/16	-	200	0/16	-	44	0/16	-	4.75	0/16	-						
Nickel	mg/kg	22 J	94 J	59F-SD02-1.5	17/17	38	8/17	2.5	280	0/17	-	210	0/17	-	130	0/17	-	140	0/17		75	2/17	1.3
Selenium	mg/kg	0.27 J	3.6 J	59F-SD02-1.5	8/17	0.52	3/17	6.9	4.1	0/17	-	1.2	2/17	3.0	0.63	3/17	5.7	25.78	0/17		1.116	3/17	3.2
Strontium	mg/kg	13	42	59F-SD02-1.5	16/16	na	-	-	na	-	-	na	-	-	na	-	-						
Thallium	mg/kg	0.13 J	3.2 J	59F-SNS03-2.5	15/17	1	4/17	3.2	na	-	-	na	-	-	2.1	2/17	1.5	3.3	0/17		2.5	2/17	1.3
Titanium	mg/kg	520	1500	59F-SD01-1.5	16/16	na	-	-	1000	4/16	1.5	na	-	-	na	-	-						
Zinc	mg/kg	33	210 J	OS1-F2-SNS01-2.5	17/17	160	1/17	1.3	120	2/17	1.8	46	12/17	4.6	79	6/17	2.7	89	4/17	2.4	100	3/17	2.1

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.8-7 Risk Characterization Summary Table
Surface Water
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Total/Dissolved	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics									
4-Methylphenol	Total	µg/L	6	6	59F-SW01-6	1/2	na	-	-
Pesticides & Polychlorinated Biphenyls									
Heptachlor	Total	µg/L	-	-	-	0/2	0.0038	-	-
Heptachlor epoxide	Total	µg/L	0.11 J	0.11 J	59F-SW01-6	1/2	0.0038	1/2	29
Pendimethalin (Prowl)	Total	µg/L	0.37 J	16	59F-SW01-6	2/2	5.2	1/2	3.1
Inorganics									
Aluminum	Dissolved	µg/L	500	510	59F-SW02-6	2/2	87	2/2	5.9
Aluminum	Total	µg/L	3900J	12000	59F-SW02-6	2/2	87	2/2	138
Barium	Dissolved	µg/L	37	100	59F-SW01-6	2/2	4	2/2	25
Barium	Total	µg/L	82	160	59F-SW01-6	2/2	4	2/2	40
Boron	Dissolved	µg/L	40 J	89	59F-SW01-6	2/2	1.6	2/2	56
Boron	Total	µg/L	47 J	110	59F-SW01-6	2/2	1.6	2/2	69
Copper	Dissolved	µg/L	4.8	5.9	59F-SW02-6	2/2	9	0/2	-
Copper	Total	µg/L	7.8	13	59F-SW02-6	2/2	9	1/2	1.4
Iron	Dissolved	µg/L	300	350	59F-SW02-6	2/2	1000	0/2	-
Iron	Total	µg/L	2900 J	8800	59F-SW02-6	2/2	1000	2/2	8.8
Lead	Dissolved	µg/L	0.18 J	0.58 J	59F-SW02-6	2/2	2.5	0/2	-
Lead	Total	µg/L	2.1	3.1	59F-SW02-6	2/2	2.5	1/2	1.2
Lithium	Dissolved	µg/L	-	-	-	0/2	14	-	-
Lithium	Total	µg/L	-	-	-	0/2	14	-	-
Manganese	Dissolved	µg/L	7.6 J	10 J	59F-SW02-6	2/2	120	0/2	-
Manganese	Total	µg/L	39	60	59F-SW02-6	2/2	120	0/2	-
Mercury	Dissolved	µg/L	-	-	-	0/2	0.77	-	-
Mercury	Total	µg/L	-	-	-	0/2	0.77	-	-
Nickel	Dissolved	µg/L	2.2	3.2	59F-SW01-6	2/2	52	0/2	-
Nickel	Total	µg/L	9	13	59F-SW01-6	2/2	52	0/2	-
Silver	Dissolved	µg/L	0.059 J	0.059 J	59F-SW01-6	1/2	0.12	0/2	-
Silver	Total	µg/L	0.032 J	0.037 J	59F-SW01-6	2/2	0.12	0/2	-
Titanium	Dissolved	µg/L	11	16	59F-SW02-6	2/2	na	-	-
Titanium	Total	µg/L	92	260	59F-SW02-6	2/2	na	-	-
Vanadium	Dissolved	µg/L	4.6	4.9	59F-SW02-6	2/2	20	0/2	-
Vanadium	Total	µg/L	12	21	59F-SW02-6	2/2	20	1/2	1.1
Zinc	Dissolved	µg/L	-	-	-	0/2	120	-	-
Zinc	Total	µg/L	20	35	59F-SW02-6	2/2	120	0/2	-

Notes and Key:
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
µg/L = Micrograms per liter
na = Not available

Table 6.8-8 Risk Characterization Summary Table
Sediment Habitat 0 to 1 foot
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics								
Dibenzofuran	mg/kg	0.052 J	0.052 J	59F-SB26-1	1/10	na	-	-
Phenanthrene	mg/kg	0.005 J	0.43	59F-SB26-1	4/10	0.204	1/10	2.1
Phenol	mg/kg	0.75 J	14 J	59F-SD01-0.25	2/10	0.42	2/10	33
Polycyclic Aromatic Hydrocarbons								
2-Methylnaphthalene	mg/kg	0.068 J	0.068 J	59F-SB26-1	1/10	na	-	-
Acenaphthene	mg/kg	0.057 J	0.057 J	59F-SB26-1	1/10	na	-	-
Benzo (a) anthracene	mg/kg	0.005 J	0.17 J	59F-SB26-1	3/10	0.108	1/10	1.6
Chrysene	mg/kg	0.0057 J	0.2 J	59F-SB26-1	4/10	0.166	1/10	1.2
Fluoranthene	mg/kg	0.01	0.46	59F-SB26-1	4/10	0.423	1/10	1.1
Fluorene	mg/kg	0.039 J	0.039 J	59F-SB26-1	1/10	na	-	-
Indeno (1,2,3-cd) pyrene	mg/kg	0.1 J	0.1 J	59F-SB26-1	1/10	0.078	1/10	1.3
Pyrene	mg/kg	0.0083 J	0.35 J	59F-SB26-1	5/10	0.195	1/10	1.8
Pesticides & Polychlorinated Biphenyls								
4,4'-DDD	mg/kg	0.0025	0.0035	59F-SB25-1	3/10	na	-	-
4,4'-DDE	mg/kg	0.00065	0.0069	59F-SB26-1	4/10	0.00316	1/10	2.2
4,4'-DDT	mg/kg	0.0029 J	0.026	59F-SNS03-0.5	3/10	0.00416	2/10	6.3
Aldrin	mg/kg	0.0027	0.0027	59F-SB28-1	1/10	0.002	1/10	1.4
beta-BHC	mg/kg	-	-	-	0/10	na	-	-
Dieldrin	mg/kg	0.00091	0.0054	59F-SB28-1	4/10	0.0019	1/10	2.8
Endosulfan sulfate	mg/kg	0.012	0.012	59F-SB28-1	1/10	na	-	-
Endrin	mg/kg	0.00084	0.0063	59F-SB26-1	3/10	0.00222	1/10	2.8
Endrin aldehyde	mg/kg	0.014	0.014	59F-SB28-1	1/10	na	-	-
Endrin ketone	mg/kg	0.0074	0.0074	59F-SB28-1	1/10	na	-	-
Methoxychlor	mg/kg	0.003	0.003	59F-SB27-1	1/10	na	-	-
PCB-1248	mg/kg	0.54 J	16 J	59F-SD01-0.25	2/8	0.0598	2/8	268
PCB-1254	mg/kg	0.016 J	2.8	59F-SB28-1	5/8	0.0598	4/8	47
Pendimethalin (Prowl)	mg/kg	0.0035 J	49 J	59F-SD01-0.25	8/10	0.37	1/10	132
Inorganics								
Aluminum	mg/kg	5400	51000	59F-SD02-0.25	10/10	na	-	-
Barium	mg/kg	160	490	59F-SNS02-0.5	4/4	na	-	-
Beryllium	mg/kg	0.14 J	1.1 J	59F-SD02-0.25	4/4	na	-	-
Boron	mg/kg	3.7 J	22 J	59F-SD02-0.25	3/4	na	-	-
Chromium	mg/kg	18 J	114 J	59F-SB28-1	10/10	43.4	9/10	2.6
Chromium VI	mg/kg	0.5 J	0.5 J	59F-SB28-1	1/1	na	-	-
Cobalt	mg/kg	2.1 J	26 J	59F-SD02-0.25	4/4	na	-	-
Copper	mg/kg	14 J	69 J	59F-SD02-0.25	10/10	31.6	8/10	2.2
Lead	mg/kg	7.6	140	59F-SD01-0.25	14/14	35.8	1/14	3.9
Lithium	mg/kg	2.4 J	24 J	59F-SD02-0.25	4/4	na	-	-
Manganese	mg/kg	110	850	59F-SD02-0.25	4/4	460	2/4	1.8
Mercury	mg/kg	0.042 J	0.16	59F-SD02-0.25	10/10	0.18	0/10	-
Molybdenum	mg/kg	0.11 J	0.73 J	59F-SD02-0.25	4/4	na	-	-
Nickel	mg/kg	11 J	81 J	59F-SD02-0.25	10/10	16	9/10	5.1
Strontium	mg/kg	22	43	59F-SD02-0.25	4/4	na	-	-
Thallium	mg/kg	0.19 J	2.1 J	59F-SNS02-0.5	3/4	na	-	-
Titanium	mg/kg	510	1400	59F-SD02-0.25	4/4	na	-	-
Vanadium	mg/kg	18	130	59F-SD02-0.25	4/4	na	-	-

Notes and Key:

Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na Not available

Table 6.8-9 Risk Characterization Summary Table
Soil Vapor Habitat - Top Depth
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance
1,1,1-Trichloroethane	$\mu g/m^3$	191000	-	-	-	0/13	-
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/13	-
1,1-Dichloroethane	$\mu g/m^3$	181000	5.3	5.3	59F-SP36-10	1/13	0/13
1,1-Dichloroethene	$\mu g/m^3$	6000	-	-	-	0/13	-
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/13	-
1,2-Dichloroethane	$\mu g/m^3$	42000	10	12000	CP2-RE05-SP06-10	3/13	0/13
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/13	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	34	70	59F-SP37-10	2/13	0/13
2-Hexanone	$\mu g/m^3$	4880	-	-	-	0/13	-
Acetone	$\mu g/m^3$	1305000	70	310	CP2-07-SP14-10	6/13	0/13
Benzene	$\mu g/m^3$	570	4.1	14	59F-SP36-10	5/13	0/13
Carbon Disulfide	$\mu g/m^3$	1200	4.5	57	59F-SP36-10	9/13	0/13
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/13	-
Chloroethane	$\mu g/m^3$	992000	-	-	-	0/13	-
Chloroform	$\mu g/m^3$	1200	50	120	59F-SP36-10	2/13	0/13
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	6.9	6.9	59F-SP36-10	1/13	0/13
Cumene	$\mu g/m^3$	23000	-	-	-	0/13	-
Ethyl Benzene	$\mu g/m^3$	23000	-	-	-	0/13	-
Freon 11	$\mu g/m^3$	88000	300	300	59F-SP36-10	1/13	0/13
Freon 113	$\mu g/m^3$	88000	270	270	CP2-07-SP14-10	1/13	0/13
Freon 12	$\mu g/m^3$	88000	7.8	7.8	59F-SP36-10	1/13	0/13
m,p-Xylene	$\mu g/m^3$	16000	6.8	11	59F-SP36-10	2/13	0/13
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/13	-
Methylene Chloride	$\mu g/m^3$	9000	-	-	-	0/13	-
o-Xylene	$\mu g/m^3$	16000	-	-	-	0/13	-
Styrene	$\mu g/m^3$	192000	-	-	-	0/13	-
Tetrachloroethene	$\mu g/m^3$	24000	8.8	510	59F-SP38-10	5/13	0/13
Toluene	$\mu g/m^3$	84	5.6	67	CP2-07-SP14-10	11/13	0/13
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/13	-
Trichloroethene	$\mu g/m^3$	6400	9.3	99	CP2-07-SP14-10	3/13	0/13
Vinyl Chloride	$\mu g/m^3$	560	-	-	-	0/13	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
$\mu g/m^3$ = Micrograms per cubic meter
na = Not available

Table 6.8-10 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Dredge Pit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV Xero	Frequency of Exceedance	Xero HQ	BTV RCRB	Frequency of Exceedance	RCRB HQ
Organics																							
1,2-Dichloroethane	mg/kg	-	-	-	0/1	na	-	-	na	-	-	na	-	-	na	-	-						
2,4-Dichlorophenol	mg/kg	-	-	-	0/9	na	-	-	na	-	-	na	-	-	na	-	-						
2-Methylphenol	mg/kg	-	-	-	0/9	na	-	-	na	-	-	na	-	-	na	-	-						
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/9	na	-	-	na	-	-	0.04	-	-	0.693	-	-						
Di-n-butyl phthalate	mg/kg	-	-	-	0/9	200	-	-	na	-	-	0.013	-	-	64.4	-	-						
Pentachlorophenol	mg/kg	-	-	-	0/9	5	-	-	31	-	-	2.1	-	-	2.8	-	-						
Pesticides & Polychlorinated Biphenyls																							
4,4'-DDD	mg/kg	-	-	-	0/6	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDE	mg/kg	-	-	-	0/6	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDT	mg/kg	-	-	-	0/6	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
delta-BHC	mg/kg	-	-	-	0/6	na	-	-	na	-	-	0.346	-	-	1.032	-	-						
Dieldrin	mg/kg	-	-	-	0/6	na	-	-	na	-	-	0.022	-	-	0.005	-	-						
Endrin	mg/kg	-	-	-	0/6	na	-	-	na	-	-	0.003	-	-	0.030	-	-						
Endrin aldehyde	mg/kg	-	-	-	0/6	na	-	-	na	-	-	0.005	-	-	0.051	-	-						
Endrin ketone	mg/kg	-	-	-	0/6	na	-	-	na	-	-	na	-	-	na	-	-						
PCB-1016		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1248		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1254		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
Pendimethalin (Prowl)	mg/kg	0.024 J	17000	25F-SPB03-1	12/12	na	-	-	na	-	-	0.865	7/12	19653.2	0.624	7/12	27244						
Inorganics																							
Aluminum	mg/kg	8300	28000	25F-SD01-0.25	9/9	na	-	-	na	-	-	na	-	-	na	-	-	54000	0/9		40976	0/9	
Antimony	mg/kg	0.14	0.27	25F-SD01-0.25	3/9	na	-	-	na	-	-	na	-	-	0.27	0/9	-						
Arsenic	mg/kg	1.7	6.4	25F-SD01-0.25	9/9	18	0/9	-	na	-	-	43	0/9	-	46	0/9	-						
Barium	mg/kg	52	170	25F-SD01-0.25	9/9	na	-	-	330	0/9	-	na	-	-	2000	0/9	-						
Boron	mg/kg	17.5	65.6	25F-SPB01-1	3/9	0.5	3/9	131	20	2/9	3.3	na	-	-	na	-	-	19^	2/9	3.5	19^	2/9	3.5
Cadmium	mg/kg	0.33 J	0.85 J	25F-SD01-0.25	6/9	32	0/9	-	140	0/9	-	0.77	1/9	1.1	0.36	4/9	2.4	1.2	0/9		0.723	2/9	1.2
Chromium	mg/kg	41.9	210	25F-SPB01-1	9/9	na	-	-	na	-	-	26	9/9	8.1	34	9/9	6.2	117.7	1/9	1.8	110	1/9	1.9
Copper	mg/kg	21	114	25F-SPB01-1	9/9	70	1/9	1.6	80	1/9	1.4	28	6/9	4.1	49	1/9	2.3	76	1/9	1.5	63	1/9	1.8
Lithium	mg/kg	5 J	12 J	25F-SD01-0.25	6/6	2	6/6	6.0	10	1/6	1.2	na	-	-	390	0/6	-	23^	0/6		23^	0/6	
Mercury	mg/kg	0.0071 J	34	25F-SB07-1	10/12	na	-	-	na	-	-	0.000051	10/12	666667	0.0013	10/12	26154	0.127	7/12	268	0.866	4/12	39
Molybdenum	mg/kg	0.11 J	130 J	25F-HA01-1	9/9	2	1/9	65	200	0/9	-	44	1/9	3.0	4.75	1/9	27	0.616	3/9	211	0.522	6/9	249
Nickel	mg/kg	24	85.6	25F-SPB01-1	9/9	38	4/9	2.3	280	0/9	-	210	0/9	-	130	0/9	-	140	0/9		75	1/9	1.1
Selenium	mg/kg	0.28 J	0.28 J	25F-SD01-0.25	1/9	0.52	0/9	-	4.1	0/9	-	1.2	0/9	-	0.63	0/9	-						
Strontium	mg/kg	18 J	37 J	25F-HA01-1	6/6	na	-	-	na	-	-	na	-	-	na	-	-						
Thallium	mg/kg	0.12 J	2.1 J	25F-SB07-1	5/9	1	3/9	2.1	na	-	-	na	-	-	2.1	0/9	-	3.3	0/9		2.5	0/9	
Titanium	mg/kg	330	1100	25F-SB04-1	6/6	na	-	-	1000	1/6	1.1	na	-	-	na	-	-						
Zinc	mg/kg	33.5	110	25F-SPB01-1	9/9	160	0/9	-	120	0/9	-	46	5/9	2.4	79	2/9	1.4	89	1/9	1.2	100	1/9	1.1

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.8-11 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Dredge Pit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV Xero	Frequency of Exceedance	Xero HQ	BTV RCRB	Frequency of Exceedance	RCRB HQ
Organics																							
1,2-Dichloroethane	mg/kg	0.0041 J	0.0041 J	25F-SD01-5	1/2	na	-	-	na	-	-	na	-	-	na	-	-						
2,4-Dichlorophenol	mg/kg	-	-	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
2-Methylphenol	mg/kg	-	-	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	-	na	-	-	na	-	-	0.04	-	-	0.693	-	-						
Di-n-butyl phthalate	mg/kg	7.52	7.52	25F-SPB03-6	1/10	na	-	-	na	-	-	0.0125	1/10	601.6	64.449	0/10	-						
Pentachlorophenol	mg/kg	-	-	-	-	5	-	-	31	-	-	2.1	-	-	2.8	-	-						
Hexanedioic Acid, dioctylester		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
Pesticides & Polychlorinated Biphenyls																							
4,4'-DDD	mg/kg	-	-	-	-	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDE	mg/kg	-	-	-	-	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDT	mg/kg	-	-	-	-	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
delta-BHC	mg/kg	-	-	-	-	na	-	-	na	-	-	0.346	-	-	1.032	-	-						
Dieldrin	mg/kg	-	-	-	-	na	-	-	na	-	-	0.022	-	-	0.005	-	-						
Endrin	mg/kg	-	-	-	-	na	-	-	na	-	-	0.003	-	-	0.030	-	-						
Endrin aldehyde	mg/kg	-	-	-	-	na	-	-	na	-	-	0.005	-	-	0.051	-	-						
Endrin ketone	mg/kg	-	-	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
Pendimethalin (Prowl)	mg/kg	0.029 J	320	25F-SPB03-5	10/10	na	-	-	na	-	-	0.865	4/10	370	0.624	4/10	513						
PCB-1016		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1248		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1254		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
Inorganics																							
Aluminum	mg/kg	9800	41000 J	25F-SD01-5	10/10	na	-	-	na	-	-	na	-	-	na	-	-	54000	0/10		40976	1/10	1.0
Antimony	mg/kg	0.18 J	0.32 J	25F-HA01-5	4/10	na	-	-	78	0/10	-	na	-	-	0.27	1/10	1.2	0.459	0/10		1.3	0/10	
Arsenic	mg/kg	1.7 J	6.45	25F-SPB03-6	9/10	18	0/10	-	na	-	-	43	0/10	-	46	0/10	-						
Barium	mg/kg	74	250 J	25F-HA01-5	10/10	na	-	-	330	0/10	-	na	-	-	2000	0/10	-						
Boron	mg/kg	16.6	19.5	25F-SPB02-5	3/10	0.5	3/10	39	20	0/10	-	na	-	-	na	-	-	19	1/10	1.03	19^	1/10	1.03
Cadmium	mg/kg	0.32 J	0.91	25F-SD01-5	7/10	32	0/10	-	140	0/10	-	0.77	3/10	1.2	0.36	6/10	2.5	1.2	0/10		0.723	4/10	1.3
Chromium	mg/kg	28 J	79 J	25F-SD01-5	10/10	na	-	-	na	-	-	26	10/10	3.0	34	9/10	2.3	117.7	0/10		110	0/10	
Copper	mg/kg	18 J	55 J	25F-SD01-5	10/10	70	0/10	-	80	0/10	-	28	7/10	2.0	49	3/10	1.1	76	0/10		63	0/10	
Lithium	mg/kg	3.4 J	17	25F-SD01-5	7/7	2	7/7	8.5	10	3/7	1.7	na	-	-	390	0/7	-	23	0/7		23^	0/7	
Mercury	mg/kg	0.013 J	42	25F-SPB02-5	10/10	na	-	-	na	-	-	0.000051	10/10	823529	0.0013	10/10	32308	0.127	8/10	331	0.866	4/10	48.5
Molybdenum	mg/kg	0.21 J	0.71 J	25F-SB06-5	7/7	2	0/7	-	200	0/7	-	44	0/7	-	4.75	0/7	-						
Nickel	mg/kg	20	62 J	25F-SD01-5	10/10	38	4/10	1.6	280	0/10	-	210	0/10	-	130	0/10	-	140	0/10		75	0/10	
Selenium	mg/kg	-	-	-	-	0.52	-	-	na	-	-	na	-	-	na	-	-						
Strontium	mg/kg	21	41 J	25F-SD01-5	7/7	na	-	-	na	-	-	na	-	-	na	-	-						
Thallium	mg/kg	0.12 J	6.7	25F-SPB03-6	7/10	1	5/10	6.7	na	-	-	na	-	-	2.1	5/10	3.2	3.3	2/10	2.0	2.5	4/10	2.7
Titanium	mg/kg	520	1400 J	25F-SD01-5	7/7	na	-	-	1000	3/7	1.4	na	-	-	na	-	-						
Zinc	mg/kg	40	160 J	25F-HA01-5	10/10	160	0/10	-	120	1/10	1.3	46	7/10	3.5	79	4/10	2.0	89	2/10	1.8	100	2/10	1.6

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.8-12 Risk Characterization Summary Table
Surface Water
Dredge Pit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Total/Dissolved	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics									
4-Methylphenol	Total	µg/L	-	-	-	0/1	na	-	-
Pesticides & Polychlorinated Biphenyls									
Heptachlor	Total	µg/L	0.0084 J	0.0084 J	25F-SW01-2	1/1	0.0038	1/1	2.2
Heptachlor epoxide	Total	µg/L	0.012 J	0.012 J	25F-SW01-2	1/1	0.0038	1/1	3.2
Pendimethalin (Prowl)	Total	µg/L	7.3	7.3	25F-SW01-2	1/1	5.2	1/1	1.4
Inorganics									
Aluminum	Dissolved	µg/L	300 J	300 J	25F-SW01-2	1/1	87	1/1	3.4
Aluminum	Total	µg/L	18000	18000	25F-SW01-2	1/1	87	1/1	207
Barium	Dissolved	µg/L	19	19	25F-SW01-2	1/1	4	1/1	4.8
Barium	Total	µg/L	75	75	25F-SW01-2	1/1	4	1/1	19
Boron	Dissolved	µg/L	-	-	-	0/1	1.6	-	-
Boron	Total	µg/L	-	-	-	0/1	1.6	-	-
Copper	Dissolved	µg/L	7.8	7.8	25F-SW01-2	1/1	9	0/1	-
Copper	Total	µg/L	27	27	25F-SW01-2	1/1	9	1/1	3.0
Iron	Dissolved	µg/L	420	420	25F-SW01-2	1/1	1000	0/1	-
Iron	Total	µg/L	19000	19000	25F-SW01-2	1/1	1000	1/1	19
Lead	Dissolved	µg/L	1.1	1.1	25F-SW01-2	1/1	2.5	0/1	-
Lead	Total	µg/L	7.7	7.7	25F-SW01-2	1/1	2.5	1/1	3.1
Lithium	Dissolved	µg/L	-	-	-	0/1	14	-	-
Lithium	Total	µg/L	-	-	-	0/1	14	-	-
Manganese	Dissolved	µg/L	40	40	25F-SW01-2	1/1	120	0/1	-
Manganese	Total	µg/L	210	210	25F-SW01-2	1/1	120	1/1	1.8
Mercury	Dissolved	µg/L	0.86	0.86	25F-SW01-2	1/1	0.77	1/1	1.1
Mercury	Total	µg/L	2.8	2.8	25F-SW01-2	1/1	0.77	1/1	3.6
Nickel	Dissolved	µg/L	10	10	25F-SW01-2	1/1	52	0/1	-
Nickel	Total	µg/L	28	28	25F-SW01-2	1/1	52	0/1	-
Silver	Dissolved	µg/L	-	-	-	0/1	0.12	-	-
Silver	Total	µg/L	0.093 J	0.093 J	25F-SW01-2	1/1	0.12	0/1	-
Titanium	Dissolved	µg/L	4.9 J	4.9 J	25F-SW01-2	1/1	na	-	-
Titanium	Total	µg/L	470	470	25F-SW01-2	1/1	na	-	-
Vanadium	Dissolved	µg/L	8.3	8.3	25F-SW01-2	1/1	20	0/1	-
Vanadium	Total	µg/L	38	38	25F-SW01-2	1/1	20	1/1	1.9
Zinc	Dissolved	µg/L	-	-	-	0/1	120	-	-
Zinc	Total	µg/L	45	45	25F-SW01-2	1/1	120	0/1	-

Notes and Key:

Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
µg/L = Micrograms per liter
na = Not available

Table 6.8-13 Risk Characterization Summary Table
Sediment 0 to 1 foot
Dredge Pit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics								
Dibenzofuran	mg/kg	-	-	-	-	na	-	-
Phenanthrene	mg/kg	0.0091 J	0.011 J	25F-HA01-1	3/6	0.204	0/6	-
Phenol	mg/kg	1.2 J	1.2 J	25F-HA01-1	1/6	0.42	1/6	2.9
Polycyclic Aromatic Hydrocarbons								
2-Methylnaphthalene	mg/kg	-	-	-	-	na	-	-
Acenaphthene	mg/kg	-	-	-	-	na	-	-
Benzo (a) anthracene	mg/kg	0.0089 J	0.012 J	25F-SB06-1	2/6	0.108	0/6	-
Chrysene	mg/kg	0.012 J	0.016 J	25F-SB06-1	2/6	0.166	0/6	-
Fluoranthene	mg/kg	0.008 J	0.035 J	25F-HA01-1	3/6	0.423	0/6	-
Fluorene	mg/kg	-	-	-	-	na	-	-
Indeno (1,2,3-cd) pyrene	mg/kg	0.012 J	0.012 J	25F-SB06-1	1/6	0.078	0/6	-
Pyrene	mg/kg	0.01 J	0.029 J	25F-HA01-1	3/6	0.195	0/6	-
Pesticides & Polychlorinated Biphenyls								
4,4'-DDD	mg/kg	-	-	-	-	na	-	-
4,4'-DDE	mg/kg	-	-	-	-	na	-	-
4,4'-DDT	mg/kg	-	-	-	-	na	-	-
Aldrin	mg/kg	-	-	-	-	na	-	-
beta-BHC	mg/kg	-	-	-	-	na	-	-
Dieldrin	mg/kg	-	-	-	-	na	-	-
Endosulfan sulfate	mg/kg	-	-	-	-	na	-	-
Endrin	mg/kg	-	-	-	-	na	-	-
Endrin aldehyde	mg/kg	-	-	-	-	na	-	-
Endrin ketone	mg/kg	-	-	-	-	na	-	-
Methoxychlor	mg/kg	-	-	-	-	na	-	-
Pendimethalin (Prowl)	mg/kg	0.024 J	27 J	25F-HA01-1	6/6	0.37	4/6	73
PCB-1248		NA	NA	-	-	na	-	-
PCB-1254		NA	NA	-	-	na	-	-
Inorganics								
Aluminum	mg/kg	8300	28000	25F-SD01-0.25	6/6	na	-	-
Barium	mg/kg	52 J	170	25F-SD01-0.25	6/6	na	-	-
Beryllium	mg/kg	0.2 J	0.8	25F-SD01-0.25	6/6	na	-	-
Boron	mg/kg	-	-	-	-	na	-	-
Chromium	mg/kg	48 J	75	25F-SD01-0.25	6/6	43.4	6/6	1.7
Cobalt	mg/kg	6.1	15	25F-SB04-1	6/6	na	-	-
Copper	mg/kg	21	49	25F-SD01-0.25	6/6	31.6	2/6	1.6
Lead	mg/kg	5 J	21	25F-SD01-0.25	6/6	35.8	0/6	-
Lithium	mg/kg	5 J	12 J	25F-SD01-0.25	6/6	na	-	-
Manganese	mg/kg	200	550	25F-SD01-0.25	6/6	460	2/6	1.2
Mercury	mg/kg	0.0071 J	34	25F-SB07-1	6/6	0.18	4/6	189
Molybdenum	mg/kg	0.2 J	130 J	25F-HA01-1	6/6	na	-	-
Nickel	mg/kg	25	56	25F-SB04-1	6/6	16	6/6	3.5
Strontium	mg/kg	18 J	37 J	25F-HA01-1	6/6	na	-	-
Thallium	mg/kg	0.12 J	2.1 J	25F-SB07-1	5/6	na	-	-
Titanium	mg/kg	330	1100	25F-SB04-1	6/6	na	-	-
Vanadium	mg/kg	30	96	25F-SB04-1	6/6	na	-	-
Chromium VI		NA	NA	-	-	na	-	-

Notes and Key:
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.8-14 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Eastern Basin
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV Xero	Frequency of Exceedance	Xero HQ	BTV RCRB	Frequency of Exceedance	RCRB HQ
Organics																							
2,4-Dichlorophenol	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-						
2-Methylphenol	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-						
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.04	-	-	0.69	-	-						
Di-n-butyl phthalate	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.013	-	-	64.4	-	-						
Pentachlorophenol	mg/kg	-	-	-	0/8	5	-	-	31	-	-	2.1	-	-	2.8	-	-						
1,2-Dichloroethane		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
Hexanedioic Acid, dioctylester		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
Pesticides & Polychlorinated Biphenyls																							
4,4'-DDD	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDE	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDT	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
delta-BHC	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.346	-	-	1.032	-	-						
Dieldrin	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.022	-	-	0.005	-	-						
Endrin	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.003	-	-	0.030	-	-						
Endrin aldehyde	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.005	-	-	0.051	-	-						
Endrin ketone	mg/kg	-	-	-	0/4	na	-	-	na	-	-	na	-	-	na	-	-						
Pendimethalin (Prowl)	mg/kg	-	-	-	0/4	na	-	-	na	-	-	0.865	-	-	0.624	-	-						
PCB-1016		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1248		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1254		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
Inorganics																							
Aluminum	mg/kg	25000	45000	25F-SD02-0.25	4/4	na	-	-	na	-	-	na	-	-	na	-	-	54000	0/4		40976	1/4	1.1
Antimony	mg/kg	0.25 J	0.33 J	25F-SD02-0.25	4/4	na	-	-	78	0/4	-	na	-	-	0.27	1/4	1.2	0.459	0/4		1.3	0/4	
Arsenic	mg/kg	4.7	7.5	25F-HA02-1	4/4	18	0/4	-	na	-	-	43	0/4	-	46	0/4	-						
Barium	mg/kg	160	220 J	25F-SD02-0.25	4/4	na	-	-	330	0/4	-	na	-	-	2000	0/4	-						
Boron	mg/kg	15 J	15 J	25F-SD02-0.25	1/4	0.5	1/4	30	20	0/4	-	na	-	-	na	-	-	19^	0/4		19^	0/4	
Cadmium	mg/kg	0.58	0.74 J	25F-HA02-1	3/4	32	0/4	-	140	0/4	-	0.77	0/4	-	0.36	3/4	2.1	1.2	0/4		0.723	1/4	1.0
Chromium	mg/kg	52	88 J	25F-SD02-0.25	4/4	na	-	-	na	-	-	26	4/4	3.4	34	4/4	2.6	117.7	0/4		110	0/4	
Copper	mg/kg	38	58 J	25F-SD02-0.25	4/4	70	0/4	-	80	0/4	-	28	4/4	2.1	49	2/4	1.2	76	0/4		63	0/4	
Lithium	mg/kg	11	20 J	25F-SD02-0.25	4/4	2	4/4	10	10	4/4	2.0	na	-	-	390	0/4	-	23^	0/4		23^	0/4	
Mercury	mg/kg	0.05	0.064	25F-SD02-0.25	4/4	na	-	-	na	-	-	0.000051	4/4	1255	0.0013	4/4	49	0.127	0/4		0.866	0/4	
Molybdenum	mg/kg	0.41 J	1.1 J	25F-SD02-0.25	2/4	2	0/4	-	200	0/4	-	44	0/4	-	4.75	0/4	-						
Nickel	mg/kg	45	69 J	25F-SD02-0.25	4/4	38	4/4	1.8	280	0/4	-	210	0/4	-	130	0/4	-	140	0/4		75	0/4	
Selenium	mg/kg	0.3 J	1.4 J	25F-HA04-1	3/4	0.52	1/4	2.7	4.1	0/4	-	1.2	1/4	1.2	0.63	1/4	2.2	25.78	0/4		1.116	1/4	1.3
Strontium	mg/kg	33	40	25F-SD02-0.25	4/4	na	-	-	na	-	-	na	-	-	na	-	-						
Thallium	mg/kg	0.2 J	2.6 J	25F-HA02-1	4/4	1	3/4	2.6	na	-	-	na	-	-	2.1	2/4	1.2	3.3	0/4		2.5	1/4	1.0
Titanium	mg/kg	570	1300	25F-SD02-0.25	4/4	na	-	-	1000	1/4	1.3	na	-	-	na	-	-						
Zinc	mg/kg	53	88 J	25F-SD02-0.25	4/4	160	0/4	-	120	0/4	-	46	4/4	1.9	79	2/4	1.1	89	0/4		100	0/4	

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.8-15 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Eastern Basin
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV Xero	Frequency of Exceedance	Xero HQ	BTV RCRB	Frequency of Exceedance	RCRB HQ
Organics																							
2,4-Dichlorophenol	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-						
2-Methylphenol	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-						
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.04	-	-	0.69	-	-						
Di-n-butyl phthalate	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.013	-	-	64.4	-	-						
Pentachlorophenol	mg/kg	-	-	-	0/8	5	-	-	31	-	-	2.1	-	-	2.8	-	-						
1,2-Dichloroethane		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
Hexanedioic Acid, dioctylester		NA	NA	-	-	na	-	-	na	-	-	na	-	-	na	-	-						
Pesticides & Polychlorinated Biphenyls																							
4,4'-DDD	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDE	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
4,4'-DDT	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.093	-	-	0.021	-	-						
delta-BHC	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.346	-	-	1.032	-	-						
Dieldrin	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.022	-	-	0.005	-	-						
Endrin	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.003	-	-	0.030	-	-						
Endrin aldehyde	mg/kg	-	-	-	0/8	na	-	-	na	-	-	0.005	-	-	0.051	-	-						
Endrin ketone	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-						
Pendimethalin (Prowl)	mg/kg	0.0049 J	0.013 J	25F-SD02-1.5	2/8	na	-	-	na	-	-	0.865	0/8	-	0.624	0/8	-						
PCB-1016		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1248		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
PCB-1254		NA	NA	-	-	na	-	-	na	-	-	0.010	-	-	0.042	-	-						
Inorganics																							
Aluminum	mg/kg	25000	40000	25F-SD02-5	8/8	na	-	-	na	-	-	na	-	-	na	-	-	54000	0/8		40976	0/8	
Antimony	mg/kg	0.23 J	0.32 J	25F-SD02-1.5	8/8	na	-	-	78	0/8	-	na	-	-	0.27	6/8	1.2	0.459	0/8		1.3	0/8	
Arsenic	mg/kg	5	7	25F-HA02-3	8/8	18	0/8	-	na	-	-	43	0/8	-	46	0/8	-						
Barium	mg/kg	170	220 J	25F-HA02-3	8/8	na	-	-	330	0/8	-	na	-	-	2000	0/8	-						
Boron	mg/kg	13 J	13 J	25F-SD02-1.5	1/8	0.5	1/8	26	20	0/8	-	na	-	-	na	-	-	19^	0/8		19^	0/8	
Cadmium	mg/kg	0.57	0.73 J	25F-HA02-3	6/8	32	0/8	-	140	0/8	-	0.77	0/8	-	0.36	6/8	2.0	1.2	0/8		0.723	1/8	1.0
Chromium	mg/kg	53	79 J	25F-SD02-1.5	8/8	na	-	-	na	-	-	26	8/8	3.0	34	8/8	2.3	117.7	0/8		110	0/8	
Copper	mg/kg	40	52 J	25F-SD02-1.5	8/8	70	0/8	-	80	0/8	-	28	8/8	1.9	49	2/8	1.1	76	0/8		63	0/8	
Lithium	mg/kg	11	17 J	25F-SD02-1.5 25F-SD02-5	8/8	2	8/8	8.5	10	8/8	1.7	na	-	-	390	0/8	-	23^	0/8		23^	0/8	
Mercury	mg/kg	0.037	0.094	25F-HA04-5	8/8	na	-	-	na	-	-	0.000051	8/8	1843	0.0013	8/8	72	0.127	0/8		0.866	0/8	
Molybdenum	mg/kg	0.14 J	1.1 J	25F-SD02-1.5	4/8	2	0/8	-	200	0/8	-	44	0/8	-	4.75	0/8	-						
Nickel	mg/kg	46	66 J	25F-SD02-5	8/8	38	8/8	1.7	280	0/8	-	210	0/8	-	130	0/8	-	140	0/8		75	0/8	
Selenium	mg/kg	0.27 J	1.9 J	25F-SD02-1.5	6/8	0.52	1/8	3.7	4.1	0/8	-	1.2	1/8	1.6	0.63	1/8	3.0	25.78	0/8		1.116	1/8	1.7
Strontium	mg/kg	30	41	25F-SD02-5	8/8	na	-	-	na	-	-	na	-	-	na	-	-						
Thallium	mg/kg	0.18 J	2.2 J	25F-HA02-5	8/8	1	6/8	2.2	na	-	-	na	-	-	2.1	1/8	1.0	3.3	0/8		2.5	0/8	
Titanium	mg/kg	560	1300	25F-SD02-5	8/8	na	-	-	1000	2/8	1.3	na	-	-	na	-	-						
Zinc	mg/kg	55	75 J	25F-SD02-1.5	8/8	160	0/8	-	120	0/8	-	46	8/8	1.6	79	0/8	-	89	0/8		100	0/8	

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.8-16 Risk Characterization Summary Table
Surface Water
Eastern Basin
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Total/ Dissolved	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics									
4-Methylphenol	Total	µg/L	-	-	-	0/1	na	-	-
Pesticides & Polychlorinated Biphenyls									
Heptachlor	Total	µg/L	-	-	-	0/1	0.0038	-	-
Heptachlor epoxide	Total	µg/L	-	-	-	0/1	0.0038	-	-
Pendimethalin (Prowl)	Total	µg/L	-	-	-	0/1	5.2	-	-
Inorganics									
Aluminum	Total	µg/L	110000 J	110000 J	25F-SW02-2	1/1	87	1/1	1264
Barium	Total	µg/L	420	420	25F-SW02-2	1/1	4	1/1	105
Boron	Total	µg/L	23 J	23 J	25F-SW02-2	1/1	1.6	1/1	14.4
Copper	Total	µg/L	71	71	25F-SW02-2	1/1	9	1/1	7.9
Iron	Total	µg/L	110000 J	110000 J	25F-SW02-2	1/1	1000	1/1	110
Lead	Total	µg/L	28	28	25F-SW02-2	1/1	2.5	1/1	11.2
Lithium	Total	µg/L	37 J	37 J	25F-SW02-2	1/1	14	1/1	2.6
Manganese	Total	µg/L	1100	1100	25F-SW02-2	1/1	120	1/1	9.2
Mercury	Total	µg/L	0.08 J	0.08 J	25F-SW02-2	1/1	0.77	0/1	-
Nickel	Total	µg/L	61 J	61 J	25F-SW02-2	1/1	52	1/1	1.2
Silver	Total	µg/L	0.18 J	0.18 J	25F-SW02-2	1/1	0.12	1/1	1.5
Titanium	Total	µg/L	2800	2800	25F-SW02-2	1/1	na	-	-
Vanadium	Total	µg/L	160	160	25F-SW02-2	1/1	20	1/1	8.0
Zinc	Total	µg/L	150	150	25F-SW02-2	1/1	120	1/1	1.3

Notes and Key:

Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
µg/L = Micrograms per liter
na = Not available

Table 6.8-17 Risk Characterization Summary Table
Sediment 0 to 1 foot
Eastern Basin
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Organics								
Dibenzofuran	mg/kg	-	-	-	-	na	-	-
Phenanthrene	mg/kg	-	-	-	-	na	-	-
Phenol	mg/kg	0.88 J	4.6 J	25F-HA04-1	4/6	0.42	4/6	11
Polycyclic Aromatic Hydrocarbons								
2-Methylnaphthalene	mg/kg	-	-	-	-	na	-	-
Acenaphthene	mg/kg	-	-	-	-	na	-	-
Benzo (a) anthracene	mg/kg	-	-	-	-	na	-	-
Chrysene	mg/kg	-	-	-	-	na	-	-
Fluoranthene	mg/kg	-	-	-	-	na	-	-
Fluorene	mg/kg	-	-	-	-	na	-	-
Indeno (1,2,3-cd) pyrene	mg/kg	-	-	-	-	na	-	-
Pyrene	mg/kg	-	-	-	-	na	-	-
Pesticides & Polychlorinated Biphenyls					-	na	-	-
4,4'-DDD	mg/kg	-	-	-	-	na	-	-
4,4'-DDE	mg/kg	-	-	-	-	na	-	-
4,4'-DDT	mg/kg	-	-	-	-	na	-	-
Aldrin	mg/kg	-	-	-	-	na	-	-
beta-BHC	mg/kg	-	-	-	-	na	-	-
Dieldrin	mg/kg	-	-	-	-	na	-	-
Endosulfan sulfate	mg/kg	-	-	-	-	na	-	-
Endrin	mg/kg	-	-	-	-	na	-	-
Endrin aldehyde	mg/kg	-	-	-	-	na	-	-
Endrin ketone	mg/kg	-	-	-	-	na	-	-
Methoxychlor	mg/kg	-	-	-	-	na	-	-
Pendimethalin (Prowl)	mg/kg	-	-	-	-	na	-	-
PCB-1248		NA	NA	-	-	na	-	-
PCB-1254		NA	NA	-	-	na	-	-
Inorganics								
Aluminum	mg/kg	25000	45000	25F-SD02-0.25	4/4	na	-	-
Barium	mg/kg	160	220 J	25F-SD02-0.25	4/4	na	-	-
Beryllium	mg/kg	0.63	1.2 J	25F-SD02-0.25	4/4	na	-	-
Boron	mg/kg	15 J	15 J	25F-SD02-0.25	1/4	na	-	-
Chromium	mg/kg	52	88 J	25F-SD02-0.25	4/4	43.4	4/4	2.0
Chromium VI		NA	NA	-	-	na	-	-
Cobalt	mg/kg	18	21 J	25F-SD02-0.25	4/4	na	-	-
Copper	mg/kg	38	58 J	25F-SD02-0.25	4/4	31.6	4/4	1.8
Lead	mg/kg	8.4	13	25F-SD02-0.25	4/4	35.8	0/4	-
Lithium	mg/kg	11	20 J	25F-SD02-0.25	4/4	na	-	-
Manganese	mg/kg	800	850	25F-HA02-1	4/4	460	4/4	1.8
Mercury	mg/kg	0.05	0.064	25F-SD02-0.25	4/4	0.18	0/4	-
Molybdenum	mg/kg	0.41 J	1.1 J	25F-SD02-0.25	2/4	na	-	-
Nickel	mg/kg	45	69 J	25F-SD02-0.25	4/4	16	4/4	4.3
Strontium	mg/kg	33	40	25F-SD02-0.25	4/4	na	-	-
Thallium	mg/kg	0.2 J	2.6 J	25F-HA02-1	4/4	na	-	-
Titanium	mg/kg	570	1300	25F-SD02-0.25	4/4	na	-	-
Vanadium	mg/kg	69	110	25F-SD02-0.25	4/4	na	-	-

Notes and Key:

Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available
NA = Not analyzed

Table 6.9-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Magazine Area	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.51-2.9	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	12	0	0%	0.51-2.9	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	12	0	0%	0.51-2.9	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	29	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	29	N	ND
	7429-90-5	Aluminum	4900	39000	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	29	N	ND
	7440-36-0	Antimony	0.11	0.54	mg/kg	OS3-F1-SB03-2.0	2	11	6	55%	1-9.4	0.27	Y	
	7440-38-2	Arsenic	1.8	12	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	18	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	7440-39-3	Barium	27	210	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	330	N	BSL
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	12	0	0%	0.36-2	NA	N	ND
	56-55-3	Benzo (a) anthracene	0.0035	0.0035	mg/kg	OS3-F1-SB03-0.5	0.5	12	1	8%	0.0066-0.038	1.1	N	BSL
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	1.1	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	12	0	0%	0.013-0.076	1.1	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	1.1	N	ND

Table 6.9-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Magazine Area	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	12	0	0%	0.51-2.9	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	0.0125	N	ND*
	7440-41-7	Beryllium	0.12	1.2	mg/kg	OS3-F1-SB01-2.0	2	12	10	83%	0.23-0.25	21	N	BSL
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	12	0	0%	0.51-2.9	0.04	N	ND*
	7440-42-8	Boron	2.2	23	mg/kg	OS3-F1-SB03-2.0	2	12	6	50%	2-4.7	0.5	Y	
	7440-43-9	Cadmium	0.06	0.51	mg/kg	A48-RC08-SB01-5.5	5.5	12	11	92%	0.42-0.42	0.36	N	BG
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	7440-47-3	Chromium	16	100	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	26	N	BG
	218-01-9	Chrysene	0.013	0.029	mg/kg	OS3-F1-SB01-0.5	0.5	12	2	17%	0.0066-0.01	1.1	N	BSL
	7440-48-4	Cobalt	3.5	31	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	13	N	BG
	7440-50-8	Copper	16	69	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	28	N	BG
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	1.1	N	ND
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	12	0	0%	0.41-2.3	0.0125	N	ND*
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	0.0125	N	ND*
	206-44-0	Fluoranthene	0.0023	0.0023	mg/kg	OS3-F1-SB03-0.5	0.5	12	1	8%	0.0066-0.038	1.1	N	BSL
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	29	N	ND
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-4.1	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	2691-41-0	HMX	ND	ND	mg/kg	ND	ND	6	0	0%	0.03-0.03	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	1.1	N	ND
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	7439-92-1	Lead	2.4	17	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	11	N	BG
	7439-93-2	Lithium	3.4	17	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	2	Y	
	7439-96-5	Manganese	130	560	mg/kg	OS3-F1-SB03-2.0	2	12	12	100%	NA	220	N	BG
	7439-97-6	Mercury	0.0063	0.1	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	0.00051	N	BG
	7439-98-7	Molybdenum	0.27	2.6	mg/kg	OS3-F1-SB02-2.0	2	12	12	100%	NA	2	Y	
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	29	N	ND
	7440-02-0	Nickel	15	74	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	38	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	556887	Nitroguanidine-DISS	ND	ND	mg/kg	ND	ND	12	0	0%	0.032-0.25	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND

Table 6.9-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Magazine Area	122-39-4	N-Nitrosodiphenylamine (as Diphenylamin	ND	ND	mg/kg	ND	ND	12	0	0%	0.2-1.2	NA	N	ND
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	12	0	0%	0.71-4.1	2.1	N	ND
	14797-73-0	Perchlorate	0.043	0.33	mg/kg	A48-ST13-SB01-6.0	6	8	2	25%	0.046-0.06	1.17	N	BSL
	85-01-8	Phenanthrene	0.0043	0.029	mg/kg	OS3-F1-SB01-0.5	0.5	12	3	25%	0.0066-0.01	29	N	BSL
	108-95-2	Phenol	0.68	1.2	mg/kg	OS3-F1-SB01-2.0	2	12	4	33%	0.2-1.2	30	N	BSL
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	12	0	0%	0.0066-0.038	1.1	N	ND
	121824	RDX	ND	ND	mg/kg	ND	ND	6	0	0%	0.04-0.04	NA	N	ND
	7782-49-2	Selenium	ND	ND	mg/kg	ND	ND	12	0	0%	0.81-3	0.52	N	ND*
	7440-22-4	Silver	0.064	0.16	mg/kg	OS3-F1-SB01-2.0	2	12	6	50%	0.4-0.94	4.2	N	BSL
	7440-24-6	Strontium	9.8	55	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	NA	Y	
	7440-28-0	Thallium	0.14	2.5	mg/kg	A48-RC08-SB01-5.5	5.5	12	8	67%	1.2-4.2	1	N	BG
	7440-32-6	Titanium	240	1200	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	1000	Y	
	7440-62-2	Vanadium	15	150	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	7.8	N	BG
	7440-66-6	Zinc	18	85	mg/kg	OS3-F1-SB01-2.0	2	12	12	100%	NA	46	N	BG

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.9-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Magazine Area	71-55-6	1,1,1-Trichloroethane	8.9	9	$\mu g/m^3$	A48-ST13-SP06-10	10	27	1	3.7%	5.4-7.7	1.9E+05	N	BSL
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	5.4-7.7	5.7E+03	UA	
	75-34-3	1,1-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4-5.7	1.8E+05	UA	
	75-35-4	1,1-Dichloroethene	9	9	$\mu g/m^3$	A48-ST13-SP06-10	10	27	1	3.7%	3.9-5.6	6.0E+03	N	BSL
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4.9-6.9	1.6E+04	UA	
	107-06-2	1,2-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4-5.7	4.2E+04	UA	
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4.9-6.9	1.6E+04	UA	
	106-99-0	1,3-Butadiene	3.3	62	$\mu g/m^3$	A48-ST13-SP05-30	30	27	20	74.1%	2.5-3		UA	
	123-91-1	1,4-Dioxane	19	28	$\mu g/m^3$	A48-ST13-SP04-30	30	27	2	7.4%	14-20		UA	
	540-84-1	2,2,4-Trimethylpentane	9.6	10	$\mu g/m^3$	A48-ST13-SP06-30	30	27	1	3.7%	4.6-6.6		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	22	200	$\mu g/m^3$	A48-ST13-SP05-30	30	27	10	37.0%	3.7-18	8.6E+05	N	BSL
	591-78-6	2-Hexanone	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	16-23	4.9E+03	UA	
	67-63-0	2-Propanol	14	25	$\mu g/m^3$	A48-ST13-SP06-30	30	27	3	11.1%	9.8-14		UA	
	622-96-8	4-Ethyltoluene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4.9-6.9		UA	
	108-10-1	4-Methyl-2-pentanone	5.2	16	$\mu g/m^3$	A48-ST13-SP03-20-T	20	27	8	29.6%	4.1-5.8		UA	
	67-64-1	Acetone	58	1,800	$\mu g/m^3$	A48-ST13-SP05-30	30	27	19	70.4%	15-160		UA	
	71-43-2	Benzene	4.3	54	$\mu g/m^3$	A48-ST13-SP05-30	30	27	16	59.3%	3.6-4.3	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	6.7-9.4		UA	
	75-15-0	Carbon Disulfide	4.4	25	$\mu g/m^3$	A48-ST13-SP03-20-T	20	27	21	77.8%	3.6-4.2	1.2E+03	N	BSL
	56-23-5	Carbon Tetrachloride	42	42	$\mu g/m^3$	A48-ST13-SP05-30	30	27	1	3.7%	6.3-8.9	6.3E+03	N	BSL
	75-00-3	Chloroethane	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	2.6-3.7	9.9E+05	UA	
	67-66-3	Chloroform	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4.8-6.9	1.2E+03	UA	

Table 6.9-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Magazine Area	156-59-2	cis-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	3.9-5.6	1.9E+04	UA	
	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4.9-6.9	2.3E+04	UA	
	110-82-7	Cyclohexane	4.5	6	$\mu g/m^3$	A48-ST13-SP06-30	30	27	4	14.8%	3.4-4.8		UA	
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	8.5-12		UA	
	64-17-5	Ethanol	8.3	720	$\mu g/m^3$	A48-ST13-SP07-30	30	27	11	40.7%	8.6-46		UA	
	100-41-4	Ethyl Benzene	6.6	7	$\mu g/m^3$	A48-ST13-SP06-30	30	27	1	3.7%	4.3-6.1	2.3E+04	N	BSL
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	5.6-7.9	8.8E+04	UA	
	76-13-1	Freon 113	15	630	$\mu g/m^3$	A48-ST13-SP06-10	10	27	5	18.5%	8-11	8.8E+04	N	BSL
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4.9-7	8.8E+04	UA	
	142-82-5	Heptane	5.2	76	$\mu g/m^3$	A48-ST13-SP06-30	30	27	11	40.7%	4.7-5.8		UA	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	42-60		UA	
	110-54-3	Hexane	4.8	110	$\mu g/m^3$	A48-ST13-SP05-30	30	27	20	74.1%	4-4.5		UA	
	95-47-6	o-Xylene	5.5	6	$\mu g/m^3$	A48-ST13-SP03-10	10	27	1	3.7%	4.3-6.1	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	27	0	NA	3.6-5.1	2.6E+05	UA	
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	3.4-4.9	8.7E+03	UA	
	103-65-1	Propylbenzene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	4.9-6.9		UA	
	100-42-5	Styrene	7.1	7	$\mu g/m^3$	A48-ST13-SP07-20	20	27	1	3.7%	4.2-6	1.9E+05	N	BSL
	127-18-4	Tetrachloroethene	8	1,800	$\mu g/m^3$	A48-ST13-SP06-10	10	27	19	70.4%	8.2-8.8	2.4E+04	N	BSL
	109-99-9	Tetrahydrofuran	7.6	64	$\mu g/m^3$	A48-ST13-SP04-30	30	27	13	48.1%	3.4-4.2		UA	
	108-88-3	Toluene	4.8	750	$\mu g/m^3$	A48-RC08-SP01-30	30	27	25	92.6%	4.8-4.9	8.4E+01	Y	
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	3.9-5.6	1.9E+04	UA	
	79-01-6	Trichloroethene	6.7	520	$\mu g/m^3$	A48-ST13-SP06-10	10	27	16	59.3%	5.6-7.2	6.4E+03	N	BSL
	75-01-4	Vinyl Chloride	ND	ND	$\mu g/m^3$	ND	ND	27	0	0.0%	2.5-3.6	5.6E+02	UA	

Footnotes:

(1) See Table ?

(2) Rationale for Deletion

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.9-3 *Risk Characterization Summary Table*
Soil Habitat 0 to 1 foot
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	**Unit**	**Minimum Detection**	**Maximum Detection**	**Location of Maximum**	**Frequency of Detection**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**BTV**	**Frequency of Exceedance**	**HQ**
Inorganics																				
Antimony	mg/kg	0.33 J	0.33 J	OS3-F1-SB03-0.5	1/1	na	-	-	78	0/1	-	na	-	-	0.27	1/1	1.2	0.459	0/1	
Boron	mg/kg	21	21	OS3-F1-SB03-0.5	1/1	0.5	1/1	42	20	1/1	1.1	na	-	-	na	-	-	19^	1/1	1.1
Lithium	mg/kg	6.4	6.4	OS3-F1-SB03-0.5	1/1	2	1/1	3.2	10	0/1	-	na	-	-	390	0/1	-	23^	0/1	
Molybdenum	mg/kg	1 J	1 J	OS3-F1-SB03-0.5	1/1	2	0/1	-	200	0/1	-	44	0/1	-	4.75	0/1	-			
Strontium	mg/kg	31	31	OS3-F1-SB03-0.5	1/1	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	880	880	OS3-F1-SB03-0.5	1/1	na	-	-	1000	0/1	-	na	-	-	na	-	-			

Notes and Key:
na - not available
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.9-4 ***Risk Characterization Summary Table***
Soil Habitat 1 to 6 feet
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	**Unit**	**Minimum Detection**	**Maximum Detection**	**Location of Maximum**	**Frequency of Detection**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**BTV**	**Frequency of Exceedance**	**HQ**
Inorganics																				
Antimony	mg/kg	0.54 J	0.54 J	OS3-F1-SB03-2	1/5	na	-	-	78	0/5	-	na	-	-	0.27	1/5	2.0	0.459	1/5	1.2
Boron	mg/kg	23	23	OS3-F1-SB03-2	1/5	0.5	1/5	46	20	1/5	1.2	na	-	-	na	-	-	19^	1/5	1.2
Lithium	mg/kg	3.4	8.2	OS3-F1-SB03-2	5/5	2	5/5	4.1	10	0/5	-	na	-	-	390	0/5	-	23^	0/5	
Molybdenum	mg/kg	0.27 J	1.1 J	OS3-F1-SB03-2	5/5	2	0/5	-	200	0/5	-	44	0/5	-	4.75	0/5	-			
Strontium	mg/kg	9.8	32	OS3-F1-SB03-2	5/5	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	240	1000	OS3-F1-SB03-2	5/5	na	-	-	1000	0/5	-	na	-	-	na	-	-			

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.9-5 Risk Characterization Summary Table
Soil Vapor - Top Depth
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance
1,1,1-Trichloroethane	$\mu g/m^3$	191000	8.9	8.9	A48-ST13-SP06-10	1/7	0/7
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/7	-
1,1-Dichloroethane	$\mu g/m^3$	181000	-	-	-	0/7	-
1,1-Dichloroethene	$\mu g/m^3$	6000	9	9	A48-ST13-SP06-10	1/7	0/7
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/7	-
1,2-Dichloroethane	$\mu g/m^3$	42000	-	-	-	0/7	-
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	-	-	-	0/7	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	57	57	A48-ST13-SP03-10	1/7	0/7
2-Hexanone	$\mu g/m^3$	4880	-	-	-	0/7	-
Acetone	$\mu g/m^3$	1305000	58	320	A48-ST13-SP03-10	6/7	0/7
Benzene	$\mu g/m^3$	570	5.6	16	A48-ST13-SP07-10	4/7	0/7
Carbon Disulfide	$\mu g/m^3$	1200	4.4	21	A48-ST13-SP03-10	6/7	0/7
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/7	-
Chloroethane	$\mu g/m^3$	992000	-	-	-	0/7	-
Chloroform	$\mu g/m^3$	1200	-	-	-	0/7	-
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/7	-
Cumene	$\mu g/m^3$	23000	-	-	-	0/7	-
Ethyl Benzene	$\mu g/m^3$	23000	-	-	-	0/7	-
Freon 11	$\mu g/m^3$	88000	-	-	-	0/7	-
Freon 113	$\mu g/m^3$	88000	630	630	A48-ST13-SP06-10	1/7	0/7
Freon 12	$\mu g/m^3$	88000	-	-	-	0/7	-
m,p-Xylene	$\mu g/m^3$	16000	7.6	16	A48-ST13-SP03-10	3/7	0/7
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/7	-
Methylene Chloride	$\mu g/m^3$	9000	-	-	-	0/7	-
o-Xylene	$\mu g/m^3$	16000	5.5	5.5	A48-ST13-SP03-10	1/7	0/7
Styrene	$\mu g/m^3$	192000	-	-	-	0/7	-
Tetrachloroethene	$\mu g/m^3$	24000	8	1800	A48-ST13-SP06-10	7/7	0/7
Toluene	$\mu g/m^3$	84	5.1	18	A48-ST13-SP07-10	7/7	0/7
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/7	-
Trichloroethene	$\mu g/m^3$	6400	22	520	A48-ST13-SP06-10	4/7	0/7
Vinyl Chloride	$\mu g/m^3$	560	-	-	-	0/7	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
$\mu g/m^3$ = Micrograms per cubic meter
na = Not available

Table 6.10-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 1, 2	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.55-0.71	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	5	0	0%	0.55-0.71	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	72-54-8	4,4'-DDD	ND	ND	mg/kg	ND	ND	3	0	0%	0.0082-0.0086	0.021	N	ND
	72-55-9	4,4'-DDE	ND	ND	mg/kg	ND	ND	3	0	0%	0.0027-0.0029	0.021	N	ND
	50-29-3	4,4'-DDT	ND	ND	mg/kg	ND	ND	3	0	0%	0.0082-0.0086	0.021	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	5	0	0%	0.55-0.71	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	29	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	29	N	ND
	309-00-2	Aldrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0014-0.0014	0.008247	N	ND
	319-84-6	alpha-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0014-0.0014	0.356	N	ND
	7429-90-5	Aluminum	11000	52000	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	29	N	ND
	7440-36-0	Antimony	0.12	0.52	mg/kg	OS2-F1-SB01-1.0-T	1	6	5	83%	1.4-1.4	0.27	Y	
	7440-38-2	Arsenic	3.5	9.4	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	18	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	7440-39-3	Barium	81	240	mg/kg	OS2-F1-SB01-1.0-T	1	6	6	100%	NA	330	N	BSL

Table 6.10-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 1, 2	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	5	0	0%	0.39-0.5	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	5	0	0%	0.015-0.019	1.1	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	5	0	0%	0.55-0.71	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	0.0125	N	ND*
	7440-41-7	Beryllium	0.3	1.2	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	21	N	BSL
	319-85-7	beta-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0014-0.0014	0.315	N	ND
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	5	0	0%	0.55-0.71	0.04	N	ND*
	7440-42-8	Boron	3.5	10	mg/kg	OS2-F1-SB01-1.0-T OS1-F1-SB01-1.0	1 1	6	6	100%	NA	0.5	Y	
	7440-43-9	Cadmium	0.081	0.19	mg/kg	OS1-F1-SB01-1.0	1	6	6	100%	NA	0.36	N	BSL
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	57-74-9	Chlordane (tech)	ND	ND	mg/kg	ND	ND	3	0	0%	0.027-0.029	NA	N	ND
	7440-47-3	Chromium	62	77	mg/kg	OS2-F1-SB01-1.0-T	1	6	6	100%	NA	26	N	BG
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	7440-48-4	Cobalt	8.1	23	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	13	N	BG
	7440-50-8	Copper	38	64	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	28	N	BG
	319-86-8	delta-BHC	ND	ND	mg/kg	ND	ND	3	0	0%	0.0014-0.0014	0.346	N	ND
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	60-57-1	Dieldrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0027-0.0029	0.0049	N	ND
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	5	0	0%	0.44-0.57	0.0125	N	ND*
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	0.0125	N	ND*
	959-98-8	Endosulfan I	ND	ND	mg/kg	ND	ND	3	0	0%	0.0027-0.0029	0.0633	N	ND
	33213-65-9	Endosulfan II	ND	ND	mg/kg	ND	ND	3	0	0%	0.0027-0.0029	0.0633	N	ND
	1031-07-8	Endosulfan sulfate	ND	ND	mg/kg	ND	ND	3	0	0%	0.0082-0.0086	0.0633	N	ND
	72-20-8	Endrin	ND	ND	mg/kg	ND	ND	3	0	0%	0.0027-0.0029	0.003163	N	ND
	7421-93-4	Endrin aldehyde	ND	ND	mg/kg	ND	ND	3	0	0%	0.0082-0.0086	0.005284	N	ND
	53494-70-5	Endrin ketone	ND	ND	mg/kg	ND	ND	3	0	0%	0.0082-0.0086	NA	N	ND
	206-44-0	Fluoranthene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	29	N	ND
	58-89-9	gamma-BHC (Lindane)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0014-0.0014	0.029281	N	ND
	76-44-8	Heptachlor	ND	ND	mg/kg	ND	ND	3	0	0%	0.0014-0.0014	0.003394	N	ND
	1024-57-3	Heptachlor epoxide	ND	ND	mg/kg	ND	ND	3	0	0%	0.0014-0.0014	0.363	N	ND

Table 6.10-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 1, 2	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	5	0	0%	0.77-1	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	7439-92-1	Lead	6.1	12	mg/kg	OS2-F1-SB01-1.0-T	1	6	6	100%	NA	11	N	BG
	7439-93-2	Lithium	4.7	23	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	2	Y	
	7439-96-5	Manganese	270	820	mg/kg	OS2-F1-SB01-1.0 OS2-F1-SB02-1	1 1	6	6	100%	NA	220	N	BG
	7439-97-6	Mercury	0.028	0.11	mg/kg	OS1-F1-SB01-1.0 OS2-F1-SB02-1	1 1	6	6	100%	NA	0.00051	N	BG
	72-43-5	Methoxychlor	ND	ND	mg/kg	ND	ND	3	0	0%	0.0055-0.029	5.742	N	ND
	7439-98-7	Molybdenum	0.4	0.77	mg/kg	OS1-F1-SB01-5.0	5	6	5	83%	1.4-1.4	2	N	BSL
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	29	N	ND
	7440-02-0	Nickel	22	77	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	38	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	5	0	0%	0.22-0.29	NA	N	ND
	40487-42-1	Pendimethalin (Prowl)	ND	ND	mg/kg	ND	ND	3	0	0%	0.0068-0.0071	0.624	N	ND
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	5	0	0%	0.77-1	2.1	N	ND
	S-PH	pH	7.57	7.57	none	OS2-F1-SB02-1	1	1	1	100%	NA	NA	N	
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	29	N	ND
	108-95-2	Phenol	1.3	2.7	mg/kg	OS2-F1-SB01-1.0	1	5	2	40%	0.28-0.29	30	N	BSL
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	5	0	0%	0.0073-0.0094	1.1	N	ND
	7782-49-2	Selenium	0.3	0.3	mg/kg	OS2-F1-SB01-1.0	1	6	1	17%	1.1-1.4	0.52	N	BSL
	7440-22-4	Silver	0.048	0.12	mg/kg	OS1-F1-SB01-1.0	1	6	6	100%	NA	4.2	N	BSL
	7440-24-6	Strontium	23	51	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	NA	Y	
	7440-28-0	Thallium	0.22	0.25	mg/kg	OS2-F1-SB02-1 OS1-F1-SB01-5.0-T	1 5	6	6	100%	NA	1	N	BSL
	7440-32-6	Titanium	550	1400	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	1000	Y	
	8001-35-2	Toxaphene	ND	ND	mg/kg	ND	ND	3	0	0%	0.11-0.11	NA	N	ND
	7440-62-2	Vanadium	43	130	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	7.8	N	BG
	7440-66-6	Zinc	29	79	mg/kg	OS2-F1-SB01-1.0	1	6	6	100%	NA	46	N	BG

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.10-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor*
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 1, 2	71-55-6	1,1,1-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	6.4-7.5	1.9E+05	UA	
	79-00-5	1,1,2-Trichloroethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	5.8-12	5.7E+03	UA	
	75-34-3	1,1-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	4.3-8.9	1.8E+05	UA	
	75-35-4	1,1-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	4.2-8.7	6.0E+03	UA	
	95-63-6	1,2,4-Trimethylbenzene	7.7	21	$\mu g/m^3$	OS4-F1-SP02	10	16	4	25%	5.2-11	1.6E+04	N	BSL
	107-06-2	1,2-Dichloroethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	4.3-8.9	4.2E+04	UA	
	108-67-8	1,3,5-Trimethylbenzene	6.6	6.6	$\mu g/m^3$	OS4-F1-SP02	10	16	1	6%	5.2-11	1.6E+04	N	BSL
	106-99-0	1,3-Butadiene	4	30	$\mu g/m^3$	OS1-F2-SP01, OS1-F2-SP01	10 20	16	13	81%	2.4-4.9		UA	
	123-91-1	1,4-Dioxane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	15-32		UA	
	540-84-1	2,2,4-Trimethylpentane	8.4	22	$\mu g/m^3$	OS4-F1-SP03	20	16	4	25%	5-10		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	22	370	$\mu g/m^3$	OS4-F1-SP03	10	16	8	50%	3.4-16	8.6E+05	N	BSL
	591-78-6	2-Hexanone	28	48	$\mu g/m^3$	OS4-F1-SP03	10	16	2	13%	17-36	4.9E+03	N	BSL
	67-63-0	2-Propanol	15	25	$\mu g/m^3$	OS4-F1-SP01	10	16	2	13%	10-22		UA	
	622-96-8	4-Ethyltoluene	8.5	28	$\mu g/m^3$	OS4-F1-SP02	20	16	4	25%	5.2-11		UA	
	108-10-1	4-Methyl-2-pentanone	5.2	27	$\mu g/m^3$	OS1-F2-SP01	10	16	4	25%	4.4-9		UA	
	67-64-1	Acetone	59	300	$\mu g/m^3$	OS3-F1-SP03	20	16	7	44%	11-49		UA	
	71-43-2	Benzene	3.8	98	$\mu g/m^3$	OS4-F1-SP03	20	16	11	69%	3.4-7	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	7.1-15		UA	
	75-15-0	Carbon Disulfide	5.1	14	$\mu g/m^3$	OS3-F1-SP01	10	16	7	44%	3.3-6.8	1.2E+03	N	BSL
	56-23-5	Carbon Tetrachloride	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	6.7-14	6.3E+03	UA	
	75-00-3	Chloroethane	3.6	3.6	$\mu g/m^3$	OS4-F1-SP02	10	16	1	6%	2.8-5.8	9.9E+05	N	BSL
	67-66-3	Chloroform	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	5.2-11	1.2E+03	UA	
	156-59-2	cis-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	4.2-8.7	1.9E+04	UA	

Table 6.10-2 *Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor*
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Open Space 1, 2	98-82-8	Cumene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	5.2-11	2.3E+04	UA	
	110-82-7	Cyclohexane	15	39	$\mu g/m^3$	OS4-F1-SP03	20	16	4	25%	3.7-7.6		UA	
	124-48-1	Dibromochloromethane	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	9.1-19		UA	
	64-17-5	Ethanol	13	320	$\mu g/m^3$	OS4-F1-SP02	20	16	10	63%	8.4-16		UA	
	100-41-4	Ethyl Benzene	69	120	$\mu g/m^3$	OS4-F1-SP02	20	16	4	25%	4.6-9.6	2.3E+04	N	BSL
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	6-12	8.8E+04	UA	
	76-13-1	Freon 113	19	54	$\mu g/m^3$	OS4-F1-SP01	20	16	3	19%	8.2-17	8.8E+04	N	BSL
	75-71-8	Freon 12	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	5.3-11	8.8E+04	UA	
	142-82-5	Heptane	8.4	120	$\mu g/m^3$	OS4-F1-SP03	20	16	8	50%	4.4-9		UA	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	45-94		UA	
	110-54-3	Hexane	4.8	120	$\mu g/m^3$	OS4-F1-SP03	20	16	10	63%	3.8-7.8		UA	
	95-47-6	o-Xylene	42	91	$\mu g/m^3$	OS4-F1-SP02	20	16	4	NA	4.6-9.6	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	3.8-7.9	2.6E+05	UA	
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	16	0	NA	NA	8.7E+03	UA	
	103-65-1	Propylbenzene	7.4	7.4	$\mu g/m^3$	OS4-F1-SP02, OS4-F1-SP02	10 20	16	2	13%	5.2-11		UA	
	100-42-5	Styrene	12	19	$\mu g/m^3$	OS4-F1-SP03	20	16	3	19%	4.5-9.4	1.9E+05	N	BSL
	127-18-4	Tetrachloroethene	31	160	$\mu g/m^3$	OS4-F1-SP01	10	16	4	25%	7.2-15	2.4E+04	N	BSL
	109-99-9	Tetrahydrofuran	3.6	25	$\mu g/m^3$	OS4-F1-SP03	20	16	7	44%	3.3-6.5		UA	
	108-88-3	Toluene	5.4	1000	$\mu g/m^3$	OS4-F1-SP02, OS4-F1-SP03	20 10	16	15	94%	4-21	8.4E+01	Y	
	156-60-5	trans-1,2-Dichloroethene	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	4.2-8.7	1.9E+04	UA	
	79-01-6	Trichloroethene	13	32	$\mu g/m^3$	OS3-F1-SP02	10	16	4	25%	5.7-120	6.4E+03	N	BSL
	75-01-4	Vinyl Chloride	ND	ND	$\mu g/m^3$	ND	ND	16	0	0%	2.7-5.6	5.6E+02	UA	

Footnotes:

(1) See Table ?

(2) Rationale for Delection

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.10-3 *Risk Characterization Summary Table*
Soil Habitat 0 to 1 foot
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Inorganics																				
Antimony	mg/kg	0.12 J	0.52 J	OS2-F1-SB01-1	3/3	na	-	-	na	-	-	na	-	-	0.27	1/3	1.9	0.459	1/3	1.1
Boron	mg/kg	8.3	10 J	OS2-F1-SB01-1	3/3	0.5	3/3	20	20	0/3	-	na	-	-	na	-	-	19^	0/3	
Lithium	mg/kg	5.6 J	23	OS2-F1-SB01-1	3/3	2	3/3	12	10	2/3	2.3	na	-	-	390	0/3	-	23^	0/3	
Strontium	mg/kg	36 J	51	OS2-F1-SB01-1	3/3	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	710	1400	OS2-F1-SB01-1	3/3	na	-	-	1000	2/3	1.4	na	-	-	na	-	-			

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.10-4 ***Risk Characterization Summary Table***
Soil Habitat 1 to 6 feet
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	**Unit**	**Minimum Detection**	**Maximum Detection**	**Location of Maximum**	**Frequency of Detection**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**Screening Level**	**Frequency of Exceedance**	**HQ**	**BTV**	**Frequency of Exceedance**	**HQ**
Inorganics																				
Antimony	mg/kg	0.29 J	0.4 J	OS2-F1-SB01-5	2/3	na	-	-	78	0/3	-	na	-	-	0.27	2/3	1.5	0.459	0/3	
Boron	mg/kg	3.5 J	8.1	OS2-F1-SB01-5	3/3	0.5	3/3	0.8	20	0/3	-	na	-	-	na	-	-	19^	0/3	
Lithium	mg/kg	4.7 J	9.4	OS2-F1-SB01-5	3/3	2	3/3	4.1	10	0/3	-	na	-	-	390	0/3	-	23^	0/3	
Strontium	mg/kg	23 J	36 J	OS2-F1-SB02-5	3/3	na	-	-	na	-	-	na	-	-	na	-	-			
Titanium	mg/kg	550 J	840	OS2-F1-SB01-5	3/3	na	-	-	1000	0/3	-	na	-	-	na	-	-			

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.10-5 Risk Characterization Summary Table
Soil Vapor Habitat - Top Depth
Open Space 1, 2, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance	HQs
1,1,1-Trichloroethane	$\mu g/m^3$	191000	-	-	-	0/6	-	-
1,1,2-Trichloroethane	$\mu g/m^3$	5700	-	-	-	0/6	-	-
1,1-Dichloroethane	$\mu g/m^3$	181000	-	-	-	0/6	-	-
1,1-Dichloroethene	$\mu g/m^3$	6000	-	-	-	0/6	-	-
1,2,4-Trimethylbenzene	$\mu g/m^3$	16000	7.7	21	OS4-F1-SP02-10	3/6	0/6	-
1,2-Dichloroethane	$\mu g/m^3$	42000	-	-	-	0/6	-	-
1,3,5-Trimethylbenzene	$\mu g/m^3$	16000	6.6	6.6	OS4-F1-SP02-10	1/6	0/6	-
2-Butanone (Methyl Ethyl Ketone)	$\mu g/m^3$	860000	22	370	OS4-F1-SP03-10	4/6	0/6	-
2-Hexanone	$\mu g/m^3$	4880	48	48	OS4-F1-SP03-10	1/6	0/6	-
Acetone	$\mu g/m^3$	1305000	59	280	OS1-F2-SP01-10	4/6	0/6	-
Benzene	$\mu g/m^3$	570	14	83	OS4-F1-SP03-10	3/6	0/6	-
Carbon Disulfide	$\mu g/m^3$	1200	5.1	9.7	OS1-F2-SP01-10	2/6	0/6	-
Carbon Tetrachloride	$\mu g/m^3$	6300	-	-	-	0/6	-	-
Chloroethane	$\mu g/m^3$	992000	3.6	3.6	OS4-F1-SP02-10	1/6	0/6	-
Chloroform	$\mu g/m^3$	1200	-	-	-	0/6	-	-
cis-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/6	-	-
Cumene	$\mu g/m^3$	23000	-	-	-	0/6	-	-
Ethyl Benzene	$\mu g/m^3$	23000	89	94	OS4-F1-SP02-10	2/6	0/6	-
Freon 11	$\mu g/m^3$	88000	-	-	-	0/6	-	-
Freon 113	$\mu g/m^3$	88000	51	51	OS4-F1-SP01-10	1/6	0/6	-
Freon 12	$\mu g/m^3$	88000	-	-	-	0/6	-	-
m,p-Xylene	$\mu g/m^3$	16000	5.7	260	OS4-F1-SP02-10	4/6	0/6	-
Methyl tert-butyl ether	$\mu g/m^3$	258000	-	-	-	0/6	-	-
Methylene Chloride	$\mu g/m^3$	9000	-	-	-	0/6	-	-
o-Xylene	$\mu g/m^3$	16000	55	57	OS4-F1-SP02-10	2/6	0/6	-
Styrene	$\mu g/m^3$	192000	12	12	OS4-F1-SP03-10	1/6	0/6	-
Tetrachloroethene	$\mu g/m^3$	24000	48	160	OS4-F1-SP01-10	2/6	0/6	-
Toluene	$\mu g/m^3$	84	6.6	1000	OS4-F1-SP03-10	6/6	2/6	12
trans-1,2-Dichloroethene	$\mu g/m^3$	19000	-	-	-	0/6	-	-
Trichloroethene	$\mu g/m^3$	6400	17	17	OS4-F1-SP01-10	1/6	0/6	-
Vinyl Chloride	$\mu g/m^3$	560	-	-	-	0/6	-	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
$\mu g/m^3$ = Micrograms per cubic meter
na = Not available

Table 6.11-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39		1,2,3,4,6,7,8-HpCDD	0.00000301	0.000045	mg/kg	34B-AH01	0.01	20	6	30%	0.000000305 - 0.000000532	NA	Y	
		1,2,3,4,6,7,8-HpCDF	0.00000056	0.00017	mg/kg	34B-AH01	0.01	23	9	39%	0.000000167 - 0.000000239	NA	Y	
		1,2,3,4,7,8,9-HpCDF	0.0000019	0.000024	mg/kg	34B-AH01	0.01	19	5	26%	0.000000152 - 0.000000225	NA	Y	
		1,2,3,4,7,8-HxCDD	0.000000503	0.0000041	mg/kg	34B-AH01	0.01	17	2	12%	0.00000028 - 0.000000517	NA	Y	
		1,2,3,4,7,8-HxCDF	0.00000021	0.000049	mg/kg	30B-SB02	0.01	20	6	30%	0.000000104 - 0.000000165	NA	Y	
		1,2,3,6,7,8-HxCDD	0.000000663	0.0000046	mg/kg	34B-AH01	0.01	17	3	18%	0.000000253 - 0.000000457	NA	Y	
		1,2,3,6,7,8-HxCDF	0.00000294	0.00003	mg/kg	30B-SB02	0.01	18	4	22%	0.0000000829 - 0.000000147	NA	Y	
		1,2,3,7,8,9-HxCDD	0.000000507	0.0000057	mg/kg	34B-AH01	0.01	17	3	18%	0.000000218 - 0.000000412	NA	Y	
		1,2,3,7,8,9-HxCDF	0.00000128	0.000017	mg/kg	30B-SB02	0.01, 0	20	6	30%	0.000000122 - 0.000000205	NA	Y	
		1,2,3,7,8-PeCDD	ND	ND	mg/kg	ND	ND	16	0	0%	0.000000132 - 0.000000295	NA	N	ND
		1,2,3,7,8-PeCDF	0.00000155	0.000024	mg/kg	30B-SB02	0.01	18	4	22%	0.000000166 - 0.00000033	NA	Y	
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 20	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
		2,3,4,6,7,8-HxCDF	0.00000245	0.000025	mg/kg	30B-SB02	0.01	18	4	22%	0.000000106 - 0.000000184	NA	Y	
		2,3,4,7,8-PeCDF	0.00000135	0.000031	mg/kg	30B-SB02	0.01	18	4	22%	0.000000158 - 0.000000292	NA	Y	
		2,3,7,8-TCDD	ND	ND	mg/kg	ND	ND	16	0	0%	0.000000104 - 0.00000017	0.00000014	N	ND*
		2,3,7,8-TCDD TEQ	1.74E-09	0.00030	mg/kg	30B-SB02	0.01	41	27	66%	-	0.00000014	Y	
		2,3,7,8-TCDF	0.00000025	0.000011	mg/kg	30B-SB02	0.01	22	8	36%	0.0000000635 - 0.000000129	NA	Y	
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.6 - 17	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	29	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 17	NA	N	ND

Table 6.11-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	20	0	0%	0.6 - 6.7	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 17	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 17	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.33	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 4	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.33	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	20	0	0%	0.6 - 17	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 17	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	29	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	29	N	ND
	7429-90-5	Aluminum	6100	69000	mg/kg	32B-SB04	5	45	45	100%	8.3 - 36	NA	N	BG
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	29	N	ND
	7440-36-0	Antimony	0.038	0.75	mg/kg	33B-SB03	1.5	45	29	64%	1 - 17	0.27	N	BG
	7440-38-2	Arsenic	0.53	7.8	mg/kg	29B-SB06	5	45	42	93%	1.7 - 7.2	18	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	5	0	0%	0.24 - 0.28	NA	N	ND
	7440-39-3	Barium	78	500	mg/kg	32B-SB04	5	45	45	100%	1 - 4.5	330	Y	
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	5	0	0%	0.42 - 0.49	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	Benzo (b&k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	5	0	0%	0.016 - 0.019	1.1	N	ND
	205-99-2	Benzo (b) fluoranthene	ND	ND	mg/kg	ND	ND	15	0	0%	0.33 - 3.3	1.1	N	ND*
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	207-08-9	Benzo (k) fluoranthene	ND	ND	mg/kg	ND	ND	15	0	0%	0.33 - 3.3	1.1	N	ND*
	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	20	0	0%	0.6 - 17	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	0.0125	N	ND*
	7440-41-7	Beryllium	0.19	1.4	mg/kg	30B-SB06	5	45	45	100%	0.21 - 0.9	21	N	BSL
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	23	0	0%	0.24 - 3.33	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	23	0	0%	0.24 - 3.33	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	2.39	2.39	mg/kg	30B-SB02	0.01, 0	23	2	9%	0.6 - 3.33	0.04	Y	
	7440-42-8	Boron	1.3	12	mg/kg	31B-SD01	1.5	45	7	16%	4.2 - 18	0.5	Y	
	7440-43-9	Cadmium	0.18	3.9	mg/kg	33B-SB03	1.5	45	40	89%	0.42 - 1.8	0.36	Y	
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	5	0	0%	0.24 - 0.28	NA	N	ND
	7440-47-3	Chromium	3.6	130	mg/kg	29B-SB06	5	45	45	100%	0.83 - 3.6	26	N	BG
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	7440-48-4	Cobalt	4	29	mg/kg	30B-SB06	5	45	45	100%	0.83 - 3.6	13	N	BG
	7440-50-8	Copper	8	89	mg/kg	32B-SB02	2	45	45	100%	0.83 - 3.6	28	N	BG
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND

Table 6.11-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	0.0125	N	ND*
	84-74-2	Di-n-butyl phthalate	0.905	8.7	mg/kg	34B-SB01	1	22	12	55%	0.48 - 3.3	0.0125	Y	
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	0.0125	N	ND*
	206-44-0	Fluoranthene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	29	N	ND
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	20	0	0%	0.667 - 3.3	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	7439-92-1	Lead	1.8	14	mg/kg	32B-SB04, 29B-SB06	5, 5	45	45	100%	1.7 - 7.2	11	N	BG
	7439-93-2	Lithium	1	18	mg/kg	32B-SB03	5	45	45	100%	5.2 - 22	2	Y	
	7439-96-5	Manganese	140	1500	mg/kg	30B-SB06	5	45	45	100%	0.64 - 4.5	220	N	BG
	7439-97-6	Mercury	0.0037	0.15	mg/kg	29B-SB09	5	45	38	84%	0.021 - 0.031	0.00051	N	BG
	7439-98-7	Molybdenum	0.13	16	mg/kg	29B-SB08	1.5	45	28	62%	1 - 4.9	2	N	BG
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	29	N	ND
	7440-02-0	Nickel	3.6	67	mg/kg	29B-SB06	5	45	45	100%	1.7 - 7.2	38	N	BG
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
		Nitroguanidine	0.1	0.1	mg/kg	30B-SB01	3	15	1	7%	0.08 - 0.09	NA	Y	
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	NA	N	ND
	86-30-6	N-Nitrosodiphenylamine	ND	ND	mg/kg	ND	ND	15	0	0%	0.667 - 3.3	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	5	0	0%	0.24 - 0.28	NA	N	ND
		OCDD	0.000000995	0.00036	mg/kg	34B-AH01	0.01	29	21	72%	0.000000494 - 0.000000937	NA	Y	
		OCDF	0.0000017	0.00049	mg/kg	34B-AH01	0.01	23	9	39%	0.000000337 - 0.000000507	NA	Y	
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.85 - 17	2.1	N	ND*
	7601-90-3	Perchlorate	0.077	7	mg/kg	30B-SB02	0	66	7	11%	0.0052 - 4	1.17	Y	
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	29	N	ND
	108-95-2	Phenol	ND	ND	mg/kg	ND	ND	20	0	0%	0.24 - 3.3	30	N	ND
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	20	0	0%	0.008 - 3.3	1.1	N	ND*
	7782-49-2	Selenium	0.23	1.6	mg/kg	31B-SD02	0.25	45	5	11%	1 - 3.4	0.52	N	BG
	7440-22-4	Silver	0.077	0.45	mg/kg	30B-SB06	5	45	4	9%	0.56 - 2	4.2	N	BSL
	7440-24-6	Strontium	16	400	mg/kg	29B-SB06	5	45	45	100%	4.2 - 18	NA	Y	
	7440-28-0	Thallium	0.14	6.6	mg/kg	32B-SB04	5	45	41	91%	0.53 - 18	1	Y	
	7440-32-6	Titanium	250	2100	mg/kg	32B-SB04	5	45	45	100%	1.7 - 7.2	1000	Y	
		Total Hepta-Dioxins	0.000000748	0.000078	mg/kg	34B-AH01	0.01, 0	23	10	43%	0.000000305 - 0.000000532	NA	Y	
		Total Hepta-Furans	0.00000056	0.00028	mg/kg	34B-AH01	0.01, 0	30	16	53%	0.000000167 - 0.000000239	NA	Y	
		Total Hexa-Dioxins	0.00000508	0.000044	mg/kg	34B-AH01	0.01, 0	20	6	30%	0.00000028 - 0.000000517	NA	Y	

Table 6.11-1 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39		Total Hexa-Furans	0.00000026	0.00032	mg/kg	30B-SB02	0.01, 0	23	9	39%	0.000000122 - 0.000000205	NA	Y	
		Total Organic Carbon	ND	ND	mg/kg	ND	ND	8	0	0%	5700 - 7400	NA	N	ND
		Total Penta-Dioxins	0.00000146	0.000047	mg/kg	30B-SB02	0.01, 0	34	6	18%	0.000000132 - 0.00025	NA	Y	
		Total Penta-Furans	0.0000204	0.00039	mg/kg	30B-SB02	0.01, 0	20	6	30%	0.000000196 - 0.000000344	NA	Y	
		Total Tetra-Dioxins	0.00000199	0.000045	mg/kg	30B-SB02	0.01, 0	20	6	30%	0.000000104 - 0.00000017	NA	Y	
		Total Tetra-Furans	0.00000025	0.00051	mg/kg	30B-SB02	0.01, 0	25	11	44%	0.0000000635 - 0.000000201	NA	Y	
	7440-62-2	Vanadium	30	280	mg/kg	29B-SB09	5	45	45	100%	0.83 - 3.6	7.8	Y	
	7440-66-6	Zinc	21	130	mg/kg	29B-SB06	5	45	45	100%	4.2 - 18	46	N	BG

Footnotes:

(1) See Table 2

(2) Rationale for Delection

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	630-20-6	1,1,1,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	71-55-6	1,1,1-Trichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	79-34-5	1,1,2,2-Tetrachloroethane	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	79-00-5	1,1,2-Trichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	75-34-3	1,1-Dichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	75-35-4	1,1-Dichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	563-58-6	1,1-Dichloropropene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	87-61-6	1,2,3-Trichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	96-18-4	1,2,3-Trichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	120-82-1	1,2,4-Trichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	95-63-6	1,2,4-Trimethylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	96-12-8	1,2-Dibromo-3-chloropropane	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	106-93-4	1,2-Dibromoethane (EDB)	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	107-06-2	1,2-Dichloroethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	78-87-5	1,2-Dichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	µg/L	ND	ND	2	0	0%	200-200	NA	N	ND
	108-67-8	1,3,5-Trimethylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	142-28-9	1,3-Dichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	594-20-7	2,2-Dichloropropane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	µg/L	ND	ND	2	0	0%	20-20	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	95-49-8	2-Chlorotoluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	95-48-7	2-Methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	µg/L	ND	ND	2	0	0%	20-20	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	20-20	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND

Table 6.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	106-47-8	4-Chloroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	106-43-4	4-Chlorotoluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	µg/L	ND	ND	2	0	0%	20-20	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	208-96-8	Acenaphthylene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	7429-90-5	Aluminum	18000	18,000	µg/L	31B-SW01-1.0	1	4	1	25%	50-50	8.7E+01	Y	
	62-53-3	Aniline	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	120-12-7	Anthracene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	7440-36-0	Antimony	0.14	0.24	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	6.1E+02	N	BSL
	7440-38-2	Arsenic	1.5	1.6	µg/L	31B-SW02-1.0	1	4	2	50%	1-1	1.5E+02	N	BSL
	103-33-3	Azobenzene	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	7440-39-3	Barium	92	230	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	4.0E+00	Y	
	71-43-2	Benzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	92-87-5	Benzidine	ND	ND	µg/L	ND	ND	2	0	0%	50-50	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	µg/L	ND	ND	2	0	0%	0.4-0.4	NA	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	µg/L	ND	ND	2	0	0%	0.4-0.4	NA	N	ND
	65-85-0	Benzoic acid	ND	ND	µg/L	ND	ND	2	0	0%	20-20	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	7440-41-7	Beryllium	0.49	0.83	µg/L	31B-SW02-1.0	1	4	2	50%	0.5-0.5	5.3E+00	N	BSL
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	µg/L	ND	ND	2	0	0%	5-5	3.0E+00	N	ND
	7440-42-8	Boron	12	18	µg/L	31B-SW01-1.0	1	4	2	50%	50-50	1.6E+00	Y	
	108-86-1	Bromobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	74-97-5	Bromochloromethane	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	75-27-4	Bromodichloromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	75-25-2	Bromoform	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	74-83-9	Bromomethane	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	7440-43-9	Cadmium	0.042	0.060	µg/L	31B-SW02-1.0	1	4	3	75%	1-1	2.2E+00	N	BSL
	7440-70-2	Calcium	5700	8,100	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	NA	N	EN
	86-74-8	Carbazole	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	56-23-5	Carbon tetrachloride	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	16887-00-6	Chloride	810	1,500	µg/L	31B-SW02-1.0	1	2	2	100%	0-0	2.3E+05	N	BSL

Table 6.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	108-90-7	Chlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	75-00-3	Chloroethane	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	67-66-3	Chloroform	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	1.2E+03	N	ND
	74-87-3	Chloromethane	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	7440-47-3	Chromium	12	12	µg/L	31B-SW01-1.0	1	4	1	25%	5-5	1.8E+02	N	BSL
	218-01-9	Chrysene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	156-59-2	cis-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	7440-48-4	Cobalt	0.20	8.1	µg/L	31B-SW02-1.0	1	4	4	100%	0-0	2.3E+01	N	BSL
	7440-50-8	Copper	2.0	14	µg/L	31B-SW01-1.0	1	4	2	50%	10-10	9.0E+00	Y	
	53-70-3	Dibenz (a,h) anthracene	ND	ND	µg/L	ND	ND	2	0	0%	0.4-0.4	NA	N	ND
	132-64-9	Dibenzofuran	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	124-48-1	Dibromochloromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	74-95-3	Dibromomethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	75-71-8	Dichlorodifluoromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	84-66-2	Diethyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	100-41-4	Ethylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	206-44-0	Fluoranthene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	86-73-7	Fluorene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	118-74-1	Hexachlorobenzene	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	µg/L	ND	ND	2	0	0%	20-20	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	µg/L	ND	ND	2	0	0%	0.4-0.4	NA	N	ND
	7439-89-6	Iron	17000	17,000	µg/L	31B-SW01-1.0	1	4	1	25%	52-62	1.0E+03	Y	
	78-59-1	Isophorone	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	98-82-8	Isopropylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	7439-92-1	Lead	0.25	9.2	µg/L	31B-SW02-1.0	1	4	4	100%	0-0	2.5E+00	Y	
	7439-93-2	Lithium	ND	ND	µg/L	ND	ND	4	0	0%	50-50	1.4E+01	N	ND*
	7439-95-4	Magnesium	3100	5,300	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	NA	N	EN
	7439-96-5	Manganese	37	300	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	1.2E+02	Y	
	7439-97-6	Mercury	ND	ND	µg/L	ND	ND	4	0	0%	0.2-0.2	7.7E-01	N	ND
	1634-04-4	Methyl tert-butyl ether	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	75-09-2	Methylene chloride	ND	ND	µg/L	ND	ND	2	0	0%	1-1	2.2E+03	N	ND
	7439-98-7	Molybdenum	0.19	0.20	µg/L	31B-SW01-1.0	1	4	2	50%	2-2	3.7E+02	N	BSL
	91-20-3	Naphthalene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	104-51-8	n-Butylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	7440-02-0	Nickel	12	12	µg/L	31B-SW01-1.0	1	4	1	25%	10-10	5.2E+01	N	BSL
	S-NANO3	Nitrate as NO3	2700	2,700	µg/L	31B-SW02-1.0	1	2	1	50%	100-100	NA	Y	
	S-NINO2	Nitrite as NO2	ND	ND	µg/L	ND	ND	2	0	0%	100-100	NA	N	ND

Table 6.11-2 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	98-95-3	Nitrobenzene	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	µg/L	ND	ND	2	0	0%	5-5	4.0E+01	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	µg/L	ND	ND	2	0	0%	10-10	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	103-65-1	n-Propylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	87-86-5	Pentachlorophenol	ND	ND	µg/L	ND	ND	2	0	0%	20-20	NA	N	ND
	14797-73-0	Perchlorate	ND	ND	µg/L	ND	ND	2	0	0%	4-4	9.3E+03	N	ND
	85-01-8	Phenanthrene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	108-95-2	Phenol	ND	ND	µg/L	ND	ND	2	0	0%	5-5	NA	N	ND
	99-87-6	p-Isopropyltoluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	7440-09-7	Potassium	1700	2,700	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	NA	N	EN
	129-00-0	Pyrene	ND	ND	µg/L	ND	ND	2	0	0%	0.2-0.2	NA	N	ND
	135-98-8	sec-Butylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	7782-49-2	Selenium	ND	ND	µg/L	ND	ND	4	0	0%	10-10	5.0E+00	N	ND
	7440-22-4	Silver	ND	ND	µg/L	ND	ND	4	0	0%	10-10	1.2E-01	N	ND*
	7440-23-5	Sodium	1700	3,400	µg/L	31B-SW02-1.0	1	4	4	100%	0-0	NA	N	EN
	7440-24-6	Strontium	92	130	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	1.5E+03	N	BSL
	100-42-5	Styrene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	98-06-6	tert-Butylbenzene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	127-18-4	Tetrachloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	8.4E+02	N	ND
	7440-28-0	Thallium	ND	ND	µg/L	ND	ND	4	0	0%	1-1	2.0E+01	N	ND
	7440-32-6	Titanium	2.8	700	µg/L	31B-SW01-1.0	1	4	4	100%	0-0	NA	Y	
	108-88-3	Toluene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	156-60-5	trans-1,2-Dichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	79-01-6	Trichloroethene	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	75-69-4	Trichlorofluoromethane	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	7440-62-2	Vanadium	2.1	39	µg/L	31B-SW02-1.0	1	4	4	100%	0-0	2.0E+01	Y	
	75-01-4	Vinyl chloride	ND	ND	µg/L	ND	ND	2	0	0%	0.5-0.5	NA	N	ND
	1330-20-7	Xylenes (total)	ND	ND	µg/L	ND	ND	2	0	0%	1-1	NA	N	ND
	7440-66-6	Zinc	40	40	µg/L	31B-SW01-1.0	1	4	1	25%	20-20	1.2E+02	N	BSL

Footnotes:

(1) See Table 2.

(2) Rationale for Deletion

BSL = Below screening level

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

PM = Petroleum mixtures are complex and the toxic constituents are being evaluated individually

Key:

COPEC = Chemical of potential ecological concern

µg/L = Micrograms per liter

NA = Not available

Table 6.11-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	120-82-1	1,2,4-Trichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	95-50-1	1,2-Dichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	122-66-7	1,2-Diphenylhydrazine (as Azobenzene)	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	541-73-1	1,3-Dichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	106-46-7	1,4-Dichlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	95-95-4	2,4,5-Trichlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	88-06-2	2,4,6-Trichlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	120-83-2	2,4-Dichlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	105-67-9	2,4-Dimethylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	51-28-5	2,4-Dinitrophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.6-0.69	NA	N	ND
	121-14-2	2,4-Dinitrotoluene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	606-20-2	2,6-Dinitrotoluene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	91-58-7	2-Chloronaphthalene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	95-57-8	2-Chlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	91-57-6	2-Methylnaphthalene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	95-48-7	2-Methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	88-74-4	2-Nitroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	88-75-5	2-Nitrophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	91-94-1	3,3'-Dichlorobenzidine	ND	ND	mg/kg	ND	ND	4	0	0%	0.6-0.69	NA	N	ND
	99-09-2	3-Nitroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	534-52-1	4,6-Dinitro-2-methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	101-55-3	4-Bromophenyl phenyl ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	59-50-7	4-Chloro-3-methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	106-47-8	4-Chloroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	7005-72-3	4-Chlorophenyl phenyl ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	106-44-5	4-Methylphenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	100-01-6	4-Nitroaniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.6-0.69	NA	N	ND
	100-02-7	4-Nitrophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	83-32-9	Acenaphthene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	NA	N	ND
	208-96-8	Acenaphthylene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	NA	N	ND
	7429-90-5	Aluminum	9800	21000	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	NA	Y	
	62-53-3	Aniline	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	120-12-7	Anthracene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	5.7E-02	N	ND
	7440-36-0	Antimony	0.057	0.083	mg/kg	31B-SD02-1.5	ND	4	4	100%	NA	2.0E+00	N	BSL
	7440-38-2	Arsenic	1.2	1.5	mg/kg	31B-SD02-1.5	ND	4	3	75%	2.2-2.2	9.8E+00	N	BSL
	103-33-3	Azobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	7440-39-3	Barium	100	230	mg/kg	31B-SD02-0.25	ND	4	4	100%	NA	NA	Y	
	92-87-5	Benzidine	ND	ND	mg/kg	ND	ND	4	0	0%	0.42-0.49	NA	N	ND
	56-55-3	Benzo (a) anthracene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	1.1E-01	N	ND
	50-32-8	Benzo (a) pyrene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	1.5E-01	N	ND
	Benzo (b & k) fluoranthene (total)	Benzo (b & k) fluoranthene (total)	ND	ND	mg/kg	ND	ND	4	0	0%	0.016-0.018	2.4E-01	N	ND
	191-24-2	Benzo (ghi) perylene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	1.7E-01	N	ND

Table 6.11-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	65-85-0	Benzoic acid	ND	ND	mg/kg	ND	ND	4	0	0%	0.6-0.69	NA	N	ND
	100-51-6	Benzyl alcohol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	85-68-7	Benzyl butyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	1.1E+01	N	ND
	7440-41-7	Beryllium	0.27	0.72	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	NA	Y	
	111-91-1	Bis(2-chloroethoxy)methane	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	111-44-4	Bis(2-chloroethyl)ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	108-60-1	Bis(2-chloroisopropyl)ether	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	117-81-7	Bis(2-ethylhexyl)phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.6-0.69	8.9E+02	N	ND
	7440-42-8	Boron	6.2	12	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	NA	Y	
	7440-43-9	Cadmium	ND	ND	mg/kg	ND	ND	4	0	0%	0.48-0.56	9.9E-01	N	ND
	86-74-8	Carbazole	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	7440-47-3	Chromium	9.7	19	mg/kg	31B-SD02-1.5	ND	4	4	100%	NA	4.3E+01	N	BSL
	218-01-9	Chrysene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	1.7E-01	N	ND
	7440-48-4	Cobalt	5.2	13	mg/kg	31B-SD02-0.25 31B-SD01-1.5	ND	4	4	100%	NA	NA	Y	
	7440-50-8	Copper	9.4	16	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	3.2E+01	N	BSL
	53-70-3	Dibenz (a,h) anthracene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	3.3E-02	N	ND
	132-64-9	Dibenzofuran	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	84-66-2	Diethyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	131-11-3	Dimethyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	84-74-2	Di-n-butyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.48-0.56	NA	N	ND
	117-84-0	Di-n-octyl phthalate	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	206-44-0	Fluoranthene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	4.2E-01	N	ND
	86-73-7	Fluorene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	NA	N	ND
	118-74-1	Hexachlorobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	87-68-3	Hexachlorobutadiene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	77-47-4	Hexachlorocyclopentadiene	ND	ND	mg/kg	ND	ND	4	0	0%	0.85-0.97	NA	N	ND
	67-72-1	Hexachloroethane	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	193-39-5	Indeno (1,2,3-cd) pyrene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	7.8E-02	N	ND
	78-59-1	Isophorone	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	7439-92-1	Lead	2.7	7.7	mg/kg	31B-SD02-0.25	ND	4	4	100%	NA	3.6E+01	N	BSL
	7439-93-2	Lithium	1	5.8	mg/kg	31B-SD02-1.5	ND	4	4	100%	NA	NA	Y	
	7439-96-5	Manganese	200	620	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	4.6E+02	Y	
	7439-97-6	Mercury	0.021	0.031	mg/kg	31B-SD01-1.5	ND	4	3	75%	0.028-0.028	1.8E-01	N	BSL
	7439-98-7	Molybdenum	0.22	0.4	mg/kg	31B-SD01-0.25	ND	4	3	75%	1.3-1.3	NA	Y	
	91-20-3	Naphthalene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	NA	N	ND
	7440-02-0	Nickel	5.7	11	mg/kg	31B-SD02-0.25 31B-SD01-1.5	ND	4	4	100%	NA	1.6E+01	N	BSL
	98-95-3	Nitrobenzene	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	62-75-9	N-Nitrosodimethylamine	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	621-64-7	N-Nitrosodi-n-propylamine	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	122-39-4	N-Nitrosodiphenylamine (as Diphenylamine	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	NA	N	ND
	87-86-5	Pentachlorophenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.85-0.97	3.6E-01	N	ND*

Table 6.11-3 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Sediment
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	14797-73-0	Perchlorate	ND	ND	mg/kg	ND	ND	4	0	0%	0.012-0.014	NA	N	ND
	85-01-8	Phenanthrene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	2.0E-01	N	ND
	108-95-2	Phenol	ND	ND	mg/kg	ND	ND	4	0	0%	0.24-0.28	4.2E-01	N	ND
	129-00-0	Pyrene	ND	ND	mg/kg	ND	ND	4	0	0%	0.008-0.0092	2.0E-01	N	ND
	7782-49-2	Selenium	1.6	1.6	mg/kg	31B-SD02-0.25	ND	4	1	25%	1.2-1.4	2.0E+00	N	BSL
	7440-22-4	Silver	ND	ND	mg/kg	ND	ND	4	0	0%	0.96-1.1	1.0E+00	N	ND
	7440-24-6	Strontium	87	89	mg/kg	31B-SD02-1.5	ND	4	4	100%	NA	NA	Y	
	7440-28-0	Thallium	0.15	0.21	mg/kg	31B-SD02-1.5	ND	4	2	50%	0.68-0.69	NA	Y	
	7440-32-6	Titanium	760	1100	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	NA	Y	
	TOC	Total Organic Carbon	ND	ND	mg/kg	ND	ND	4	0	0%	6000-6900	NA	N	ND
	7440-62-2	Vanadium	58	79	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	NA	Y	
	7440-66-6	Zinc	30	46	mg/kg	31B-SD01-1.5	ND	4	4	100%	NA	1.2E+02	N	BSL

Footnotes:

(1) See Table 2

(2) Rationale for Deletion

BSL = Below screening level

BG = Consistent with background concentrations

ITC = Individual toxic compounds associated with the mixture are assessed separately

EN = Essential Nutrient

ND = Not detected above the reporting limit

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

mg/kg = Milligrams per kilogram

NA = Not available

Table 6.11-4 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	71-55-6	1,1,1-Trichloroethane	37	5100	$\mu g/m^3$	33B-SP21	20	63	3	4.8%	6.1 - 1500	1.9E+05	N	BSL
	79-00-5	1,1,2-Trichloroethane	18	18	$\mu g/m^3$	33B-SP11	20	63	1	1.6%	6.1 - 1500	5.7E+03	N	BSL
	75-34-3	1,1-Dichloroethane	6.3	36	$\mu g/m^3$	33B-SP09	20	63	2	3.2%	4.5 - 1100	1.8E+05	N	BSL
	75-35-4	1,1-Dichloroethene	9	60000	$\mu g/m^3$	33B-SP21	20	63	23	36.5%	4.4 - 1100	6.0E+03	Y	
	95-63-6	1,2,4-Trimethylbenzene	7.6	98	$\mu g/m^3$	33B-SP20	20	63	12	19.0%	5.5 - 1300	1.6E+04	N	BSL
	107-06-2	1,2-Dichloroethane	5.3	34	$\mu g/m^3$	33B-SP11	20	63	4	6.3%	4.5 - 1100	4.2E+04	N	BSL
	108-67-8	1,3,5-Trimethylbenzene	7	26	$\mu g/m^3$	33B-SP20	20	63	8	12.7%	5.5 - 1300	1.6E+04	N	BSL
	106-99-0	1,3-Butadiene	2.5	1200	$\mu g/m^3$	30B-SP15	16	63	52	82.5%	2.5 - 600		UA	
	123-91-1	1,4-Dioxane	17	27	$\mu g/m^3$	32B-SP08	40	63	3	4.8%	16 - 3900		UA	
	540-84-1	2,2,4-Trimethylpentane	5.6	94	$\mu g/m^3$	30B-SP15	16	63	15	23.8%	5.2 - 1300		UA	
	78-93-3	2-Butanone (Methyl Ethyl Ketone)	18	1700	$\mu g/m^3$	30B-SP15	16	63	37	58.7%	3.3 - 800	8.6E+05	N	BSL
	591-78-6	2-Hexanone	27	91	$\mu g/m^3$	30B-SP15	16	63	2	3.2%	18 - 4400	4.9E+03	N	BSL
	67-63-0	2-Propanol	12	15000	$\mu g/m^3$	33B-SP14	10	63	13	20.6%	11 - 2600		UA	
	622-96-8	4-Ethyltoluene	10	110	$\mu g/m^3$	33B-SP20	20	63	13	20.6%	5.5 - 1300		UA	
	108-10-1	4-Methyl-2-pentanone	6	29	$\mu g/m^3$	33B-SP18	20	63	6	9.5%	4.6 - 1100		UA	
	67-64-1	Acetone	57	1600	$\mu g/m^3$	30B-SP15	16	63	49	77.8%	11 - 2600		UA	
	71-43-2	Benzene	3.7	320	$\mu g/m^3$	30B-SP15	16	63	48	76.2%	3.6 - 860	5.7E+02	N	BSL
	75-27-4	Bromodichloromethane	12	36	$\mu g/m^3$	32B-SP10	10	63	5	7.9%	7.5 - 1800		UA	
	75-15-0	Carbon Disulfide	3.8	1600	$\mu g/m^3$	33B-SP14	10	63	47	74.6%	3.5 - 840	1.2E+03	Y	
	56-23-5	Carbon Tetrachloride	7.2	4400	$\mu g/m^3$	30B-SP15	10	63	12	19.0%	7 - 1700	6.3E+03	N	BSL
	75-00-3	Chloroethane	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	3 - 710	9.9E+05	UA	
	67-66-3	Chloroform	10	2300	$\mu g/m^3$	33B-SP21	20	63	24	38.1%	5.5 - 1300	1.2E+03	Y	

Table 6.11-4 Occurrence, Distribution, and Selection of Chemicals of Potential Ecological Concern - Soil Vapor
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Exposure Point	CAS Number	Chemical	Minimum Concentration	Maximum Concentration	Units	Location of Maximum Concentration	Sample Depth (feet bgs)	Number of Samples	Number of Detections	Detection Frequency	Range of Detection Limits	Screening Toxicity Value (1)	COPEC Flag (Y/N)	Rationale for Deletion (2)
Area 39	156-59-2	cis-1,2-Dichloroethene	5.2	1000	$\mu g/m^3$	33B-SP11	20	63	6	9.5%	4.4 - 1100	1.9E+04	N	BSL
	98-82-8	Cumene	6	6	$\mu g/m^3$	30B-SP15	16	63	1	1.6%	5.5 - 1300	2.3E+04	N	BSL
	110-82-7	Cyclohexane	4.6	810	$\mu g/m^3$	33B-SP14	10	63	19	30.2%	3.8 - 930		UA	
	124-48-1	Dibromochloromethane	12	13	$\mu g/m^3$	33B-SP12	10	63	2	3.2%	9.5 - 2300		UA	
	64-17-5	Ethanol	11	410	$\mu g/m^3$	30B-SP15	16	63	35	55.6%	8.4 - 2000		UA	
	100-41-4	Ethyl Benzene	5.7	220	$\mu g/m^3$	30B-SP15	16	63	18	28.6%	4.9 - 1200	2.3E+04	N	BSL
	75-69-4	Freon 11	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	6.3 - 1500	8.8E+04	UA	
	76-13-1	Freon 113	12	1800	$\mu g/m^3$	30B-SP14	20	63	21	33.3%	8.6 - 2100	8.8E+04	N	BSL
	75-71-8	Freon 12	12	12	$\mu g/m^3$	32B-SP09	20	63	1	1.6%	5.5 - 1300	8.8E+04	N	BSL
	142-82-5	Heptane	6	460	$\mu g/m^3$	32B-SP08	20	63	48	76.2%	4.6 - 1100		UA	
	87-68-3	Hexachlorobutadiene	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	48 - 12000		UA	
	110-54-3	Hexane	4.8	1200	$\mu g/m^3$	30B-SP15	16	63	54	85.7%	3.9 - 950		UA	
	95-47-6	o-Xylene	6	160	$\mu g/m^3$	30B-SP15	16	63	16	25.4%	4.9 - 1200	1.6E+04	N	BSL
	1634-04-4	Methyl tert-butyl ether	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	4 - 970	2.6E+05	UA	
	75-09-2	Methylene Chloride	ND	ND	$\mu g/m^3$	ND	ND	63	0	0.0%	3.9 - 1600	8.7E+03	UA	
	103-65-1	Propylbenzene	8	22	$\mu g/m^3$	33B-SP20, 33B-SP13	20, 7.5	63	8	12.7%	5.5 - 1300		UA	
	100-42-5	Styrene	10	15	$\mu g/m^3$	30B-SP12	10	63	5	7.9%	4.8 - 1200	1.9E+05	N	BSL
	127-18-4	Tetrachloroethene	8.8	530	$\mu g/m^3$	30B-SP14	20	63	7	11.1%	7.6 - 1800	2.4E+04	N	BSL
	109-99-9	Tetrahydrofuran	3.8	98	$\mu g/m^3$	33B-SP15	20	63	26	41.3%	3.3 - 800		UA	
	108-88-3	Toluene	5.2	13000	$\mu g/m^3$	33B-SP21	20	63	53	84.1%	4.2 - 1000	8.4E+01	Y	
	156-60-5	trans-1,2-Dichloroethene	7.2	7.2	$\mu g/m^3$	33B-SP11	20	63	1	1.6%	4.4 - 1100	1.9E+04	N	BSL
	79-01-6	Trichloroethene	7.4	1700000	$\mu g/m^3$	33B-SP21	10, 20	63	39	61.9%	6 - 5800	6.4E+03	Y	
	75-01-4	Vinyl Chloride	4.9	4.9	$\mu g/m^3$	30B-SP18	10	63	1	1.6%	2.9 - 690	5.6E+02	N	BSL

Footnotes:

(1) See Table ?

(2) Rationale for Delection

BSL = Below screening level

* = Some of the detection limits are elevated (i.e., half the reporting limit above screening level)

ND = Not detected above the reporting limit

NR = Research has shown that 1,3-Butadiene is not reproducible

Key:

bgs = Below ground surface

COPEC = Chemical of potential ecological concern

$\mu g/m^3$ = Micrograms per cubic meter

ND = Not detected

UA = discussed in uncertainty analysis

Table 6.11-5 Risk Characterization Summary Table
Soil Habitat 0 to 1 foot
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
Bis(2-ethylhexyl)phthalate	mg/kg	2.39	2.39	30B-SB02-0	2/11	na	-	-	na	-	-	0.04	2/11	60	0.6929	2/11	3.4			
Di-n-butyl phthalate	mg/kg	0.905	8.7	34B-SB01-1	7/10	200	0/10	-	na	-	-	0.0125	7/10	696	64.449	0/10	-			
Nitroguanidine	mg/kg	-	-	-	0/6	na	-	-	na	-	-	na	-	-	na	-	-			
Inorganics																				
Barium	mg/kg	78	330	30B-SB04-1	10/10	na	-	-	330	0/10	-	na	-	-	2000	0/10	-			
Boron	mg/kg	6.2	11 J	29B-SB05-1	3/10	0.5	3/10	22	20	0/10	-	na	-	-	na	-	-	19^	0/10	
Cadmium	mg/kg	0.29 J	0.58 J	30B-SB05-1	7/10	32	0/10	-	140	0/10	-	0.77	0/10	-	0.36	4/10	1.6	0.723	0/10	
Lithium	mg/kg	1 J	7.2	30B-SB05-1	10/10	2	9/10	3.6	10	0/10	-	na	-	-	390	0/10	-	23^	0/10	
Perchlorate	mg/kg	0.49 J	7	30B-SB02-0	2/19	na	-	-	1.17	1/19	6.0	20.3	0/19	-	24	0/19	-			
Strontium	mg/kg	16 J	220 J	30B-SB07-1	10/10	na	-	-	na	-	-	na	-	-	na	-	-			
Thallium	mg/kg	0.14 J	4.6 J	30B-SB04-1	9/10	1	7/10	4.6	na	-	-	na	-	-	2.1	2/10	2.2	2.5	1/10	1.8
Titanium	mg/kg	400 J	1300	30B-SB04-1	10/10	na	-	-	1000	2/10	1.3	na	-	-	na	-	-			
Vanadium	mg/kg	45 J	94	30B-SB05-1	10/10	na	-	-	na	-	-	7.8	10/10	12.1	280	0/10	-	118.8	0/10	
Dioxins/Furans																				
1,2,3,4,6,7,8-HpCDD	mg/kg	0.00000301	0.000045	34B-AH01-0.01	6/12	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,6,7,8-HpCDF	mg/kg	0.00000056	0.00017	34B-AH01-0.01	9/15	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,7,8,9-HpCDF	mg/kg	0.0000019	0.000024	34B-AH01-0.01	5/11	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,7,8-HxCDD	mg/kg	0.000000503	0.0000041	34B-AH01-0.01	2/9	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,7,8-HxCDF	mg/kg	0.00000021	0.000049	30B-SB02-0.01	6/12	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,6,7,8-HxCDD	mg/kg	0.000000663 J	0.0000046	34B-AH01-0.01	3/9	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,6,7,8-HxCDF	mg/kg	0.00000294	0.00003	30B-SB02-0.01	4/10	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,7,8,9-HxCDD	mg/kg	0.000000507	0.0000057	34B-AH01-0.01	3/9	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,7,8,9-HxCDF	mg/kg	0.00000128 J	0.000017	30B-SB02-0.01	6/12	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,7,8-PeCDF	mg/kg	0.00000155	0.000024	30B-SB02-0.01	4/10	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,4,6,7,8-HxCDF	mg/kg	0.00000245 J	0.000025	30B-SB02-0.01	4/10	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,4,7,8-PeCDF	mg/kg	0.00000135 J	0.000031	30B-SB02-0.01	4/10	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,7,8-TCDD	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,7,8-TCDF	mg/kg	0.00000025	0.000011	30B-SB02-0.01	8/14	na	-	-	na	-	-	na	-	-	na	-	-			
OCDD	mg/kg	0.000000995 J	0.00036	34B-AH01-0.01	16/18	na	-	-	na	-	-	na	-	-	na	-	-			
OCDF	mg/kg	0.0000017	0.00049	34B-AH01-0.01	9/15	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hepta-Dioxins	mg/kg	0.0000056	0.000078	34B-AH01-0	9/15	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hepta-Furans	mg/kg	0.00000056	0.00028	34B-AH01-0.01	16/22	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hexa-Dioxins	mg/kg	0.00000508	0.000044	34B-AH01-0.01	6/12	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hexa-Furans	mg/kg	0.00000026	0.00032	30B-SB02-0	9/15	na	-	-	na	-	-	na	-	-	na	-	-			
Total Penta-Dioxins	mg/kg	0.00000146 J	0.000047	30B-SB02-0.01	6/21	na	-	-	na	-	-	na	-	-	na	-	-			
Total Penta-Furans	mg/kg	0.0000204	0.00039	30B-SB02-0.01	6/12	na	-	-	na	-	-	na	-	-	na	-	-			
Total Tetra-Dioxins	mg/kg	0.00000199	0.000045	30B-SB02-0	6/12	na	-	-	na	-	-	na	-	-	na	-	-			
Total Tetra-Furans	mg/kg	0.00000025	0.00051	30B-SB02-0.01	11/17	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,7,8-TCDD Avian TEQ		9.95E-11	0.001088085	30B-SB02-0.01	22/26	na	-	-	na	-	-	0.0000018	10/26	590	na	-	-			
2,3,7,8-TCDD Mammalian TEQ		2.985E-10	0.000323332	30B-SB02-0.01	22/26	na	-	-	na	-	-	na	-	-	0.00000014	11/26	2310			

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.11-6 Risk Characterization Summary Table
Soil Habitat 1 to 6 feet
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

						Plant Receptor			Soil Invertebrate Receptor			Avian Receptor			Mammalian Receptor			Background		
Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	Screening Level	Frequency of Exceedance	HQ	BTV	Frequency of Exceedance	HQ
Organics																				
Bis(2-ethylhexyl)phthalate	mg/kg	-	-	-	0/11	na	-	-	na	-	-	0.04	-	-	0.6929	-	-			
Di-n-butyl phthalate	mg/kg	1.5	6.1	33B-SB02-5	5/11	200	0/11	-	na	-	-	0.0125	5/11	488	64.449	0/11	-			
Nitroguanidine	mg/kg	0.1	0.1	30B-SB01-3	1/9	na	-	-	na	-	-	na	-	-	na	-	-			
Inorganics																				
Barium	mg/kg	83	500	32B-SB04-5	34/34	na	-	-	330	4/34	1.5	na	-	-	2000	0/34	-	274.3	8/34	1.8
Boron	mg/kg	1.3 J	12	31B-SD01-1.5	4/34	0.5	4/34	24	20	0/34	-	na	-	-	na	-	-	19^	0/34	
Cadmium	mg/kg	0.18 J	3.9	33B-SB03-1.5	32/34	32	0/34	-	140	0/34	-	0.77	4/34	5.1	0.36	25/34	11	0.723	6/34	5.4
Lithium	mg/kg	1.9 J	18	32B-SB03-5	34/34	2	31/34	9.0	10	4/34	1.8	na	-	-	390	0/34	-	23^	0/34	
Perchlorate	mg/kg	0.077	5	30B-SB02-3	4/46	na	-	-	1.17	1/46	4.3	20.3	0/46	-	24	0/46	-			
Strontium	mg/kg	21	400	29B-SB06-5	34/34	na	-	-	na	-	-	na	-	-	na	-	-			
Thallium	mg/kg	0.17 J	6.6 J	32B-SB04-5	31/34	1	26/34	6.6	na	-	-	na	-	-	2.1	15/34	3.1	2.5	14/34	2.6
Titanium	mg/kg	250 J	2100 J	32B-SB04-5	34/34	na	-	-	1000	12/34	2.1	na	-	-	na	-	-			
Vanadium	mg/kg	30 J	280	29B-SB09-5	34/34	na	-	-	na	-	-	7.8	34/34	36	280	0/34	-	118.8	6/34	2.4
Dioxins/Furans																				
1,2,3,4,6,7,8-HpCDD	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,6,7,8-HpCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,7,8,9-HpCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,7,8-HxCDD	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,4,7,8-HxCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,6,7,8-HxCDD	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,6,7,8-HxCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,7,8,9-HxCDD	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,7,8,9-HxCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
1,2,3,7,8-PeCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,4,6,7,8-HxCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,4,7,8-PeCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,7,8-TCDD	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,7,8-TCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
OCDD	mg/kg	0.00000159 J	0.000009	34B-AH01-3	5/11	na	-	-	na	-	-	na	-	-	na	-	-			
OCDF	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hepta-Dioxins	mg/kg	0.000000748 J	0.000000748 J	34B-SNS03-2.5	1/8	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hepta-Furans	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hexa-Dioxins	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
Total Hexa-Furans	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
Total Penta-Dioxins	mg/kg	-	-	-	0/13	na	-	-	na	-	-	na	-	-	na	-	-			
Total Penta-Furans	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
Total Tetra-Dioxins	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
Total Tetra-Furans	mg/kg	-	-	-	0/8	na	-	-	na	-	-	na	-	-	na	-	-			
2,3,7,8-TCDD Avian TEQ		1.59E-10	9.77E-10	34B-SNS03-2.5	5/15	na	-	-	na	-	-	0.0000018	0/15	-	na	-	-			
2,3,7,8-TCDD Mammalian TEQ		4.77E-10	8.167E-09	34B-SNS03-2.5	5/15	na	-	-	na	-	-	na	-	-	0.00000014	0/15	-			

Notes and Key:
Only samples that are located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds one of the receptor-specific screening levels or a screening level is not available and will therefore be retained as a COPEC.
If the maximum detection for an inorganic exceeds one of the receptor-specific screening levels, it was also compared to the BTV. If the maximum detection is below the BTV, it was eliminated as a COPEC.
^ - Mean soil background concentration for California (Kearney Foundation, 1996)
BTV = Background threshold value
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.11-7 Risk Characterization Summary Table
Surface Water
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Total/ Dissolved	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Inorganics									
Aluminum	Dissolved	µg/L	-	-	-	0/2	87	-	-
Aluminum	Total	µg/L	18000	18000	31B-SW01-1	1/2	87	1/2	207
Barium	Dissolved	µg/L	92	92	31B-SW01-1	2/2	4	2/2	23
Barium	Total	µg/L	92	230	31B-SW01-1	2/2	4	2/2	58
Boron	Dissolved	µg/L	-	-	-	0/2	1.6	-	-
Boron	Total	µg/L	12 J	18 J	31B-SW01-1	2/2	1.6	2/2	11.3
Copper	Dissolved	µg/L	-	-	-	0/2	9	-	-
Copper	Total	µg/L	2 J	14	31B-SW01-1	2/2	9	1/2	1.6
Iron	Dissolved	µg/L	-	-	-	0/2	1000	-	-
Iron	Total	µg/L	17000	17000	31B-SW01-1	1/2	1000	1/2	17
Lead	Dissolved	µg/L	0.25 J	0.27 J	31B-SW01-1	2/2	2.5	0/2	-
Lead	Total	µg/L	7.8	9.2	31B-SW02-1	2/2	2.5	2/2	3.7
Manganese	Dissolved	µg/L	37	52	31B-SW01-1	2/2	120	0/2	-
Manganese	Total	µg/L	52	300	31B-SW01-1	2/2	120	1/2	2.5
Nitrate as NO3	Total	µg/L	2700	2700	31B-SW02-1	1/2	na	-	-
Titanium	Dissolved	µg/L	3.5 J	4 J	31B-SW01-1	2/2	na	-	-
Titanium	Total	µg/L	2.8 J	700	31B-SW01-1	2/2	na	-	-
Vanadium	Dissolved	µg/L	2.1	2.5	31B-SW01-1	2/2	20	0/2	-
Vanadium	Total	µg/L	30	39	31B-SW02-1	2/2	20	2/2	

Notes and Key:
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
µg/L = Micrograms per liter
na = Not available

Table 6.11-8 Risk Characterization Summary Table
Sediment 0 to 1 foot
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Screening Level	Frequency of Exceedance	HQ
Inorganics								
Aluminum	mg/kg	9800	18000	31B-SD02-0.25	2/2	na	-	-
Barium	mg/kg	100	230	31B-SD02-0.25	2/2	na	-	-
Beryllium	mg/kg	0.27 J	0.7	31B-SD02-0.25	2/2	na	-	-
Boron	mg/kg	6.2	9.7	31B-SD02-0.25	2/2	na	-	-
Cobalt	mg/kg	5.2	13	31B-SD02-0.25	2/2	na	-	-
Lithium	mg/kg	1 J	4.9 J	31B-SD02-0.25	2/2	na	-	-
Manganese	mg/kg	200 J	500	31B-SD02-0.25	2/2	460	1/2	1.1
Molybdenum	mg/kg	0.4 J	0.4 J	31B-SD01-0.25	1/2	na	-	-
Strontium	mg/kg	87 J	88 J	31B-SD01-0.25	2/2	na	-	-
Thallium	mg/kg	0.15 J	0.15 J	31B-SD02-0.25	1/2	na	-	-
Titanium	mg/kg	760	810	31B-SD02-0.25	2/2	na	-	-
Vanadium	mg/kg	58 J	70 J	31B-SD02-0.25	2/2	na	-	-

Notes:
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
Where a screening level is not available, the constituent will be retained as COPEC.
HQ = Hazard quotient
J = Estimated value
mg/kg = Milligrams per kilogram
na = Not available

Table 6.11-9 Risk Characterization Summary Table
Soil Vapor - Top Depth
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Screening Level	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Frequency of Exceedance	HQs
1,1,1-Trichloroethane	µg/m^3	191000	37	4700	33B-SP21-10	2/32	0/32	-
1,1,2-Trichloroethane	µg/m^3	5700	-	-	-	0/32	-	-
1,1-Dichloroethane	µg/m^3	181000	6.3	6.3	33B-SP09-10	1/32	0/32	-
1,1-Dichloroethene	µg/m^3	6000	9	43000	33B-SP21-10	10/32	2/32	7.2
1,2,4-Trimethylbenzene	µg/m^3	16000	7.6	68	33B-SP20-10	6/32	0/32	-
1,2-Dichloroethane	µg/m^3	42000	15	15	33B-SP11-10	1/32	0/32	-
1,3,5-Trimethylbenzene	µg/m^3	16000	8	24	33B-SP13-7.5	4/32	0/32	-
2-Butanone (Methyl Ethyl Ketone)	µg/m^3	860000	19	200	33B-SP18-7	17/32	0/32	-
2-Hexanone	µg/m^3	4880	-	-	-	0/32	-	-
Acetone	µg/m^3	1305000	57	1300	30B-SP20-10	25/32	0/32	-
Benzene	µg/m^3	570	3.7	100	32B-SP07-10	24/32	0/32	-
Carbon Disulfide	µg/m^3	1200	3.8	1600	33B-SP14-10	24/32	1/32	1.3
Carbon Tetrachloride	µg/m^3	6300	20	4400	30B-SP15-10	5/32	0/32	-
Chloroethane	µg/m^3	992000	-	-	-	0/32	-	-
Chloroform	µg/m^3	1200	10	2100	33B-SP21-10	13/32	2/32	1.8
cis-1,2-Dichloroethene	µg/m^3	19000	9.2	160	33B-SP11-10	3/32	0/32	-
Cumene	µg/m^3	23000	-	-	-	0/32	-	-
Ethyl Benzene	µg/m^3	23000	5.7	130	33B-SP13-7.5	9/32	0/32	-
Freon 11	µg/m^3	88000	-	-	-	0/32	-	-
Freon 113	µg/m^3	88000	12	980	30B-SP22-10	10/32	0/32	-
Freon 12	µg/m^3	88000	-	-	-	0/32	-	-
m,p-Xylene	µg/m^3	16000	5.3	550	33B-SP14-10	15/32	0/32	-
Methyl tert-butyl ether	µg/m^3	258000	-	-	-	0/32	-	-
Methylene Chloride	µg/m^3	9000	-	-	-	0/32	-	-
o-Xylene	µg/m^3	16000	6	150	33B-SP13-7.5	8/32	0/32	-
Styrene	µg/m^3	192000	12	15 J	30B-SP12-10	3/32	0/32	-
Tetrachloroethene	µg/m^3	24000	18	77	32B-SP11-10	4/32	0/32	-
Toluene	µg/m^3	84	6.6	12000	33B-SP21-10	26/32	9/32	143
trans-1,2-Dichloroethene	µg/m^3	19000	-	-	-	0/32	-	-
Trichloroethene	µg/m^3	6400	7.4	1700000	33B-SP21-10	17/32	4/32	266
Vinyl Chloride	µg/m^3	560	4.9	4.9	30B-SP18-10	1/32	0/32	-

Notes and Key:
The shallowest collection depth for samples located in areas of potential exposure habitat are included in this summary.
Highlighted Constituent - The maximum detection exceeds the screening level and will therefore be retained as a COPEC.
HQ = Hazard quotient
µg/m3 = Micrograms per cubic meter
na = Not available

Table 6.12-1 SLERA Summary Table
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Management Area	Media Evaluated	Habitat COPECs	Habitat Quality	Future Land Use	Exposure Potential	Recommendation
Admin Area East						
	Soil	Phthalates PCBs Inorganics	Poor	Commercial	Current - Moderate Future - Moderate	SMDP: potential downgradient migration (drainage ditch)
	Surface Water	Inorganics	Poor	Commercial	Current - Low Future - Low	SMDP: potential downgradient migration (drainage ditch)
	Soil Vapor	Toluene	Poor	Commercial	Current - Low Future - Low	No further action
Admin Area West						
	Soil	Phthalates PCBs Inorganics	Moderate	Commercial	Current - Moderate Future - Moderate	SMDP: potential downgradient migration (drainage ditch)
	Surface Water	Inorganics	Poor	Commercial	Current - Low Future - Low	SMDP: potential downgradient migration (drainage ditch)
	Soil Vapor	None	Poor	Commercial	Current - Low Future - Low	No further action
Line 02						
	Soil	Phthalates Inorganics	Good	Mixed Commercial/ Residential	Current – High Future – Low	No further action
	Soil Vapor	VOCs	Good	Mixed Commercial/ Residential	Current – High Future – Low	No further action
Line 05 North						
	Soil	None	Fair (tailings)	Residential	Current – Medium Future – Low	No further action
	Soil Vapor	None	Fair (tailings)	Residential	Current – Medium Future – Low	No further action

Table 6.12-1 SLERA Summary Table
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Management Area	Media Evaluated	Habitat COPECs	Habitat Quality	Future Land Use	Exposure Potential	Recommendation
Westlakes						
	Soil	PCBs Inorganics	Fair	Residential, Open/Preserves, Parks	Current – High Future – Low	SMDP to determine if further action necessary
	Surface Water	Phthalates Inorganics	Fair (intermittent)	Residential, Open/Preserves, Parks	Current – High Future – Low	SMDP to determine if further action necessary
	Sediment	Inorganics	Fair (intermittent)	Residential, Open/Preserves, Parks	Current – High Future – Low	SMDP to determine if further action necessary
Buffalo Creek						
	Soil	PCBs Inorganics	Fair	Unknown	Current – High Future – Medium	SMDP to determine if further action necessary
	Surface Water	Pesticides Inorganics	Fair (intermittent)	Unknown	Current – High Future – Medium	SMDP to determine if further action necessary
	Sediment	Pesticides PCBs Inorganics	Fair (intermittent)	Unknown	Current – High Future – Medium	SMDP to determine if further action necessary
Open Space Areas 5 and 7						
	Soil	None	Good	Residential	Current – Medium Future – Low	No further action
	Soil Vapor	None	Good	Residential	Current – Medium Future – Low	No further action

Table 6.12-1 SLERA Summary Table
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Management Area	Media Evaluated	Habitat COPECs	Habitat Quality	Future Land Use	Exposure Potential	Recommendation
Chemical Plant 2						
	Soil	Phthalates Pesticides PCBs Inorganics	Good	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
	Surface Water	Pesticides Inorganics	Fair (intermittent)	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
	Sediment	Misc. Organics PAHs Pesticides PCBs Inorganics	Fair (intermittent)	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
	Soil Vapor	None	Good	Not currently planned	Current – Low Future – Low	No further action
Dredge Pit and Eastern Basin						
	Soil	Phthalates Pesticides Inorganics	Good	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
	Surface Water	Pesticides Inorganics	Fair (intermittent)	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
	Sediment	Misc. Organics Pesticides Inorganics	Fair (intermittent)	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
Magazine Area						
	Soil	Inorganics	Fair	Not currently planned	Current – Low Future – Low	No further action
	Soil Vapor	None	Fair	Not currently planned	Current – Low Future – Low	No further action

Table 6.12-1 SLERA Summary Table
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Management Area	Media Evaluated	Habitat COPECs	Habitat Quality	Future Land Use	Exposure Potential	Recommendation
Open Space Areas 1, 2, and 4						
	Soil	Inorganics	Fair	Not currently planned	Current – Medium Future – Medium	No further action
	Soil Vapor	Toluene	Fair	Not currently planned	Current – Medium Future – Medium	No further action
Area 39						
	Soil	Phthalates Dioxins Furans Inorganics	Fair (high human activity)	Not currently planned	Current – Medium Future – Medium	SMDP to determine if further action necessary
	Surface Water	Inorganics	Good	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
	Sediment	Inorganics	Good	Not currently planned	Current – High Future – High	SMDP to determine if further action necessary
	Soil Vapor	VOCs	Fair (high human activity)	Not currently planned	Current – Medium Future – Medium	SMDP to determine if further action necessary

Notes:

ESL = Ecological screening level
PCB = Polychlorinated biphenyl
SMDP = Scientific/Management Decision Point
VOC = Volatile Organic Compound
Habitat COPECs = Chemicals above guild-specific ESLs and, for inorganics, above both ESLs and background concentrations in habitat areas; does not include those constituents lacking screening levels

7.0 UNCERTAINTY ANALYSIS

Risk estimates are values that have uncertainties associated with them. These uncertainties, which arise at every step of a risk assessment, are evaluated to provide an indication of the relative degree of uncertainty associated with a risk estimate. This section presents a qualitative discussion of the uncertainties associated with the risk assessment for the source areas in the BOU.

Risk assessments are not intended to estimate actual risks to a receptor associated with exposure to chemicals in the environment. In fact, estimating actual risks is impossible because of the variability in the exposed or potentially exposed populations. Therefore, risk assessment is a means of estimating the probability that an adverse health effect (e.g., cancer, impaired reproduction) will occur in a receptor. The multitude of conservative assumptions used in risk assessments guard against underestimation of risks.

Risk estimates are calculated by combining site data, assumptions about individual receptor's exposures to media, and toxicity data. The uncertainties in this risk assessment can be grouped into four main categories associated with performing these steps:

- Uncertainties in environmental sampling and analysis;
- Uncertainties in fate and transport modeling;
- Uncertainties in assumptions concerning exposure scenarios; and
- Uncertainties in toxicity data and dose response extrapolations.

The uncertainties associated with each of the four categories are discussed below.

7.1 UNCERTAINTIES COMMON TO BOTH THE HUMAN HEALTH AND ECOLOGICAL RISK ASSESSMENTS

General uncertainties that apply to the both the HHRA and SLERA process are discussed briefly below. Uncertainties specific to the HHRA and SLERA for each of the BOU MAs are also discussed in detail below.

7.1.1 *Environmental Sampling and Analysis*

The risk assessment for the site is based on the sampling results obtained from multiple investigations over time. Errors in sampling results can arise from the field sampling, laboratory analyses, and data analyses. Errors in laboratory analysis procedures are possible, although the impacts of these sorts of errors on the risk estimates are likely to be low. The environmental sampling at the site is one source of uncertainty in the evaluation. However, the sampling locations were selected to identify the areas with the greatest likelihood of containing chemicals of interest; therefore, the sampling and analysis data should be sufficient to characterize chemical concentrations and distributions, and subsequently the associated potential risks.

Furthermore, data were utilized that were collected over time. Older samples may no longer be reflective of concentrations of chemicals that may be degraded (TPH and related compounds) or decrease with time (e.g., VOCs). This may have resulted in overestimation of associated risks. The use of older samples may also have underestimated risks. For example, soil gas results from several years ago may be lower than current concentrations, depending on the time it takes for a chemical to migrate from a source to the sampling location.

7.1.1.1 *1,3-Butadiene*

1,3-butadiene has been detected in many soil vapor samples. However, detections of 1,3-butadiene at the site could not be reproduced upon repeated sampling at the same locations. Therefore, (as outlined in the White paper) it was not selected as a COPC or evaluated in the risk assessment.

7.1.1.2 *Arsenic*

There are interferences for arsenic in the 6020 (ICP-MS) analysis which can lead to false positives. Chloride may interfere with the analysis by combining with the argon gas used in the instrument to create argon chloride. Argon chloride has the same mass as arsenic. This may lead to a potential overestimation of risk.

7.1.1.3 *Thallium*

There are analytical interferences for thallium with the Method 6010 (ICP) data. The ICP analysis is subject to many spectral interferences. Within

the background dataset, a few samples were analyzed by both Method 6010 (ICP) and Method 6020 (ICP-MS). Thallium was detected in the Method 6010 analysis but not in the Method 6020 analysis which has lower detection limits. This may have lead to an overestimation of risk by inclusion of thallium that may not be present in the samples.

7.1.2 *Chemical of Potential Concern Selection-Background Comparison*

No background data were available for surface water, groundwater or sediments. This may have led to the inclusion of some inorganics that are present at background levels, particularly arsenic, resulting in overestimation of risks associated with these media. In addition, some metals in soil did not have site-specific background concentrations, such as boron and lithium. California regional background values for these two metals were taken from the Kearney Foundation (1996) and may not accurately represent site-specific background concentrations.

Furthermore, rather than use of a weight of evidence approach, metals were included as COPCs if a single statistical test (Gehan or quantile) did not support the conclusion that site and background data were comparable. This may have led to the inclusion of some metals that are present at background levels, particularly arsenic, aluminum, and vanadium, resulting in overestimation of risks associated with these metals.

7.1.3 *Chemical of Potential Concern Selection-Concentration-Toxicity Evaluation*

A number of chemicals had detection limits in one or more samples that exceeded the concentration-toxicity screening criteria utilized for COPC selection (Section 4.0). It should be noted, however, that Aerojet conducted a rigorous evaluation of laboratories prior to procuring the laboratory for this investigation. One of the main selection criteria was having detection limits below the screening levels. In many cases (*e.g.*, NDMA), even the most refined laboratory analytical methods are not capable of accurately detecting concentrations of some chemicals down to the screening level. Additionally, when one compound (*e.g.*, TCE) was present at very high concentrations, the sample had to be diluted to obtain an accurate quantification of the TCE; therefore, detection limits for all other compounds in the sample were elevated. However, Aerojet has made every effort to provide detection limits suitable for use in the present risk assessment.

7.1.4 *Exposure Point Concentrations*

In estimating exposure point concentrations, the detected concentrations of COPCs at each location were used. Because utilizing this procedure assumes that a receptor is exposed to a single location (which can include the maximum detected concentration of a chemical) throughout the duration of their tenure at the property, for some samples this may be a conservative assumption. Subsequently, risks may have been overestimated at these locations because a receptor is more likely to be exposed to an area averaged estimate of concentration rather than a maximum.

7.1.5 *Toxicity Assessment*

Extrapolation of toxicological data from animal tests is one of the largest sources of uncertainty in a risk assessment. There may be important, but unidentified, differences in uptake, metabolism, and distribution of chemicals in the body between the test species and target species. For the most part, these uncertainties are addressed through use of conservative assumptions (such as uncertainty factors) in establishing reference toxicity values, which results in the likelihood that the risk is overstated.

Typically, animals are administered doses of a chemical in a standard diet or in air that are higher than would be experienced in an environmental setting. Individuals may be exposed to much lower doses in a highly variable diet, which may affect the toxicity of the chemical. In these studies, animals, usually laboratory rodents, are exposed daily to the chemical agent for various periods of time up to their 2-year lifetimes. Individuals may be exposed either intermittently or regularly for an exposure period ranging from months to a full lifetime. Because of these differences, extrapolation is a large source of uncertainty in a risk assessment.

7.2 *UNCERTAINTIES ASSOCIATED WITH THE HUMAN HEALTH RISK ASSESSMENT*

Uncertainties that apply to the HHRA are discussed below.

7.2.1 *Chemicals of Potential Concern Selection*

As described in Section 4.3.2, COPC selection screening criteria were based in part on CHHSLs and Region 9 PRGs. The BOU HHRA (and

associated screening criteria) was completed in November 2008, before USEPA published the Regional Screening Levels (RSLs) in February 2009. Since February 2009, USEPA has updated the RSLs multiple times. When this document was being revised, the most recent RSLs had been published in December 2009 (USEPA 2009a). Since RSLs and other guidance are frequently revised, this document can only provide a comparison against the information available at the time of revision and, as such, uncertainty will remain. Aerojet anticipates that the most recent RSLs will be taken into account at the time USEPA identifies the cleanup goals for those areas requiring remedial action.

In November 2009, DTSC issued HHRA Note #3 (DTSC 2009b), which provides clarification on which screening values DTSC recommends where both Cal-EPA and USEPA values are available. The COPC selection was reviewed to evaluate the differences between previous screening criteria and the December 2009 RSLs. This comparison and the potential uncertainties associated with the differences between the previous screening criteria and RSLs are discussed for each of the MAs below.

In addition, background levels of arsenic and thallium may be significant contributors to risks where they have been selected as COPCs. Arsenic ILCRs in background range from 1×10^{-5} to 6×10^{-4} and thallium HIs in background range from 0.02 to 0.64.

7.2.2 *Fate and Transport Modeling*

The assumptions and uncertainties inherent in each of the fate and transport models applied to the site are discussed in each of the individual model sections. To the extent practical, models have been calibrated to reflect actual site conditions. However, where site-specific data were unavailable, fate and transport models and their input parameters were selected such that modeled concentrations at a temporally or spatially remote receptor point would be overestimated. Thus, actual future concentrations of COPCs in each of the modeled media at the site are likely to be less than those predicted by the model.

7.2.3 *Exposure Assessment*

In this report, the exposure assessment is based on a number of assumptions with varying degrees of uncertainty (USEPA, 1992a). Uncertainties can arise from the types of exposures examined, the points of potential human exposure, the concentrations of COPCs at the points of

human exposure, and the intake assumptions. These factors and the ways in which they contribute to the risk estimation are discussed below.

7.2.3.1 *Types of Exposures Examined*

The selection of exposure pathways is a process, often based on professional judgment, which attempts to identify the most probable potentially harmful exposure scenarios. In an evaluation, risks are sometimes not calculated for all of the exposure pathways that may occur, possibly causing some underestimation of risk. In this evaluation, potential risks were estimated for future hypothetical residential and worker exposure scenarios at the site. Risks to potential receptors were estimated for a number of different exposure pathways (e.g., inhalation of dust). While other exposure routes could exist for a particular site use, these exposures are expected to be lower than the risks associated with the pathways considered.

The near-surface and perched groundwater consumption scenarios are highly unlikely since there are no plans to use groundwater as a domestic water source, and perched water has a limited total volume to support domestic use.

7.2.3.2 *Points of Human Exposure*

Another source of uncertainty in the exposure assessment is the assumption made regarding the locations where individuals could be exposed to media at the site. In this assessment, assumptions were made to indicate the locations where people could come into contact with a specific media. It is conservatively assumed that individuals will be exposed to a consistent COPC concentration in each media, based on the assumptions used in the assessment, regardless of where they are on the site. That is, fluctuations in chemical concentrations, either spatially or temporally, are not considered.

Furthermore, calculation of exposures on a point-by-point basis assumes that receptors are limited to COPC concentration(s) in immediate proximity to the location and depth, when in fact, the receptor may be exposed to a much broader range of chemical concentrations. This is likely to lead to an overestimation of potential risk.

7.2.3.3 *Intake Assumptions Used*

The risks calculated depend largely on the assumptions used to calculate the rate of COPC intake. The uncertainties associated with the parameters used in this risk assessment are described below.

Individuals can come into contact with chemicals via a number of different exposure routes. For the reasonable maximum exposure scenarios, standard default rates were used for these exposures. These represent upper bound values and provide reasonable maximum activity assumptions. The use of these standard default and upper end values makes it likely that the risk is not underestimated, and may in fact, be overestimated.

The amount of COPCs the body absorbs may be different from the amount of a COPC contacted. In this assessment, absorption of ingested and inhaled COPCs is conservatively assumed to be 100 percent. Actual chemical- and site-specific values are likely less than this default value.

Use of USEPA versus DTSC Note 1 Exposure Parameters. Exposure parameters utilized in the HHRA are based upon USEPA defaults. Use of USEPA defaults for commercial receptors (all pathways) and for residential receptors (groundwater pathways) are specified in the White Paper. For the remaining pathways/receptors, USEPA parameters were utilized because they are applicable and to maintain consistency in the sources for exposure parameters. DTSC has guidance for default exposure parameters for use at military sites presented in DTSC HHRA Note 1 (DTSC, 2005). As part of this uncertainty analysis, the impacts that use of the DTSC Note 1 parameters has on estimated ILCRs and HIs is evaluated.

The primary differences between the exposure parameters utilized in this BOU HHRA and the DTSC Note 1 parameters are:

- Resident child skin surface area of 2,800 squared centimeter (cm^2) was used in this BOU HHRA versus DTSC Note 1 value of 2,900 cm^2;
- Commercial worker inhalation rate of 20 cubic meter (m^3) was used versus DTSC Note 1 value of 14 m^3;
- Commercial worker skin surface area of 3,300 cm^2 was used versus DTSC Note 1 value of 5,700 cm^2; and
- Construction worker dermal adherence factor of 0.3 mg/cm^2 was used versus DTSC Note 1 value of 0.8 mg/cm^2.

The DTSC Note 1 values were input into the exposure calculations for three MAs (Administration Area East, Administration Area West, and Chemical Plant 2) to determine if their use would result in a significant impact on the risk/hazard. The three MAs were utilized as an initial screening tool because they included some of the greatest risk/hazard estimates and also had the broadest range of COPCs detected within the BOU.

The results of this evaluation are presented on the table below:

	Samples > HI = 1				Samples > ILCR 10-6		
	Resident		Construction	Commercial		Construction	Commercial
	Child	Adult	Worker	Worker	Resident	Worker	Worker
Admin West Soil							
Total Samples Assessed	**277**						
DTSC Note 1 Parameters	15	0	18	0	14	19	7
BOU USEPA Parameters	15	0	18	0	14	18	7
Change[a]	0	0	0	0	0	1	0
Admin West Soil Vapor							
Total Samples Assessed	**80**						
DTSC Note 1 Parameters	0	0	0	0	4	0	0
BOU USEPA Parameters	0	0	0	0	4	0	0
Change[a]	0	0	0	0	0	0	0
Admin East Soil							
Total Samples Assessed	**313**						
DTSC Note 1 Parameters	13	3	8	3	35	10	25
BOU USEPA Parameters	13	3	4	2	35	6	21
Change[a]	0	0	4	1	0	4	4
Admin East Soil Vapor							
	194						
DTSC Note 1 Parameters	25	18	1	9	83	1	49
BOU USEPA Parameters	25	18	1	12	83	1	56
Change[a]	0	0	0	-3	0	0	-7
Chemical Plant 2 Soil							
Total Samples Assessed	**263**						
DTSC Note 1 Parameters	11	2	5	2	26	3	16
BOU USEPA Parameters	11	2	4	2	26	2	12
Change[a]	0	0	1	0	0	1	4
Chemical Plant 2 Soil Vapor							
	102						
DTSC Note 1 Parameters	14	12	1	9	27	1	18
BOU USEPA Parameters	11	2	4	2	26	2	12
Change[a]	0	0	1	0	0	1	4

a Samples either now exceeding or no longer exceeding risk metrics by utilizing DTSC note 1 parameters. Positive numbers are samples now exceeding; negative numbers are samples no longer exceeding.

As demonstrated on the table above, the relative change in risk/hazard estimates observed for soils using DTSC Note 1 exposure parameters versus the USEPA defaults is minimal. Out of the hundreds of samples evaluated, only a handful of sample locations would exhibit ILCRs or HIs that exceed the risk metrics for a given receptor that did not exceed for this receptor using the USEPA defaults. Additionally, all the identified sample locations had estimated risks that exceeded risk metrics for at least one of the evaluated receptor types using the USEPA defaults. Review of these results with the FS team also indicated that the changes in risk estimates would likely have no impact on the areas recommended for

further evaluation in the FS. Therefore, use of the DTSC Note 1 parameters is considered unlikely to have any significant effect on the results and recommendations of the HHRA and FS. However, future HHRAs conducted for the Aerojet site will include the use of the DTSC Note 1 parameters.

7.2.4 *Toxicity Assessment*

In this report, the toxicity assessment is based on a number of assumptions with varying degrees of uncertainty (USEPA, 1992a). Uncertainties can arise from the toxicological data and dose response extrapolations, extrapolation of animal studies to humans, types of exposures examined, the points of potential human exposure, the concentrations of COPCs at the points of human exposure, and the intake assumptions. These factors and the ways in which they contribute to the risk estimation are discussed below.

7.2.4.1 *Toxicological Data and Dose Response Extrapolations*

The availability and quality of toxicological data is another source of uncertainty in the risk assessment. Uncertainties associated with animal and human studies may have influenced the toxicity criteria. Carcinogenic criteria are classified according to the amount of evidence available that suggests human carcinogenicity. USEPA assigns each carcinogen a designation of A through E, dependent upon the strength of the scientific evidence for carcinogenicity. In the establishment of the non-carcinogenic criteria, conservative multipliers, known as uncertainty and modifying factors, are used.

7.2.4.2 *Uncertainties in Animal and Human Studies*

Extrapolation of toxicological data from animal tests is one of the largest sources of uncertainty in a risk assessment. There may be important, but unidentified, differences in uptake, metabolism, and distribution of chemicals in the body between the test species and humans. For the most part, these uncertainties are addressed through use of conservative assumptions in establishing values for RfDs and CSFs, which results in the likelihood that the risk is overstated.

Typically, animals are administered doses of a chemical in a standard diet or in air that are higher than would be experienced in an environmental setting. Humans may be exposed to much lower doses in a highly variable diet, which may affect the toxicity of the chemical. In these

studies, animals, usually laboratory rodents, are exposed daily to the chemical agent for various periods of time up to their 2-year lifetimes. Humans have an average 70-year lifetime and may be exposed either intermittently or regularly for an exposure period ranging from months to a full lifetime. Because of these differences, it is not surprising that extrapolation error is a large source of uncertainty in a risk assessment.

7.2.4.3 *Non-Carcinogenic Toxicity Criteria*

In the establishment of the non-carcinogenic criteria, conservative multipliers, known as uncertainty factors, are used. The chronic non-carcinogenic toxicity criteria located in the IRIS database have uncertainty factors as high as 10,000. This means that the dose corresponding to a toxicological endpoint (e.g., LOAEL) was divided by 10,000; thus increasing the toxicity by several orders of magnitude. The purpose of the uncertainty factor is to account for the extrapolation of toxicity data from animals to humans and to insure the protection of sensitive individuals. However, in accomplishing these things, the uncertainty in the actual toxicity of the chemical in humans is greatly increased.

Uncertainty surrounding TICs could also lead to an underestimation of potential risk. However, because these compounds occur with other COPCs that have associated risks, that underestimation is not expected to alter the overall conclusions of this HHRA.

7.2.4.4 *Carcinogenic Toxicity Criteria*

This HHRA utilized the carcinogenic slope factors for TCE published by Cal-EPA (OEHHA, 2008). These slope factors are less than provisional slope factors for TCE developed by the NCEA, and may lead to an underestimation of potential risk.

Uncertainty due to extrapolation of toxicological data for potential carcinogens tested in animals-to-human data is more prominent for potentially carcinogenic chemicals than non-carcinogenic ones. USEPA uses the LMS model to extrapolate the toxicological data. The LMS assumes that there is no threshold for carcinogenic substances; that is, exposure to even one molecule of a carcinogen is sufficient to cause cancer. This is a highly conservative assumption because the body has several mechanisms to protect against cancer.

The use of the LMS model to extrapolate is a well-recognized source of significant uncertainty in the development of carcinogenic toxicity criteria

and, subsequently, theoretical carcinogenic risk estimates. At high levels of exposure, there may indeed be a risk of cancer regardless of whether the effect occurs via a threshold mechanism or not. An animal bioassay can not determine what happens at low levels of exposure, however, which are generally typical of human exposure levels.

At low levels of exposure, the probability of cancer can not be measured, but must be extrapolated from higher dosages. To do this, animals are typically exposed to carcinogens at levels that are orders of magnitude greater than those likely to be encountered by humans in the environment. It would be difficult, if not impossible, to perform animal experiments with a large enough number of animals to directly estimate the level of risk at the low exposure levels typically encountered by humans. Thus, to estimate the risk to humans exposed at low levels, dose response data derived from animals given high dosages are extrapolated downward using mathematical models such as the LMS, which assumes that there is no threshold of response. The dose response curve generated by the model is known as the maximum likelihood estimate (MLE). The slope of the 95 percent lower confidence interval (i.e., upper-bound limit) curve, which is a function of the variability in the input animal data, is taken as the CSF. CSFs are then used directly in cancer risk assessment.

The federal government, including USEPA itself, has acknowledged the limitations of the high to low dose extrapolation models, particularly the LMS (USEPA, 1991). In fact, this aspect of cancer risk assessment has been criticized by many scientists (including regulatory scientists) in recent years. USEPA is currently in the process of re-evaluating the 1986 cancer risk assessment guidelines (USEPA, 1996).

Even for genotoxic (i.e., non-threshold) substances, there are two major sources of bias embedded in the LMS:

- Its inherent conservatism at low doses; and
- The routine use of the linearized form in which the 95 percent upper confidence interval is used instead of the unbiased MLE.

The inherent conservatism at low doses is due in part to the fact that the LMS ignores all of the numerous biological factors that argue against a linear dose-response relationship for genotoxic effects (e.g., DNA repair, immunosurveillance, toxicokinetic factors).

Several other factors inherent in the LMS result in overestimated carcinogenic potency:

- Any exaggerations in the extrapolation that can be produced by some high dose responses (if they occur) are generally neglected;
- Upper confidence limits on the actual response observed in the animal study are used rather than the actual response, resulting in upper-bound low dose extrapolations, which can greatly overestimate risk; and
- Non-genotoxic chemicals (i.e., threshold carcinogens) are modeled in the same manner as highly genotoxic chemicals.

The following excerpts are from the *Regulatory Program of the United States Government*, April 1990 – March 1991, Executive Office of the President (USEPA, 1991c):

"None of (the) purported advantages of the LMS approach has a sound statistical basis. It is a fundamental axiom of statistics that unbiased estimates are generally preferred to biased ones. Using the upper confidence limit instead of the unbiased estimate exaggerates underlying specification errors instead of eliminating them. "Instability" is overcome, but at the cost of greater errors in specification. The problem with the LMS is that it generates biases that intensify with the degree to which the multistage model miss-specifies the true dose response relationship.

The LMS cannot be justified as a method of scientific risk assessment. The "yardstick" defense implicitly asserts that scientific advancements in risk assessment methodology should take a back seat to the preservation of an outdated and misguided statistical procedure.

The habitual reliance upon either the multistage model or its LMS descendant cannot be supported by sound scientific principles."

Typically, animals are administered high doses, including the controversial maximum tolerated dose of a chemical in a standard diet. Humans, on the other hand, may be exposed to much lower doses in a highly variable diet. In these studies, animals, usually laboratory rodents, are exposed daily to the chemical agent for various periods of time up to their 2-year lifetime. Humans have an average 70-year lifetime and may be exposed either intermittently or regularly for an exposure period ranging from months to a full lifetime. Because of these differences, extrapolation error is a large source of uncertainty in risk assessment.

Even when studies of chemical effects in humans are available, they typically are for workplace exposures that exceed those expected in the

environment. Uncertainties can be large because activity patterns, exposure duration, frequency, individual susceptibility, and dose may not be the same in study populations as individuals exposed to environmental concentrations. Because conservative methods are used in developing the RfDs and CSFs, the possibility of underestimating risks is low.

7.2.4.5 *Constituents without Toxicity Data*

The absence of toxicity data for chemicals such as 2,2,4-TMP is likely to lead to an underestimation of potential risk. However, in light of the co-occurrence of these compounds with other COPCs having associated risks, the total underestimation of risk is not expected to significantly alter the results of this HHRA.

7.2.4.6 *Trichloroethene*

This HHRA used the toxicity criteria (i.e., carcinogenic slope factor and RfD) for TCE published by Cal-EPA (OEHHA, 2004). These toxicity criteria are less than provisional slope factors for TCE developed by the NCEA, and may lead to an underestimation of potential risk. Therefore, this HHRA included a second evaluation of the risks associated with soil vapor using the NCEA toxicity criteria. The following table presents the results of this evaluation, which utilized Administration East and Administration West as the example site(s).

Administration Area East (Soil Vapor)

Land Use	Receptor	Hazard/Risk	Results above Thresholds [1]	Maximum HI or ILCR
Resident	Child	HI	25 / 30	856 / 856
Resident	Adult	HI	18 / 23	367/367
Resident	Child/Adult	ILCR	84 / 108	4×10^{-2} / 4×10^{-2}
Commercial	Adult	HI	12 / 14	133 / 133
Commercial	Adult	ILCR	56 / 78	1×10^{-2} / 1×10^{-2}
Construction	Adult	HI	1 / 2	3.4 / 3.4
Construction	Adult	ILCR	1 / 2	1×10^{-5} / 1×10^{-5}

Administration Area West (Soil Vapor)

Land Use	Receptor	Hazard/Risk	Results above Thresholds [1]	Maximum HI or ILCR
Resident	Child	HI	0 / 0	0.03/0.11
Resident	Adult	HI	0 / 0	0.01/0.05
Resident	Child/Adult	ILCR	4 / 28	5×10^{-6}/9×10^{-5}
Commercial	Adult	HI	0 / 0	0.005/0.02
Commercial	Adult	ILCR	0 / 19	1×10^{-6}/2×10^{-5}
Construction	Adult	HI	0 / 0	0.00012/0.00038
Construction	Adult	ILCR	0 / 0	3×10^{-8}/5×10^{-7}

Administration Area West (Groundwater)

Land Use	Receptor	Hazard/Risk	Results above Thresholds [1]	Maximum HI or ILCR
Resident	Child	HI	57 / 57	4702 / 4702
Resident	Adult	HI	50 / 51	2084 / 2084
Resident	Child/Adult	ILCR	55 / 58	1×10^{-1}/1×10^{-1}
Resident – GW VI	Child	HI	11 / 14	46 / 58
Resident – GW VI	Adult	HI	6 / 9	20 / 25
Resident – GW VI	Child/Adult	ILCR	34 / 36	3×10^{-3} / 2×10^{-2}
Commercial	Adult	HI	4 / 6	7 / 9
Commercial	Adult	ILCR	29 / 34	8×10^{-4} / 4×10^{-3}

Notes:
OEHHA Toxicity Data / USEPA Toxicity Data
1 = Thresholds are 1.0 for Non-Carcinogenic Effects and 1×10^{-6} for Cancer Risks.

7.2.4.7 *Iron*

For a number of soil sample locations, iron is a primary contributor (driver) to the estimated HI. With iron contributing substantially to HIs, it is important to note that there is a substantial amount of uncertainty associated with the NCEA provisional iron reference dose. The reference dose is based upon mean dietary intakes rather than a distinct toxic endpoint observed in humans or animals. Complicating the consideration of the assessment results is that iron is an essential nutrient and is required for proper human physiological activity. Therefore, while in some cases iron in a number of samples is a significant contributor to the HI, this likely results in an overestimation of the hazard associated with these exposures.

7.2.4.8 *Aluminum*

For several MAs, aluminum is a primary contributor (driver) to the estimated HI. With aluminum contributing substantially to HIs, it is important to note that there is a substantial amount of uncertainty associated with the provisional aluminum inhalation reference dose. The reference dose is based upon only a single occupational study with some personal monitoring data that is presumed to be time-weighted average (TWA), but cannot definitively be categorized as such. Performance of exposed workers was significantly ($p<0.02$) lower on psychomotor tests, however, no clinical manifestations related to exposure were noted. The lower end of the range of measured exposures of 4.6 mg/m^3 was utilized as an LOAEL for an 8-hour occupational exposure (Hosovski et al., 1990) and "corrected" for discontinuous exposure (10 m^3/20 m^3 and 5 days/7 days), resulting in an LOAEL of 1.64 mg/m^3. Uncertainty factors were applied for intrahuman variability (10), LOAEL to NOAEL

extrapolation (10) for presence of an inadequate database (3), yielding a total uncertainty factor of 300. Application of this uncertainty factor resulted in the provisional reference concentration (RfC) of 5×10^{-3} mg/m^3, or 1.4×10^{-3} mg/kg-day. Given the paucity of data, there is significant uncertainty in the application of this RfC/RfD to the risk assessment in the present analysis.

To render an RfC/RfD consistent with an occupational exposure, for the construction worker scenario, the TWA correction is removed and the occupational equivalent LOAEL of 4.6 mg/m^3 is utilized. Applying the same uncertainty factors as applied in the derivation of the provisional RfD, this yields an occupational RfC of 4.6 mg/m^3 /300 = 1.53×10^{-3} mg/m^3, or an RfD of 4.4×10^{-3} mg/kg-day.

7.2.4.9 Lead

At the time of the data collection and draft version of this HHRA, Cal-EPA had lead assessment methodologies and screening levels predicated upon the use of a threshold blood lead level of 10 µg/dL, that is, cumulative exposures resulting in a total blood lead level of 10 µg/dL were considered acceptable. Recently, OEHHA has released new screening levels (CHHSLs) based upon a revised toxicity assessment approach, namely, the use of an incremental increase of 1 µg/dL in blood lead (over background blood lead at the 90th percentile) as a benchmark. This benchmark is a more conservative benchmark approach to assessment of lead exposures, resulting in a change of the CHHSL for residential and commercial receptors from 150 and 3,500 mg/kg to 80 and 320 mg/kg respectively. Because more conservative exposure parameters are utilized in the Leadspread model for this assessment and the results are selected from the 99th percentile per the White Paper, the approach in this HHRA is considered sufficiently protective for the purposes of establishing areas for further evaluation in the FS. However, for future HHRAs, the more recent assessment procedure (1 µg/dL increase over background at the 90th percentile) will be considered.

7.2.4.10 Total Petroleum Hydrocarbons

At the time of the data collection and draft version of this HHRA, neither Cal-EPA nor USEPA had quantitative guidance for evaluating risks associated with TPH mixtures. Subsequently, TPH measurements were not selected as COPCs as part of the HHRA. Recently, DTSC has issued interim guidance on evaluating human health risks from TPH (DTSC, 2009). The intent of this guidance was to provide 1) data collection

recommendations, and 2) quantitative risk assessment calculation guidance for the most toxic TPH-related components (as well as carbon range-specific information). Where appropriate, the sampling and analysis of soil vapor and soil samples for the BOU included and targeted quantification of the most toxic TPH-related compounds (e.g. PAHs and VOCs) and these data were included in the present risk analysis. Subsequently, the BOU HHRA has quantified risks associated with areas containing detected TPH concentrations in a manner consistent with the spirit of the recent DTSC guidance. Since the most toxic TPH-related constituents were evaluated, not quantifying TPH has low potential for underestimation of risks. DTSC's guidance will be considered during preparation of HHRAs for subsequent OUs.

7.2.5 *Management Area Uncertainties*

Uncertainties that apply specifically to the HHRA performed for each MA are discussed below.

7.2.5.1 *Administration Area*

Administration Area: Buildings 20002 and 20004. In addition to the risks estimated for default residential and commercial receptors for the Administration Area conducted as part of this HHERA, a site-specific commercial/ industrial worker vapor intrusion HHRA effort was conducted in November 2007 on soil vapor samples collected proximal to Buildings 20002 and 20004. The site-specific commercial/industrial worker vapor intrusion HHRA is presented in Appendix II and summarized below.

While the commercial site-specific HHRA was conducted utilizing procedures similar to the methods employed in the present HHRA, a number of different inputs and assumptions were utilized in the site-specific evaluation conducted for Buildings 20002 and 20004. Most notably:

- Only commercial workers were assessed.
- COPC selection was conducted utilizing OEHHA CHHSLs based upon an ILCR of 10^{-6} and an HQ of 0.2.
- Model inputs were modified to more closely reflect site-specific conditions, including:

- Geometric mean values for bulk density, total porosity, and water-filled porosity based upon site specific data collected proximal to Buildings 20002 and 20004;
- Soil type was based on observed soil proximal to Buildings 20002 and 20004;
- Site-specific building footprints for warehouse areas;
- Site-specific interior building heights for warehouse based on existing building characteristics;
- Selection of air exchange rates for warehouse and office space with consideration of site-specific building characteristics; and
- Selection of soil-building pressure differential based upon site-specific building characteristics.

Areas were identified and assessed as either "warehouse" or "office space" based upon building-specific floor plans. Modeling of vapor intrusion was then conducted for areas of the building based upon these building-specific designations.

The same USEPA/Cal-EPA exposure assessment paradigms and toxicity criteria selection hierarchy as that employed in the present HHRA was used. Results of the quantitative analysis (on a point-by-point basis) were then utilized to create risk domains via interpolation of the risk estimates. The results of the analyses indicated the following:

- All non-cancer HIs were below the target HI of 1.0 for both warehouse and office workers;
- For warehouse workers, all of the interpolated theoretical upper-bound cancer risks were below 10^{-5}. The interpolated theoretical upper-bound cancer risk surface was below 10^{-6} throughout Building 20004 and most of Building 20002, with a very small area between 10^{-6} and 10^{-5} in the south-central portion of Building 20002.
- For office workers, all of the interpolated theoretical upper-bound cancer risks were below 10^{-5}. The interpolated theoretical upper-bound cancer risk surface was below 10^{-6} with some smaller areas between 10^{-5} and 10^{-6} in the northwest and south/central office spaces in Building 20002, and some areas in the northwest office spaces of Building 20004 and a small area in the southwest office spaces of Building 20004.

7.2.5.2 *Administration Area East*

Soil Detection Limits. As described in earlier sections, screening for COPCs in soil was conducted based on FOD (>5 percent, organics only), background comparisons (inorganics only), and comparison of the maximum detected concentrations to conservative screening levels based upon residential land use. While this procedure is anticipated to be sufficiently conservative because it assumes all the maximums for every chemical are collocated, a number of chemicals were not selected as COPCs, but had analytical results that were "nondetect" with the maximum detection limit greater than the screening level.

Approximately 30 chemicals analyzed for in soil at Administration Area East were excluded as COPCs based upon these metrics, but had one or more detection limits greater than the screening level (where screening levels are one-tenth a health-based level). For most of these chemicals, while the maximum detection limit was greater than the screening level, elevated detection limits occurred in only a few samples and/or the detection limits were less than the health-based level utilized to derive the screening level; indicating that even if detected, they would not be risk drivers. It is also noted that most of these chemicals were neither detected nor selected as COPCs at other MAs in the BOU. This is an indication they are unlikely to be present at concentrations that would change the order of magnitude of the risks and/or hazards estimated for the Administration Area. The presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates. However, even if they were present at concentrations approaching the detection limits, it is unlikely they would cause a substantial increase in the risk estimates because the estimated risks are clearly driven by the presence of other known COPCs based upon previous site activities.

Soil Vapor Detection Limits. Screening for COPCs in soil vapor was conducted based on FOD (>5 percent, organics only) and comparison of the maximum detected concentrations to conservative screening levels based upon residential land use. While anticipated to be conservative, a number of chemicals were not selected as COPCs, but had analytical results that were "nondetect" with the maximum detection limit greater than the screening level.

Approximately 25 chemicals analyzed for in soil vapor at Administration Area East were excluded as COPCs based upon these metrics, but had one or more detection limits greater than the screening level (where screening

levels are one-tenth a health-based level). For many of these chemicals, while the maximum detection limit was greater than the screening level, the detection limits for many were sufficient to identify additional risk drivers (relative contributions from other COPCs) if present. It is also noted that most of these chemicals were not detected nor selected as COPCs at other MAs in the BOU, with detection limits sufficient to have detected substantial concentrations that might result in estimated risks of interest. This is an indication these chemicals are not COPCs for the facility in general and subsequently are unlikely to be present at concentrations that would change the order of magnitude of the risks and/or hazards estimated for the Administration Area. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely even if they were present at concentrations approaching the detection limits, that they would cause a substantial increase in the risk estimates.

Naphthalene. Naphthalene was not analyzed in soil vapor samples. Naphthalene was detected above the RISL (1700 µg/Kg) in two soil samples collected in the Administration East area (locations 03D-SB46 and 51D-SB09). The presence of Naphthalene in soil, along with its volatility, may result in the presence of Naphthalene in soil vapor. The omission of this data may result in the underestimation of risk to human health from the inhalation of vapors that contain Naphthalene. However, the area surrounding 03D-SB46 is encompassed by the area posing an unacceptable risk to human health from the inhalation of other VOCs in soil vapor (Figure 9.0-1) and will be further analyzed in the FS. At location 51D-SB09, shallower soil samples do not contain Naphthalene (detection limit < 7.3 µg/Kg)

Iron. For a number of soil sample locations, iron is a significant contributor (driver) for calculated HQs. With iron contributing substantially to HIs, it is important to note the substantial amount of uncertainty associated with the NCEA provisional iron RfD. The RfD is based upon mean dietary intakes rather than a distinct toxic endpoint observed in humans or animals. Complicating the consideration of the assessment results is that iron is an essential nutrient and is required for proper human physiological activity. Therefore, while in some cases iron is a significant contributor to HI in a number of samples, this likely overestimates hazard associated with these exposures.

<u>RSL Review</u>. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details

which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening level. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL (mg/kg)	Would use of the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Acenaphthene	370	340	No	None
Anthracene	2200	1700	No	None
Benzyl alcohol	1800	610	No	None
Cobalt	66	2.3	No; passed background comparison	None
Fluorene	270	230	No	None
Lithium	160	16	Yes	Low[1]
N-Nitrosodimethylamine	0.00095	0.00023	Yes	Very Low[2]

1 – Lithium was detected in 98% of samples but the maximum detection is approximately one-quarter of the RSL.

2 – N-Nitrosodimethylamine was only detected in one sample, therefore the impact on estimated soil risks at Administration Area East is likely limited.

7.2.5.3 *Administration West*

Soil Detection Limits. As described in earlier sections, screening for COPCs in soil was conducted utilizing conservative screening metrics, a number of chemicals were not selected as COPCs, but had analytical results that were "nondetect" with the maximum detection limit greater than the screening level.

Approximately 20 chemicals analyzed for in soil at Administration Area West were excluded as COPCs based upon these metrics, but had one or more detection limits greater than the screening level (where screening levels are one-tenth a health-based level). For most of these chemicals, while the maximum detection limit was greater than the screening level, elevated detection limits occurred in only a few samples and/or the detection limits were less than the health-based level utilized to derive the screening level; indicating that even if detected, they would not be risk drivers. Therefore, while the presence of detection limits greater than screening levels in some samples for certain chemicals imparts a degree of uncertainty to the risk estimates, it is considered unlikely even if they were present at concentrations approaching the detection limits, that they would cause a substantial increase in the risk estimates given the magnitude of the risks estimated for existing COPCs.

Soil Vapor Detection Limits. As described in earlier sections, screening for COPCs in soil vapor was conducted utilizing sufficiently conservative procedures, a number of chemicals were not selected as COPCs, but had analytical results that were "nondetect" with the maximum detection limit greater than the screening level.

Approximately 30 chemicals analyzed for in soil vapor at Administration Area West were excluded as COPCs based upon these metrics, but had one or more detection limits greater than the screening level (where screening levels are one-tenth a health-based level). For many of these chemicals, while the maximum detection limit was greater than the screening level, most detection limits were below the health-based level from which the screening level was derived (screening level = health-based level x 0.1) and/or had only a single detection limit that was above the health-based level. Additionally, many detection limits were achieved that would detect concentrations of chemicals sufficient to be risk drivers with respect to the relative contributions from detected COPC concentrations. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely even if they were present at concentrations approaching the detection limits, that they would cause a substantial increase in the risk estimates.

Groundwater Detection Limits. Over 100 chemicals were excluded as COPCs in groundwater because they were not detected. A substantial number of these contained one or more analyses for which detection limits were above screening levels established for COPC selection. Of these, approximately 75 had detection limits greater than the health-based level used to establish the screening criteria. Only a relative handful (approximately 14) were chemicals that have sufficient solubility that if present in soil, could be possible candidates to reach groundwater. The others, generally speaking, are heavy organics (including organochlorine pesticides, PCBs, PAHs) unlikely to move through the vadose zone. Given the range of estimated risks for COPCs selected, it is relevant to note that only a handful of chemicals have detection limits above concentrations that represent the upper end of the acceptable risk range assuming domestic use. Even if present, they are unlikely to change the risk estimates sufficiently to alter risk-based decisions made using the current results. The dataset utilized also contains a combination of older and newer data, and the newer data contains detection limits that are below the health-based limits. Therefore, while the groundwater dataset does contain elevated detection limits for some constituents, these are

considered unlikely to adversely affect the location-specific risk estimates sufficient to change decisions made based upon the results.

Surface Water Detection Limits. COPC selection was conducted for surface water chemical measurements conservatively utilizing domestic use groundwater screening criteria. Approximately 40 chemicals were excluded as COPCs because they were not detected, but had one or more detection limits that exceeded these conservative criteria. However, use of domestic use criteria for surface water screening is highly conservative, as surface water incidental contact is substantially less intensive than domestic use. This is evidenced by the fact that the maximum detected arsenic concentration in water was 3,000 times greater than the domestic use screening criteria (at 10^{-6}), but the maximum estimated residential/recreational contact risk for arsenic was 4 times less than the *de minimus* risk level of 10^{-6}. Reviewing the maximum detection limits against this differential, most of the detection limits are sufficient to have captured concentrations of chemicals not selected as COPCs that, if present in surface water, could potentially change a location-specific risk estimate.

Surface Water and Groundwater COPC Selection. Detected chemical concentrations in surface water were screened for COPC selection utilizing domestic use groundwater screening values. As the surface water incidental contact exposures are significantly lower than domestic use exposures, the use of groundwater criteria will result in more chemicals being selected as COPCs, when in fact, the detected concentrations are well below a concentration of interest. Furthermore, no background data was available for surface water or groundwater. This may have led to the inclusion of some metals that are present at background levels, particularly arsenic, resulting in overestimation of risks associated with these media.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL (mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Acenaphthene	370	340	No	None
Cobalt	66	2.3	No; passed background comparison	None
Fluorene	270	230	No	None
Lithium	160	16	Yes	Low[1]

1 – Lithium was detected in 97% of samples, but the maximum detection is less than one-quarter of the RSL.

Groundwater:

Chemical	Screening Value (µg/L)	1/10 the 2009 RSL (µg/L)	Would use of the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Ethylbenzene	30	0.15	Yes	Low[1]

1 – While all detected ethylbenzene concentrations are above the RSL, ethylbenzene was detected in only 3 percent of the samples.

In each location where ethylbenzene is present, other VOCs (e.g., TCE and PCE) were also detected, and groundwater risks are predominated by these other VOCs. There will also be institutional controls placed on the lands that will prohibit the use of groundwater for any use. While ethylbenzene was detected in soil vapor samples and was included as a soil vapor COPC, ethylbenzene in vapor does not present a significant risk to any receptor. Therefore, these cumulative lines of evidence suggest that exclusion of ethylbenzene as a COPC will likely have minimal or no impact on the final risk estimate. Lastly, in areas where groundwater VOCs present a estimated risk above applicable risk metrics, existing and planned remedial systems are designed to capture and treat all VOCs identified as COPCs, including ethylbenzene.

7.2.5.4 *Area 39*

Soil Detection Limits. Approximately 24 chemicals in soil were eliminated as COPCs because they were not detected, but had maximum detection limits greater than the screening level utilized in COPC selection. With the exception of the nitrosamine compounds, most chemicals either had: 1) maximum detection limits less than the health-based level utilized to derive the screening criteria, or 2) elevated detection limits that occurred

in only a few samples and the remaining detection limits were less than the health-based level. Therefore, while the presence of detection limits greater than screening levels imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates given the magnitude of the risks estimated for existing COPCs.

Soil Vapor Detection Limits. Approximately 14 chemicals analyzed for in soil vapor were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. For several of these chemicals, the detection limits were below the health-based level. The remaining had only a handful of detection limits (less than 10 percent) above the health-based level, with the rest less than the health-based level. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely they would substantially change the risk estimates.

Groundwater Detection Limits. Over 60 chemicals were excluded as COPCs in groundwater because they were not detected, but had detection limits above screening levels. About one-fourth of these have maximum detection limits that are below the health-based criteria utilized to derive the screening criteria. Given the range of estimated risks for COPCs selected, it is relevant to note that only a handful of chemicals have detection limits that are above concentrations that represent the upper end of the acceptable risk range assuming domestic use. Even if present, they are unlikely to change the risk estimates sufficiently to alter risk-based decisions made upon the current results. The dataset utilized also contain a combination of older and newer data, and the newer data contain detection limits that are below the health-based limits. Therefore, while the groundwater dataset does contain elevated detection limits for some constituents, these are considered unlikely to adversely affect the location-specific risk estimates sufficient to change decisions made based upon the results.

Surface Water Detection Limits. Approximately 55 chemicals were excluded as COPCs in surface water because they were not detected, but had one or more detection limits that exceeded these conservative criteria. However, use of domestic use criteria for surface water screening is highly conservative, as surface water incidental contact is substantially less intensive than domestic use. This is evidenced by the fact that the maximum detected arsenic concentration in water was 4,000 times greater than the domestic use screening criteria (at 10^{-6}), but the maximum estimated residential/recreational contact risk for arsenic was 3 times less

than the *de minimus* risk level of 10^{-6}. Reviewing the maximum detection limits against this differential, most of the detection limits are sufficient to have captured concentrations of chemicals not selected as COPCs that, if present in surface water, could potentially change a location-specific risk estimate.

Surface Water and Groundwater COPC Selection. Detected chemical concentrations in surface water were screened for COPC selection utilizing domestic use groundwater screening values. As the surface water incidental contact exposures are significantly lower than domestic use exposures, the use of groundwater criteria will result in more chemicals being selected as COPCs, when in fact, the detected concentrations are well below a concentration of interest. Furthermore, no background data were available for surface water or groundwater. This may have led to the inclusion of some metals that are present at background levels, particularly arsenic, resulting in overestimation of risks associated with these media.

Background Aluminum. While the data are statistically different for at least one test, background concentrations are consistent with observed site concentrations for many samples, and subsequent risk estimates for the site may be indistinguishable from contributions to risk estimates from background. Exploration of additional lines of evidence (e.g., additional statistical analyses, site history) outlined in Section 5.6 above supports the conclusion that detected aluminum may not be site related, and may in fact, be indicative of background concentrations. Therefore, associated risks may be overestimated.

Background Thallium. Thallium is a COPC, and while the data are statistically different from background for at least one test, background concentrations are consistent with observed site concentrations for many samples. Background levels of thallium may be a significant contributor to estimated risks and risk estimates for the site may be indistinguishable from contributions to risk estimates from background and risks associated with this chemical may be overestimated.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Cobalt	66	2.3	No; passed background comparison	None
Lithium	160	16	Yes	Low[1]
Nickel	160	150	No	None

1 – Lithium was detected in 100 percent of samples, but the maximum detection is less than 15 percent of the RSL.

Groundwater:

For the detected chemicals eliminated during COPC selection, none of the RSL changes would result in lower screening levels than the ones used.

7.2.5.5 Buffalo Creek

Soil Detection Limits. Approximately 15 chemicals were eliminated as COPCs in soil because they were not detected, but had maximum detection limits greater than the screening level utilized in COPC selection. Only a few of these chemicals had maximum detection limits greater than the health-based level utilized to derive the screening criteria (PCBs and nitrosamine compounds). For most of these chemicals, while the maximum detection limit was greater than the screening level, elevated detection limits occurred in only a few samples and/or the detection limits were less than the health-based level utilized to derive the screening level. Therefore, while the presence of detection limits greater than screening levels in some samples for certain chemicals imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates given the magnitude of the risks estimated for existing COPCs.

Sediment Detection Limits. Approximately 14 chemicals were eliminated as COPCs in sediment because they were not detected, but had maximum detection limits greater than the screening level. Elevated detection limits occurred in only a few samples and/or only a few of these chemicals had maximum detection limits greater than the health-based level utilized to derive the screening criteria (PCBs and nitrosamine compounds). Therefore, while the presence of detection limits greater than screening levels in some samples for certain chemicals imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially

affect the risk estimates given the magnitude of the risks estimated for existing COPCs.

Sediment COPC Selection. No background data were available for sediment, therefore, all detected inorganics above screening levels were considered COPCs. This may have led to the inclusion of some metals, particularly arsenic, that are present at background levels, resulting in overestimation of risks associated with these media.

Background Arsenic and Thallium. Arsenic and thallium were identified as COPCs in Buffalo Creek. While the data are statistically different from background, background concentrations are consistent with observed site concentrations for many samples. Background levels of thallium and arsenic may be significant contributors to estimated risks and risk estimates for the site may be indistinguishable from contributions to risk estimates from background and risks associated with these chemicals may be overestimated.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL (mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Cobalt	66	2.3	No; passed background comparison	None
Lithium	160	16	Yes	Low[1]
Nickel	160	150	No	None

1 – Lithium was detected in 100 percent of samples, but the maximum detection is one-tenth of the RSL.

7.2.5.6 *Chemical Plant 2*

Soil Detection Limits. Approximately 14 chemicals were eliminated as COPCs in soil because they were not detected, but had maximum detection limits greater than the screening level utilized in COPC selection. Only a few of these chemicals had maximum detection limits greater than the health-based level utilized to derive the screening criteria.

For most of the chemicals, elevated detection limits occurred in only a few samples and the remaining detection limits were less than the health-based level utilized to derive the screening level. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the location-specific risk estimates.

Soil Vapor Detection Limits. Approximately 20 chemicals analyzed for in soil vapor were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. For most of these chemicals, elevated detection limits occurred in only a few samples (generally 10 percent or less) with the remaining detection limits less than the health-based level utilized to derive the screening criteria. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

Background Aluminum, Arsenic, and Thallium. While the data for these metals were determined to be statistically different by at least one test, background concentrations are consistent with observed site concentrations for many samples, and subsequent risk estimates for the site may be indistinguishable from contributions to risk estimates from background. Exploration of additional lines of evidence (e.g., additional statistical analyses, site history) outlined in Section 5.6 above supports the conclusion that detected arsenic may not be site related, and may in fact, be indicative of background concentrations. Therefore, risks associated with these chemicals may be overestimated.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Acenaphthene	370	340	No	None
Alpha-BHC	0.0090	0.0077	No	None
Anthracene	2200	1700	No	None
Benzyl alcohol	1800	610	No	None

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Beta-BHC	0.032	0.027	No	None
Cobalt	66	2.3	No; passed background comparison	None
Fluorene	270	230	No	None
Gamma-BHC (Lindane)	0.044	0.027	No	None
Lithium	160	16	Yes	Low[1]
Nickel	160	150	No	None

1 – Lithium was detected in 100 percent of samples, but the maximum detection is one-quarter of the RSL.

7.2.5.7 *Line 02*

Soil Detection Limits. Approximately 20 chemicals were eliminated as COPCs in soil because they were not detected, but also had maximum detection limits greater than the screening level utilized in COPC selection. Only about half of these chemicals had maximum detection limits greater than the health-based level utilized to derive the screening criteria. The elevated detection limits occurred in only a few samples, with the remaining detection limits being less than the health-based level. Therefore, while the presence of detection limits greater than screening levels in some samples for certain chemicals imparts a degree of uncertainty to the risk estimates, because detection limits were sufficient for the key chemicals of interest, it is considered unlikely to substantially affect the risk estimates given the magnitude of the risks estimated for existing COPCs.

Soil Vapor Detection Limits. Only a handful of chemicals (approximately 14) analyzed for in soil vapor were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. For many of these chemicals, elevated detection limits occurred in only a few samples with the remaining detection limits less than the health-based level utilized to derive the screening criteria. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

Background Arsenic and Thallium. While the two population tests indicate that data for these metals are statistically different than background, background concentrations are consistent with observed site

concentrations for many samples, and subsequent risk estimates for the site may be indistinguishable from contributions to risk estimates from background. Exploration of additional lines of evidence (e.g., additional statistical analyses, site history) outlined in Section 5.6 above supports the conclusion that detected arsenic may not be site related, and may in fact, be indicative of background concentrations. Therefore, risks associated with these chemicals may be overestimated.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Anthracene	2200	1700	No	None
Cobalt	66	2.3	No; passed background comparison	None
Lithium	160	16	Yes	Low[1]

1 – Lithium was detected in 100 percent of samples, but the maximum detection is less than one-quarter of the RSL.

7.2.5.8 Line 05

Soil Detection Limits. Approximately 20 chemicals were eliminated as COPCs in soil because they were not detected, but had maximum detection limits greater than the screening level utilized in COPC selection. Only about half of these chemicals had maximum detection limits greater than the health-based level utilized to derive the screening criteria, with elevated detection limits occurring in mostly one sample, and the remaining detection limits being less than the health-based level. Therefore, while the presence of detection limits greater than screening levels in some samples for certain chemicals imparts a degree of uncertainty to the risk estimates, because detection limits were sufficient for the key chemicals of interest, it is considered unlikely to substantially affect the risk estimates given the magnitude of the risks estimated for existing COPCs.

Soil Vapor Detection Limits. Only a handful of chemicals (approximately nine) analyzed for in soil vapor were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. For all, but one, of these chemicals (1,1-DCP), the detection limits were less than the health-based level utilized to derive the screening criteria. For 1,1-DCP, the elevated detection limits occurred in only 10 percent of the samples, with the remaining detection limits being below the health-based level. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Acenaphthene	370	340	No	None
Anthracene	2200	1700	No	None
Cobalt	66	2.3	No; passed background comparison	None
Fluorene	270	230	No	None
Lithium	160	16	Yes	Low[1]
Nickel	160	150	No	None

1 – Lithium was detected in 100 percent of samples, but the maximum detection is less than one-fifth of the RSL.

7.2.5.9 *Magazine Area and Open Space 3*

Soil Detection Limits. Approximately 14 chemicals were eliminated as COPCs in soil because they were not detected, but had maximum detection limits greater than the screening level utilized in COPC selection. Only about half of these chemicals had maximum detection limits greater than the health-based level utilized to derive the screening criteria. The elevated detection limits occurred mostly in one sample, with the remaining detection limits being less than the health-based level. Therefore, while the presence of detection limits greater than screening

levels in some samples for certain chemicals imparts a degree of uncertainty to the risk estimates, because detection limits were sufficient for the key chemicals of interest, it is considered unlikely to substantially affect the risk estimates given the magnitude of the risks estimated for existing COPCs.

Soil Vapor Detection Limits. Only a handful of chemicals (approximately eight) analyzed for in soil vapor were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. For all, but one, of these chemicals (1,1-DCP), the detection limits were less than the health-based level utilized to derive the screening criteria. For 1,1-DCP, the elevated detection limits occurred in only 15 percent of the samples, with the remaining detection limits being below the health-based level. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Cobalt	66	2.3	No; passed background comparison	None
Lithium	160	16	Yes	Low[1]
Nickel	160	150	No	None

1 – Lithium was detected in 100 percent of samples, but the maximum detection is less than one-fifth of the RSL.

7.2.5.10 *Open Space Areas 1, 2, and 4*

Soil Detection Limits. Only a handful of chemicals (approximately nine) analyzed for in soil were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. For most of these chemicals, the detection limits were less than the health-based level utilized to derive the screening criteria; but for the

nitrosamine compounds, the detection limits were elevated. While the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

Soil Vapor Detection Limits. Only a handful of chemicals (approximately eight) analyzed for in soil vapor were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. However, for all of these chemicals, the detection limits were less than the health-based level utilized to derive the screening criteria. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Cobalt	66	2.3	No; passed background comparison	None
Lithium	160	16	Yes	Low[1]
Nickel	160	150	No	None

1 – Lithium was detected in 100 percent of samples, but the maximum detection is less than one-fifth of the RSL.

7.2.5.11 *Open Space Areas 5 and 7*

Soil Detection Limits. Only a handful of chemicals (approximately nine) analyzed for in soil were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. For most of these chemicals, the detection limits were less than the health-based level utilized to derive the screening criteria. However, the nitrosamine compounds had elevated detection limits. While the presence of detection limits greater than screening levels in some samples imparts a

degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

Soil Vapor Detection Limits. Only a handful of chemicals (approximately eight) analyzed for in soil vapor were excluded as COPCs because they were not detected, but had one or more detection limits greater than the screening level. However, for all of these chemicals, the detection limits were less than the health-based level utilized to derive the screening criteria. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the risk estimates.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Cobalt	66	2.3	No; passed background comparison	None
Lithium	160	16	No	None
Nickel	160	150	No	None

7.2.5.12 *Westlakes*

Soil Detection Limits. Approximately 15 chemicals were eliminated as COPCs in soil because they were not detected, but had maximum detection limits greater than the screening level utilized in COPC selection. Only four of these chemicals had maximum detection limits greater than the health-based level utilized to derive the screening criteria. With the exception of the nitrosamine compounds, most of the chemicals with elevated detection limits occurred in only a few samples and the remaining detection limits were less than the health-based level utilized to derive the screening level. Therefore, while the presence of detection limits greater than screening levels in some samples imparts a degree of uncertainty to the risk estimates, it is considered unlikely to substantially affect the location-specific risk estimates.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Soil:

Chemical	Screening Value (mg/kg)	1/10 the 2009 RSL(mg/kg)	Would the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Alpha-BHC	0.0090	0.0077	No	None
Cobalt	66	2.3	No; passed background comparison	None
Gamma-BHC (Lindane)	0.044	0.027	No	None
Lithium	160	16	Yes	Low[1]
Nickel	160	150	No	None

1 – Lithium was detected in 100 percent of samples, but the maximum detection is one-fifth of the RSL.

7.2.5.13 *WLLO Area Surface Water and Groundwater*

Surface Water Detection Limits. Approximately 50 chemicals were excluded as COPCs in surface water because they were not detected, but had one or more detection limits that exceeded these conservative criteria. However, use of domestic use criteria for surface water screening is highly conservative, as surface water incidental contact is substantially less intensive than domestic use. This is evidenced by the fact that the maximum detected arsenic concentration in water was 2,000 times greater than the domestic use screening criteria (at 10^{-6}), but the maximum estimated residential/recreational contact risk for arsenic was 6 times less than the *de minimus* risk level of 10^{-6}. Reviewing the maximum detection limits against this differential, most of the detection limits are sufficient to have captured concentrations of chemicals of interest for this receptor, if present.

Groundwater Detection Limits. Like other groundwater MAs, because the screening criteria are so conservative, this MA had numerous detection limits that exceeded the screening levels. Over 60 of the chemicals were excluded as COPCs in groundwater because they were not detected, but these contained detection limits above screening levels. About one-fourth of these have maximum detection limits that are below the health-based

criteria utilized to derive the screening criteria, approximately another fourth have detection limits that are below concentrations that represent the middle of the acceptable risk range and assuming domestic use. The remaining dataset with detection limits exceeding the above metrics consist primarily of PAHs and polychloro-ethanes. Therefore, while the dataset contain elevated detection limits for some constituents resulting in uncertainty associated with the results (several PAHs and polychloro-ethanes), the detection limits for most COPCs selected at this and other groundwater MAs are sufficient to have detected concentrations of interest.

Surface Water and Groundwater COPC Selection. Detected chemical concentrations in surface water were screened for COPC selection utilizing domestic use groundwater screening values. As the surface water incidental contact exposures are significantly lower than domestic use exposures, the use of groundwater criteria will result in more chemicals being selected as COPCs, when in fact, the detected concentrations are well below a concentration of interest. Furthermore, no background data were available for surface water or groundwater. This may have led to the inclusion of some metals that are present at background levels, particularly arsenic, resulting in overestimation of risks associated with these media.

RSL Review. For the detected chemicals eliminated during COPC selection, none of the RSL changes would result in lower screening levels than the ones used.

7.2.5.14 *Chemical Plant 2 Region Surface Water and Groundwater*

Surface Water Detection Limits. Approximately 50 chemicals were excluded as COPCs in surface water because they were not detected, but had one or more detection limits that exceeded these conservative criteria. However, use of domestic use criteria for screening is highly conservative, as surface water incidental contact is substantially less intensive than domestic use. This is evidenced by the fact that the maximum detected arsenic concentration in water was 18,000 times greater than the domestic use screening criteria (at 10^{-6}), but the maximum estimated residential/recreational contact risk for arsenic was equal to the *de minimus* risk level of 10^{-6}. Reviewing the maximum detection limits against this differential, most of the detection limits are sufficient to have captured concentrations of chemicals not selected as COPCs that, if present in surface water, could potentially change a location-specific risk estimate.

Groundwater Detection Limits. Like other groundwater MAs, because the screening criteria are so conservative, this MA had numerous detection limits that exceeded the screening levels. Over 90 of the chemicals were excluded as COPCs in groundwater because they were not detected, but had detection limits above screening levels. Nearly 25 percent of these have maximum detection limits below the health-based criteria utilized to derive the screening criteria, approximately another 30 percent have detection limits below concentrations that represent the upper of the acceptable risk range while assuming domestic use. The remaining dataset (approximately 27 chemicals) with detection limits exceeding the above metrics consist primarily of PAHs, polychloro-alcanes, and chloro and methylbenzenes. For the trimethylbenzenes and trichlorobenzenes, the elevated detection limits are present in only a handful of samples, and the remaining detection limits are less than health-based levels. While the dataset contain elevated detection limits for some constituents resulting in uncertainty associated with the results (several PAHs and polychloro-alcanes), the detection limits for most COPCs selected at this and other groundwater MAs are sufficient to have detected concentrations of interest.

Surface Water and Groundwater COPC Selection. Detected chemical concentrations in surface water were screened for COPC selection utilizing domestic use groundwater screening values. As the surface water incidental contact exposures are significantly lower than domestic use exposures, the use of groundwater criteria will result in more chemicals being selected as COPCs, when in fact, the detected concentrations are well below a concentration of interest. Furthermore, no background data were available for surface water or groundwater. This may have led to the inclusion of some metals that are present at background levels, particularly arsenic, resulting in overestimation of risks associated with these media.

RSL Review. The screening levels used in the COPC selection were compared to the 2009 RSLs (USEPA, 2009a). The following table details which of the detected chemicals eliminated during COPC selection had RSLs less than the previous screening levels. Consistent with the previous COPC selection, one-tenth of the RSL is used for comparison.

Groundwater:

Chemical	Screening Value (µg/L)	1/10 the 2009 RSL (µg/L)	Would use of the 2009 RSL result in selection as COPC?	Underestimation of Risks?
Chlorobenzene	11	9.1	No	None

7.3 *UNCERTAINTIES ASSOCIATED WITH THE SCREENING-LEVEL ECOLOGICAL RISK ASSESSMENT*

The SLERA was designed to provide a protective assessment of potential risks—i.e., used methods and value that would likely overestimate the potential for adverse impacts. To ensure that risk estimates are protective:

- Constituent concentrations in media are based on samples collected from known or suspected impacted areas of each MA.
- Assessment was performed on a sample location-by-location basis.
- Exposure assumed that wildlife does not avoid contaminated areas or foods.
- ESL values and their use were reviewed and approved by oversight regulatory agencies.

In addition to applicable uncertainties identified in Sections 7.1 and 7.2, uncertainties related to the SLERA are discussed below.

7.3.1 *Exposure Assessment*

Sources of uncertainty related to COPEC exposures include:

- Identification of potentially exposed ecological receptors;
- Receptor presence at the MA;
- Omission of dermal contact; and
- Detection limits greater than ESLs.

7.3.1.1 *Identification of Potentially Exposed Ecological Receptors*

Identification of potentially exposed ecological receptors was based in large part on site visits and the following existing sources of information:

1. California's Wildlife Habitat Relationship System;
2. RareFind queries of the California Natural Diversity Database; and
3. Characterizations of habitats, plants, wildlife, and special status species as described in *Biological Resource Assessment for Aerojet Superfund Site, Sacramento County, California* (ECORP, 2005).

Although comprehensive, some plants and animals that may occur at MAs may not have been identified.

Note that identification of all plants and animals that may occur at MAs is not required to perform a SLERA. The above biological characterizations are considered to be sufficient to support a SLERA as they identify:

- Types, size, and nature of dominant habitats at MAs;
- Dominant wildlife observed or expected at MAs;
- Special status species observed or expected at MAs; and
- Biota of commercial (e.g., livestock) or recreational (e.g., game) interest (if present) at MAs.

7.3.1.2 *Receptor Presence at the Management Area.*

For this SLERA, the amount of time organisms spend at the MA was assumed to be 100 percent. In fact, the sample location-by-location assessment used in this SLERA assumes that organisms spend 100 percent of their time at a particular sampling location. This assumption does not account for an integration of exposure over a biologically relevant exposure area by individuals and/or populations. Given that many of the sampling locations were selected based on known or suspected areas in each MA containing chemicals, this assumption is considered to result in overestimates of potential risks to plant and wildlife populations.

7.3.1.3 *Omission of Dermal Contact*

Exposure due to dermal contact was considered insignificant and was not quantitatively evaluated in this SLERA. In general, results of dermal risk calculations indicate that the dermal exposure route is minor relative to the ingestion pathway, typically comprising less than 5 percent of the risk due to ingestion for a given chemical (Peterle, 1991; USEPA, 2005). The omission of dermal contact is likely to have a negligible effect on conclusions reached in the SLERA.

7.3.1.4 *Detection Limits Greater than ESLs*

As discussed in Section 7.1.2, Aerojet conducted a rigorous evaluation of laboratories prior to procuring the laboratory for this investigation. One of the main selection criteria was having detection limits below the screening levels. In some cases, even the most refined laboratory analytical methods are not capable of accurately detecting some of the chemicals down to the screening level. For example, the ESL for mercury in soil is 0.00051 mg/kg, below the limit of any analytical method. Additionally, when one compound was present at a very high

concentration, the sample had to be diluted to obtain an accurate quantification of the elevated compound; therefore, detection limits for all other compounds in the sample became elevated. BOU data used in this SLERA with detection limits greater than ESLs are presented in Appendix J, which shows an analysis of detection limits greater than ESLs in each media, on an MA-by-MA basis.

It should be noted that detection limits for soil vapor did not exceed ESLs with the exception of Area 39, where detection limits for benzene and vinyl chloride were above ESLs in only 1 of 32 samples. Detection limits greater than ESLs in soil, sediment, and surface water may result in underestimates of the potential for adverse ecological impacts from these constituents, because not all concentrations potentially greater than ESLs can be quantified. Note that this limitation is also common to the state of the practice of ERAs and is not unique to this SLERA.

7.3.2 *Effects Assessment*

Key sources of uncertainty related to using ESLs (effects assessment) include:

- Representative surrogate species;
- Laboratory-to-field toxicity extrapolations;
- Lack of ESLs for amphibians and reptiles;
- Limited general and/or guild-specific ESLs for ecological receptor groups;
- Evolving science and emerging contaminants
- Lack of agency-recognized soil vapor ESLs; and
- Effects due to exposure to multiple COPECs.

Note that the ESLs were conscientiously identified, reviewed, and approved for use by the Agencies with the intent of providing a conservative assessment. Moreover, the sample location-by-location application of ESLs is considered to provide a protective assessment. Accordingly, use of ESLs is consistent with the current state of the practice and, when available for aquatic biota, sediment-dwelling biota, or

terrestrial biota[30], is anticipated to provide a conservative assessment of potential ecological impacts.

7.3.2.1 *Representative Surrogate Species*

ESLs were based on values for organisms that may not occur at the MAs within the BOU (USEPA 2000a; MacDonald et al., 2000; USEPA, 2005-2007). Accordingly, and as is standard practice, exposure and responses for these organisms (often laboratory species) are assumed to be representative for organisms at BOU MAs—i.e., may be used to infer potential risks to biota observed at BOU MAs.

Species are known to vary with respect to sensitivity to specific chemicals (USEPA, 1998; Calabrese and Baldwin, 1993). Based on our review of the toxicological data, ranges of sensitivity for members within a class of vertebrates were commonly up to 100-fold. This range of uncertainty is substantiated by Calabrese and Baldwin (1993). Although a range in sensitivity may be described, little is known about the relative chemical-specific sensitivity (and the "direction" of sensitivity) for species in the wild compared to laboratory test species.

7.3.2.2 *Laboratory-to-Field Extrapolations*

A number of studies (primarily for aquatic systems) have evaluated the ability of single-chemical laboratory toxicity test results to predict adverse effects of that chemical on organisms under field conditions. Preliminary chemical contaminant studies suggest that laboratory toxicity tests represent more conservative exposure scenarios than those that occur in nature (USEPA, 1991b). Furthermore, concentrations of chemicals causing no effect in laboratory tests also do not appear to affect communities in the field. Thus, the use of SLERA screening levels is likely to provide a conservative level of protection to plant communities and wildlife populations observed in the field.

7.3.2.3 *Lack of ESLs for Reptiles and Amphibians*

Potential impacts to reptile and amphibian populations could not be assessed due to the lack of widely recognized screening-level ecotoxicity

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[30] Plant, soil invertebrate, bird, and mammal.

benchmarks. This lack of recognized ecotoxicity benchmarks for amphibians and reptiles is characteristic of the state-of-the-practice for ERAs and is not unique to this BOU SLERA. Potential impacts to amphibians and reptiles that are inferred from risk characterizations for other warm-blooded wildlife is fraught with uncertainties and is not conducted in this SLERA. The lack of ESLs for reptiles and amphibians represents a potential data gap for decision-makers.

7.3.2.4 *Limited General and/or Guild-Specific ESLs for Ecological Receptor Groups*

ESLs for a limited number of constituents are available for soil invertebrates and birds. Positively detected constituents lacking ESLs are presented for each MA in Tables 7.3-1 through 7.3-13. For the most part, constituents lacking ESLs in soil, sediment, and surface water are restricted to metals, and data gaps are more significant for sediment ESLs than soil or surface water ESLs.

A few detected organic compounds lacked general and/or guild-specific ESLs. However, for the most part, these compounds generally occurred at low concentrations, low frequency, and/or were not identified as risk drivers for the human health risk assessment. Accordingly, the lack of ESLs for these organic compounds is considered unlikely to affect the conclusions of the SLERA.

Guild-specific ESLs are limited for a number of constituents, in particular for soil invertebrates and birds, as shown in the COPEC screening and Guild-Specific Risk Characterization tables (Section 6.0). For the most part, ESLs for soil invertebrates are restricted to a limited number of metals, PAHs, phenols, chloroanalines, and chlorobenzenes (USEPA, 2005-2007; Efroymson et al, 1997b). Principally, ESLs for birds are restricted to a limited number of metals, chlorinated pesticides, and PCBs (USEPA, 2005-2007; Sample et al, 1996). Limited ESLs in soil, surface water, and sediment in particular, as well as specifically for soil invertebrates and birds may result in underestimates of the potential for adverse ecological impacts to these receptor groups. Note that this limitation is common to the state of the practice of ERAs and is not unique to this SLERA.

7.3.2.5 *Evolving Science and Emerging Contaminants*

Although perchlorate is no longer considered an emerging contaminant, studies are on-going to understand toxicity of this chemical. Standard regression-estimated perchlorate BAFs for the soil to plant pathway were

used to develop the BOU Eco SSL for perchlorate (1.17mg/Kg), as discussed in Section 6.1.2.2. DTSC and USEPA feel there is a large degree of uncertainty regarding how well standard regression estimates uptake for plants in specific types of habitats and may, based upon recent studies, significantly underestimate the perchlorate uptake in annual grasslands. Because of this uncertainty, DTSC is currently considering changes to the calculation of plant uptake for perchlorate, which could decrease the perchlorate ESL. DTSC and USEPA do, however, acknowledge that the BOU perchlorate Eco SSL is significantly higher than the PGW SSL and it is unlikely that significant perchlorate contamination in soil was missed during the BOU remedial investigation.

7.3.2.6 *Lack of Agency-Recognized Soil Vapor ESLs*

Currently, there is no widely recognized or regulatory agency-approved source of ESLs to support screening of soil vapor data. Consequently, several sources were considered for this SLERA—each were found to have advantages and limitations as summarized on Table 7.3-14.

Following discussions with regulatory agencies, Aerojet was directed to:

- Identify VOC COPCs based on human health-based soil vapor screening levels.[31]
- Consider ecotoxicity benchmarks[32] developed by DTSC for Edwards AFB (notwithstanding the lack of supporting documentation).
- Consider the lowest NOAEL-equivalent benchmarks compiled by Gallegos et al. 2007. For the purposes of this uncertainty analysis, use of the Edwards AFB benchmarks was evaluated given:
  - These values generally provide the most conservative soil vapor screening values of the three sources considered;

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[31] Human health-based screening levels were considered to be more protective (i.e., lower in value) as compared to ESLs (pers. comm., B.Faulkner, DTSC). Accordingly, these VOCs represent an initial set of constituents from which to screen using ESLs and are listed in the left-hand column of MA-specific soil vapor COPEC tables.

[32] Edwards AFB benchmarks for soil vapor are in terms of concentration (mg/m^3); the same units as would be used for soil vapor ESLs.

- These values are currently undergoing a rigorous evaluation by the USEPA Region 9 Biological Technical Advisory Group (BTAG) as prospective soil vapor ESLs; and
- It is anticipated that soil vapor ESLs accepted by BTAG will be comparable to or greater than the Edwards AFB benchmarks (pers. comm., B.Sample, N.Black, USEPA Region 9).

The following VOCs did not have Edwards AFB benchmarks:[33]

- 1,3-Butadiene
- 1,4-Dioxane
- 2-Propanol
- 4-Ethyltoluene
- 4-Methyl-2-pentanone
- Bromodichloromethane
- Cyclohexane
- Dibromochloromethane
- Ethanol
- Heptane
- Hexachlorobutadiene
- Hexane
- Propylbenzene
- Tetrahydrofuran
- 2,2,4-Trimethylpentane

These VOCs generally occur at low concentrations and are not risk drivers for the human health risk assessment. Accordingly, the lack of toxicity benchmarks for these VOCs is considered unlikely to affect the conclusions of the SLERA.

When comparing maximum soil vapor concentrations at sampling locations in habitat at MAs to the Edwards AFB benchmarks, the following VOCs were found to have exceedances at only 4 of 11 MAs (Table 7.3-15).[34]

Only Area 39 and Line 2 MAs were found to have multiple VOCs that exceeded their corresponding Edwards AFB benchmarks. In addition, toluene was the only VOC to exceed its corresponding soil vapor ESL at Administration Area East and Open Space 1,2,3,4 MAs. Note that the ESL for toluene was based on the Edwards AFB ecotoxicity benchmark of 84 µg[toluene]/m^3 and is considered to be highly conservative based on:

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[33] These VOCs are not repeated in MA-specific soil vapor COPEC tables.

[34] For further details, please see MA-specific soil vapor COPEC tables.

- Comparisons to benzene and vinyl chloride – this ESL suggests that toluene is approximately an order of magnitude more toxic than benzene and vinyl chloride, two VOCs among the lowest Edwards AFB benchmarks.
- Comparison to the lowest NOAEL-equivalent benchmark of 2400 $\mu g/m^3$ from Gallegos et al. (2007).

Moreover, the maximum concentrations of toluene at these two MAs do not exceed the lowest NOAEL-equivalent benchmark of 2400 $\mu g/m^3$ (from Gallegos et al. 2007).

Based on an examination of spatial distribution (Figures 6.3-3 [Line 2] and 6.11-3 [Area 39]), exceedances of the Edwards AFB benchmark for TCE appear to be localized. Hence, TCE (and other co-located VOCs) is considered unlikely to result in population-level impacts to burrowing small mammals. Similarly, where not co-located with TCE, the exceedances of Edwards AFB benchmarks for carbon disulfide, chloroform, 1,1-DCE, and PCE also appear to be localized (Figures 6.3-3 and 6.11-3)—i.e., only at sampling locations 30B-SP10, 30B-SP15, 30B-SP22, 30B-SP23 within Area 39. Hence, carbon disulfide, chloroform, 1,1-DCE, and PCE are considered unlikely to result in population-level impacts to burrowing small mammals.

Based on this examination, exposures to VOCs in soil vapor at BOU MAs are considered to pose a minimal risk to small mammal populations. Further, uncertainties related to soil vapor ESLs are not anticipated to result in significant underestimates of potential risks to burrowing small mammal populations. Lastly, exceedances of soil vapor ESLs alone are not the basis for a potential future risk management action—for example, in addition to other factors (e.g., habitat quality, future land use), consideration of potential human health risks (human health-based screening levels are less than ESLs) and the cost/benefit of potential risk management actions are also included in the FS.

It should be noted that detection limits for soil vapor did not exceed ESLs, with the exception of Area 39, where detection limits for benzene and vinyl chloride were above ESLs in only 1 of 32 samples. Detection limits greater than ESLs in soil, sediment, and surface water may result in underestimates of the potential for adverse ecological impacts from these constituents, because not all concentrations potentially greater than ESLs can be quantified. Note that this limitation is also common to the state of the practice of ERAs and is not unique to this SLERA.

Effects Due to Exposure to Multiple COPECs. Effects due to exposure to multiple COPECs were not accounted for in this SLERA. Metals are known to have synergistic, antagonistic, or neutral influence on the toxicity of other metals (Calabrese, 1991). In several cases, the magnitude of these interactions is related to relative concentrations of the constituents. Although conservatively assumed to result in underestimates of potential risks, given the relative paucity of data for species in the wild, characterizing the magnitude of potential effects due to cumulative exposures to multiple COPECs is considered to be speculative at this time.

7.3.3 Chemicals Without ESLs

Aerojet has conducted a screening of site data against the detected chemicals in soil, surface water, and sediment that do not have ESLs. This screening consisted of an examination of FOD and spatial distribution. ESL development has been conducted for any chemical that is above background (inorganics only), has an FOD greater than 5 percent, and are spatially co-located. Based on the FOD data in Tables 7.3-1 though 7.3-13 and background threshold values, many COPECs have been dropped, as summarized in Table 7.3-16. The remaining COPECs are listed as follows:

Area	Media	COPEC
Admin West	Soil 0-1’	iron, strontium, total cyanide
Admin West	Soil 1-6’	total cyanide
Admin West	Ditch Soil	total cyanide
Line 02	Soil 0-1’	aluminum
Line 02	Soil, 1-6’	aluminum
Westlakes	Sediment	beryllium, boron, chromium VI, molybdenum, thallium
Buffalo Creek	Soil, 0-1’	alpha chlordane
Buffalo Creek	Sediment	alpha chlordane, chromium VI, cobalt, molybdenum
Buffalo Creek	Surface water	Nitrate as NO3, titanium dissolved, titanium total
Chem Plant 2	Soil, 0-1’	aluminum
Chem Plant 2	Soil, 1-6’	aluminum
Chem Plant 2	Sediment	4,4’-DDD, aluminum, barium, beryllium, boron, cobalt, lithium, molybdenum, vanadium
Dredge Pit	Soil, 1-6’	aluminum
Dredge Pit	Sediment	molybdenum
Eastern Basin	Soil, 0-1’	aluminum
Eastern Basin	Sediment	aluminum, molybdenum, thallium
Area 39	Soil, 0-1’	strontium
Area 39	Soil, 1-6’	strontium

These COPECs are listed in Table 7.3-17, with recommended ESLs, and the basis of the ESL. Also included in Table 7.3-17 are the maximum detected concentration of each COPEC, and whether or not this concentration exceeds the recommended ESL. If an exceedance is noted, a further assessment has been competed to determine if any other COPECs also detected in the sample have exceedances of previously established ESLs. If so, the finding that there is an additional exceedance, due to the "new" ESLs would not change SLERA conclusions.

As shown in Table 7.3-17, COPECs with recommended ESLs all had other COPEC exceedances in the sample with the maximum detected concentration, except for strontium in Area 39 soil. Sample 30B-SB07-1 in surface soil, with a strontium concentration of 220 mg/kg, exceeded the recommended ESL of 96 mg/kg by a factor of 2.3-fold, and thus would have been color-coded yellow on Figure 6.11-1. However, the subsurface Sample 30B-SB07 on Figure 6.11-2 is color-coded yellow for a thallium exceedance. In addition, the surface soil Sample 30B-SB07-1 is 100 feet northeast of 30B-SNS02 that is color-coded red for 2,37,8-TCDD exceedances for avian and mammalian receptors, and there are seven other surface soil samples color-coded red within the area (Figure 6.11-1). Therefore, this strontium exceedance is deemed minor and would not change Area 39 SLERA conclusions. Although no sediment ESLs could be readily found for beryllium or lithium (Table 7.3-17), this data gap is deemed minor, as the samples with the maximum detected concentrations (59F-SD02-0.25 in Chemical Plant 2 and WL-SB05-0.5 in the West Lake Area) are already color-coded red, due to other COPEC exceedances (Figures 6.5-1 and 6.8-1, respectively).

In conclusion, overall concerns due to COPECs without ESLs are minor, as discussed previously in this section, and SLERA results and conclusions do not change if the new ESLs recommended herein are considered.

7.3.4 HARDNESS BASED SURFACE WATER SCREENING LEVELS

Table 6.1-4 presented Surface Water Screening Levels for the protection of aquatic life, with an assumed hardness of 100 mg/L for the six metals that have hardness-dependent water quality criteria (cadmium, total chromium, copper, lead, nickel, zinc). However, surface waters of BOU such as Buffalo Creek likely have a hardness lower than 100 mg/L, as effluent limitations in the NPDES permit for Aerojet's industrial discharges uses a hardness value of 35 mg/L, based on historical data collected by Aerojet under the permit. As surface water with hardness lower than 100 mg/L is potentially more toxic to aquatic life, for those

metals that have hardness-dependent criteria, it is likely that potential surface water impacts to aquatic life were underestimated in the SLERA for these metals. A comparison of metals criteria (in mg/L), for a hardness of 100 mg/L vs. a hardness of 35 mg/L, is presented as follows (calculated from information provided in California Toxics Rule [2000] for dissolved concentrations):

Hardness-Dependent Metal	Chronic Criterion at Hardness of 100 mg/L	Chronic Criterion at Hardness of 35 mg/L
Cadmium	0.0022	0.0010
Chromium	0.18	0.075
Copper	0.009	0.004
Lead	0.0025	0.0008
Nickel	0.052	0.021
Zinc	0.12	0.049

Based on this comparison it can be seen that the chronic criterion for all six metals is lower at the softer water hardness of 35 mg/L. These lower metals criteria would result in the following changes to the SLERA Surface Water assessment:

Management Area	Surface Water COPEC Selection	Surface Water HQ Changes	Change to SLERA Surface Water Conclusions
Admin East and West	Cd now selected.	HQs not estimated, as no viable aquatic habitat	No change.
Westlakes	No change.	Dissolved HQs increased: Cu HQ: 2.7 → 6.0 Pb HQ: <1 → 3.0 Zn HQ: <1 → 1.1	Increase in surface water HQs. Table 6.12-1 already says current exposure potential "High" due to other COPECs.
Buffalo Creek	No change.	Dissolved HQs increased: Cu HQ: 1.7 → 3.8 Pb HQ: 1.3 → 4.1 Zn HQ: <1 → 2.0	Increase in surface water HQs. Table 6.12-1 already says current exposure potential "Medium "due to other COPECs.

Management Area	Surface Water COPEC Selection	Surface Water HQ Changes	Change to SLERA Surface Water Conclusions
Chem Plant 2	Cd now selected.	Dissolved HQs increased: Cd: HQ = 1.3 Cu HQ: <1 → 1.5	Slight increase in surface water HQs. Table 6.12-1 already says current exposure potential "High" due to other COPECs.
Dredge Pit	COPECs selected for Chem Plan 2 overall.	Dissolved HQs increased: Cu HQ: <1 → 2.0 Pb HQ: <1 → 1.4	Slight increase in surface water HQs. Table 6.12-1 already says current exposure potential "High" due to other COPECs.
Eastern Basin	COPECs selected for Chem Plan 2 overall.	Total HQs increased (no dissolved results): Cu HQ: 7.9 → 18 Pb HQ: 11.2 → 35 Ni HQ: 1.2 → 2.9 Zn HQ: 1.3 → 3.1	Increase in surface water HQs, but use of total concentrations overestimates potential toxicity. Table 6.12-1 already says current exposure potential "High" due to other COPECs.
Area 39	No change.	Total HQ increased (no dissolved results for Cu): Cu HQ: 1.6 → 3.5	Increase in surface water HQs, but use of total concentrations overestimates potential toxicity. Table 6.12-1 already says current exposure potential "High" due to other COPECs.

Based on this uncertainty evaluation, the use of more restrictive chronic metals quality criteria, to account for softer surface waters, would not significantly change SLERA conclusions related to surface water.

7.4 *COMBINATIONS OF SOURCES OF UNCERTAINTY*

Uncertainties from different sources are compounded in the risk assessment. For example, if a person's daily intake rate for a chemical is compared to an RfD to determine potential health risks, the uncertainties in the concentration measurements, exposure assumptions, and toxicities will all be expressed in the result. Therefore, by combining all upper bound numbers, the uncertainty is compounded, and the resulting risk estimate is generally above the 90th or 95th percentile, perhaps even greater than the 99th percentile.

Table 7.3-1 Detected Constituents Lacking Ecological Screening Levels
Administration Area East Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection
SOIL 0-1'					
1,1,2,2-Tetrachloroethane	mg/kg	3	3	51D-SB04-1	1/1
Iron	mg/kg	22400	22400	03D-SNS06-0.01	1/1
Strontium	mg/kg	26	29	A20-ST22-SB01-1	2/2
SOIL 1-6'					
Strontium	mg/kg	15	34	A20-ST22-SB01-5	5/5
DITCH 0-1'					
Benzyl alcohol	mg/kg	0.12 J	0.12 J	03D-SNS34-0.25	1/14
Dibenzofuran	mg/kg	0.061 J	0.061 J	11D-SNS22-0.5	1/14
Iron	mg/kg	15100	30100	11D-SNS02-0.01	3/3
Strontium	mg/kg	19 J	35	11D-SNS19-0.5	13/14
Total Cyanide	mg/kg	0.76	1.8	11D-SNS21-0.5	2/13
SURFACE WATER (Admin East and Admin West combined)					
Bromodichloromethane	µg/L	1.2	1.2	03D-SW04-1.0	1/15
Nitrate as NO3	µg/L	390	5700	12D-SW01-2.0	14/15
Bromoform	µg/L	0.92	0.92	03D-SW04-1.0	1/15
Nitrite as NO2	µg/L	16	28	03D-SW01-1.5	5/14
Dibromochloromethane	µg/L	0.25	0.25	03D-SW04-1.0	1/15
Titanium	µg/L	3.6	410	12D-SW01-2.0	12/15

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
No onsite aquatic exposure expected, as limited aquatic habitat present.
J = Estimated value.
mg/kg = Milligrams per kilogram
µg/L = Micrograms per liter

Table 7.3-2 Detected Constituents Lacking Ecological Screening Levels
Administration Area West Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection
SOIL 0-1'					
Iron	mg/kg	10900	45200	08D-SNS02-0.01	12/12
Strontium	mg/kg	15	200 J	06D-SNS08-0.5	11/11
Total Cyanide	mg/kg	0.6	25	06D-SNS06-0.5	4/13
SOIL 1-6'					
Iron	mg/kg	14600	23000	D(C)-SB01-5	4/4
Strontium	mg/kg	17 J	54	06D-SNS07-2.5	17/17
Total Cyanide	mg/kg	0.78	2.6	06D-SNS06-2.5	3/7
1,1,2,2-Tetrachloroethane	mg/kg	0.4	0.4	52D-AH03-5	1/1
DITCH 0-1'					
Carbazole	mg/kg	0.0066 J	0.0066 J	05D-SNS15-0.5	1/19
Iron	mg/kg	12700	37000	09D-SNS01-0.01	18/18
Strontium	mg/kg	11 J	78	D(b)-SD01-0	22/22
Titanium	mg/kg	170 J	1600	09D-SD01-0.25	22/22
Total Cyanide	mg/kg	0.5 J	1.3	05D-SNS13-0.5	3/11

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
Surface water COPECs on Table 7.3-1.
J = Estimated value.
mg/kg = Milligrams per kilogram

Table 7.3-3 Detected Constituents Lacking Ecological Screening Levels
Line 02 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection
SOIL 0-1'					
Aluminum	mg/kg	6990	41000	28E-SB03-1	18/18
Strontium	mg/kg	11	30 J	28E-SB03-1	12/12
SOIL 1-6'					
Aluminum	mg/kg	10000	48000	59E-SB04-2.5	30/30
Strontium	mg/kg	15	48	59E-SB04-2.5	28/28

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram

Table 7.3-4 Detected Constituents Lacking Ecological Screening Levels
Line 5 North Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection
SOIL 0-1'					
Strontium	mg/kg	19	48	52E-SNS02-0.5	3/3
SOIL 1-6'					
Strontium	mg/kg	28	29	52E-SB16-5	2/2

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram

Table 7.3-5 Detected Constituents Lacking Ecological Screening Levels
Westlakes Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Total/ Dissolved
SOIL 0-1'						
Strontium	mg/kg	15	62 J	WL-SB05-0.5	17/17	-
SOIL 1-6'						
Strontium	mg/kg	12	63 J	WL-SB05-1.5	26/26	-
SEDIMENT						
Aluminum	mg/kg	13000	39000	WL-SB04-0.5	16/16	-
Barium	mg/kg	85	240	WL-SB05-0.5	16/16	-
Beryllium	mg/kg	0.32	1.2	WL-SB05-0.5	16/16	-
Boron	mg/kg	8.9	29	WL-SD08-0.5	5/14	-
Chromium VI	mg/kg	0.036 J	0.85 J	WL-SB10-0.5	16/16	-
Cobalt	mg/kg	8.8	18	WL-SB10-0.5	16/16	-
Lithium	mg/kg	7.5	18 J	WL-SB05-0.5	16/16	-
Molybdenum	mg/kg	0.16 J	0.67 J	WL-SB05-0.5	12/16	-
Strontium	mg/kg	15	62 J	WL-SB05-0.5	16/16	-
Thallium	mg/kg	0.14 J	3.2 J	WL-SD06-0.5	14/16	-
Titanium	mg/kg	340	860	WL-SB10-0.5	16/16	-
Vanadium	mg/kg	48 J	110 J	WL-SB04-0.5	16/16	-
SURFACE WATER						
Nitrate as NO3	µg/L	950	950	WL-SW04-1	1/2	Total
Titanium	µg/L	4.2 J	4.3 J	WL-SW03-0.5	2/2	Dissolved
Titanium	µg/L	46	170	WL-SW04-1	2/2	Total

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
Sediment samples collected 0-1′ are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram
µg/L = Micrograms per liter

Table 7.3-6 Detected Constituents Lacking Ecological Screening Levels
Buffalo Creek Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Total/ Dissolved
SOIL 0-1'						
alpha-Chlordane	mg/kg	0.0018 J	0.016 J	BC-SD02-0.25	3/6	-
gamma-Chlordane	mg/kg	0.0046 J	0.013 J	BC-SD02-0.25	2/6	-
Strontium	mg/kg	16	58	59E-SD02-0.25	3/3	-
SOIL 1-6'						
Strontium	mg/kg	14	63	59E-SD01-5	3/3	-
SEDIMENT						
alpha-Chlordane	mg/kg	0.0018 J	0.016 J	BC-SD02-0.25	3/6	-
gamma-Chlordane	mg/kg	0.0046 J	0.013 J	BC-SD02-0.25	2/6	-
Aluminum	mg/kg	12200	38000	WL-SD13-0.25	16/16	-
Barium	mg/kg	86	240	WL-SD12-0.5	8/8	-
Boron	mg/kg	2.3 J	12	WL-SD02-0.25	5/8	-
Chromium VI	mg/kg	0.022 J	2.2 J	WL-SD13-0.25	5/8	-
Cobalt	mg/kg	9.3	33	WL-SD12-0.5	8/8	-
Lithium	mg/kg	6.8	16	59E-SD02-0.25	8/8	-
Molybdenum	mg/kg	0.27 J	0.71 J	WL-SD13-0.25	8/8	-
Strontium	mg/kg	16	65	WL-SD01-0.5	8/8	-
Thallium	mg/kg	0.12 J	2.2 J	WL-SD09-0.5	7/8	-
Titanium	mg/kg	530	1100	59E-SD02-0.25	8/8	-
Vanadium	mg/kg	45	110	WL-SD12-0.5	8/8	-
SURFACE WATER						
Trichlorofluoromethane	µg/L	0.24 J	0.24 J	WL-SW08-1	1/9	Total
Nitrate as NO3	µg/L	450	2400	WL-SW01-1	7/8	Total
Titanium	µg/L	7.3	18	WL-SW06-9	6/8	Dissolved
Titanium	µg/L	12	91	WL-SW07-1.5	8/8	Total

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
Sediment samples collected 0-1′ are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram
µg/L = Micrograms per liter

Table 7.3-7 Detected Constituents Lacking Ecological Screening Levels
Open Space 5 and 7 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection
SOIL 0-1'					
Strontium	mg/kg	19	20	OS5-F1-SB01-1	2/2

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
mg/kg = Milligrams per kilogram

Table 7.3-8 Detected Constituents Lacking Ecological Screening Levels
Chemical Plant 2 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Total/ Dissolved
SOIL 0-1'						
Hexanedioic Acid, dioctylester	mg/kg	1	2	59F-SPB01-1	2/2	-
Endrin ketone	mg/kg	0.0074	0.0074	59F-SB28-1	1/27	-
Aluminum	mg/kg	5400	51000	59F-SD02-0.25	24/24	-
Strontium	mg/kg	16 J	64 J	62F-SNS01-0.5	16/16	-
SOIL 1-6'						
Hexanedioic Acid, dioctylester	mg/kg	1	1	59F-SPB02-5	2/2	-
Aluminum	mg/kg	14000	64000	59F-SD02-1.5	17/17	-
Strontium	mg/kg	13	42	59F-SD02-1.5	16/16	-
SEDIMENT						
Dibenzofuran	mg/kg	0.052 J	0.052 J	59F-SB26-1	1/10	-
2-Methylnaphthalene	mg/kg	0.068 J	0.068 J	59F-SB26-1	1/10	-
Acenaphthene	mg/kg	0.057 J	0.057 J	59F-SB26-1	1/10	-
Fluorene	mg/kg	0.039 J	0.039 J	59F-SB26-1	1/10	-
4,4'-DDD	mg/kg	0.0025	0.0035	59F-SB25-1	3/10	-
Endosulfan sulfate	mg/kg	0.012	0.012	59F-SB28-1	1/10	-
Endrin aldehyde	mg/kg	0.014	0.014	59F-SB28-1	1/10	-
Endrin ketone	mg/kg	0.0074	0.0074	59F-SB28-1	1/10	-
Methoxychlor	mg/kg	0.003	0.003	59F-SB27-1	1/10	-
Aluminum	mg/kg	5400	51000	59F-SD02-0.25	10/10	-
Barium	mg/kg	160	490	59F-SNS02-0.5	4/4	-
Beryllium	mg/kg	0.14 J	1.1 J	59F-SD02-0.25	4/4	-
Boron	mg/kg	3.7 J	22 J	59F-SD02-0.25	3/4	-
Chromium VI	mg/kg	0.5 J	0.5 J	59F-SB28-1	1/1	-
Cobalt	mg/kg	2.1 J	26 J	59F-SD02-0.25	4/4	-
Lithium	mg/kg	2.4 J	24 J	59F-SD02-0.25	4/4	-
Molybdenum	mg/kg	0.11 J	0.73 J	59F-SD02-0.25	4/4	-
Strontium	mg/kg	22	43	59F-SD02-0.25	4/4	-
Thallium	mg/kg	0.19 J	2.1 J	59F-SNS02-0.5	3/4	-
Titanium	mg/kg	510	1400	59F-SD02-0.25	4/4	-
Vanadium	mg/kg	18	130	59F-SD02-0.25	4/4	-
SURFACE WATER						
4-Methylphenol	µg/L	6	6	59F-SW01-6	1/2	Total
Titanium	µg/L	11	16	59F-SW02-6	2/2	Dissolved
Titanium	µg/L	92	260	59F-SW02-6	2/2	Total

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
Sediment samples collected 0-1′ are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram
µg/L = Micrograms per liter

Table 7.3-9 Detected Constituents Lacking Ecological Screening Levels
Dredge Pit
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Total/ Dissolved
SOIL 0-1'						
Aluminum	mg/kg	8300	28000	25F-SD01-0.25	9/9	-
Strontium	mg/kg	18 J	37 J	25F-HA01-1	6/6	-
SOIL 1-6'						
1,2-Dichloroethane	mg/kg	0.0041 J	0.0041 J	25F-SD01-5	1/2	-
Aluminum	mg/kg	9800	41000 J	25F-SD01-5	10/10	-
Strontium	mg/kg	21	41 J	25F-SD01-5	7/7	-
SEDIMENT						
Aluminum	mg/kg	8300	28000	25F-SD01-0.25	6/6	-
Barium	mg/kg	52 J	170	25F-SD01-0.25	6/6	-
Beryllium	mg/kg	0.2 J	0.8	25F-SD01-0.25	6/6	-
Cobalt	mg/kg	6.1	15	25F-SB04-1	6/6	-
Lithium	mg/kg	5 J	12 J	25F-SD01-0.25	6/6	-
Molybdenum	mg/kg	0.2 J	130 J	25F-HA01-1	6/6	-
Strontium	mg/kg	18 J	37 J	25F-HA01-1	6/6	-
Thallium	mg/kg	0.12 J	2.1 J	25F-SB07-1	5/6	-
Titanium	mg/kg	330	1100	25F-SB04-1	6/6	-
Vanadium	mg/kg	30	96	25F-SB04-1	6/6	-
SURFACE WATER						
Titanium	µg/L	4.9 J	4.9 J	25F-SW01-2	1/1	Dissolved
Titanium	µg/L	470	470	25F-SW01-2	1/1	Total

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
Sediment samples collected 0-1′ are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram
µg/L = Micrograms per liter

Table 7.3-10 Detected Constituents Lacking Ecological Screening Levels
Eastern Basin
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Total/ Dissolved
SOIL 0-1'						
Aluminum	mg/kg	25000	45000	25F-SD02-0.25	4/4	-
Strontium	mg/kg	33	40	25F-SD02-0.25	4/4	-
SOIL 1-6'						
Aluminum	mg/kg	25000	40000	25F-SD02-5	8/8	-
Strontium	mg/kg	30	41	25F-SD02-5	8/8	-
SEDIMENT						
Aluminum	mg/kg	25000	45000	25F-SD02-0.25	4/4	-
Barium	mg/kg	160	220 J	25F-SD02-0.25	4/4	-
Beryllium	mg/kg	0.63	1.2 J	25F-SD02-0.25	4/4	-
Boron	mg/kg	15 J	15 J	25F-SD02-0.25	1/4	-
Cobalt	mg/kg	18	21 J	25F-SD02-0.25	4/4	-
Lithium	mg/kg	11	20 J	25F-SD02-0.25	4/4	-
Molybdenum	mg/kg	0.41 J	1.1 J	25F-SD02-0.25	2/4	-
Strontium	mg/kg	33	40	25F-SD02-0.25	4/4	-
Thallium	mg/kg	0.2 J	2.6 J	25F-HA02-1	4/4	-
Titanium	mg/kg	570	1300	25F-SD02-0.25	4/4	-
Vanadium	mg/kg	69	110	25F-SD02-0.25	4/4	-
SURFACE WATER						
Titanium	µg/L	2800	2800	25F-SW02-2	1/1	Total

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
Sediment samples collected 0-1′ are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram
µg/L = Micrograms per liter

Table 7.3-11 *Detected Constituents Lacking Ecological Screening Levels*
Magazine Area Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection
SOIL 0-1'					
Strontium	mg/kg	31	31	OS3-F1-SB03-0.5	1/1
SOIL 1-6'					
Strontium	mg/kg	9.8	32	OS3-F1-SB03-2	5/5

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
mg/kg = Milligrams per kilogram

Table 7.3-12 Detected Constituents Lacking Ecological Screening Levels
Open Space 1, 2, 3, and 4 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection
SOIL 0-1'					
Strontium	mg/kg	36 J	51	OS2-F1-SB01-1	3/3
SOIL 1-6'					
Strontium	mg/kg	23 J	36 J	OS2-F1-SB02-5	3/3

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram

Table 7.3-13 *Detected Constituents Lacking Ecological Screening Levels*
Area 39 Management Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Constituents	Unit	Minimum Detection	Maximum Detection	Location of Maximum	Frequency of Detection	Total/ Dissolved
SOIL 0-1'						
Strontium	mg/kg	16 J	220 J	30B-SB07-1	10/10	-
SOIL 1-6'						
Nitroguanidine	mg/kg	0.1	0.1	30B-SB01-3	1/9	-
Strontium	mg/kg	21	400	29B-SB06-5	34/34	-
SEDIMENT						
Aluminum	mg/kg	9800	18000	31B-SD02-0.25	2/2	-
Barium	mg/kg	100	230	31B-SD02-0.25	2/2	-
Beryllium	mg/kg	0.27 J	0.7	31B-SD02-0.25	2/2	-
Boron	mg/kg	6.2	9.7	31B-SD02-0.25	2/2	-
Cobalt	mg/kg	5.2	13	31B-SD02-0.25	2/2	-
Lithium	mg/kg	1 J	4.9 J	31B-SD02-0.25	2/2	-
Molybdenum	mg/kg	0.4 J	0.4 J	31B-SD01-0.25	1/2	-
Strontium	mg/kg	87 J	88 J	31B-SD01-0.25	2/2	-
Thallium	mg/kg	0.15 J	0.15 J	31B-SD02-0.25	1/2	-
Titanium	mg/kg	760	810	31B-SD02-0.25	2/2	-
Vanadium	mg/kg	58 J	70 J	31B-SD02-0.25	2/2	-
SURFACE WATER						
Nitrate as NO3	µg/L	2700	2700	31B-SW02-1	1/2	Total
Titanium	µg/L	3.5 J	4 J	31B-SW01-1	2/2	Dissolved
Titanium	µg/L	2.8 J	700	31B-SW01-1	2/2	Total

Notes and Key:
Only soil samples that are located in areas of potential exposure habitat are included in this summary.
Sediment samples collected 0-1′ are included in this summary.
J = Estimated value.
mg/kg = Milligrams per kilogram
µg/L = Micrograms per liter

Table 7.3-14 Summary of Relevant Features for Identified Inhalation Toxicity Sources
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Source Features	Gallegos et al. (2007)	Vandenberg AFB (USAF, 2004)	Edwards AFB[1] (DTSC unspecified)
Supporting Documentation[2]	Yes	Yes	No
Small Mammals Only	Yes	Yes	No documentation
Independent Scientific Peer Review	Yes	No	No
Agency Review	Yes	No	Yes
Assessment Endpoints	Population-Level	Population-Level	No documentation
Number of Constituents	15	16	No documentation
BTEX, TCE?	Yes	Yes[3]	No documentation
Primary Effect Endpoints	Reproductive/Developmental	Reproductive/Developmental	Any[4]
Chronic Exposure[5]	Yes	Yes	No documentation
Continuous Exposure[6]	Yes	Yes	No documentation
Level of Effect[5]	Chronic NOAEL	Chronic NOAEL	No documentation
Metric	Geometric mean of relevant, credible toxicity studies[7]	NOAEL from most applicable/defensible study based on science and study design[8]	Lowest Possible Value[4]
Several Studies Considered[9]	Yes	Yes	No documentation
Transparent Selection Process	Yes	Yes	No

Notes:

1. As no supporting documentation is provided, information listed for this source is considered anecdotal at this time.
2. Supporting documentation is provided that describes methodology, scope, toxicity studies considered, and scientific justification
3. Also includes 1,2-dichloroethene and chlorobenzenes
4. Value that would result in the lowest inhalation TRV was selected, irrespective of effect including, but not limited to, cellular/subcellular protein content, organ weight, rotorod performance, etc.
5. Chronic NOAELs were preferred. However, if not available, uncertainty factors were applied to LOAELS or other effect levels resulting in chronic NOAEL-equivalent TRVs.
6. Value corrected for a 24hr/day, 7days/week exposures
7. USEPA (2005) uses a geometric mean to derive screening values and, where supported, is a credible method for considering/ accounting for the findings from multiple sources, while reducing the influence of high values (as compared to an arithmetic mean).
8. Often, lowest value from reviewed toxicity studies
9. Summary of other studies that were considered are provided

Table 7.3-15 *Summary of Soil Vapor Exceedances –*
Comparison of Maximum Soil Vapor Concentrations[1] to Edwards AFB Benchmarks
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Volatile Organic Compounds	Admin East	Line 2	Magazine Area	Open Space 1,2,3,4	Area 39
Carbon disulfide					X
Chloroform					X
1,1-Dichloroethene		X			X
cis-1,2-Dichloroethene		X			
Tetrachloroethene		X			
Toluene	X	X	X	X	X
Trichloroethene		X			X

Notes:
1. Maximum soil vapor concentration at the shallowest sampling depth (generally, 10 feet below ground surface) at sampling locations within habitat.

Table 7.3-16 COPECs Without ESLs with LOW FOD, Below Background, or Not Spatially Collocated [a]

Management Area/Media	SLERA Table	COPEC	Rationale for Not Requiring ESL Development
Admin Area East/Soil 0-1′	7.3-1	1,1,2,2-tetrachloroethane	Only 1 detection
Admin Area East/Soil 0-1′	7.3-1	iron	Only 1 detection; MDC of 22,400 mg/kg < BTV of 37,000 mg/kg
Admin Area East/Soil 0-1′	7.3-1	strontium	Only 2 detections; MDC of 29 mg/kg < BTV of 128 mg/kg
Admin Area East/Soil 1-6′	7.3-1	strontium	MDC of 34 mg/kg < BTV of 128 mg/kg
Admin Area East/Ditch 0-1′	7.3-1	benzyl alcohol	Only 1 detection
Admin Area East/Ditch 0-1′	7.3-1	dibenzofuran	Only 1 detection
Admin Area East/Ditch 0-1′	7.3-1	iron	MDC of 30,100 mg/kg < BTV of 37,000 mg/kg
Admin Area East/Ditch 0-1′	7.3-1	strontium	MDC of 35 mg/kg < BTV of 128 mg/kg
Admin Area East/Ditch 0-1′	7.3-1	total cyanide	Only 2 detections
Admin Area West/Soil 0-1′	7.3-2	1,1,2,2-tetrachloroethane	Only 1 detection
Admin Area West/Soil 1-6′	7.3-2	iron	MDC of 23,000 mg/kg < BTV of 37,000 mg/kg
Admin Area West/Soil 1-6′	7.3-2	strontium	MDC of 54 mg/kg < BTV of 128 mg/kg
Admin Area West/Ditch 0-1′	7.3-2	carbazole	Only 1 detection
Admin Area West/Ditch 0-1′	7.3-2	iron	MDC of 37,000 mg/kg = BTV of 37,000 mg/kg
Admin Area West/Ditch 0-1′	7.3-2	strontium	MDC of 78 mg/kg < BTV of 128 mg/kg
Admin Area West/Ditch 0-1′	7.3-2	titanium	MDC of 1,600 mg/kg < BTV of 4,716 mg/kg
Line 02/Soil 0-1′	7.3-3	strontium	MDC of 30 mg/kg < BTV of 128 mg/kg
Line 02/Soil 1-6′	7.3-3	strontium	MDC of 48 mg/kg < BTV of 128 mg/kg
Line 5 North/Soil 0-1′	7.3-4	strontium	MDC of 48 mg/kg < BTV of 128 mg/kg
Line 5 North/Soil 1-6′	7.3-4	strontium	MDC of 29 mg/kg < BTV of 128 mg/kg
Westlakes/Soil 0-1′	7.3-5	strontium	MDC of 62 mg/kg < BTV of 128 mg/kg
Westlakes/Soil 0-1′	7.3-5	titanium	MDC of 860 mg/kg < BTV of 4,716 mg/kg
Westlakes/Soil 1-6′	7.3-5	strontium	MDC of 63 mg/kg < BTV of 128 mg/kg
Westlakes/Sed	7.3-5	aluminum	MDC of 39,000 mg/kg < BTV of 54,000 mg/kg
Westlakes/Sed	7.3-5	barium	MDC of 240 mg/kg < BTV of 320 mg/kg
Westlakes/Sed	7.3-5	cobalt	MDC of 18 mg/kg < BTV of 33 mg/kg
Westlakes/Sed	7.3-5	lithium	MDC of 18 mg/kg < BTV of 23 mg/kg
Westlakes/Sed	7.3-5	strontium	MDC of 62 mg/kg < BTV of 128 mg/kg
Westlakes/Sed	7.3-5	titanium	MDC of 860 mg/kg < BTV of 4,716 mg/kg
Westlakes/Sed	7.3-5	vanadium	MDC of 110 mg/kg < BTV of 130 mg/kg

Management Area/Media	SLERA Table	COPEC	Rationale for Not Requiring ESL Development
Westlakes/SW	7.3-5	nitrate, titanium	Only 1 or 2 detections
Buffalo Creek/Soil 0-1′	7.3-6	gamma-chlordane	Only 2 detections
Buffalo Creek/Soil 0-1′	7.3-6	strontium	MDC of 58 mg/kg < BTV of 128 mg/kg
Buffalo Creek/Soil 1-6′	7.3-6	strontium	MDC of 63 mg/kg < BTV of 128 mg/kg
Buffalo Creek/Sed	7.3-6	gamma-chlordane	Only 2 detections
Buffalo Creek/Sed	7.3-6	aluminum	MDC of 38,000 mg/kg < BTV of 40,976 mg/kg
Buffalo Creek/Sed	7.3-6	barium	MDC of 240 mg/kg < BTV of 274 mg/kg
Buffalo Creek/Sed	7.3-6	boron	MDC of 12 mg/kg < BTV of 19 mg/kg
Buffalo Creek/Sed	7.3-6	lithium	MDC of 16 mg/kg < BTV of 23 mg/kg
Buffalo Creek/Sed	7.3-6	strontium	MDC of 65 mg/kg < BTV of 128 mg/kg
Buffalo Creek/Sed	7.3-6	thallium	MDC of 2.2 mg/kg < BTV of 2.5 mg/kg
Buffalo Creek/Sed	7.3-6	titanium	MDC of 1,100 mg/kg < BTV of 4,716 mg/kg
Buffalo Creek/Sed	7.3-6	vanadium	MDC of 110 mg/kg < BTV of 119 mg/kg
Buffalo Creek/SW	7.3-6	trichlorofluoromethane	Only 1 detection
Open Space 5 & 7/Soil 0-1′	7.3-7	strontium	Only 2 detections; MDC of 20 mg/kg < BTV of 128 mg/kg
Chem Plant 2/Soil 0-1′	7.3-8	hexanedoic acid, dioctylester	Only 2 detections
Chem Plant 2/Soil 0-1′	7.3-8	endrin ketone	Only 1 detection; low FOD
Chem Plant 2/Soil 0-1′	7.3-8	strontium	MDC of 64 mg/kg < BTV of 128 mg/kg
Chem Plant 2/Soil 1-6′	7.3-8	hexanedoic acid, dioctylester	Only 2 detections
Chem Plant 2/Soil 1-6′	7.3-8	strontium	MDC of 42 mg/kg < BTV of 128 mg/kg
Chem Plant 2/Sed	7.3-8	dibenzofuran	Only 1 detection
Chem Plant 2/Sed	7.3-8	2-methylnaphthalene	Only 1 detection
Chem Plant 2/Sed	7.3-8	acenaphthene	Only 1 detection
Chem Plant 2/Sed	7.3-8	fluorene	Only 1 detection
Chem Plant 2/Sed	7.3-8	endosulfan sulfate	Only 1 detection
Chem Plant 2/Sed	7.3-8	endrin aldehyde	Only 1 detection
Chem Plant 2/Sed	7.3-8	endrin ketone	Only 1 detection
Chem Plant 2/Sed	7.3-8	methoxychlor	Only 1 detection
Chem Plant 2/Sed	7.3-8	chromium VI	Only 1 detection
Chem Plant 2/Sed	7.3-8	strontium	MDC of 43 mg/kg < BTV of 128 mg/kg
Chem Plant 2/Sed	7.3-8	thallium	MDC of 2.1 mg/kg < BTV of 2.5 mg/kg
Chem Plant 2/Sed	7.3-8	titanium	MDC of 1,400 mg/kg < BTV of 4,716 mg/kg
Chem Plant 2/ SW	7.3-8	4-methylphenol	Only 1 detection
Chem Plant 2/ SW	7.3-8	titanium	Only 2 detections

Management Area/Media	SLERA Table	COPEC	Rationale for Not Requiring ESL Development
Dredge Pit/Soil 0-1′	7.3-9	aluminum	MDC of 28,000 mg/kg < BTV of 40,976 mg/kg
Dredge Pit/Soil 0-1′	7.3-9	strontium	MDC of 37 mg/kg < BTV of 128 mg/kg
Dredge Pit/Soil 1-6′	7.3-9	1,2-dichloroethane	Only 1 detection
Dredge Pit/Soil 1-6′	7.3-9	strontium	MDC of 41 mg/kg < BTV of 128 mg/kg
Dredge Pit/Sed	7.3-9	aluminum	MDC of 28,000 mg/kg < BTV of 40,976 mg/kg
Dredge Pit/Sed	7.3-9	barium	MDC of 170 mg/kg < BTV of 274 mg/kg
Dredge Pit/Sed	7.3-9	beryllium	MDC of 0.8 mg/kg < BTV of 1.0 mg/kg
Dredge Pit/Sed	7.3-9	cobalt	MDC of 15 mg/kg < BTV of 24 mg/kg
Dredge Pit/Sed	7.3-9	lithium	MDC of 12 mg/kg < BTV of 23 mg/kg
Dredge Pit/Sed	7.3-9	strontium	MDC of 37 mg/kg < BTV of 128 mg/kg
Dredge Pit/Sed	7.3-9	thallium	MDC of 2.1 mg/kg < BTV of 2.5 mg/kg
Dredge Pit/Sed	7.3-9	titanium	MDC of 1,100 mg/kg < BTV of 4,716 mg/kg
Dredge Pit/Sed	7.3-9	vanadium	MDC of 96 mg/kg < BTV of 119 mg/kg
Dredge Pit/SW	7.3-9	titanium	Only 1 detection
Eastern Basin/Soil 0-1′	7.3-10	strontium	MDC of 40 mg/kg < BTV of 128 mg/kg
Eastern Basin/Soil 1-6′	7.3-10	aluminum	MDC of 40,000 mg/kg < BTV of 40,976 mg/kg
Eastern Basin/Soil 1-6′	7.3-10	strontium	MDC of 41 mg/kg < BTV of 128 mg/kg
Eastern Basin/Sed	7.3-10	barium	MDC of 220 mg/kg < BTV of 274 mg/kg
Eastern Basin/Sed	7.3-10	boron	Only 1 detection; MDC of 15 mg/kg < BTV of 19 mg/kg
Eastern Basin/Sed	7.3-10	cobalt	MDC of 21 mg/kg < BTV of 24 mg/kg
Eastern Basin/Sed	7.3-10	lithium	MDC of 20 mg/kg < BTV of 23 mg/kg
Eastern Basin/Sed	7.3-10	strontium	MDC of 40 mg/kg < BTV of 128 mg/kg
Eastern Basin/Sed	7.3-10	titanium	MDC of 1,300 mg/kg < BTV of 4,716 mg/kg
Eastern Basin/Sed	7.3-10	vanadium	MDC of 110 mg/kg < BTV of 119 mg/kg
Eastern Basin/SW	7.3-10	titanium	Only 1 detection
Magazine Area/Soil 0-1′	7.3-11	strontium	Only 1 detection; MDC of 31 mg/kg < BTV of 128 mg/kg
Magazine Area/Soil 1-6′	7.3-11	strontium	MDC of 32 mg/kg < BTV of 128 mg/kg
Open Space 1 - 4/Soil 0-1′	7.3-12	strontium	MDC of 51 mg/kg < BTV of 128 mg/kg
Open Space 1 - 4/Soil 1-6′	7.3-12	strontium	MDC of 36 mg/kg < BTV of 128 mg/kg
Area 39/Soil 0-1′	7.3-13	nitroguanadine	Only 1 detection
Area 39/Sed	7.3-13	aluminum	Only 2 detections; MDC of 18,000 mg/kg <BTV of 40,976 mg/kg
Area 39/Sed	7.3-13	barium	Only 2 detections; MDC of 230 mg/kg < BTV of 274 mg/kg
Area 39/Sed	7.3-13	beryllium	Only 2 detections; MDC of 0.7 mg/kg < BTV of 1.0 mg/kg
Area 39/Sed	7.3-13	boron	Only 2 detections; MDC of 9.7 mg/kg < BTV of 19 mg/kg

Management Area/Media	SLERA Table	COPEC	Rationale for Not Requiring ESL Development
Area 39/Sed	7.3-13	cobalt	Only 2 detections; MDC of 13 mg/kg < BTV of 24 mg/kg
Area 39/Sed	7.3-13	lithium	Only 2 detections; MDC of 4.9 mg/kg < BTV of 23 mg/kg
Area 39/Sed	7.3-13	molybdenum	Only 1 detection; MDC of 0.4 mg/kg < BTV of 0.52 mg/kg
Area 39/Sed	7.3-13	strontium	Only 2 detections; MDC of 88 mg/kg < BTV of 128 mg/kg
Area 39/Sed	7.3-13	thallium	Only 1 detection; MDC of 0.15 mg/kg < BTV of 2.5 mg/kg
Area 39/Sed	7.3-13	titanium	Only 2 detections; MDC of 810 mg/kg < BTV of 4,716 mg/kg
Area 39/Sed	7.3-13	vanadium	Only 2 detections; MDC of 70 mg/kg < BTV of 119 mg/kg
Area 39/SW	7.3-13	Nitrate	Only 1 detection
Area 39/SW	7.3-13	Titanium	Only 2 detections

Notes and Key:

[a] COPECs considered not spatially collocated if number of detections limited to 1 or 2.

MDC = maximum detected concentration.

BTV = background threshold value.

Notes:

- BTVs for iron, lithium, strontium, and titanium from Kearney Foundation (1996); other BTVs are site-specific (i.e., Redding Corning-Red Bluff [RCRB] or Xerothents soil types, based on BTVs presented in Section 6 Risk Characterization Tables. If the soil type of the sample MDC was unavailable, the lower of the RCRB and Xerothent BTVs was conservatively used.
- BTVs for soil used to assess sediment, as no site-specific BTVs available for sediment, and site runoff of soil expected to be representative of sediment background.
- Low frequency of detection (FOD) defined as less than 5 percent.

8.0 *EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER POSED BY CONSTITUENTS IN SOIL VAPOR AND SOIL*

PGW screening levels were developed as part of the BOU RI to identify chemical concentrations in soil that could potentially migrate into and degrade surface water and groundwater. PGW SVSLs for a select number of VOCs in soil vapor were developed using VLEACH modeling and PGW SSLs for chemicals in soil were developed using the Designated Level Methodology (DLM). Details regarding the development of the PGW SVSLs for soil vapor and PGW SSLs for soil are presented in Section 3.0 of the BOU RI (Volume I). The PGW SVSLs for VOCs in soil vapor and PGW SSLs for chemicals in soil were developed using default and/or conservative parameters, which would likely result in an overestimation of the potential risk for those chemicals to impact surface water and groundwater. For metals, the PGW SSL was the higher of either the statistical BTV for that metal based on soil type or the concentration protective of groundwater calculated using the DLM. The BTV was selected as the PGW SSL for all metals.

Therefore, while comparison of site analytical data to the PGW SVSLs and SSLs in the RI provided the means to evaluate where a chemical had been sufficiently characterized a chemical concentration above its PGW SVSL or SSL does not necessarily signify a risk; rather, it identifies those chemicals that require further evaluation.

This section presents a detailed evaluation of those chemicals detected in soil vapor and soil at concentrations above their PGW SSLs with respect to their potential to adversely impact surface water and groundwater quality. Each chemical that was reported at a concentration greater than its respective PGW SVSLs or PGW SSLs was evaluated and ranked as a negligible, low, moderate, or high risk to groundwater. Samples containing chemicals that resulted in a low, moderate, or high risk ranking will be further evaluated in the FS to determine whether remedial action is needed. Samples with chemicals ranked as a negligible risk will not be evaluated in the FS. It should be noted that a moderate or high risk ranking indicates that further evaluation will be performed during the FS and does not automatically constitute a requirement for remediation.

8.1 EVALUATION METHODS

Methods utilized to evaluate those chemicals detected in soil vapor and soil at concentrations above their PGW SSLs with respect to their potential to adversely impact surface water and groundwater quality are described below.

8.1.1 Potential Risk to Surface Water Evaluation Methods

The potential for non-VOCs to impact surface water was evaluated by direct comparison of the concentrations detected in soil samples collected between surface and 1 foot bgs to their respective PGW SSLs. This direct comparison to PGW SSLs was made because (1) no site specific leachability and errodability data was available; and (2) the RI used the PGW SSLs to evaluate whether a chemical was defined sufficiently to assess potential risks to surface water.

8.1.2 Potential Risk to Groundwater Evaluation Methods

The methodologies used to evaluate chemical concentrations in soil vapor and soil that exceeded their PGW SSLs with respect to their potential to migrate into and adversely impact groundwater are described below.

8.1.2.1 *Volatile Organic Compounds*

At locations that overlie groundwater containing VOCs, concentrations of those compounds detected in soil vapor could potentially be due to volatilization and gaseous diffusion of VOCs in groundwater. Concentrations of VOCs present in soil vapor due to migration from the groundwater do not pose a risk to groundwater. This section describes the methodologies that were used to estimate the contribution of VOCs in soil vapor from groundwater and to evaluate the potential risk to groundwater posed by the VOC concentrations detected in soil vapor.

Screening-level vapor transport modeling was performed to estimate soil vapor concentrations in the vadose zone that would be in equilibrium with groundwater screening levels [e.g., the lower of the MCL or public health goal (PHG)]. The modeling followed the methods presented in Johnson et al., 1999, and those also used in the vapor intrusion model evaluation conducted at the Aerojet site (Aerojet, 2006c, 2008). The vapor intrusion modeling calculated the concentrations of VOCs anticipated being present in soil vapor at a depth of 10 feet bgs based on VOC concentrations observed in groundwater. Area-specific depth to water

and VOC concentrations detected in groundwater were used in the model. Details of the modeling are provided in Appendix K.

The ratio between a specific groundwater concentration (e.g., the MCL) and the calculated equilibrium soil vapor concentration at 10 feet bgs is a constant. This linearity allows calculation of equilibrium soil vapor concentrations that would result from location-specific groundwater concentrations.

Location-specific groundwater concentrations were based on chemical iso-concentration contour maps prepared for the BOU RI. These maps were prepared in part using data from grab groundwater samples that have the potential to be biased either high or low. Therefore, the representativeness of data obtained from the grab groundwater samples is uncertain.

The first step in the evaluation was subtraction of the calculated VOC concentration in soil vapor in equilibrium with the groundwater from the measured VOC concentration in soil vapor. The subtraction of the VOC equilibrium concentration from the measured VOC concentration was performed for all detected VOCs, regardless of the depth at which the sample was collected. Because VOC concentrations in soil vapor originating from groundwater should increase closer to groundwater, the subtraction of only the calculated VOC equilibrium concentration at a depth of 10 feet bgs is considered conservative and would likely result in an overestimation of the potential risk to groundwater.

If the modified (measured concentration minus the calculated equilibrium concentration) VOC concentration was less than its PGW SVSL, it was considered a low risk. If the modified VOC concentration was above its PGW SVSL, the following criteria were used to further evaluate its potential risk to groundwater:

1. If the compound was not detected in groundwater within 250 feet of the soil vapor sampling location, the modified VOC concentration was considered a low risk. It is recognized that the possibility exists for a structural feature (e.g., a building) to impede recharge, which would have the effect of protecting groundwater, but would not impede diffusion. Considering that the VOCs at the Aerojet site have been in the vadose zone for decades, it is most likely that those VOCs would have had sufficient time to migrate into and impact groundwater.
2. If the distribution of VOCs in groundwater did not indicate the potential presence of a local source of VOCs to groundwater, or if the

potential presence of a local source could not be ascertained, the modified VOC concentration was considered a moderate risk. An order of magnitude increase in VOC concentrations relative to that observed in the closest upgradient groundwater was used to define a local source of VOCs to groundwater.

3. If the distribution of VOCs in groundwater indicated that there was a local source of VOCs to groundwater, the modified VOC concentration was considered a high risk.

8.1.2.2 *Non-Volatile Organic Compounds*

A ranking system was developed to evaluate the potential for concentrations of non-VOCs such as metals, SVOCs, TPH, PCBs, NDMA, and/or perchlorate detected in soil at concentrations above their respective PGW SSLs to adversely impact groundwater. The ranking system considered the vertical extent of the compound in the vadose zone and the presence, or absence, of the compound in groundwater.

The system used to rank those concentrations of non-VOCs with respect to their potential risk to groundwater based on their vertical extent (Vertical Definition Rank) in the vadose zone and their presence or absence in groundwater (Groundwater Impact Rank) is described below. For both ranking systems, a higher ranking indicates that the concentration of a compound detected at concentrations above its PGW SSL potentially poses a higher risk to groundwater.

<u>Vertical Definition Ranking</u>

Rank	Condition
0	Detected concentrations of the chemical are limited to the upper 11 feet of soil and there are a minimum of two nondetects of that chemical in the soil samples collected below the last sample that had the chemical detected. For metals, concentrations within background were used instead of nondetects.
1	Detected concentrations of the chemical are limited to the upper 11 feet of soil and the chemical was not detected in the one soil sample collected below the last sample that had the chemical detected. For metals, concentrations within background were used instead of nondetects.

2	Concentrations of the chemical were detected in soil samples collected at depths greater than 11 feet bgs, but 1) the deepest sample containing a detected concentration was less than half the distance from surface to groundwater, and 2) there was at a minimum of one nondetect (or concentration within background for metals) in deeper soil samples.
3	Concentrations of the chemical were detected in soil samples collected more than half the distance from the surface to groundwater, but that chemical was not detected in at least one soil sample collected below the deepest sample with a detected concentration. For metals, concentrations that were within background levels were used instead of nondetects.
3	Concentrations of a low solubility compounds (i.e., metals, SVOCs, TPH or PCBs) were detected in the deepest soil sample collected and the depth of the deepest sample was less than half the distance from surface to groundwater.
4	Concentrations of a high solubility compound (i.e., NDMA or perchlorate) were detected in the deepest soil sample collected and the depth of the deepest sample was less than half the distance from surface to groundwater.
5	Concentrations of the chemical were detected in the deepest soil samples collected and the depth of the deepest sample was more than half the distance from surface to groundwater.

As reflected in the Vertical Definition Ranking System, uncertainty regarding the presence or absence of the compound in deeper soil samples, those closest to the groundwater, resulted in a higher ranking.

<u>Groundwater Impact Ranking</u>

Rank	**Condition**
0	The compound was detected in soil at a concentration above its PGW SSL, but was not detected in a grab groundwater sample or monitoring well within approximately 100 feet of the soil sampling location.
1	The compound was detected in soil at a concentration above its PGW SSL, but was not detected in a grab groundwater sample or monitoring well within approximately 100 to 250 feet downgradient of the soil sampling location (no

groundwater samples were collected within 100 feet of the soil sampling location).

1 The compound was detected in soil at a concentration above its PGW SSL and was detected in a grab groundwater sample or monitoring well within approximately 100 feet of the soil sampling location, but 1) the source appears to be upgradient, and 2) the detected concentration was less than the Applicable or Relevant and Appropriate Requirements (ARARs).

1 A metal was detected in soil at a concentration above its PGW SSL and was detected in a groundwater sample within 250 feet of the soil sampling location, but the detected groundwater concentration was less than the lowest ARAR.

3 The compound was detected in soil at a concentration above its PGW SSL and the presence of that compound in groundwater within 250 feet of the sampling location could not be determined (no groundwater samples were collected within 100 feet of the soil sampling location). This condition includes situations where the compound was reported in upgradient groundwater samples, but at a comparable concentration so that a local contribution of the chemical to groundwater could not be determined.

4 The compound was detected in soil at a concentration above its PGW SSL and was detected in a grab groundwater sample or monitoring well within approximately 100 to 250 feet downgradient (no groundwater samples collected within 100 feet) of the soil sample location at a concentration above that observed in groundwater upgradient, but the source of the groundwater concentration is not definitively from the investigated feature.

6 The compound was detected in soil at a concentration above its PGW SSL and was detected in a grab groundwater sample or monitoring well within approximately 100 feet of the soil sampling location at a concentration greater than that observed in groundwater upgradient.

As reflected in the Groundwater Impact Ranking System, uncertainty regarding the presence or absence of the compound in groundwater resulted in a higher ranking.

The scores from the two ranking systems were added together to develop a final score, with the highest score associated with a higher potential risk.

The risk associated with groundwater based upon the scores is outlined below.

Total Score	Potential Risk to Groundwater
0 to 2	Negligible
3 to 4	Low
5 to 6	Moderate
Greater than 6	High

The ranking system was not used for samples collected from lined culverts or drop inlet basins. These samples were automatically assigned a negligible risk.

There were a few instances where a compound was detected in local groundwater, but was ranked as a moderate risk because the compound was detected only in shallow soils and was well defined vertically. In these instances, the sample location was examined to determine if it was peripheral to a region with sampling locations where that compound was detected and ranked as a high risk. If no high risk sample locations were present, the risk for the chemical at that location was elevated to high based on the presence of that chemical in the groundwater.

8.2 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER - ADMINISTRATION AREA EAST

Administration Area East encompasses the following two sub-management areas:

- **Buildings 20002/20004 Area:** Includes all of Source Areas 3D, 50D, and 51D; portions of Source Area 4D; and various features such as septic systems, floor drains, collection systems, sumps, storage and holding tanks, and conveyance pipelines associated with the rocket engine manufacturing facilities located in Buildings 20002 and 20004. The Buildings 20002/20004 Area also includes various other features, including septic tanks and leachfields, identified during the previous (pre-2005) and current investigations.
- **Building 20022 Area:** Includes portions of Source Area 11D; RCRA Units B, C, and X; a radiographic facility (Building 20034); a septic system, and other features associated with Building 20022; and various chemical handling or storage areas in the eastern portion of the Administration Area.

Evaluation of the potential risk to surface water and groundwater posed by chemicals detected in soil vapor and soil within Administration Area East at concentrations above their PGW SSL is presented below.

8.2.1 Potential Risk to Surface Water – Administration Area East

As previously indicated, concentrations of site-related chemicals present in soil at a depth up to 1 foot bgs above their respective PGW SSLs were considered to potentially pose a risk to surface water. The most likely pathway for these chemicals to reach surface water would be through entrainment in surface water runoff. The water quality of surface water runoff from the Administration Area is monitored under existing NPDES Permit CA0004111. The NPDES permit provides a method for managing and evaluating the potential cumulative impacts to surface water from the Administration Area.

Surface water runoff from the Administration Area is directed to a series of lined and unlined ditches that discharge to the West Lake Storm-Water Retention Cells (Westlakes). Surface water within the Westlakes that does not infiltrate into the ground is periodically discharged to Buffalo Creek, a tributary to the American River. Prior to the discharge to Buffalo Creek, samples of the surface water are analyzed in accordance with the NPDES Permit. Discharges are not permitted if any constituent concentrations exceed the discharge limits established in the NPDES Permit.

In Administration Area East, concentrations of non-VOCs above their respective PGW SSLs were detected in soil samples collected between 0 and 1 foot bgs at 32 locations (Table 8.2-1). Concentrations of non-VOCs above their respective PGW SSLs, detected in soil samples collected between 0 and 12 feet bgs, are shown in Figure 8.2-1. Soil samples collected between 0 and 1 foot bgs were not analyzed for VOCs because they tend to volatilize from soil close to the atmosphere.

As shown in Figure 8.2-1, the majority of the soil samples containing chemicals above their PGW SSLs were collected from ditches. Compounds detected in those samples above their PGW SSLs and the range of concentrations are listed on the table below.

Compound	PGW SSL	Range of Concentrations
Cadmium	1.2 mg/kg	1.4 to 3.7 mg/kg
Lead	23 mg/kg	23 to 210 mg/kg
Aroclor 1254	34 µg/kg	37 to 10,000 µg/kg

Compound	PGW SSL	Range of Concentrations
Aroclor 1260	34 µg/kg	42 to 1,600 µg/kg
Benzo(a)anthracene	29 µg/kg	42 to 130 µg/kg
Benzo(a)pyrene	2.9 µg/kg	6.1 to 41 µg/kg
Benzo(b&k)fluoranthene	29 µg/kg	30 to 88 µg/kg
TPH-D	100 mg/kg	120 to 1,400 mg/kg
TPH-Mo	500 mg/kg	520 to 4,300J mg/kg

For the purposes of the BOU RI/FS, it is assumed that the existing regulatory framework for managing potential impacts to surface water associated with the Administration Area are sufficient. Potential risks to human health and ecological receptors from chemicals present in surface water and sediment in drainage ditches, the Westlakes, and Buffalo Creek are included in the evaluations presented in Sections 5.0 and 6.0, respectively.

8.2.2 *Potential Risk to Groundwater – Administration Area East*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs and VOCs detected in soil and soil vapor within Administration Area East at concentrations above their PGW SSLs and SVSLs are summarized below.

8.2.2.1 *Non-Volatile Organic Compounds*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs detected in soil within Administration Area East at concentrations above their PGW SSLs are summarized below.

The risk ranking of each non-VOC at each location within Administration Area East where that compound was detected above its PGW SSLs is presented on Table 8.2-1.

The maximum risk posed by each class (metals, SVOCs, PCBs, perchlorate, TPH, and NDMA) of non-VOC that was detected at concentrations above their PGW SSLs in soil samples collected from the shallow (surface to 12 feet bgs) soil layer and deep (greater than 12 feet bgs) soil layer within Administration Area East are shown in Figures 8.2-1 and 8.2-2, respectively. PGW risk contours based on the maximum risk posed by any class of non-VOC in the shallow and deep soil layers within Administration Area East are shown in Figure 8.2-3.

Metals

Cadmium and lead were detected at concentrations above their respective PGW SSLs at multiple locations within Administration Area East. The results of the risk ranking for those metals are summarized on Table 8.2-1 and below. Factors that resulted in a higher risk ranking for those metals included a potentially wider range of background concentrations than was reflected in the background data, inadequate vertical characterization, and the absence of background concentrations for metals in groundwater.

Cadmium

Cadmium was detected in nine samples collected within Administration Area East at concentrations above its PGW SSL. The ranking system assigned negligible risk to six samples containing cadmium above its PGW SSL, low risk to two samples, and a moderate risk to one sample. A total score indicating a moderate risk was given to one sample containing cadmium because the vertical extent had not been delineated. However, because the detected concentration (2 mg/kg) of cadmium is likely to be naturally occurring, the risk posed by the sample was downgraded to low. It should be noted that cadmium was often detected at concentrations that exceeded the statistical upper background concentration of 1.2 mg/kg, but nonetheless may still be naturally occurring.

Lead

Lead was detected in eight samples collected within Administration Area East at concentrations above its PGW SSL. The ranking system assigned a negligible risk to five samples and a low risk to three samples that had lead at concentrations above its PGW SSL.

Lead was often reported at concentrations that equaled or exceeded the statistical upper background concentration of 23 mg/kg, but nonetheless may still be naturally occurring. It is recognized, however, that many detections of lead (e.g., up to 210 mg/kg lead was reported) are likely attributed to historical activities.

Semivolatile Organic Compounds

SVOCs were detected at concentrations greater than the respective PGW SSLs in 25 samples collected within Administration Area East. The detected SVOCs and the associated number of samples are listed on the table below.

Compound	Number of Samples
Benzo(a)anthracene	4
Benzo(a)pyrene	10
Benzo(b&k)fluoranthene	4
Naphthalene	6
2,4-dintitrotoluene	1

Of the 25 samples that had SVOCs reported above PGW SSLs, the ranking system assigned a negligible risk to 9 samples, low risk to 11 samples, and a moderate risk to 5 samples. Moderate risks were associated with sample locations that had SVOCs detected at depths greater than 11 feet bgs.

Polychlorinated Biphenyls

PCBs were detected at concentrations greater than their respective PGW SSL in 45 soil samples collected within Administration Area East. The detected PCBs and the associated number of samples are listed on the table below.

Compound	Number of Samples
Aroclor 1248	1
Aroclor 1254	35
Aroclor 1260	9

Of the 45 samples that contained PCBs above their PGW SSL, the ranking system indicated that 13 were negligible risk, 11 were low risk, 17 were moderate risk, and 4 were high risk. The high risk samples were associated with borings 3D SB46 and 3D-SB67, in the proximity of Well 881 where PCBs were detected in groundwater. The majority of the moderate risks were assigned to sample locations where the vertical extent was not delineated and/or relevant groundwater data was not available.

Total Petroleum Hydrocarbons

TPH-D and/or TPH-Mo were detected at concentrations greater than their respective PGW SSLs in 39 soil samples collected within Administration Area East. The number of samples containing TPH-D and TPH-Mo above their PGW SSLs are listed on the table below.

Compound	Number of Samples
TPH-D	21
TPH-Mo	18

Of the 39 samples that had TPH-D and/or TPH-Mo reported above their respective PGW SSLs, 8 were ranked as low risk, 21 were ranked as moderate risk, and 10 were ranked as high risk. The high risks were associated with sample locations where TPH was detected in local groundwater and did not appear to be from an upgradient source. Moderate risks were generally associated with sample locations where the extent of TPH above the PGW SSL was not vertically delineated and/or was present in soil samples collected at depths greater than 10 feet bgs.

N-Nitrosodimethylamine

NDMA at a concentration that exceeded the PGW SSL of 0.03 µg/kg was reported in a soil sample collected at 5 feet bgs from boring 3D-SB35. The detected concentration of NDMA was classified as a negligible risk to groundwater because 1) it was restricted to the sample at 5 feet bgs, and 2) it was not detected in a grab groundwater sample from the same boring (Figure 8.2-2).

8.2.2.2 *Volatile Organic Compounds*

The risk ranking of VOCs at each location within Administration Area East where those compounds were detected at concentrations above their PGW SVSLs are presented on Table 8.2-2 and in Figure 8.2-4. PGW risk contours based on the maximum risk posed by any VOC at any depth within Administration Area East are also presented in Figure 8.2-4.

VOCs detected in soil vapor samples collected within Administration Area East at concentrations above their PGW SVSLs, and the corresponding number of samples, are listed on the table below.

Compound	Number of Samples
PCE	136
TCE	48
Benzene	21
Vinyl chloride	16

Compound	Number of Samples
Cis-1,2-DCE	14
1,1-DCA	9
1,1-DCE	4
1,2-DCA	2
Trans-1,2-DCE	1
Methylene chloride	1

PCE was the most commonly reported VOC and the VOC reported at the highest concentrations. Benzene, methylene chloride, and trans-1,2-DCE were not detected in groundwater and, therefore, were not evaluated.

The screening-level vapor transport model used a depth to groundwater of 30 feet. The modeling results for TCE, PCE, cis-1,2-DCE, and vinyl chloride are summarized on the table below. The modeling results for the other VOCs are provided in Appendix K.

	PCE	TCE	cis-1,2-DCE	Vinyl Chloride
Depth to Groundwater (ft bgs)	30	30	30	30
Soil Vapor Depth (ft)	10	10	10	10
Groundwater Concentration (µg/L)	0.1	0.8	6	0.1
Equilibrium Soil Vapor Concentration (µg/m^3)	13	99	316	17

The ranking system assigned a high risk to VOCs in soil vapor at the locations listed below. Locations having VOCs that were identified by the ranking system as posing a high risk to groundwater are shown in Figure 8.2-4.

- Boring 3D-SP102 located by a TCE/PCE sump in the southern portion of Building 20002 (Site 3D);
- Boring 3D-SP107 located by the utility corridor southwest of Building 20002 (Site 3D);
- Boring A20-RB37-SP01 located by RCRA Unit B;
- Boring A20-RC29-SP01 located by RCRA Unit C and the decontamination area of Building 20029; and
- Boring A20-ST05-SP01 by the septic tank south of Building 20005.

A few locations were further evaluated because the VOC concentrations detected in the soil vapor samples did not appear to be commensurate with VOC concentrations detected in groundwater. Based upon the relative increases in VOC groundwater concentrations, grab groundwater samples from boring 03D-SP110 along the utility corridor south of Building 20002 (Site 3D) and boring 3D-SP122 adjacent to a former waste oil tank west of Building 20004 suggested that those two borings were proximal to a source of VOCs to groundwater. However, the ranking system assigned a low risk to the VOC soil vapor data collected from boring 3D-SP110 and a moderate risk to the VOC soil vapor data collected from 3D-SP122. Possible explanations for this apparent discrepancy include 1) a false negative resulting from using screening level grab groundwater samples; or 2) a relative depletion of soil vapor (i.e., any vapor associated with a historical release have dissipated and no longer pose a threat to groundwater).

Thirty-four sample locations were assigned a moderate risk (Table 8.2-2 and Figure 8.2-4). Ten of those sample locations were associated with the decontamination sumps and utility corridor along the south side of Building 20001. Twenty-two of the moderate risk samples were associated with 20 of the identified and investigated site features associated with Buildings 20002 and 20004 Area. Two of the moderate risk samples were near RCRA Units B and X within the Building 20022 Area (Figure 8.2-4).

8.3 EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER - ADMINISTRATION AREA WEST

Administration Area West encompasses the following three sub-management areas listed below.

- **Administration Area West Open Ditch System –** All or portions of five drainage ditches and catch basins identified as Source Sites 5D, 9D, 12D, D(b), and D(d);
- **Building 20009 Area –** Two Source Sites (6D and 52D), including a former waste oil tank and treatment basin in and around Building 20009; and
- **Former Sewage Treatment Plant Area (FSTP) –** Two Source Sites [8D and D(c)] associated with the Aerojet FSTP, and former RCRA Units W and Y.

Evaluation of the potential risk to surface water and groundwater posed by chemicals detected in soil and soil vapor within Administration Area West at concentrations above their PGW SSL and SVSLs is presented below.

8.3.1 *Potential Risk to Surface Water – Administration Area West*

As previously discussed, concentrations of site-related chemicals present in soil at a depth up to 1 foot bgs above their respective PGW SSLs were considered to potentially pose a risk to surface water. The most likely pathway for these chemicals to reach surface water would be through entrainment in surface water runoff. The water quality of surface water runoff from the Administration Area is monitored under existing NPDES Permit CA0004111. The NPDES permit provides a method for managing and evaluating the potential cumulative impacts to surface water from the Administration Area.

Surface water runoff from the Administration Area is directed to a series of lined and unlined ditches that discharge to the West Lake Storm-Water Retention Cells (Westlakes). Surface water within the Westlakes that does not infiltrate into the ground is periodically discharged to Buffalo Creek, a tributary to the American River. Prior to the discharge to Buffalo Creek, samples of the surface water are analyzed in accordance with the NPDES Permit. Discharges are not permitted if any constituent concentrations exceed the discharge limits established in the NPDES Permit.

Within Administration Area West, concentrations of non-VOCs above their respective PGW SSLs were detected in soil samples collected between 0 and 1 foot bgs at 39 locations (Table 8.3-1). Concentrations of non-VOCs above their respective PGW SSLs, detected in soil samples collected between 0 and 12 feet bgs, are shown in Figure 8.3-1. Soil samples collected between 0 and 1 foot bgs were not analyzed for VOCs because they tend to volatilize from soil close to the atmosphere.

As shown in Figure 8.3-1, most of the soil samples containing concentrations of non-VOCs above their respective PGW SSLs were collected from ditches. Non-VOCs that exceeded their PGW SSLs and the associated range of concentrations are listed on the table below.

Compound	PGW SSL	Range of Concentrations
Cadmium	1.2 mg/kg	1.5 to 190 mg/kg
Chromium	500 mg/kg	670 to 43,000 mg/kg,

Compound	PGW SSL	Range of Concentrations
Lead	23 mg/kg	26 to 640 mg/kg;
Perchlorate	60 µg/kg	78 to 99 µg/kg,
Aroclor 1254	34 µg/kg	46 to 2,500 µg/kg;
Aroclor 1260	34 µg/kg	100 to 800 µg/kg;
Benzo(a)anthracene	29 µg/kg	29 to 68 µg/kg;
Benzo(a)pyrene	2.9 µg/kg	14 to 100 µg/kg;
Benzo(b&k)fluoranthene	29 µg/kg	38 to 260 230g/kg,
Dibenzo(a,h)anthracene	2.9 µg/kg	6.8 to 18 µg/kg
Indeno(1,2,3-cd)pyrene	29 µg/kg	59 µg/kg
TPH-D	100 mg/kg	130 to 250 mg/kg;
TPH-Mo	500 mg/kg	730 to 850 mg/kg.

For the purposes of the BOU RI/FS, it is assumed that the existing regulatory framework for managing potential impacts to surface water associated with the Administration Area are sufficient. Potential risks to human health and ecological receptors from chemicals present in surface water and sediment in drainage ditches, the Westlakes, and Buffalo Creek are included in the evaluations presented in Sections 5.0 and 6.0, respectively.

8.3.2 *Potential Risk to Groundwater – Administration Area West*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs and VOCs detected in soil and soil vapor within Administration Area West at concentrations above their PGW SSLs and SVSLs are summarized below.

8.3.2.1 *Non-Volatile Organic Compounds*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs detected in soil within Administration Area West at concentrations above their PGW SSLs are summarized below.

The risk ranking of each non-VOC at each location within Administration Area West where that compound was detected above its PGW SSLs is presented on Table 8.3-1.

The maximum risk posed by each class (metals, SVOCs, PCBs, perchlorate, TPH, and NDMA) of non-VOC that was detected at concentrations above their PGW SSLs in soil samples collected from the

shallow (surface to 12 feet bgs) soil layer and deep (greater than 12 feet bgs) soil layer within Administration Area West are shown in Figures 8.3-1 and 8.3-2, respectively. PGW risk contours based on the maximum risk posed by any class of non-VOC in the shallow and deep soil layers within Administration Area West are shown in Figure 8.3-3.

Metals

Antimony, cadmium, chromium, hexavalent chromium, and lead were detected at concentrations above their respective PGW SSLs at multiple locations within Administration Area West. The number of samples having concentrations of those metals above their respective PGW SSLs is provided on the table below.

Metal	Number of Samples
Antimony	2
Cadmium	44
Chromium	16
Hexavalent chromium	3
Lead	35

The results of the risk ranking for those metals are summarized on Table 8.3-1 and below. Factors that resulted in a higher risk ranking for those metals included a potentially wider range of background concentrations than was reflected in the background data, inadequate vertical characterization, and the absence of background concentrations for metals in groundwater.

Antimony

Two samples had concentrations of antimony above its PGW SSL. At both locations, antimony appeared to be present only in shallow (0.5 foot bgs) soil, was vertically delineated, and was not detected in the groundwater. The ranking system, therefore, assigned a negligible risk to groundwater to the samples containing antimony.

Cadmium

Of the 44 samples that had concentrations of cadmium above its PGW SSL, the ranking system assigned negligible risk to 10 samples, low risk to 32 samples, and moderate risk to 2 samples. A moderate risk ranking was

generally associated with samples that 1) did not have the vertical extent delineated, and 2) relevant groundwater data does not exist. Seven samples were originally assigned a moderate risk, however, the detected concentrations of cadmium were not significantly elevated above the statistical upper background concentration and the risk was downgraded to low.

Cadmium was often reported at concentrations that exceeded the statistical upper background concentration (1.2 mg/kg), but nonetheless may still be naturally occurring. However, it is assumed that concentrations of cadmium significantly above the background concentration (e.g., up to 190 mg/kg) are not likely to be naturally occurring and are due to historical activities.

Chromium

Chromium generally posed a negligible to low risk to groundwater. Of the 16 soil samples that had total chromium concentrations greater than its PGW SSL, nine samples were ranked as negligible risk, six were low risk, and one was a moderate risk. One sample (from boring 5D-SB06) was ranked as a moderate risk because the vertical extent had not been delineated below 1 foot bgs, and the absence of relative groundwater data.

Hexavalent Chromium

Three samples contained concentrations of hexavalent chromium above its PGW SSL of 21 mg/kg. The ranking system assigned a negligible risk to one sample and a low risk to the other two samples. Each of the samples had the vertical extent well defined.

Lead

Of the 35 samples that contained concentrations of lead above its PGW SSL, the ranking system assigned a negligible risk to 17 samples, a low risk to 15, and a moderate risk to 3 samples.

A moderate risk was associated with samples that 1) did not have the vertical extent of lead delineated to concentrations below its PGW SSL, and 2) relevant groundwater data does not exist. Two samples were originally assigned a moderate risk, but were downgraded to low risk because the reported concentrations (30 and 48 mg/kg) are believed to be within the range that could be naturally occurring. Lead was often reported at concentrations that exceeded the statistical upper background

concentration of 23 mg/kg, but may still be naturally occurring. It is recognized, however, that some of the detected lead concentrations (e.g., up to 640 mg/kg) are not likely to be naturally occurring and are due to Aerojet activities.

Semivolatile Organic Compounds

SVOCs were reported at concentrations greater than the respective PGW SSLs in 35 samples. The reported SVOCs and the associated number of samples are provided on the table below.

Compound	Number of Samples
Benzo(a)anthracene	5
Benzo(a)pyrene	13
Benzo(b&k)fluoranthene	13
Dibenzo(a,h)anthracene	2
Indeno(1,2,3-cd)pyrene	2

Of the 35 samples that had SVOCs reported above their PGW SSLs, the ranking system assigned a negligible risk to 12 samples, a low risk to 19 samples, and a moderate risk to 4 samples (Table 8.3-1). Moderate risks were generally assigned to those samples that did not have the vertical extent delineated and no relevant groundwater data exists.

Polychlorinated Biphenyls

PCBs were reported at concentrations greater than their respective PGW SSLs in 12 soil samples collected within Administration Area West. The detected PCBs and the associated number of samples are listed on the table below.

Compound	Number of Samples
Aroclor 1254	5
Aroclor 1260	7

The ranking system assigned a negligible risk to one sample, a low risk to two samples, a moderate risk to six samples, and a high risk to three samples (Table 8.3-1). The three samples assigned a high risk were collected from boring 52D-SB18. The high risk was primarily due to the presence of PCBs in a grab groundwater sample from that boring. A

moderate risk was assigned to samples collected at six locations because the vertical extent of PCBs was not delineated and relevant groundwater data does not exist.

Total Petroleum Hydrocarbons

TPH was reported at concentrations greater than the respective PGW SSL in 10 soil samples. The number of samples each of those compounds was detected at concentrations above their PGW SSLs is provided on the table below.

Compound	Number of Samples
TPH-D	6
TPH-Mo	4

Of the 10 samples that had TPH reported above their respective PGW SSLs, the ranking system assigned a high risk to three samples, a moderate risk to five samples, a low risk to one sample, and a negligible risk to one sample. Samples assigned a high risk were generally collected at locations where TPH was detected in local groundwater that did not appear to be from an upgradient source. Moderate risk was generally associated with sample locations where the vertical extent of TPH was not completely defined and the potential impact to groundwater posed by TPH at that location could not be accurately assessed because there was an upgradient source or no relevant data exists.

Perchlorate

Perchlorate at concentrations above its PGW SSL of 60 µg/kg was reported in five samples collected within Administration Area West. At all locations, the underlying groundwater contained perchlorate from an upgradient source and any local contribution was either nonexistent or masked. A low risk was assigned to two samples collected at Source Area 8D because the concentrations of perchlorate in soil were well defined vertically. A moderate risk was assigned to three samples collected at Source Area 6D because the extent of perchlorate above its PGW SSL was not defined below a depth of approximately 2.5 feet bgs.

8.3.2.2 *Volatile Organic Compounds*

The risk ranking of VOCs at each location within Administration Area West where those compounds were detected at concentrations above their

PGW SVSLs are presented on Table 8.3-2 and in Figure 8.3-4. PGW risk contours based on the maximum risk posed by any VOC at any depth within Administration Area West are also shown in Figure 8.3-4.

VOCs at concentrations above their PGW SVSLs were detected in 48 soil vapor samples collected within Administration Area West. VOCs detected in soil vapor samples collected within Administration Area West at concentrations above their PGW SSLs, and the corresponding number of samples, are listed on the table below.

Compound	Number of Samples
PCE	26
TCE	13
Benzene	9

TCE was the most commonly detected VOC and the VOC reported at the highest concentrations. The screening-level vapor transport model used a depth to groundwater of 30 feet. The modeling results for TCE, PCE, and benzene are summarized on the table below.

	TCE	PCE	Benzene
Depth to Groundwater (ft bgs)	30	30	30
Soil Vapor Depth (ft)	10	10	10
Groundwater Concentration (µg/L)	0.8	0.1	0.2
Equilibrium Soil Vapor Concentration (µg/m^3)	99	13	11

The ranking system assigned a low risk to 44 of the 48 VOC soil vapor samples and a moderate risk to 4 of the soil vapor samples collected within Administration Area West. A rank of low risk was assigned to the majority of the sample locations because the compound was not detected in groundwater (20 samples) or because most or all of the soil vapor concentrations were equal or less than their equilibrium soil vapor concentrations. A moderate risk was assigned to the soil vapor samples collected at three [52D-SP35, 52D-SP42, and D(c)-SP05] locations at depths greater than 10 feet bgs. It should be noted that the soil vapor samples collected at those locations at 10 feet bgs were assigned a low risk. Assignment of a moderate risk to the soil vapor samples collected at those locations at depths greater than 10 feet bgs may be due to the use of the modeled 10-foot bgs concentration during evaluation of the deeper soil vapor samples.

8.4 *EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER – WLLO AREA*

The Westlakes; Line 02; Line 05 North; and Open Space Areas 5, 6, and 7 (referred to hereafter as the WLLO Area) encompass the six management areas listed below.

- **Line 02 Region:** Includes all of Source Areas 28E, 29E, 59E, E(d), E(e), E(m), E(n), and the Former DSA; RCRA Units T and Z; and various features such as collection systems, floor drains, sumps, storage areas, septic tanks and leach fields, and a cleaning slab.
- **Line 05 North:** Includes all of Source Areas 51E, 52E, and E[l] in proximity to the northernmost building (05085) in Line 05 and various site features that may have contributed chemicals to soil and/or groundwater.
- **Westlakes Storm Water Retention Basins/Open Space 6.**
- **Western Main Administration Area Ditch and Buffalo Creek.**
- **Open Spaces 5 and 7.**

Evaluation of the potential risk to surface water and groundwater posed by chemicals detected in soil and soil vapor at concentrations above their respective PGW SSLs and SVSLs within the WLLO Area (Westlakes/Open Space 6, Line 02, Line 05 North and Open Space Areas 5 and 7) is presented below.

8.4.1 *Potential Risk to Surface Water – WLLO Area*

Buffalo Creek and the Westlakes are the two surface water bodies present in the WLLO Area. Locally, storm water temporarily ponds in various low areas located throughout the WLLO. Concentrations of site-related chemicals present in soil at a depth up to 1 foot bgs at concentrations above their PGW SSLs could potentially enter these surface water bodies by entrainment in storm water runoff.

The water quality of storm-water runoff from the WLLO that enters Buffalo Creek and the Westlakes is monitored under existing NPDES Permit CA0004111. The NPDES permit provides a method for managing and evaluating the potential cumulative impacts to surface water. Storm-water runoff from Line 02 and Line 05 North is directed to a series of unlined ditches that channel the runoff to the Westlakes. Surface water within the Westlakes that does not infiltrate into the ground is

periodically discharged to Buffalo Creek, a tributary to the American River. Prior to the discharge to Buffalo Creek, samples of the surface water are analyzed in accordance with the NPDES Permit. Discharges are not permitted if any constituent concentrations exceed the discharge limits established in the NPDES Permit.

In the WLLO Area, concentrations of non-VOCs above their respective PGW SSLs were detected in soil samples collected between 0 and 1 foot bgs at 38 locations (Table 8.4-1). Concentrations of non-VOCs above their respective PGW SSLs, detected in soil samples collected between 0 and 12 feet bgs within the WLLO area, are shown in Figures 8.4-1 through 8.4-4. Soil samples collected between 0 and 1 foot bgs were not analyzed for VOCs because they tend to volatilize from soil close to the atmosphere. Compounds detected in those samples above their PGW SSLs, and the range of concentrations detected above their PGW SSLs, are listed on the table below.

Compound	PGW SSL	Range of Concentrations
Aluminum	43,000 mg/kg	47,000 mg/kg
Cadmium	0.72 mg/kg	0.74 to 27.9 mg/kg
Lead	42 mg/kg	25.7 to 170 mg/kg
Thallium	2.5 mg/kg	2.8 to 2.9 mg/kg
Perchlorate	60 µg/kg	65 to 670 µg/kg
Aroclor 1254	34 µg/kg	73 to 1,100 µg/kg
Aroclor 1260	34 µg/kg	35J to 37J µg/kg
Benzo(a)anthracene	29 µg/kg	88 µg/kg
Benzo(a)pyrene	2.9 µg/kg	6.9 to 130 µg/kg
Benzo(b&k)fluoranthene	29 µg/kg	29 to 350 µg/kg
Dibenzo(a,h)anthracene	2.9 µg/kg	8.2 to 14 µg/kg
Indeno(1,2,3-cd)pyrene	29 µg/kg	31 to 57 µg/kg
TPH-D	100 mg/kg	110 to 250 mg/kg
TPH-Mo	500 mg/kg	550 to 760 mg/kg

For the purposes of the BOU RI/FS, it is assumed that the existing regulatory framework for managing potential impacts to surface water associated with the WLLO are sufficient. Potential risks to human health and ecological receptors from chemicals present in surface water and sediment in drainage ditches, the Westlakes, and Buffalo Creek are included in the evaluations presented in Sections 5.0 and 6.0, respectively.

8.4.2 *Potential Risk to Groundwater – WLLO Area*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs and VOCs detected in soil and soil vapor within the WLLO Area at concentrations above their PGW SSLs and SVSLs are summarized below.

8.4.2.1 *Non-Volatile Organic Compounds*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs detected in soil within the WLLO Area at concentrations above their PGW SSLs are summarized below.

The risk ranking of each non-VOC at each location within WLLO Area where that compound was detected above its PGW SSLs is presented on Table 8.4-1.

The maximum risk posed by each class (metals, SVOCs, PCBs, perchlorate, TPH, and NDMA) of non-VOC that was detected at concentrations above their PGW SSLs in soil samples collected from the shallow (surface to 12 feet bgs) soil layer within Line 02, Line 05 North, Westlakes, and Buffalo Creek is shown in Figures 8.4-1 through 8.4-4. The maximum risk posed by each class (metals, SVOCs, PCBs, perchlorate, TPH, and NDMA) of non-VOC that was detected at concentrations above their PGW SSLs in soil samples collected from the deep (greater than 12 feet bgs) soil layer within Line 02, Line 05 North, Westlakes, and Buffalo Creek is shown in Figures 8.4-5 through 8.4-8.

PGW risk contours based on the maximum risk posed by any class of non-VOC in the shallow and deep soil layers within Line 02, Line 05 North, Westlakes, and Buffalo Creek are shown in Figures 8.4-9 through 8.4-12.

<u>Metals</u>

Aluminum, cadmium, lead, manganese, nickel, and thallium were detected at concentrations above their respective PGW SSLs at multiple locations within the WLLO Area. The number of samples having concentrations of those metals above their respective PGW SSLs is provided on the table below.

Metal	Number of Samples
Aluminum	11
Cadmium	12
Lead	12
Manganese	13
Nickel	3
Thallium	13

The results of the risk ranking for those metals are summarized on Table 8.4-1 and below. Factors that resulted in a higher risk ranking for those metals included a potentially wider range of background concentrations than was reflected in the background data, inadequate vertical characterization, and the absence of background concentrations for metals in groundwater.

Aluminum

Of the 11 samples containing aluminum above its PGW SSL, one was assigned a negligible risk, and the remainders were assigned a low risk. Three samples containing aluminum above its PGW SSL were originally ranked moderate to high risk, but were downgraded to low risk because the reported aluminum concentrations (up to 79,000 mg/kg) are likely to be naturally occurring.

Cadmium

The ranking system assigned a negligible risk to 1 sample, a low risk to 10 samples, and moderate risk to 1 sample that contained concentrations of cadmium above its PGW SSL. Five samples were initially ranked as moderate to high risk, but were downgraded to low risk because the reported cadmium concentrations (up to 4.8 mg/kg) are likely to be naturally occurring.

Lead

Twelve samples contained concentrations of lead above its PGW SSL. The ranking system assigned a negligible risk to two samples, a low risk to nine samples, and a moderate risk to one sample. Four samples were initially assigned a moderate risk because the samples were collected at locations where the vertical extent was not delineated and relevant groundwater data does not exist. However, the rank of those samples was

downgraded from moderate to low because the reported concentrations (up to 52 mg/kg) are likely to be naturally occurring.

Manganese

A low risk was assigned to all 13 soil samples that contained manganese above its PGW SSL. Moderate to high risks had initially been assigned to 11 of the samples either because (1) a sample had manganese detected at concentrations greater than the PGW SSL in deeper soil samples collected near groundwater, or (2) because manganese was detected in local groundwater. However, the risks associated with those samples was downgraded from moderate or high to low because the range of detected concentrations (up to 5,000 mg/kg) of manganese are likely to be naturally occurring.

Dissolved concentrations of manganese exceeding the National Secondary Drinking Water Regulations (NSDWR) of 50 µg/L were reported in grab samples collected from borings DSA-SB01 and E(e)-SB02 in Line 02. Due to detection of manganese above its NSDWR, the ranking system initially assigned a high risk to five samples collected in the vicinity of those two borings. However, the solubility of manganese is a function of the reduction/oxidation (redox) conditions (i.e., manganese is typically less soluble in an oxic environment and more soluble under anaerobic conditions). The presence of manganese in the grab samples is more likely to have resulted from dissolution of manganese-bearing minerals in the aquifer, than leaching from the vadose zone. Using the ranking system, the presence of manganese in groundwater is highly likely to result in an overestimation of the potential for manganese in soil to impact groundwater. For this reason, and because the detected concentrations were within the range believed to be naturally occurring, the high risk assigned to those samples was downgraded to low.

Nickel

Nickel was detected at concentrations above its PGW SSL in three soil samples collected at three (28E-SB01, 59E-SB03, and 59E-SB04) locations within Line 02. The ranking system assigned a low risk to the sample collected from boring 28E-SB01 and a moderate risk to the samples collected from borings 59E-SB03 and 59E-SB04. The moderate risk ranking was due primarily because the vertical extent of nickel at concentrations above its PGW SSL had not been completely delineated. Although nickel was reported at concentrations above the statistical upper background concentration of 120 mg/kg, the detected concentrations (up

to 210 mg/kg) may still be naturally occurring. Therefore, the risk ranking for those two samples was downgraded from moderate to low.

Thallium

A low risk was assigned to all 13 soil samples that contained concentrations of thallium above its PGW SSL. Initially, the ranking system had assigned moderate to high risks to 10 of the 13 samples that had thallium reported above the PGW SSL in samples collected near the top of groundwater. Thallium was often reported at concentrations that exceeded the statistical upper background concentration (2.5 mg/kg); but as discussed in Sections 5.1.5.2 and 5.1.9.2 of the RI (Volume I), the detected concentrations are believed to be naturally occurring. For these reasons, the risk ranking for thallium in the soil samples was downgraded to low risk.

Semivolatile Organic Compounds

SVOCs were detected at concentrations greater than the respective PGW SSLs in 25 soil samples collected within the WLLO Area. The detected SVOCs and the associated number of samples are listed on the table below.

Compound	Number of Samples
Benzo(a)anthracene	2
Benzo(a)pyrene	8
Benzo(b&k)fluoranthene	8
Dibenzo(a,h)anthracene	3
Indeno(1,2,3-cd)pyrene	4

The ranking system assigned a negligible risk to 8 samples, a low risk to 6 samples and a moderate risk to 11 samples. Samples assigned a low risk were collected at locations where the vertical extent of those compounds had been characterized.

Polychlorinated Biphenyls

PCBs were detected at concentrations greater than their respective PGW SSLs in 17 soil samples collected within the WLLO Area. The detected PCBs and the associated number of samples are listed on the table below.

Compound	Number of Samples
Aroclor 1254	14
Aroclor 1260	3

The three soil samples containing Aroclor 1260 above its PGW SSL were collected within the Westlakes. The 14 samples containing Aroclor 1254 at concentrations above its PGW SSL were collected at locations within the Western Administration Ditch and Buffalo Creek.

The ranking system assigned a low risk to four samples and a moderate risk to 13 of the samples. Assignment of a moderate risk was primarily due to the absence of PCB data for deeper soil samples and groundwater.

Total Petroleum Hydrocarbons

TPH-D and/or TPH-Mo were detected at concentrations greater than their respective PGW SSLs in 14 soil samples collected within the WLLO Area. The number of samples containing TPH-D and TPH-Mo above their PGW SSLs are listed on the table below.

Compound	Number of Samples
TPH-D	8
TPH-Mo	6

The ranking system assigned a low risk to 4 of the 14 samples, a moderate risk to 9 samples, and a high risk to 1 sample. The high risk was assigned to a soil sample collected from a boring [E(l)-SB01] within Line 05 North because hydrocarbons were detected to a depth of 62 feet bgs, approximately 6 feet above the water table. Groundwater analytical data for TPH does not exist for that area. The samples assigned a low risk were collected at locations where the vertical extent of those compounds had been characterized.

Perchlorate

Perchlorate at concentrations above its PGW SSL was detected in 62 soil samples collected within Line 02 and Line 05 North. The majority of the detections were in soil samples collected within Line 02 (Figures 8.4-1 and 8.4-5). The ranking system assigned a low risk to 4 samples, a moderate

risk to 4 samples, and a high risk to 54 samples. The samples assigned a low risk contained perchlorate at concentrations above its PGW SSL only in shallow (less than 12 feet bgs) soil and the vertical extent was delineated.

N-Nitrosodimethylamine

NDMA was reported above its PGW SSL in soil samples collected at only two locations (borings 28E-SB02 and 59E-SB02) in Line 02. The ranking system assigned a moderate risk to both samples because the compound was defined vertically, but was detected in samples collected more than half the distance between surface and groundwater.

8.4.2.2 *Volatile Organic Compounds*

Soil vapor sampling for VOCs was only conducted within Line 02, Line 05 North, and Open Space Area 5 during the BOU RI. Due to the likelihood that wet or saturated conditions existed within the Westlakes and along Buffalo Creek, which would preclude the collection of soil vapor, soil vapor sampling was not conducted within those areas. Soil vapor samples for VOCs were not collected within Open Space Areas 6 and 7 because evaluation of those areas during preparation of the BOU FSP (Aerojet, 2006b) indicated that soil vapor sampling was not warranted.

The risk ranking of VOCs at each location within Line 02 and Line 05 North where those compounds were detected at concentrations above their PGW SVSLs is presented on Table 8.4-2. VOCs were not detected at concentrations above their PGW SSLs in soil vapor samples collected within Open Space 5.

The risk ranking of VOCs at each location within Line 02 and Line 05 North where those compounds were detected at concentrations above their PGW SVSLs is shown in Figures 8.4-13 and 8.4-14, respectively. PGW risk contours based on the maximum risk posed by any VOC at any depth within Line 02 and Line 05 North are presented in Figures 8.4-13 and 8.4-14, respectively.

VOCs reported in soil vapor samples collected within Line 02 and Line 05 North at concentrations above their PGW SVSLs, and the corresponding number of samples, are provided on the table below.

Compound	Number of Samples
TCE	48
PCE	34
Benzene	29
Carbon tetrachloride	6
Cis-1,2-DCE	2
1,2-DCA	1

TCE was the most commonly detected VOC and the VOC reported at the highest concentrations. Therefore, TCE was used to evaluate potential risk to groundwater. The screening-level vapor transport model used a depth to groundwater of 45 feet for Line 02 and 65 feet for Line 05 North. The modeling results for TCE are summarized on the table below.

	TCE	TCE	TCE	TCE
Depth to Groundwater (ft bgs)	45	45	65	65
Soil Vapor Depth (ft)	10	10	10	10
Groundwater Concentration (µg/L)	5	50	5	50
Equilibrium Soil Vapor Concentration (µg/m^3)	423	4226	297	2971

Within Line 02, the ranking system assigned a high risk to VOCs in soil vapor collected at one (28E-SP16) location at Source Area 28E and one (DSA-SP04) location at Source Area DSA (Figure 8.4-13). A moderate risk was assigned to VOC concentrations detected in soil vapor samples collected at four (29E-SP07, 29E-SP08, 29E-SP09, and 29E-SP11) locations at Source Area 29E.

The ranking system also assigned a moderate risk to the VOC concentrations detected at four [DSA-SP10, DSA-SP17, DSA-SP20, and E(n)-SP05] locations situated in an area having relatively low concentrations (1.4 to 2.2 µg/L) of TCE in groundwater (Figure 8.4-13). The TCE that occurs in groundwater in these areas is very likely to be due to hydrodynamic dispersion from adjacent areas where concentrations are higher, and is not believed to have sourced locally. Based on the presence of the relatively low concentrations of TCE from an upgradient source, it appears that the moderate rank may overestimate the actual risk to groundwater posed by the VOCs detected in soil vapor at those locations.

8.5 *EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER - CHEMICAL PLANT 2 REGION*

The Chemical Plant 2 Region of the BOU encompasses the five submanagement areas listed below.

- **Chemical Plant 2 North:**
  - Source Areas 59F, 62F, CP2-07, CP2-08, and F(c) and various features and structures associated with the former nitroplasticizer and chemical manufacturing facilities (Buildings 15002, 15007, 15008, 15009, 15010, 15014, 15015, 15016, and 15020);
  - Former RCRA Unit I; and
  - Septic tank at Building 15007 (CP2-ST07).
- **Chemical Plant 2 South:**
  - Source Areas 60F and 61F and various features and structures associated with the former nitroplasticizer and chemical manufacturing facilities (Buildings 15001, 15003, 15004, 15005, 15011, 15017, and 15094);
  - RCRA Unit E; and
  - Septic tanks at Building 15001 (CP2-ST01/03).
- **Magazine Area (Includes Open Space Area 3):**
  - Septic Tanks at Buildings 48013 (A48-ST13) and 48019 (A48-ST19);
  - Former RCRA Unit C; and
  - Magazine Buildings 48004 and 48010, and Building 48014.
- **Dredge Pit and Eastern Basin:** Source Area 25F.
- **Open Spaces 1, 2, and 4.**

Evaluation of the potential risk to surface water and groundwater posed by chemicals detected in soil and soil vapor at concentrations above their respective PGW SSLs and SVSLs within the Chemical Plant 2 Region is presented below.

8.5.1 *Potential Risk to Surface Water – Chemical Plant 2 Region*

There are no surface water bodies within in the Chemical Plant 2 Region. Storm water runoff from this area may pond seasonally, but does not flow off site or into any streams, ponds, or lakes. The absence of storm water

runoff to a surface water body implies minimal potential risks to surface water from the Chemical Plant 2 Area. However, chemicals that were detected at concentrations above their PGW SSLs in soil at a depth up to 1 foot bgs are summarized below.

In the Chemical Plant 2 Region, concentrations of non-VOCs above their respective PGW SSLs were detected in soil samples collected between 0 and 1 foot bgs at 41 locations (Table 8.5-1). Concentrations of non-VOCs above their respective PGW SSLs, detected in soil samples collected between 0 and 12 feet bgs in the Chemical Plant 2 Region, are shown in Figures 8.5-1 through 8.5-3. Soil samples collected between 0 and 1 foot bgs were not analyzed for VOCs because they tend to volatilize from soil close to the atmosphere. Compounds detected in those samples above their PGW SSLs, and the range of concentrations detected above their PGW SSLs, are listed on the table below.

Compound	PGW SSL	Range of Concentrations
Aluminum	43,000 mg/kg	44,000 to 51,000 mg/kg
Arsenic	11 mg/kg	35 mg/kg
Cadmium	0.72 mg/kg	0.75 to 1.6 mg/kg
Lead	42 mg/kg	140 mg/kg
Mercury	5.7 mg/kg	34 mg/kg
Thallium	2.5 mg/kg	2.8 to 3.2 mg/kg
4,4′-DDD	280 µg/kg	2,300J µg/kg
4,4′-DDT	200 µg/kg	1,200J µg/kg
Aldrin	4.0 µg/kg	7.4 µg/kg
Dieldrin	4.2 µg/kg	5.1 to 8.3 µg/kg
Heptachlor epoxide	6.0 µg/kg	8.2 to 28 µg/kg
Aroclor 1248	34 µg/kg	540J to 120,000J µg/kg
Aroclor 1254	34 µg/kg	61 to 2,800 µg/kg
Benzo(a)anthracene	29 µg/kg	51 to 170 µg/kg
Benzo(a)pyrene	2.9 µg/kg	6.8 to 150J µg/kg
Benzo(b)fluoranthene	29 µg/kg	230J µg/kg
Benzo(b&k)fluoranthene	29 µg/kg	29 to 220J µg/kg
Dibenzo(a,h)anthracene	2.9 µg/kg	8.4 µg/kg
Indeno(1,2,3-cd)pyrene	29 µg/kg	100J µg/kg
Pentachlorophenol	400 µg/kg	2,800 µg/kg

8.5.2 *Potential Risk to Groundwater – Chemical Plant 2 Region*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs and VOCs detected in soil and soil vapor at concentrations above their PGW SSLs within the management areas included in the Chemical Plant 2 Region are summarized below.

8.5.2.1 *Non-Volatile Organic Compounds*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs detected in soil within the management areas included in the Chemical Plant 2 Region at concentrations above their PGW SSLs are summarized below.

The risk ranking of each non-VOC at each location within the Chemical Plant Area (North and South), the Magazine Area, and the Dredge Pits where that compound was detected above its PGW SSLs are presented on Table 8.5-1.

The maximum risk posed by each class (metals, SVOCs, PCBs, perchlorate, TPH, and NDMA) of non-VOC that was detected at concentrations above their PGW SSLs in soil samples collected from the shallow (surface to 12 feet bgs) soil layer within the Chemical Plant Area (North and South), the Magazine Area, and the Dredge Pits are shown in Figures 8.5-1, 8.5-2, and 8.5-3, respectively. The maximum risk posed by each class of non-VOC that was detected at concentrations above their PGW SSLs in soil samples collected from the deep (greater than 12 feet bgs) soil layer within the Chemical Plant Area (North and South), the Magazine Area, and the Dredge Pits are shown in Figures 8.5-4, 8.5-5, and 8.5-6, respectively.

PGW risk contours based on the maximum risk posed by any class of non-VOC in the shallow and deep soil layers within the Chemical Plant Area (North and South), the Magazine Area, and the Dredge Pits are shown in Figures 8.5-7, 8.5-8, and 8.5-9, respectively.

<u>Metals</u>

Aluminum, arsenic, cadmium, lead, mercury, and thallium were detected at concentrations above their respective PGW SSLs at multiple locations within the management areas included in the Chemical Plant 2 Region. The number of samples having concentrations of those metals above their respective PGW SSLs is provided on the table below.

Metal	Number of Samples
Aluminum	4
Arsenic	3
Cadmium	11
Lead	1
Mercury	2
Thallium	16

The results of the risk ranking for those metals are summarized on Table 8.5-1 and below. Factors that resulted in a higher risk ranking for those metals included a potentially wider range of background concentrations than was reflected in the background data, inadequate vertical characterization, and the absence of background concentrations for metals in groundwater.

Aluminum

The four samples that contained aluminum at concentrations above its PGW SSL were ranked as a low risk to groundwater. Although aluminum was detected in the soil samples at concentrations above its statistical upper background concentration of 43,000 mg/kg, the detected concentrations (up to 64,000 mg/kg) of aluminum may still be naturally occurring.

Arsenic

Arsenic at concentrations above its PGW SSL was detected in three samples. The ranking system assigned a low risk to two of the samples because the vertical extent had been defined to levels less than the PGW SSL. A moderate risk was assigned to a sample collected at one location (59F-SNS01) because the vertical extent of arsenic had not been characterized to levels below its PGW SSL.

Cadmium

Cadmium was detected at concentrations above its PGW SSL in 11 samples collected within the management areas included in the Chemical Plant 2 Region.

A low risk was assigned to all 11 samples. The ranking system initially assigned a moderate risk to 8 samples where the vertical extent of cadmium had not been characterized to levels below its PGW SSL and relevant groundwater data does not exist. However, because the detected concentrations (up to 1.6 mg/kg) of cadmium were within the range that may be naturally occurring , even if above the statistical upper range of background (0.72 mg/kg), the risk posed by cadmium in those eight soil samples was downgraded from moderate to low.

Lead

The ranking system assigned a low risk to the one sample collected at one location (59F-SB26) containing lead at a concentration above its PGW SSL. Lead concentrations greater than its PGW SSL at that location were well defined and restricted to 0.25 foot bgs.

Mercury

Mercury at concentrations above its PGW SSL was detected in two soil samples collected within the upper 11 feet of soil at one location (25F-SB07) in the Dredge Pit (Source Area 25F). The ranking system assigned a low risk to mercury at that location primarily because the concentrations were well defined vertically.

Thallium

A low risk was assigned to all 16 samples that had thallium reported above the PGW SSL. The ranking system initially assigned moderate to high risks to nine samples, but the associated risks were downgraded to low. Thallium was often reported at concentrations that exceeded the statistical upper background concentration (2.5 mg/kg); but as discussed in Section 6.2.5.2 of the RI (Volume I), the detected concentrations are believed to be naturally occurring.

<u>Semivolatile Organic Compounds</u>

SVOCs were detected at concentrations greater than the respective PGW SSLs in 41 soil samples collected within the management areas included in the Chemical Plant 2 Region. The detected SVOCs and the associated number of samples are listed on the table below.

Compound	Number of Samples
Benzo(a)anthracene	3
Benzo(a)pyrene	21
Benzo(b&k)fluoranthene	14
Dibenzo(a,h)anthracene	1
Indeno(1,2,3-cd)pyrene	1
Pentachlorophenol	1

The ranking system assigned a low risk to 31 of the 41 soil samples and a moderate risk to 10 soil samples that contained SVOCs above their PGW SSL. A low risk was assigned to those samples collected at locations where the vertical extent of those compounds had been characterized.

Polychlorinated Biphenyls

PCBs were detected at concentrations greater than their respective PGW SSL in 22 soil samples collected within the Chemical Plant 2 North Area. The detected PCBs and the associated number of samples are listed on the table below.

Compound	Number of Samples
Aroclor 1248	4
Aroclor 1254	18

The ranking system assigned a low risk to 9 soil samples and a moderate risk to 13 soil samples containing PCBs at concentrations above their PGW SSLs. The moderate risk rank is primarily due to the absence of deeper samples on which to assess the vertical extent and analytical data for PCBs in groundwater.

Perchlorate

Perchlorate was detected at concentrations greater than its PGW SSL of 60 µg/kg in one soil sample collected within the Chemical Plant 2 Area and two soil samples collected within the Magazine Area.

The ranking system assigned a low risk to the perchlorate concentration detected at location 59F-SB11 in Chemical Plant 2 North because the vertical extent was well defined.

The ranking system assigned a moderate risk to the perchlorate concentrations detected in the two soil samples collected at one (A48-ST13-SB01) location within the Magazine Area. The moderate risk was based on the presence of perchlorate above its PGW SSL in each soil sample collected at this location, and due to the absence of relevant groundwater data.

Organochlorine Pesticides

Organochlorine pesticides were reported at concentrations greater than their respective PGW SSL in 10 samples. The reported pesticides and the associated number of samples are provided on the table below.

Compound	Number of Samples
4,4-DDD	1
4,4-DDT	1
Aldrin	1
Dieldrin	3
Heptachlor epoxide	4

The ranking system assigned a low risk to six of the samples and a moderate risk to four of the samples containing organochlorine pesticides. Assignment of a moderate risk was due primarily on the absence of deeper soil data to determine vertical extent.

8.5.2.2 *Volatile Organic Compounds*

The risk ranking of VOCs detected at concentrations above their PGW SVSLs within the management areas included in the Chemical Plant 2 Region is discussed below. VOCs detected in soil vapor samples collected within the management areas included in the Chemical Plant 2 Region at concentrations above their PGW SVSLs, and the corresponding number of samples, are listed on the table below.

Compound	Number of Samples
1,2-DCA	31
PCE	6
Vinyl chloride	5
Benzene	4
Carbon tetrachloride	2

1,2-DCA was the primary VOC detected in soil vapor samples within the Chemical Plant 2 Area at concentrations above its PGW SVSL. 1,2-DCA was also the most commonly detected VOC in perched groundwater beneath the Chemical Plant 2 Area. However, 1,2-DCA was detected in only three monitoring wells screened in the FWBZ and the maximum detected concentration was 4.7J µg/L. Vinyl chloride, carbon tetrachloride, and benzene were not detected in the FWBZ in the areas where soil vapor samples exceeded the PGW SSL.

The 1,2-DCA in the FWBZ appears to be a small remnant of a larger 1,2-DCA plume that existed in the area historically. In the Stage 1 RI Report (ICF Kaiser, 1993), the Chemical Plant 2 area was depicted as being within an area having 1,2-DCA concentrations greater than 5 µg/L and 1,2-DCA concentrations greater than 1,000 µg/L were reported in several Chemical Plant 2 wells (see summary table below). During the BOU RI sampling period, the highest concentration of 1,2-DCA detected in the FWBZ was an estimated 4.7J µg/L. As indicated on the table below, wells that historically had detection of 1,2-DCA greater than 1,000 µg/L had less than 0.5 µg/L during the BOU RI sampling period (2005-2006).

1,2-DCA Concentrations in FWBZ in 1993 and 2006

Monitoring Well	Stage 1 RI (1992-93)	BOU RI (2005-06)
22	520	0.34J
24	820	<0.5
25	130	<0.5
131	7,900	0.61
215	6,300	0.45J
3222	2,200	<0.5
3292	110	<0.5
3348	43	1.7

Concentrations reported in µg/L.
Only FWBZ wells with data available during both periods are included in the above table.

The decrease in 1,2-DCA concentrations and extent in the FWBZ beneath the Chemical Plant 2 Region, and the southwestern portion of the Aerojet site, is an indication that 1,2-DCA mass contributions from perched groundwater and/or soil vapor are not significant. Based on the data, VOC concentrations detected in soil vapor samples collected within the Chemical Plant 2 Area were assigned a low risk. A figure showing that all soil vapor sampling locations were assigned a low risk was not prepared.

8.6 *EVALUATION OF POTENTIAL RISK TO SURFACE WATER AND GROUNDWATER – AREA 39*

Evaluation of the potential risk to surface water and groundwater posed by chemicals detected in soil and soil vapor within Area 39 at concentrations above their PGW SSLs and SVSLs is presented below.

8.6.1 *Potential Risk to Surface Water – Area 39*

As previously indicated, concentrations of site-related chemicals present in soil at a depth up to 1 foot bgs above their respective PGW SSLs were considered to potentially pose a risk to surface water. Chemicals present in shallow soils could be entrained in storm water runoff and into one of several storm water impoundments present in Area 39.

Perchlorate (491 µg/kg) and thallium (4.6 mg/kg) were the only two compounds detected in soil collected between 0 and 1 foot bgs in Area 39 at concentrations above their respective PGW SSLs (Table 8.6-1). Concentrations of perchlorate and thallium above their respective PGW SSLs, detected in soil samples collected between 0 and 12 feet bgs in Area 39, are shown in Figure 8.6-1. As discussed in Section 7.2.4.2 of the RI (Volume I), although the detected concentration of thallium is higher than the statistical background concentration, it still may be naturally occurring.

8.6.2 *Potential Risk to Groundwater – Area 39*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs and VOCs detected in soil and soil vapor within Area 39 at concentrations above their PGW SSLs are summarized below.

8.6.2.1 *Non-Volatile Organic Compounds*

The results of the evaluation of the potential risk to groundwater posed by non-VOCs detected in soil within Area 39 at concentrations above their PGW SSLs are summarized below.

The risk ranking of each non-VOC at each location within Area 39 where that compound was detected above its PGW SSLs is presented on Table 8.6-1. The maximum risk posed by each class (metals, SVOCs, PCBs, perchlorate, TPH, and NDMA) of non-VOC that was detected at concentrations above their PGW SSLs in soil samples collected from the shallow (surface to 12 feet bgs) soil layer and deep (greater than 12 feet

bgs) soil layer within Area 39 are shown in Figures 8.6-1 and 8.6-2, respectively. PGW risk contours based on the maximum risk posed by any class of non-VOC in the shallow and deep soil layers within Area 39 are shown in Figure 8.6-3.

Metals

Aluminum, cadmium, and thallium were detected at concentrations above their respective PGW SSLs at multiple locations within Area 39. The number of samples having concentrations of those metals above their respective PGW SSLs is provided on the table below.

Metal	Number of Samples
Aluminum	1
Cadmium	9
Thallium	21

The results of the risk ranking for those metals are summarized on Table 8.6-1 and below. Factors that resulted in a higher risk ranking for those metals included a potentially wider range of background concentrations than was reflected in the background data, inadequate vertical characterization, and the absence of background concentrations for metals in groundwater.

Aluminum

The ranking system assigned a low risk to the one soil sample collected at one location (32B-SB04) that contained aluminum above its PGW SSL because the detection was at 5 feet bgs and was vertically defined and depth to groundwater is approximately 85 feet bgs.

Cadmium

Of the nine samples that had cadmium above its PGW SSL, one sample was assigned a negligible risk and the remainders were assigned a low risk. The ranking system initially assigned a moderate risk to three samples. However, because the detected concentrations of cadmium in the moderate risk ranked samples are believed to be naturally occurring, the rank for those three samples was downgraded from moderate to low.

Thallium

Of the 21 soil samples containing thallium at concentrations above its PGW SSL, 2 samples were assigned a negligible risk and 19 were assigned a low risk. The ranking system initially assigned a moderate risk to 6 samples. However, as discussed in Section 7.2.4.2 of the BOU RI, although the detected concentrations of thallium were above the statistical upper background concentration, they are still likely to be naturally occurring. Therefore, the risk ranking for those six soil samples was downgraded from moderate to low.

Perchlorate

Perchlorate was reported at concentrations greater than the PGW SSL in six soil samples collected at three locations. The ranking system assigned a high risk to all three locations primarily because perchlorate is detected in the local groundwater.

8.6.2.2 Volatile Organic Compounds

The risk ranking of VOCs at each location within Area 39 where those compounds were detected at concentrations above their PGW SVSLs are presented on Table 8.6-2 and in Figure 8.6-4. PGW risk contours based on the maximum risk posed by any VOC at any depth within Area 39 are also presented in Figure 8.6-4.

Thirty-three VOCs were detected at concentrations above their PGW SVSLs in 20 soil vapor samples from 15 locations collected within Area 39. The detected VOC and the number of soil vapor samples in which it was detected above its PGW SVSL are provided on the table below.

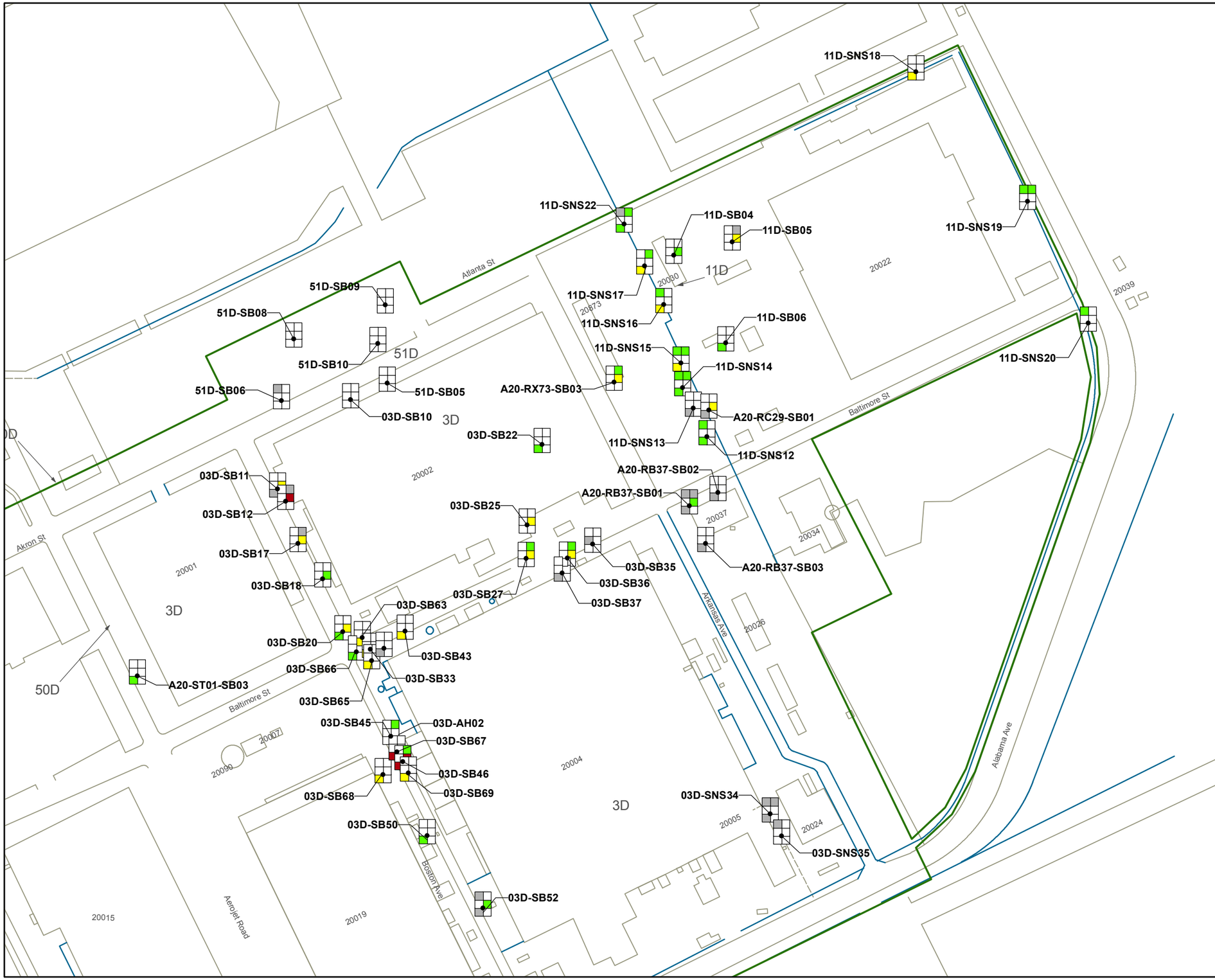
Compound	Number of Samples
TCE	14
Benzene	8
1,1-DCE	4
Carbon tetrachloride	4
PCE	3

The screening-level vapor transport model used a depth to groundwater of 30 feet, the average depth to perched groundwater in the area where VOCs were reported in soil vapor. The modeling results for TCE,

benzene, 1,1-DCE, and PCE are summarized on the table below. Carbon tetrachloride was not detected in groundwater within Area 39 and, therefore, was not evaluated.

	TCE	Benzene	1,1-DCE	PCE
Depth to Groundwater (ft bgs)	30	30	30	30
Soil Vapor Depth (ft)	10	10	10	10
Groundwater Concentration (µg/L)	0.8	0.2	5	0.1
Equilibrium Soil Vapor Concentration (µg/m^3)	99	11	1701	13

The ranking system assigned a low risk to 25 of the 33 soil vapor samples, a moderate risk to 1 sample, and a high risk to seven samples. A high risk was assigned to soil vapor samples collected at two (33B-SP14 and 33B-SP21) locations and a moderate risk to a soil vapor sample collected at location 33B-SP20 (Figure 8.6-4). A low risk was assigned to the majority of the soil vapor samples because the compounds detected in those samples were not detected in groundwater. It should be noted that while some VOCs detected at concentrations above their PGW SSLs were observed in the perched groundwater, no VOCs were detected above their PGW SVSLs in the FWBZ. All sample locations would have been assigned a low risk if the presence of VOCs in the FWBZ rather than the perched groundwater had been used in the evaluation.



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 200 '

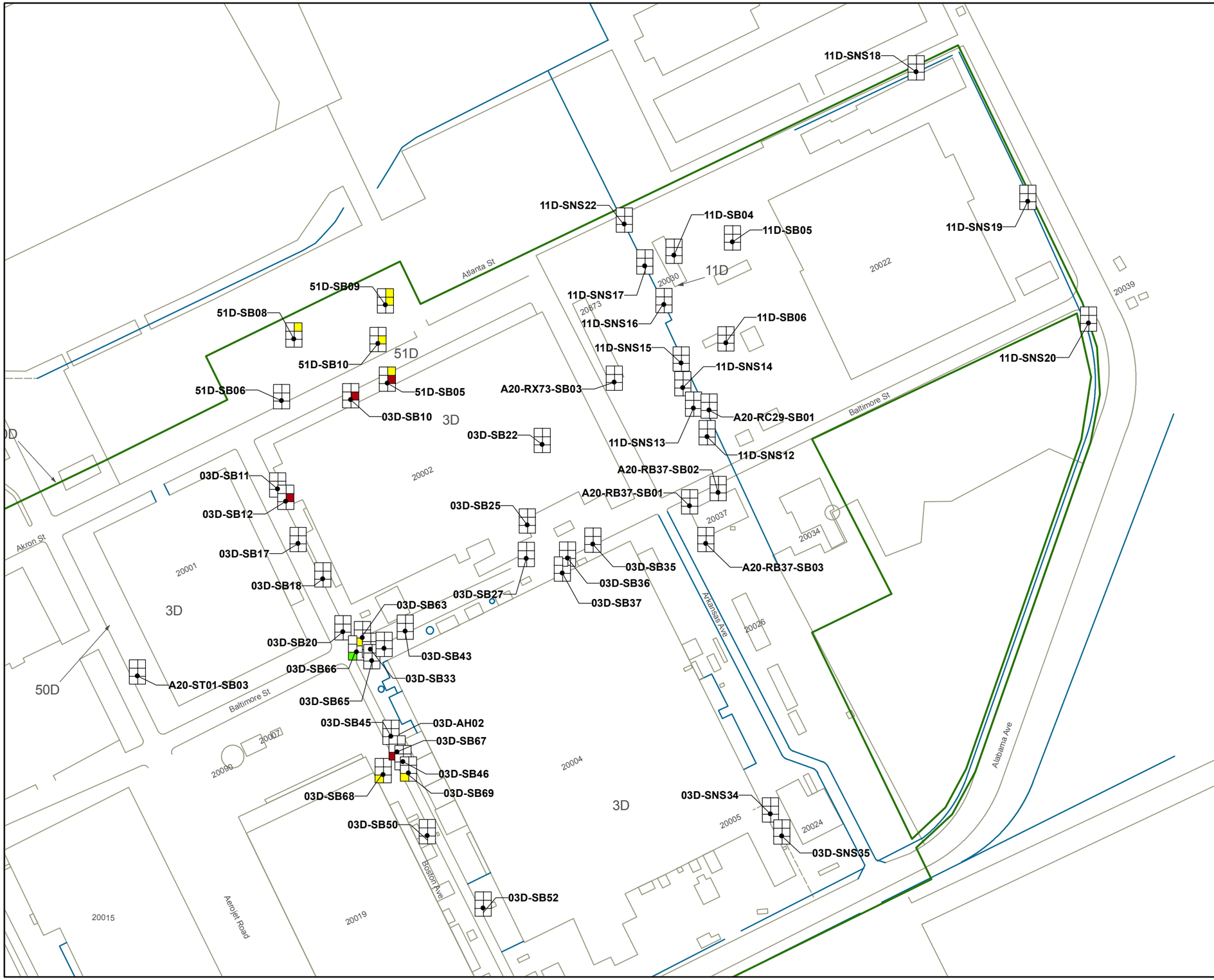
0 200 400

AEROJET

Environmental Remediation

Figure 8.2-1

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Administration Area East



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 200 '

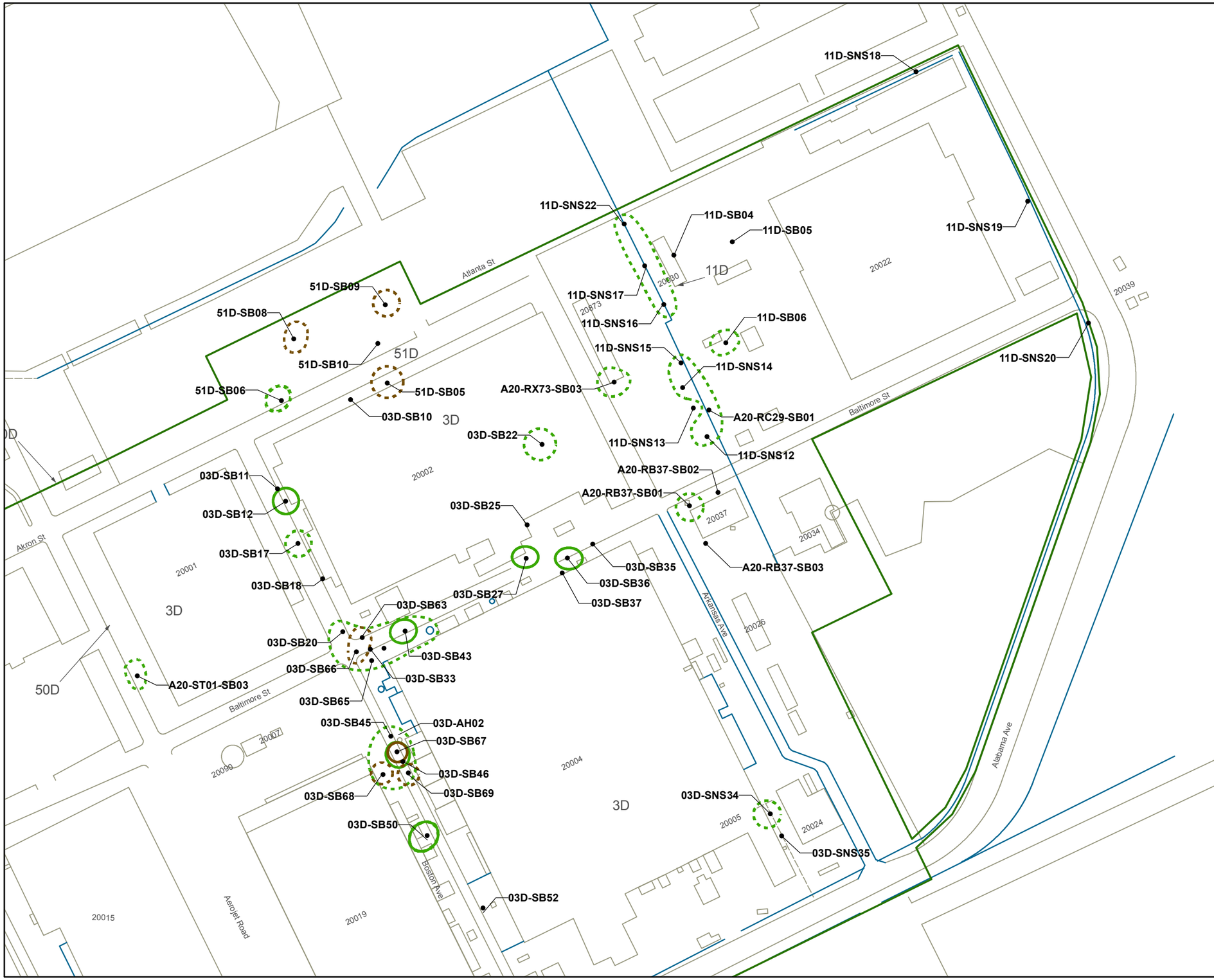
0 200 400

AEROJET

Environmental Remediation

Figure 8.2-2

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Administration Area East



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 200 '

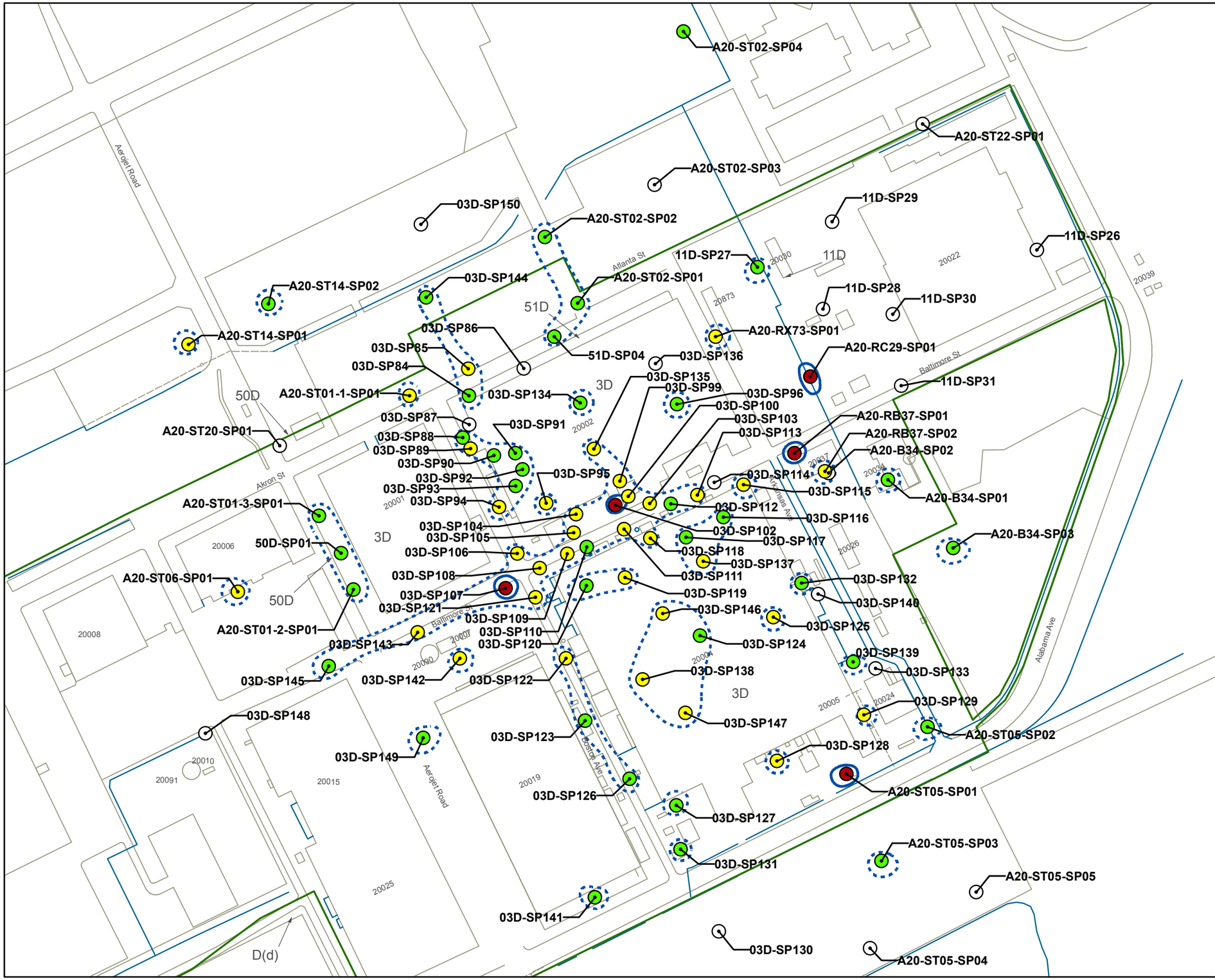
0 200 400

AEROJET

Environmental Remediation

Figure 8.2-3

Potential Risk to Groundwater Contours
Non-Volatile Organic Compounds in Shallow and Deep Soil - Administration Area East



< PGW SVSL or Not analyzed

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

Low Risk to Groundwater Contour

High Risk to Groundwater Contour

PGW SVSL = Protection of Groundwater Soil Vapor Screening Screening Level

N

1 " = 250 '

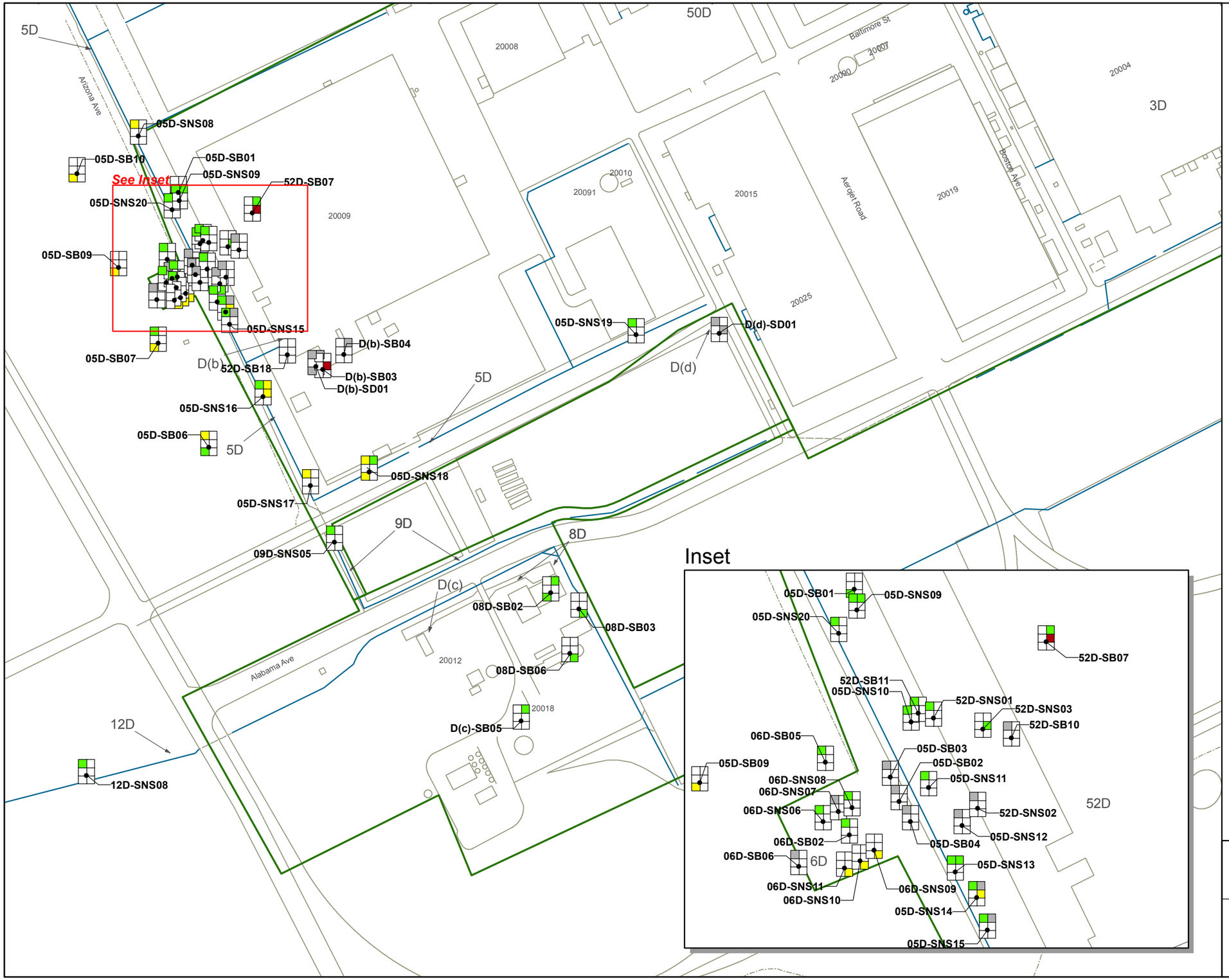
0 250 500

AEROJET

Environmental Remediation

Figure 8.2-4

Potential Risk to Groundwater
Volatile Organic Compounds
Administration Area East



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 250 '

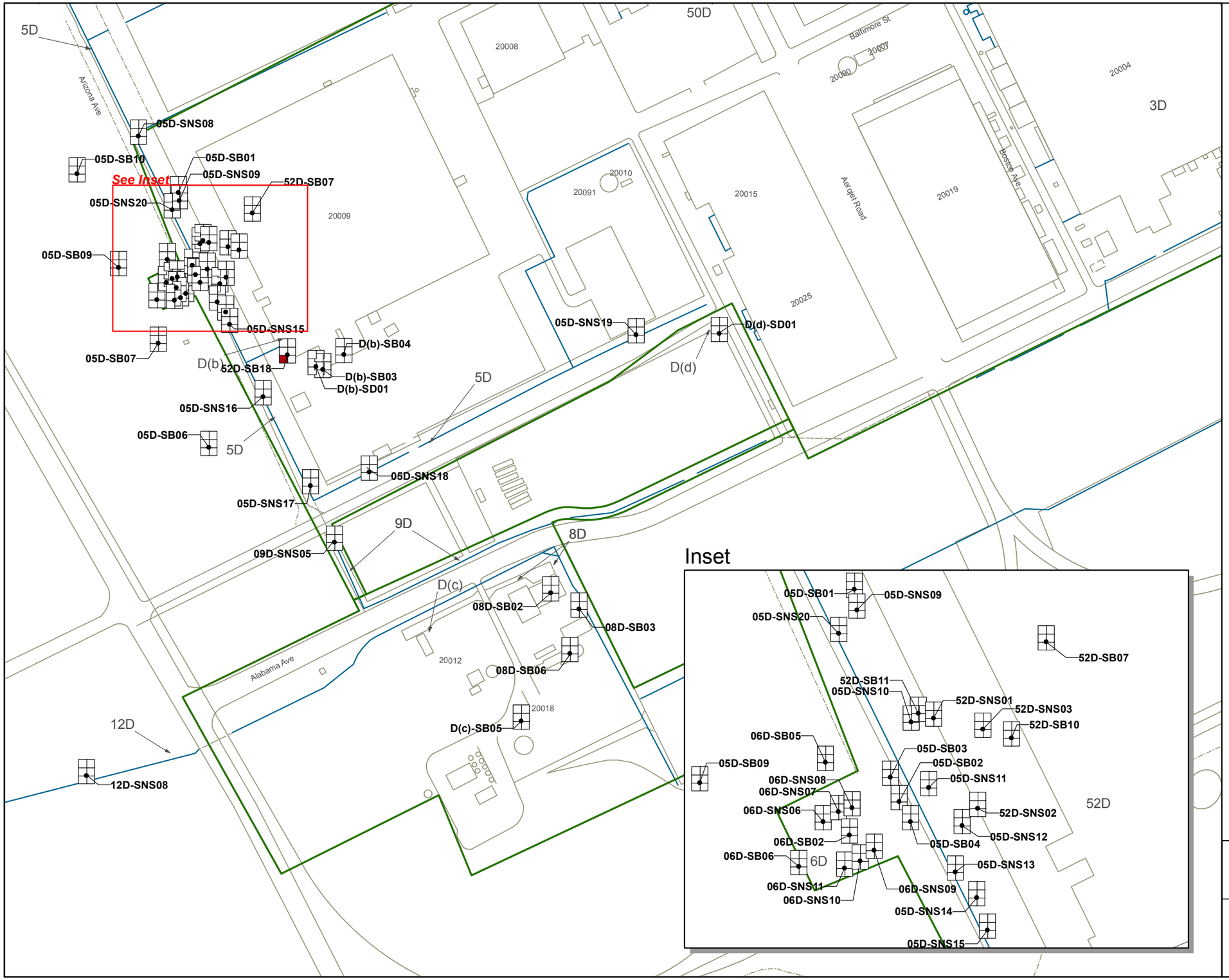
0 250 500

AEROJET

Environmental Remediation

Figure 8.3-1

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Administration Area West



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 250 '

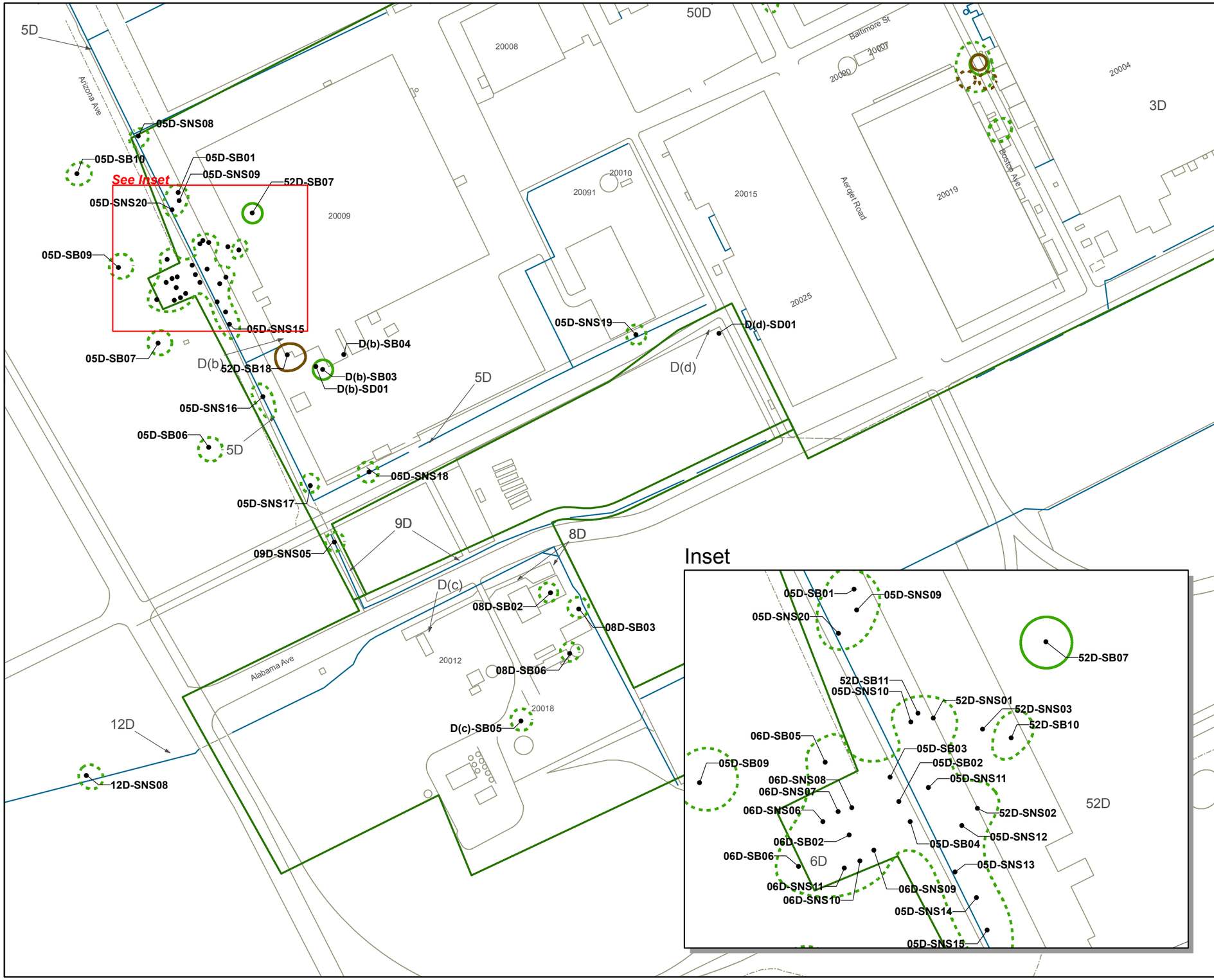
0 250 500

AEROJET

Environmental Remediation

Figure 8.3-2

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Administration Area West



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 250 '

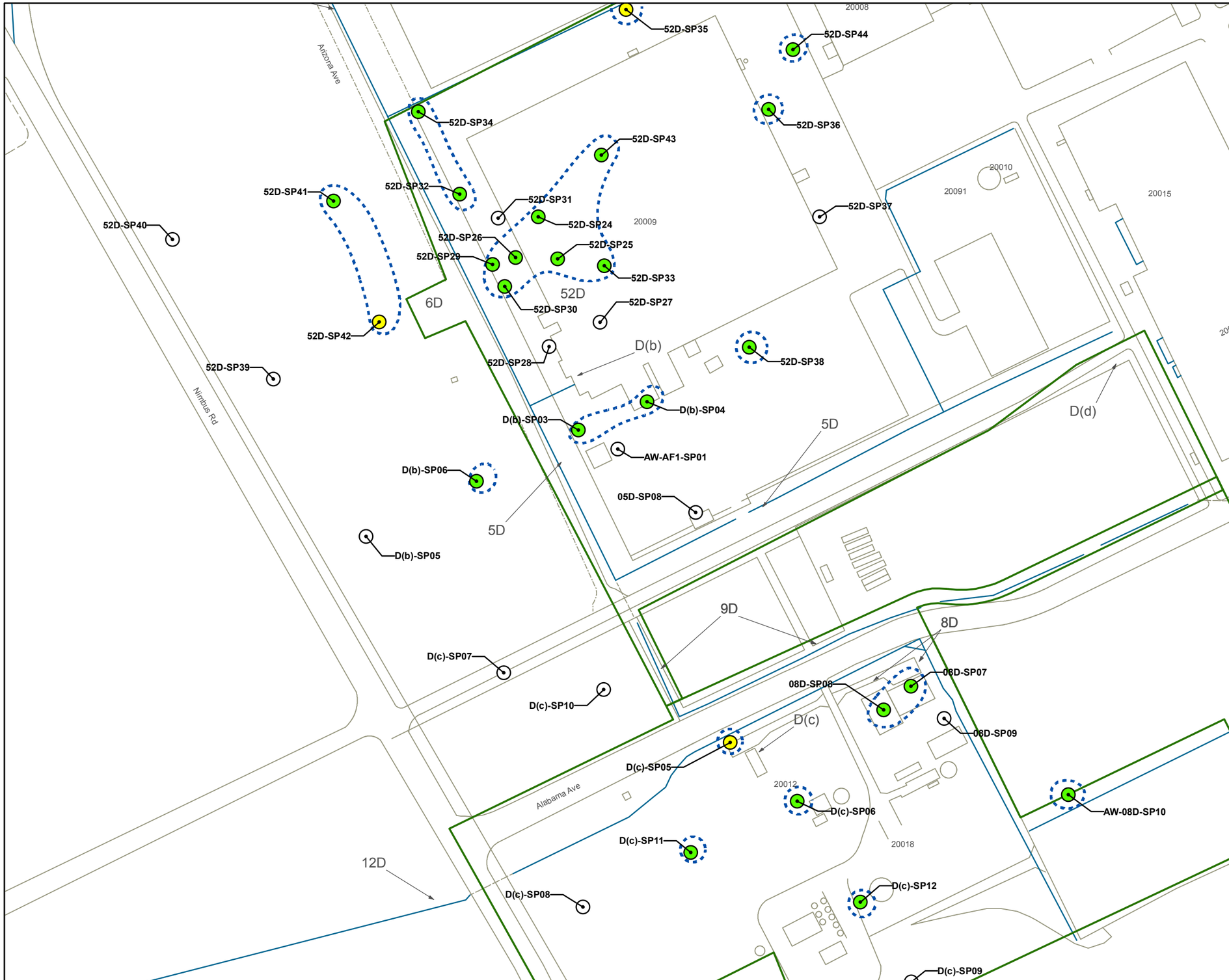
0 250 500

AEROJET

Environmental Remediation

Figure 8.3-3

Potential Risk to Groundwater Contours Non-Volatile Organic Compounds in Shallow and Deep Soil - Administration Area West



< PGW SVSL or Not analyzed

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

Low Risk to Groundwater Contour

High Risk to Groundwater Contour

PGW SVSL = Protection of Groundwater Soil Vapor Screening Screening Level

N

1 " = 200 '

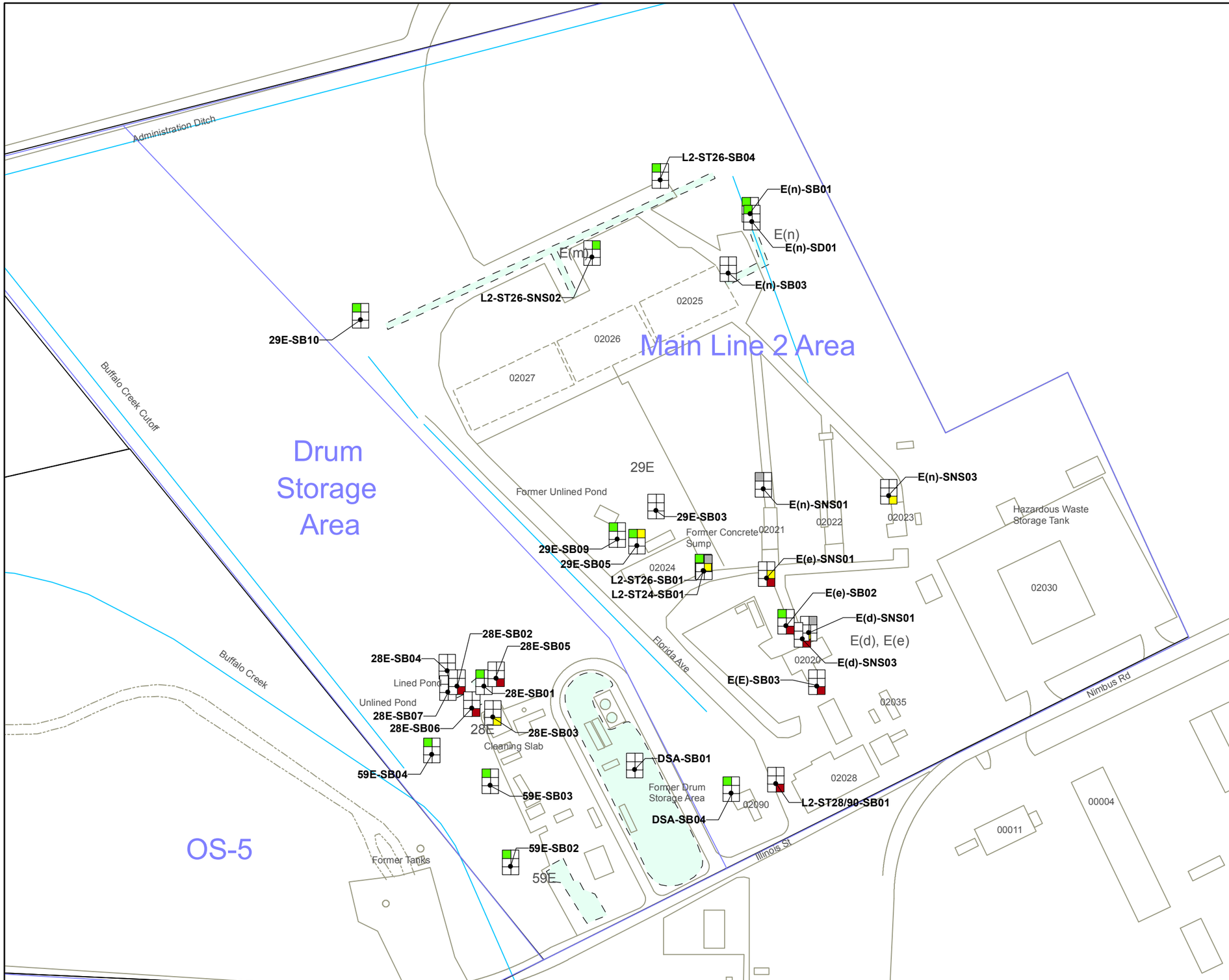
0 200 400

AEROJET

Environmental Remediation

Figure 8.3-4

Potential Risk to Groundwater
Volatile Organic Compounds
Administration Area West



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 150 '

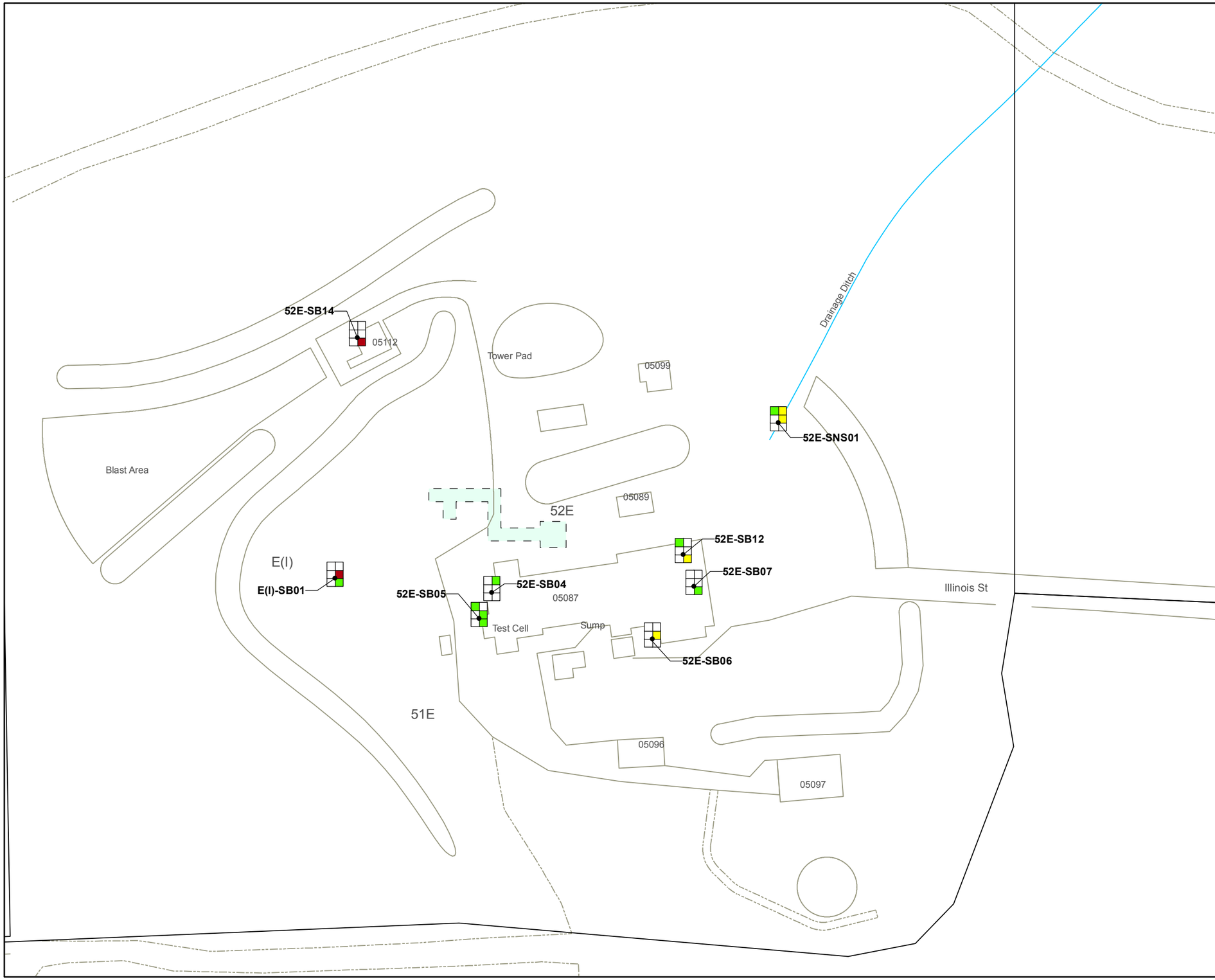
0 150 300

AEROJET

Environmental Remediation

Figure 8.4-1

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Line 02



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 75 '

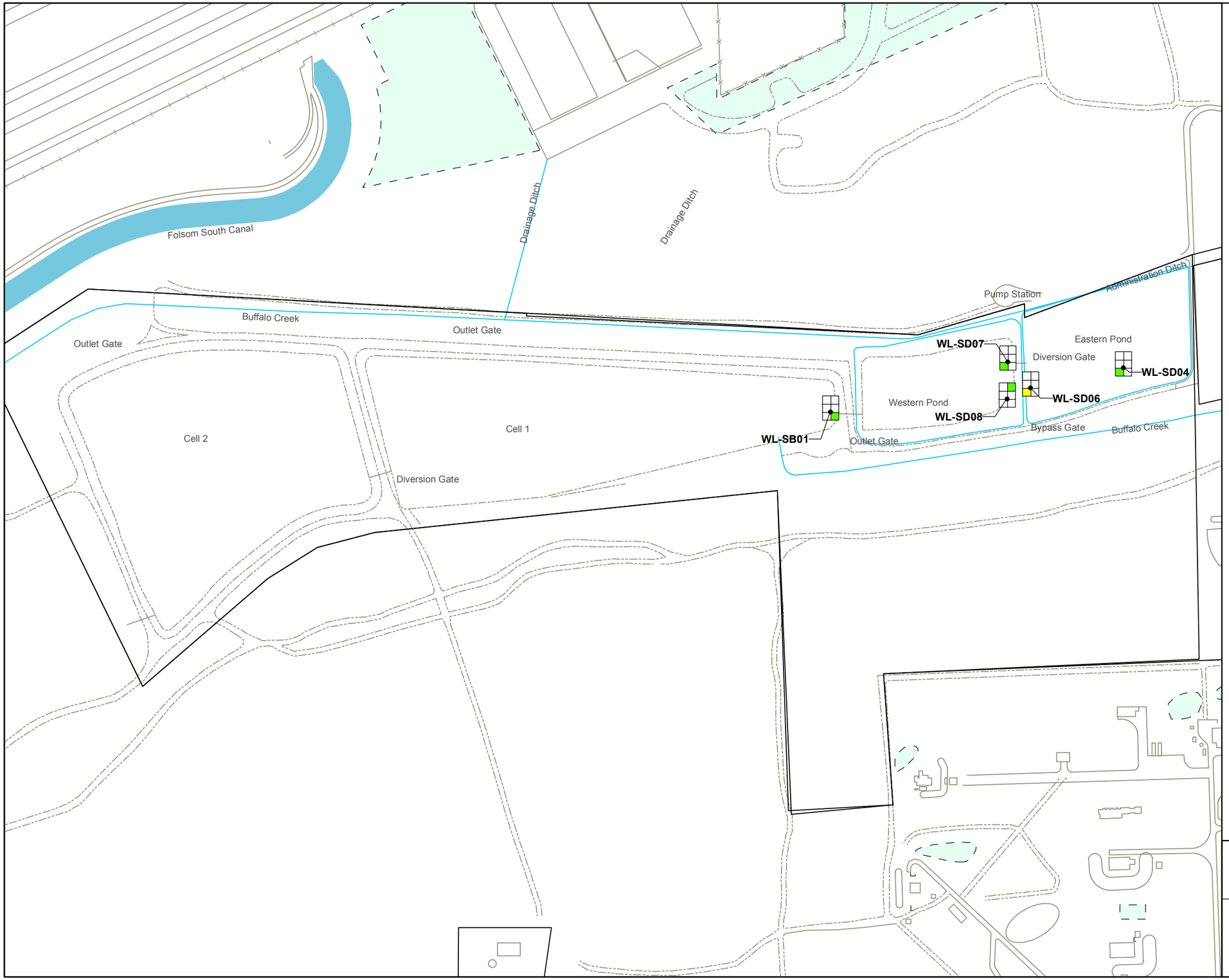
0 75 150

AEROJET

Environmental Remediation

Figure 8.4-2

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Line 05 North



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 300 '

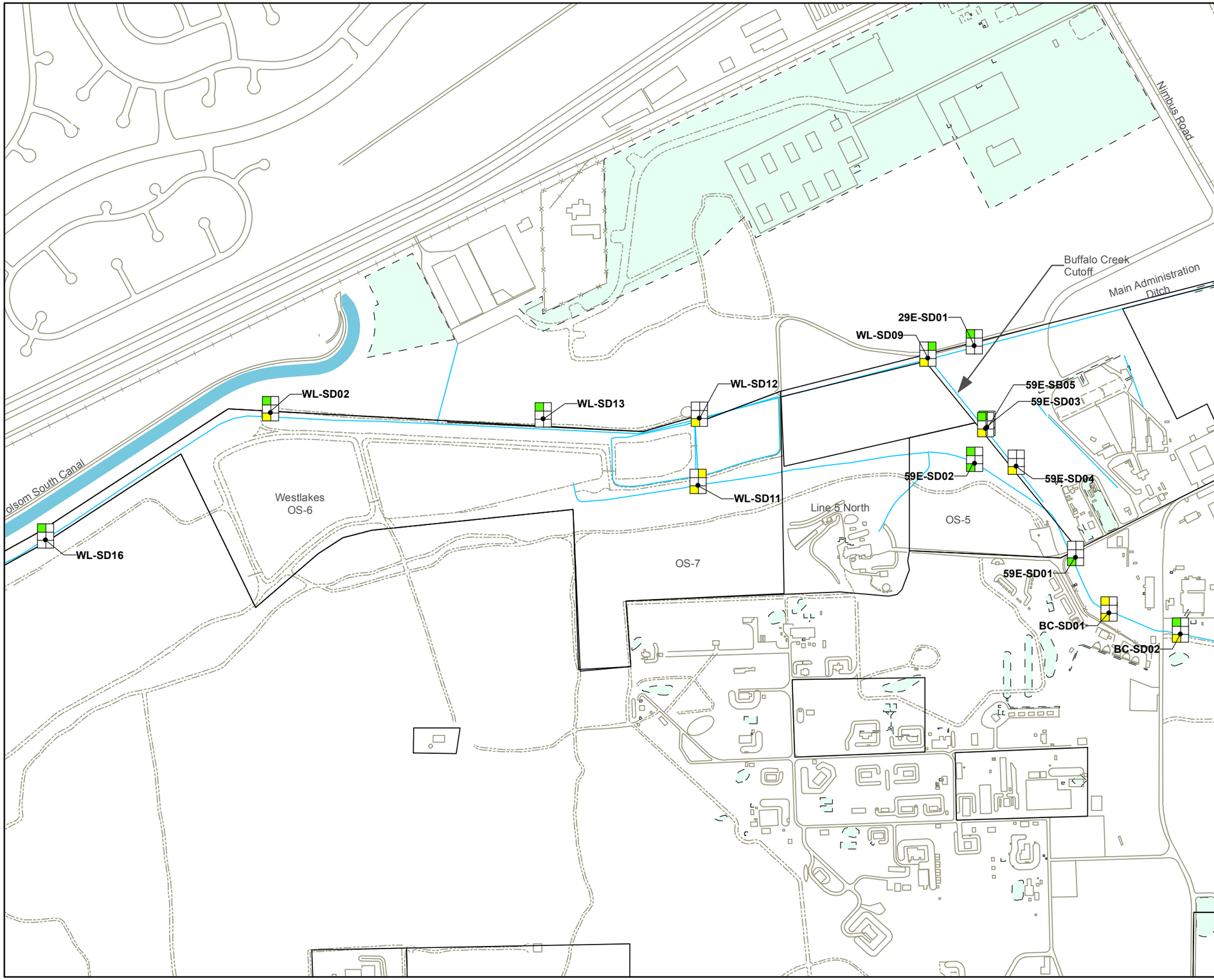
0 300 600

AEROJET

Environmental Remediation

Figure 8.4-3

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Westlakes



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 600 '

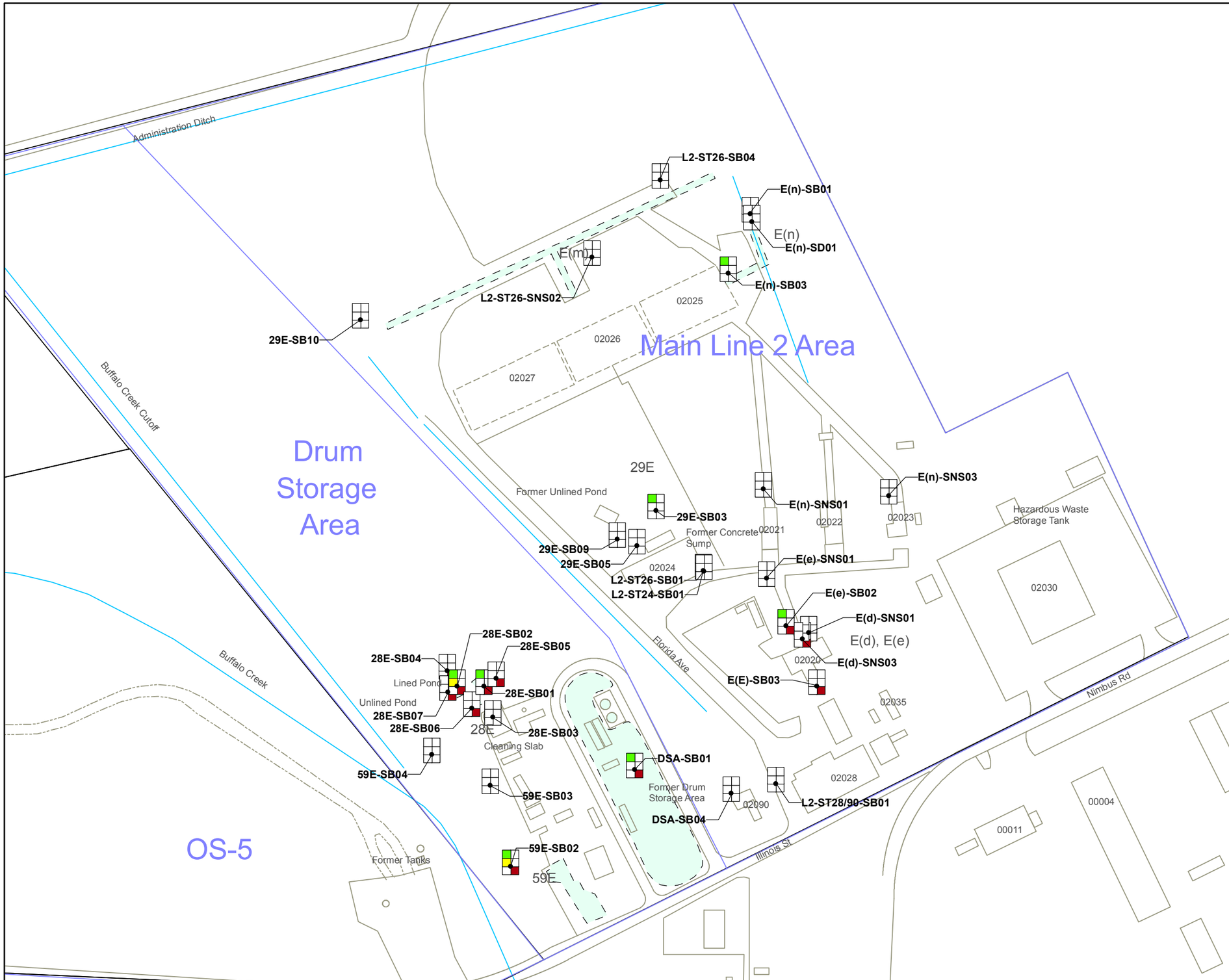
0 600 1,200

AEROJET

Environmental Remediation

Figure 8.4-4

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Buffalo Creek



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 150 '

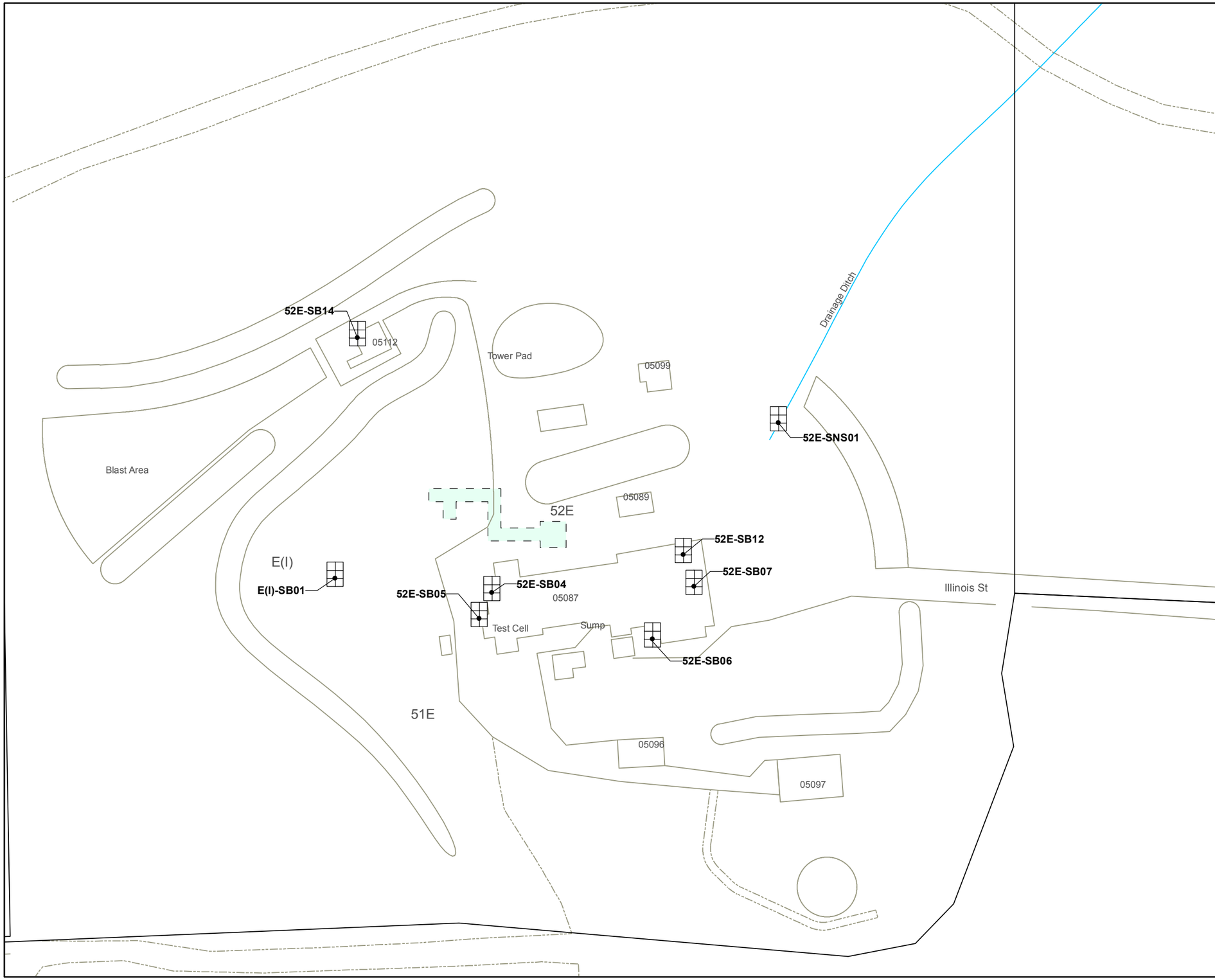
0 150 300

AEROJET

Environmental Remediation

Figure 8.4-5

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Line 02



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 75 '

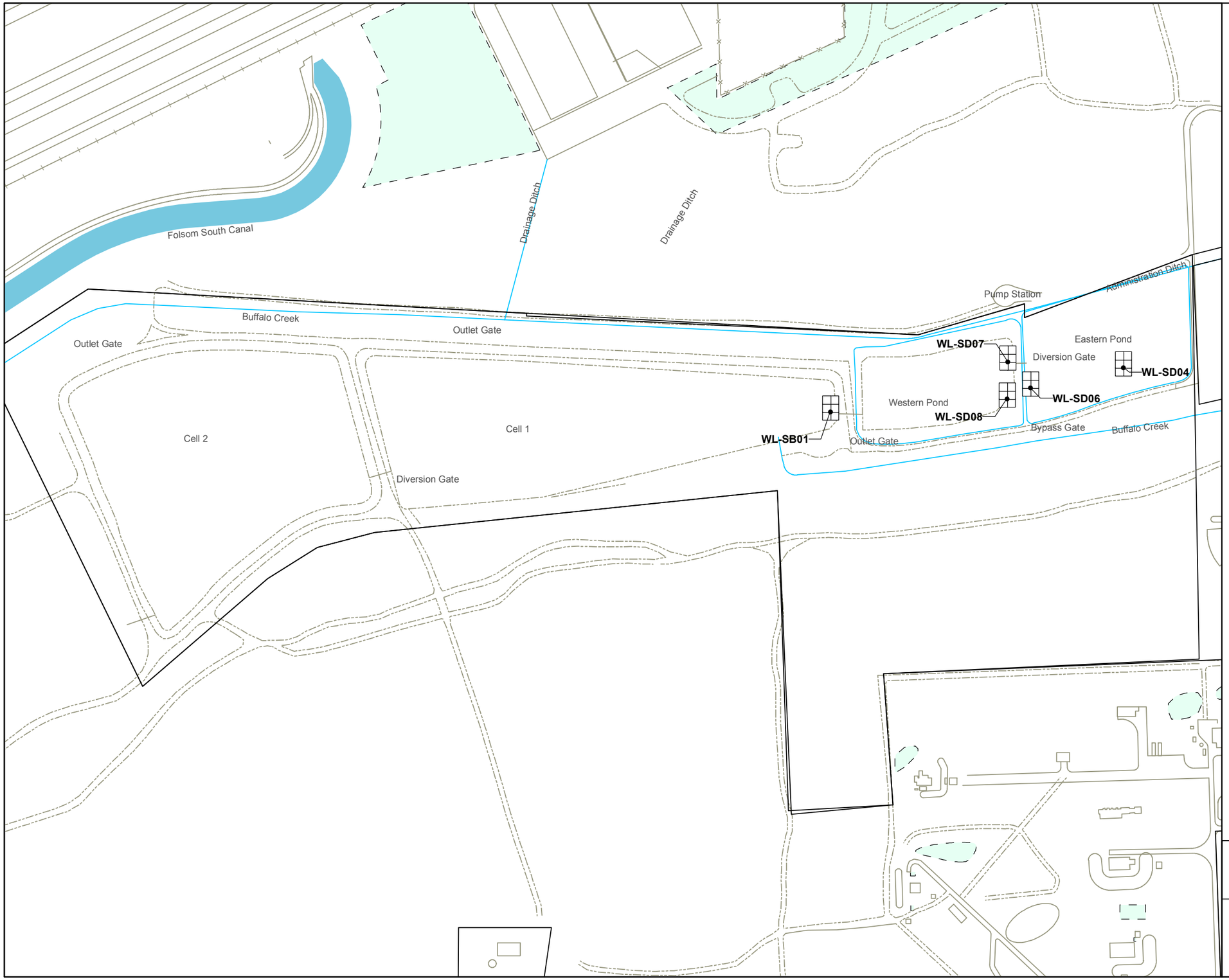
0 75 150

AEROJET

Environmental Remediation

Figure 8.4-6

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Line 05 North



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 300 '

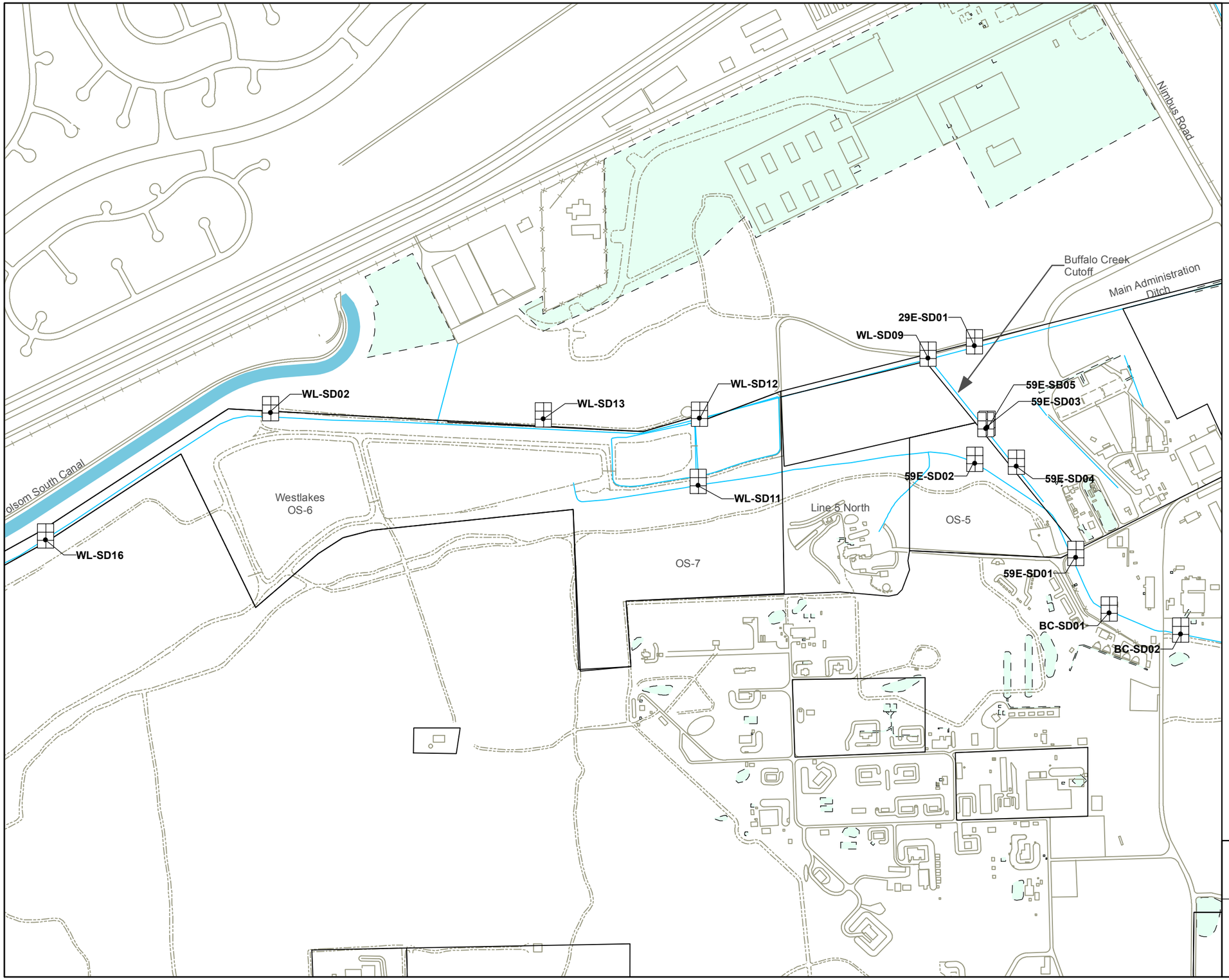
0 300 600

AEROJET

Environmental Remediation

Figure 8.4-7

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Westlakes



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 600 '

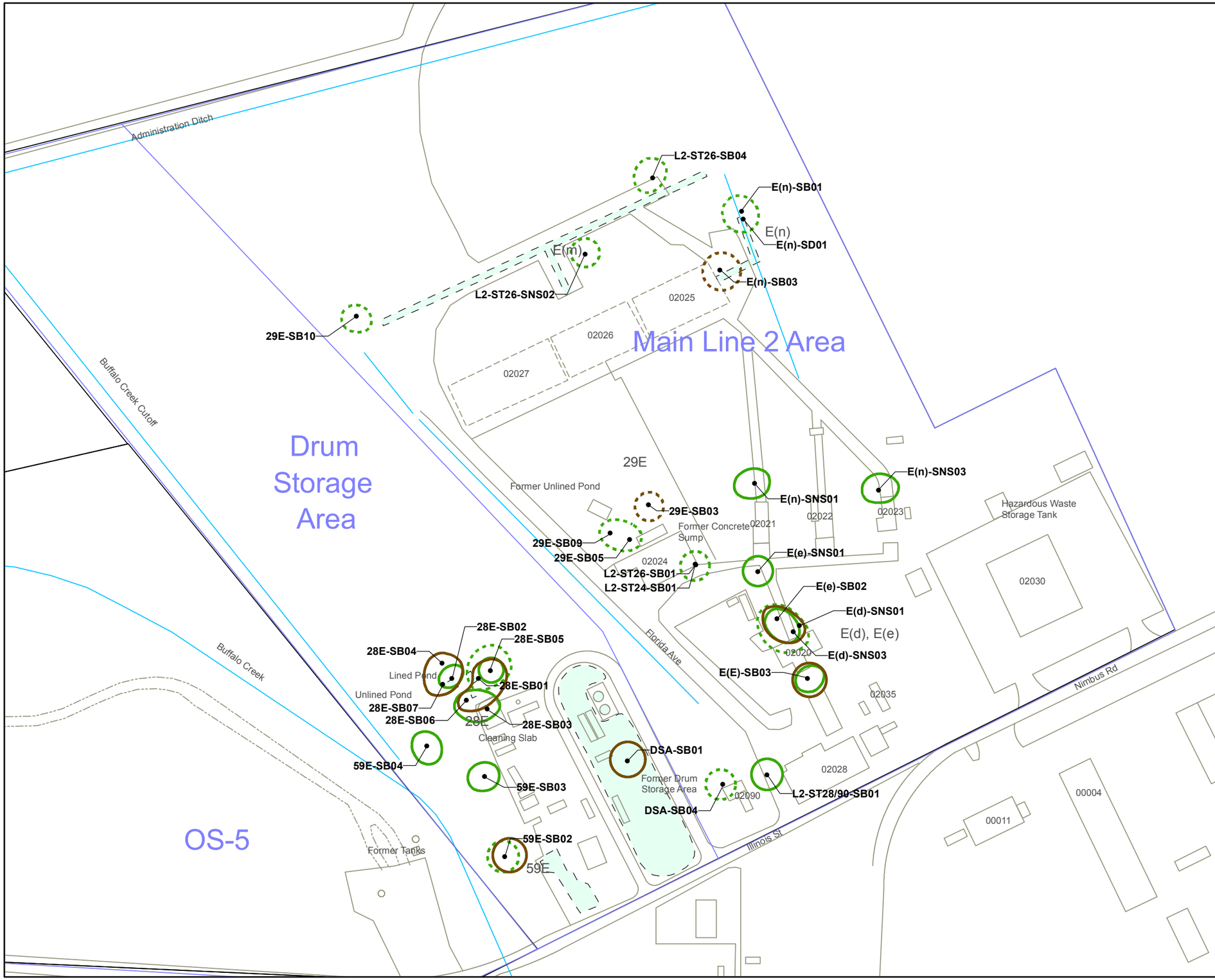
0 600 1,200

AEROJET

Environmental Remediation

Figure 8.4-8

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Buffalo Creek



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 150 '

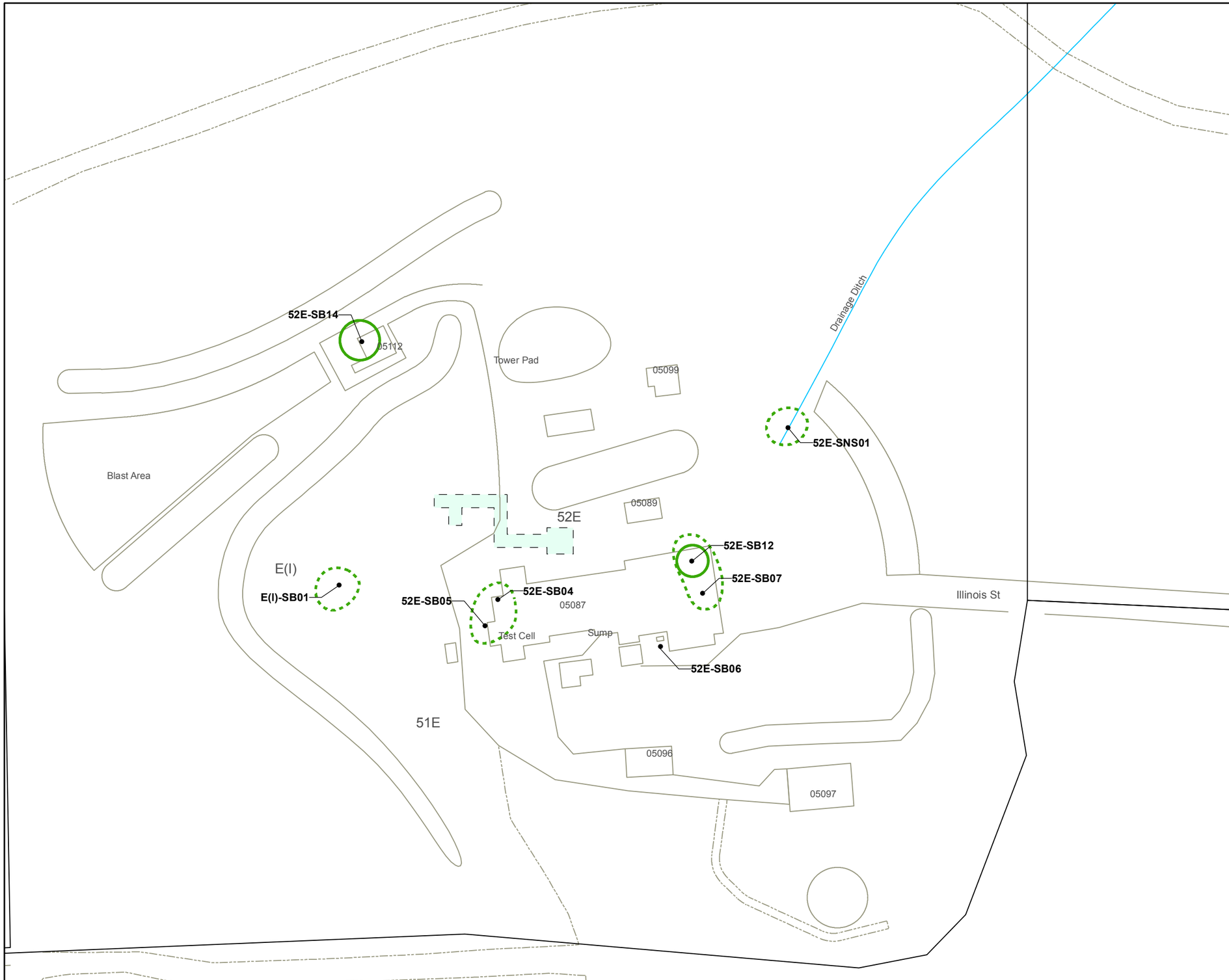
0 150 300

AEROJET

Environmental Remediation

Figure 8.4-9

Potential Risk to Groundwater Contours Non-Volatile Organic Compounds in Shallow and Deep Soil - Line 02



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 75 '

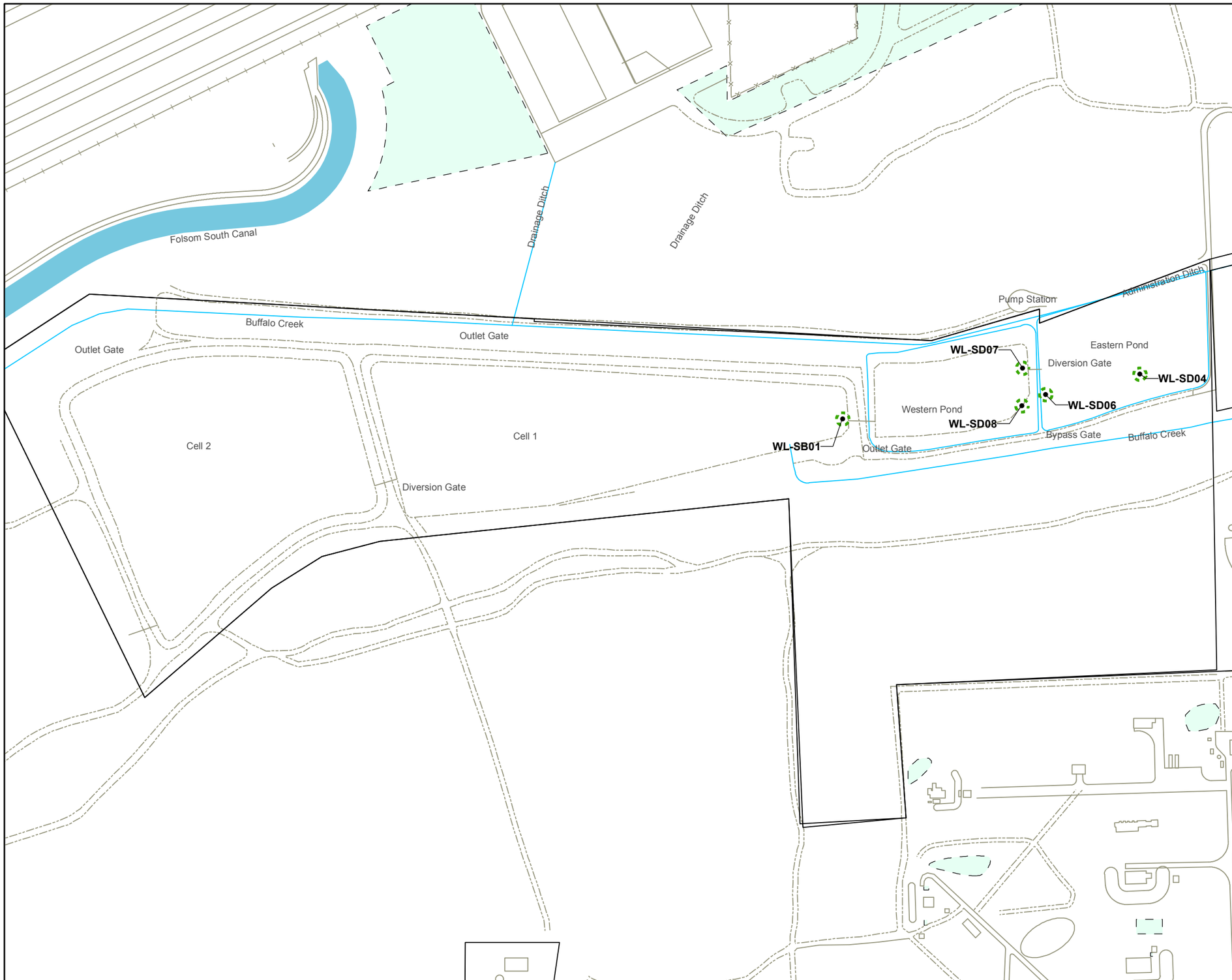
0 75 150

AEROJET

Environmental Remediation

Figure 8.4-10

Potential Risk to Groundwater Contours Non-Volatile Organic Compounds in Shallow and Deep Soil - Line 05 North



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 300 '

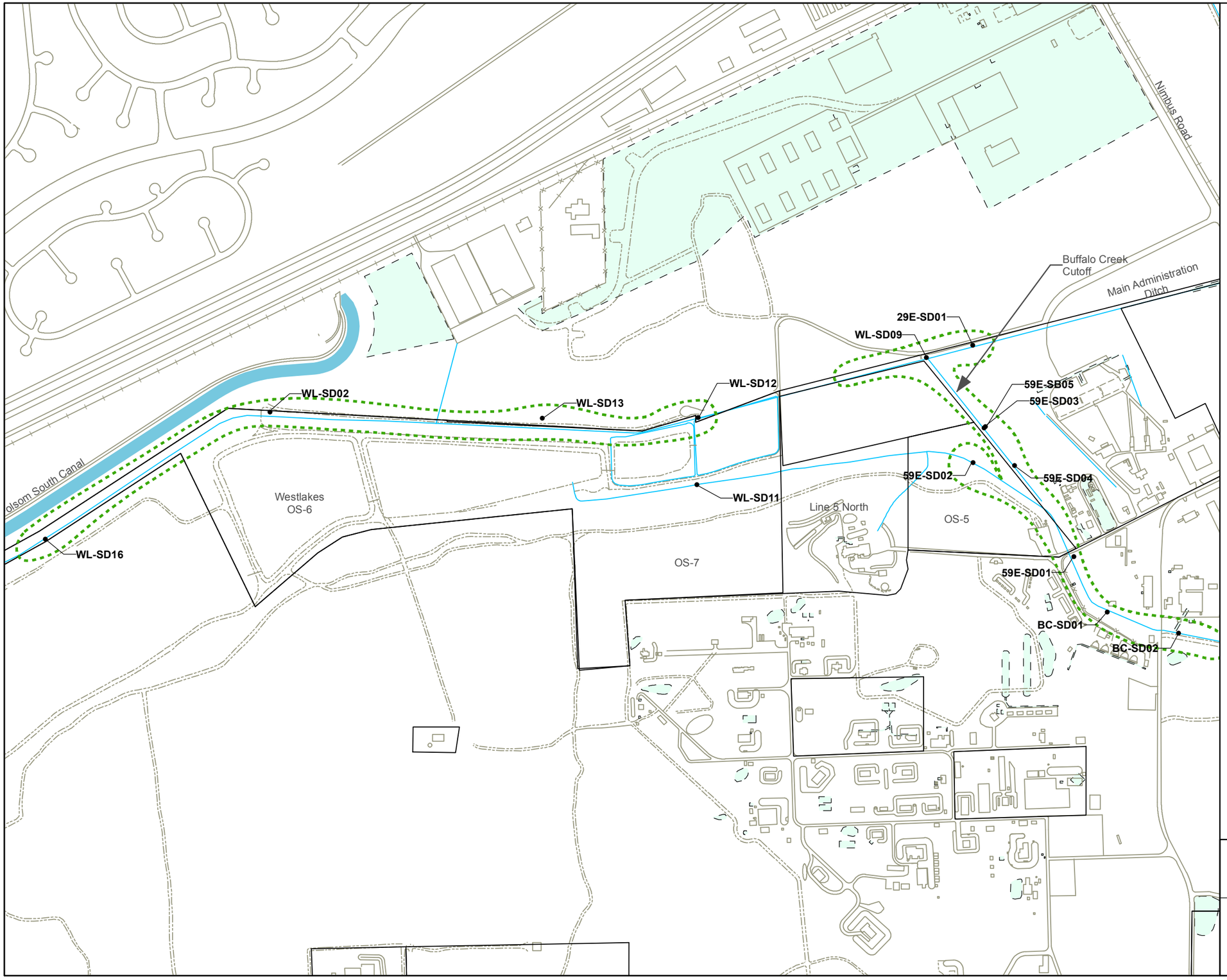
0 300 600

AEROJET

Environmental Remediation

Figure 8.4-11

Potential Risk to Groundwater Contours
Non-Volatile Organic Compounds in Shallow and Deep Soil - Westlakes



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 600 '

0 600 1,200

AEROJET

Environmental Remediation

Figure 8.4-12

Potential Risk to Groundwater Contours
Non-Volatile Organic Compounds in Shallow and Deep Soil - Buffalo Creek

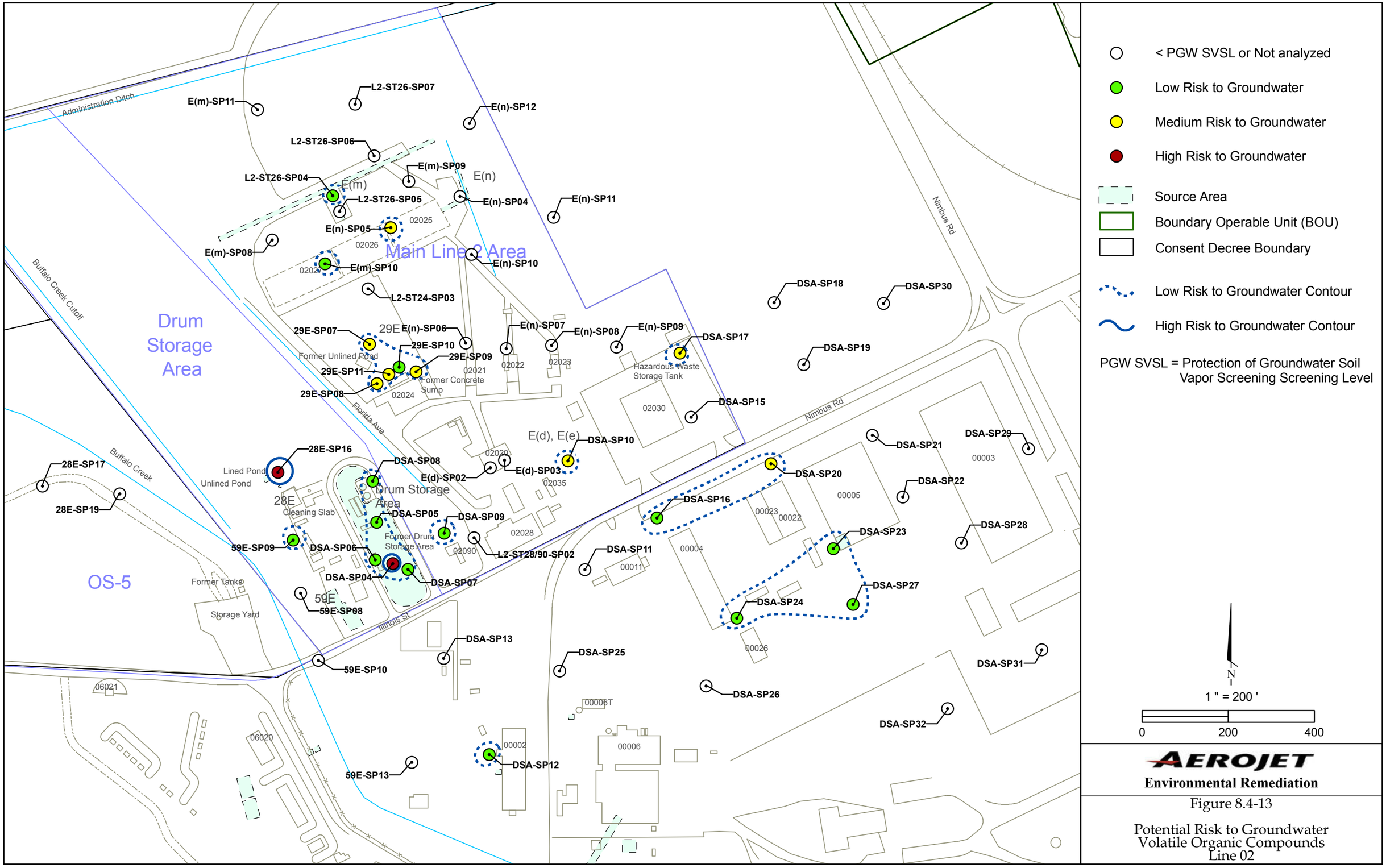
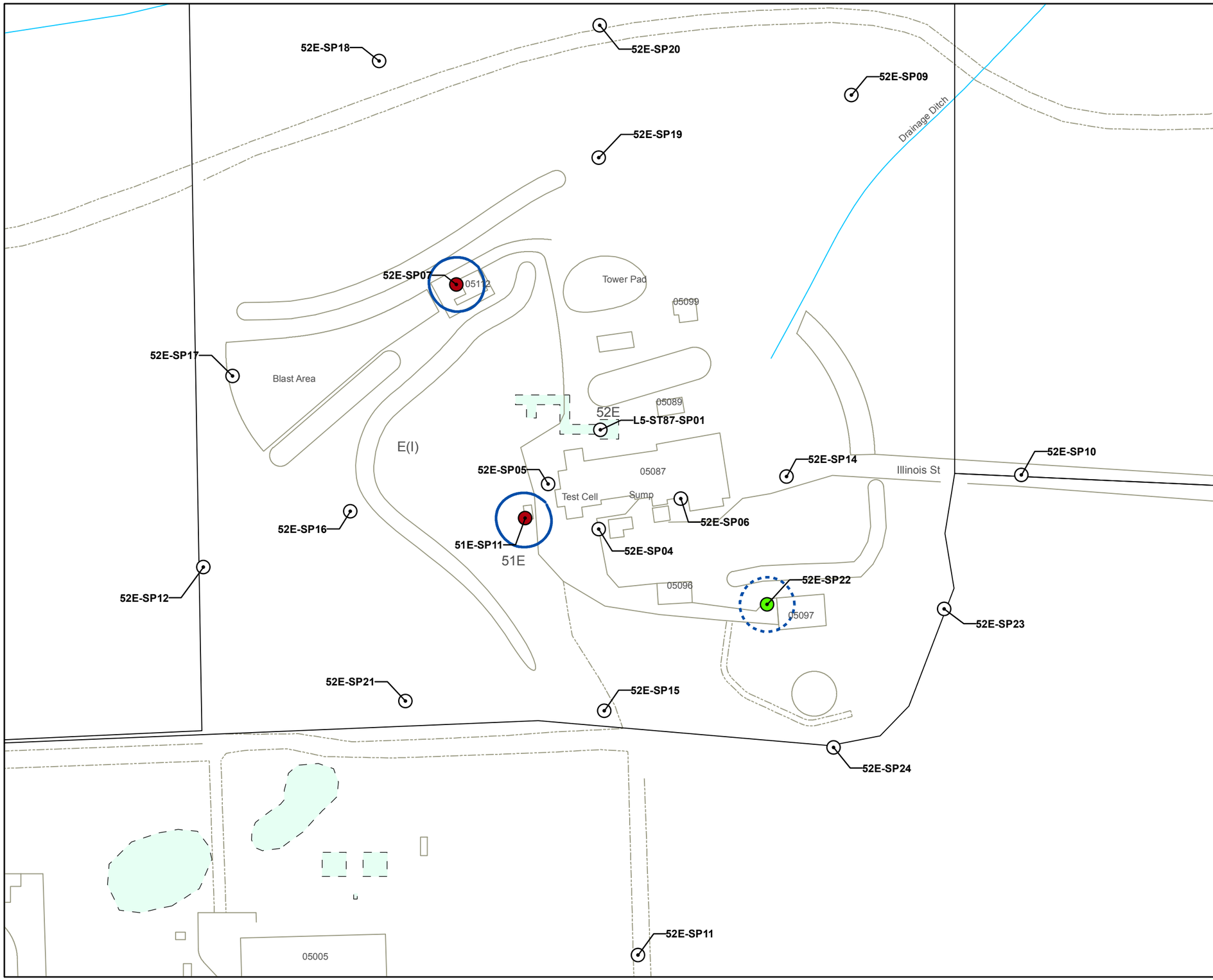


Figure 8.4-13

Potential Risk to Groundwater
Volatile Organic Compounds
Line 02



< PGW SVSL or Not analyzed

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

Low Risk to Groundwater Contour

High Risk to Groundwater Contour

PGW SVSL = Protection of Groundwater Soil Vapor Screening Screening Level

N

1 " = 100 '

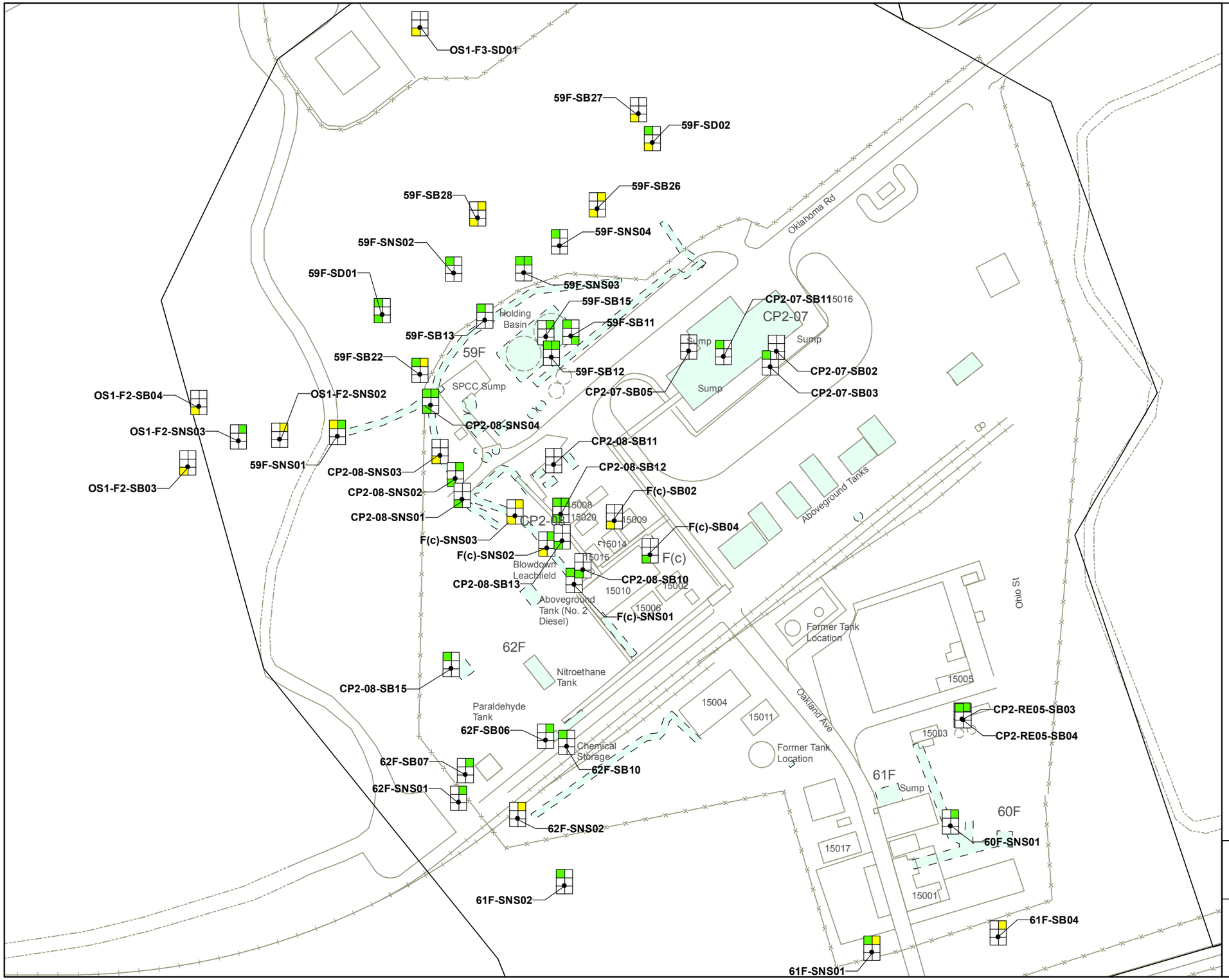
0 100 200

AEROJET

Environmental Remediation

Figure 8.4-14

Potential Risk to Groundwater
Volatile Organic Compounds
Line 05 North



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 150 '

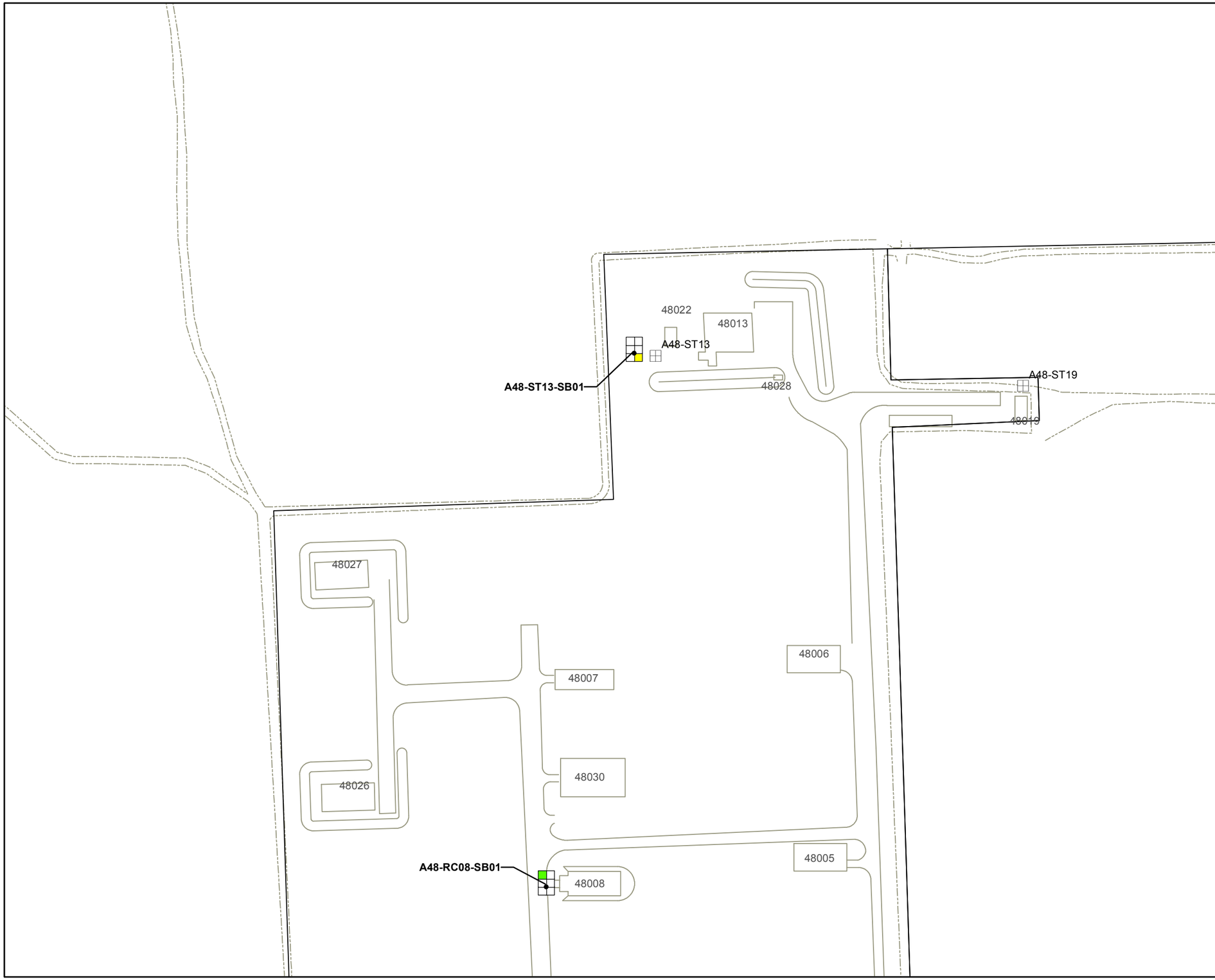
0 150 300

AEROJET

Environmental Remediation

Figure 8.5-1

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Chemical Plant 2 Area



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 200 '

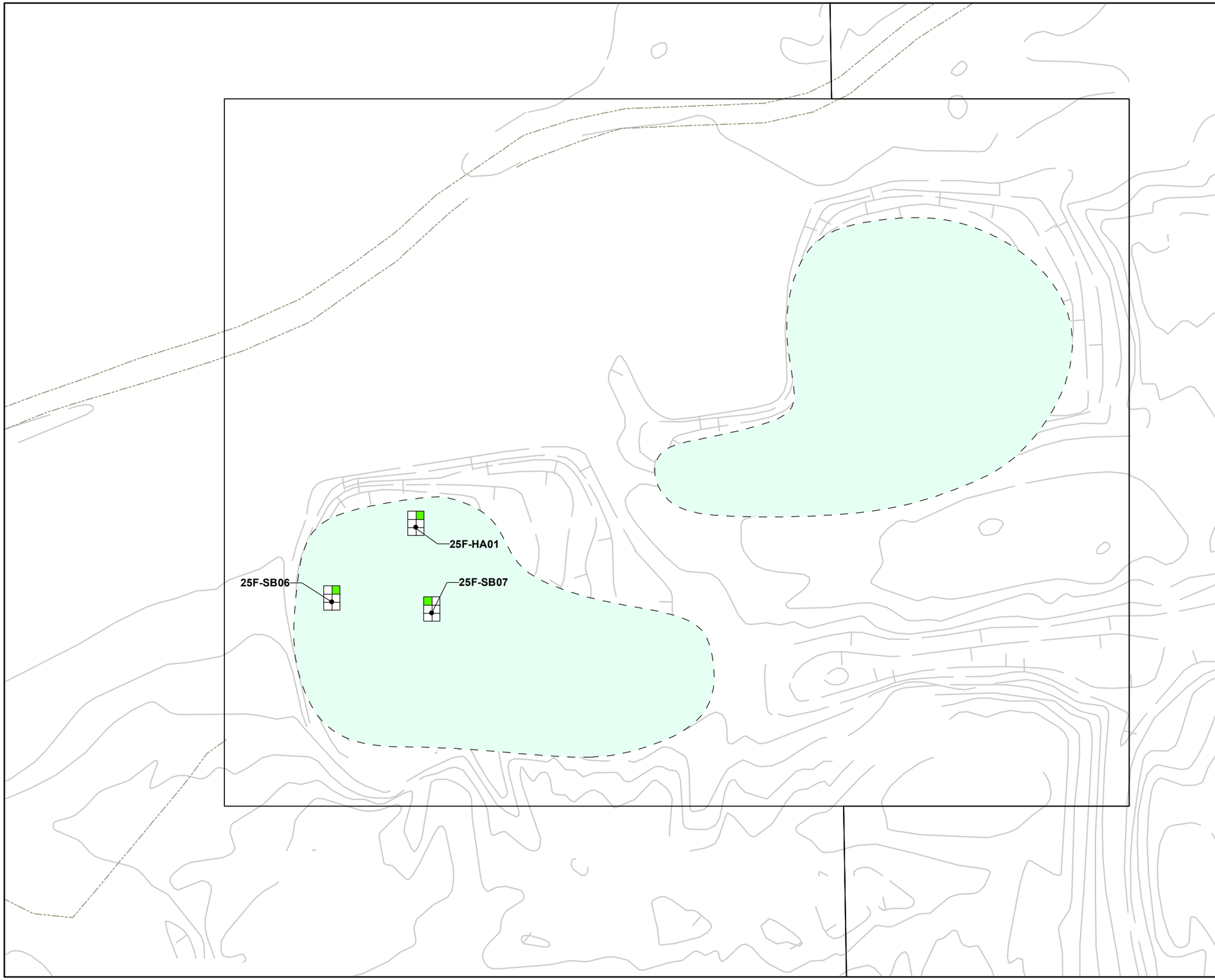
0 200 400

AEROJET

Environmental Remediation

Figure 8.5-2

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Magazine Area



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 75 '

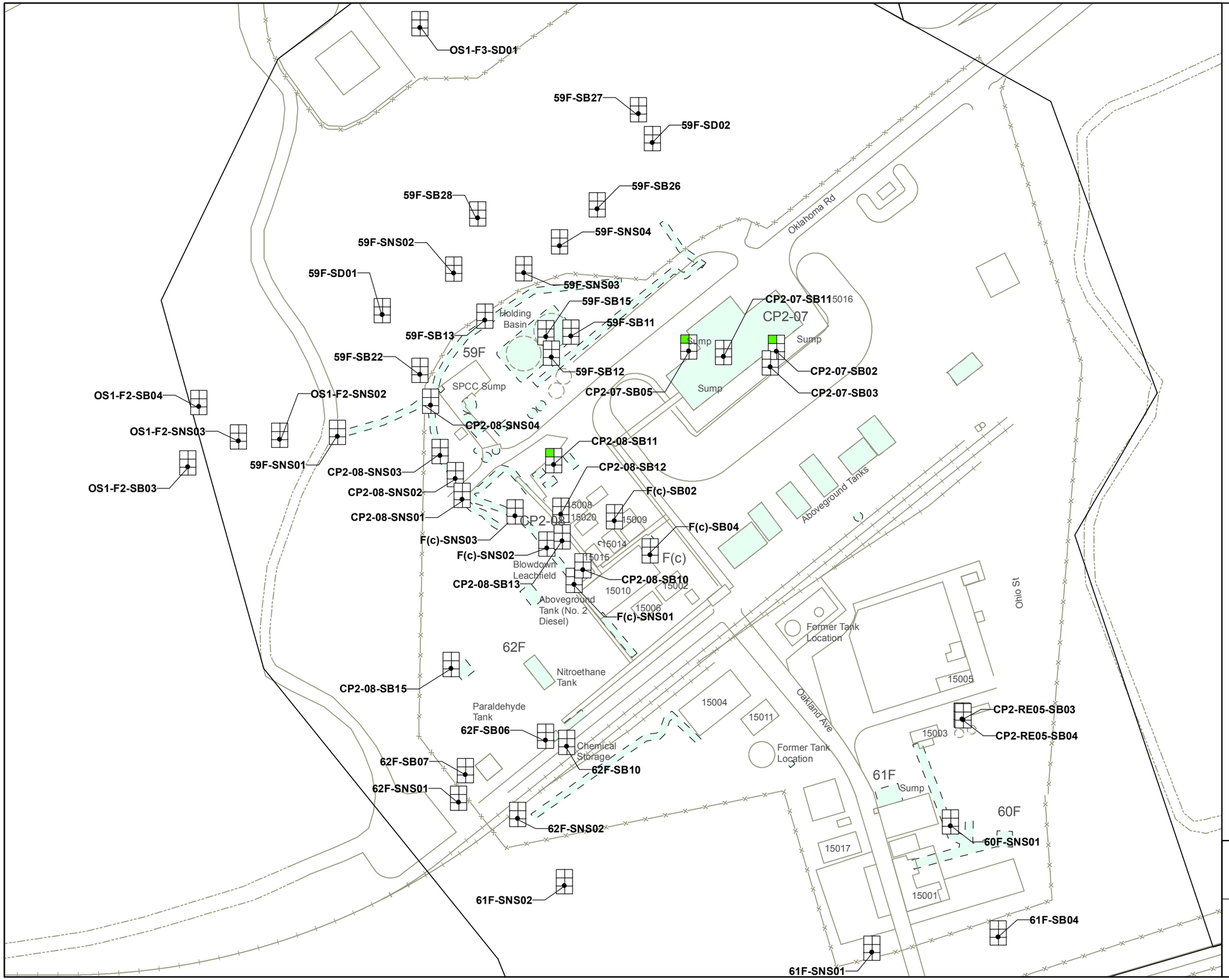
0 75 150

AEROJET

Environmental Remediation

Figure 8.5-3

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Dredge Pit and Eastern Basin



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals, NDMA, PCBs — SVOCs, TPH, Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 150 '

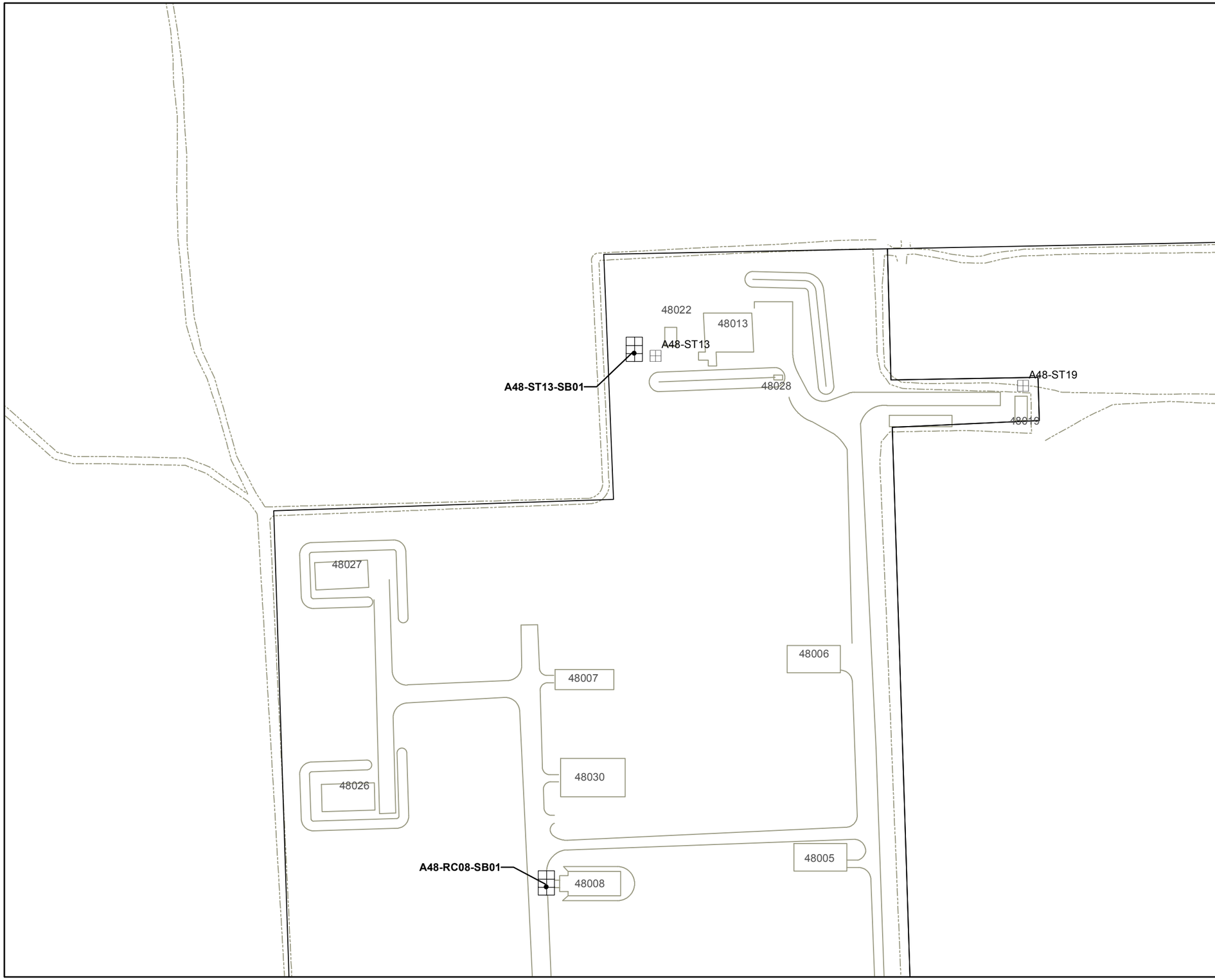
0 150 300

AEROJET

Environmental Remediation

Figure 8.5-4

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Chemical Plant 2 Area



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 200 '

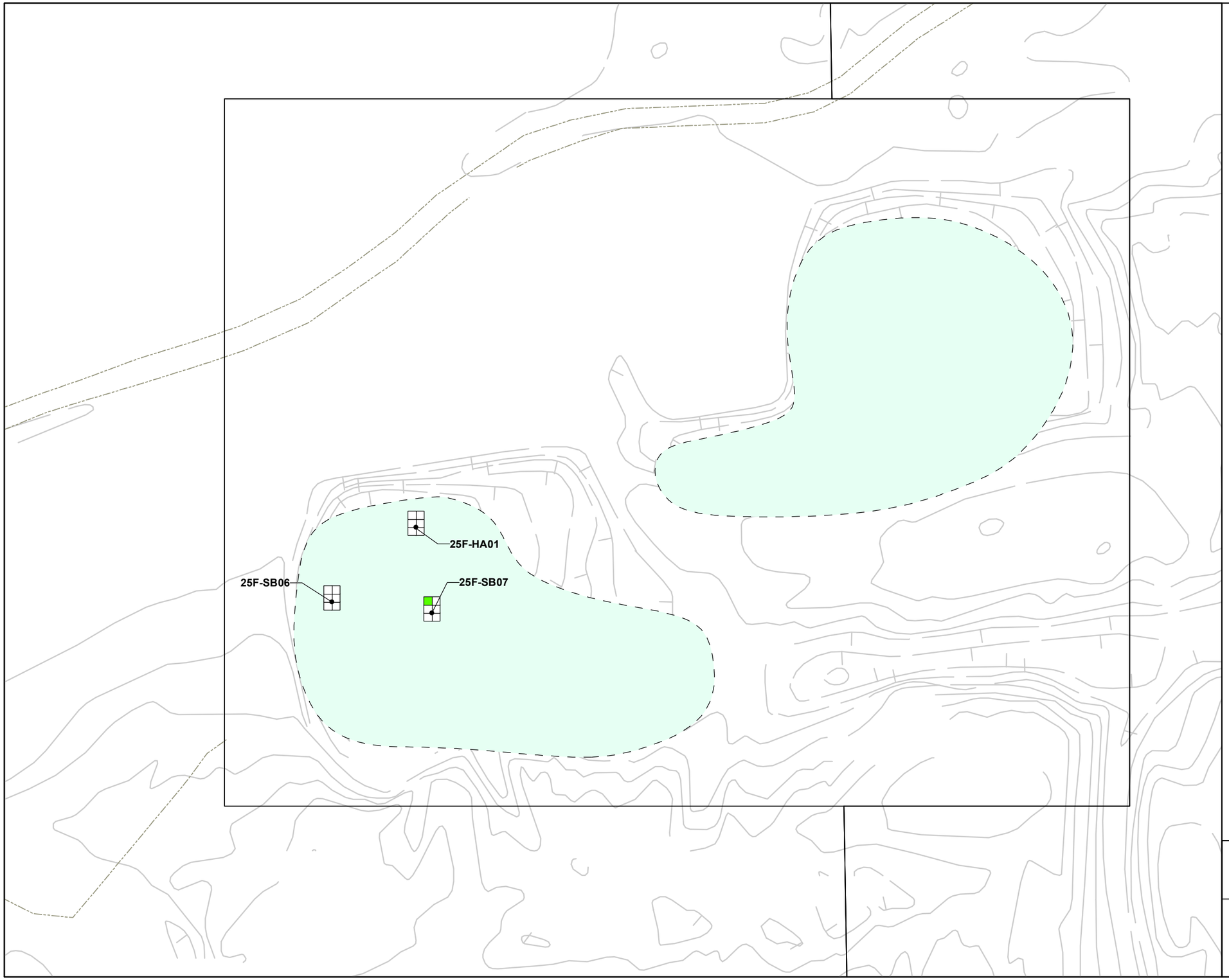
0 200 400

AEROJET

Environmental Remediation

Figure 8.5-5

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Magazine Area



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 75 '

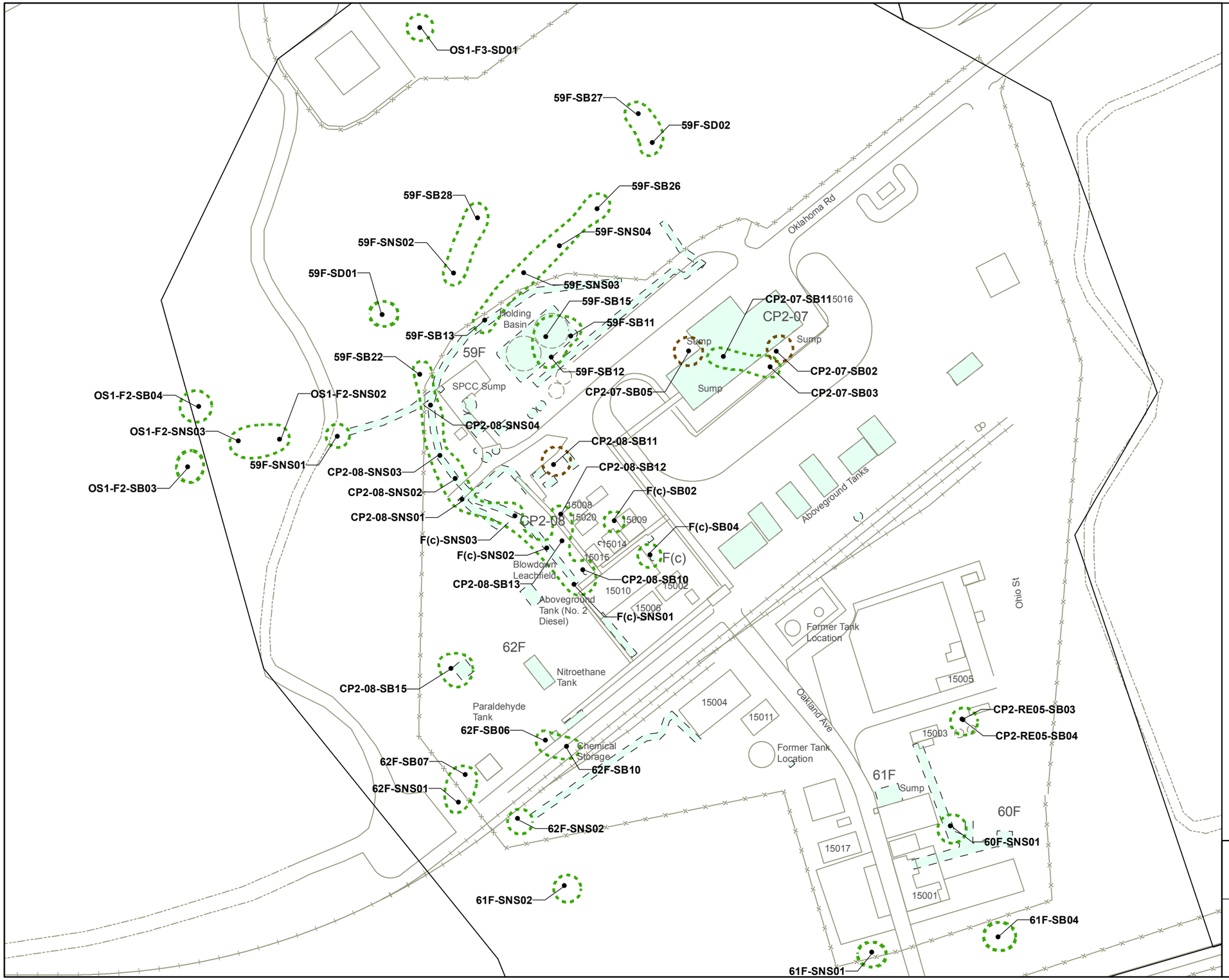
0 75 150

AEROJET

Environmental Remediation

Figure 8.5-6

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Dredge Pit and Eastern Basin



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 150 '

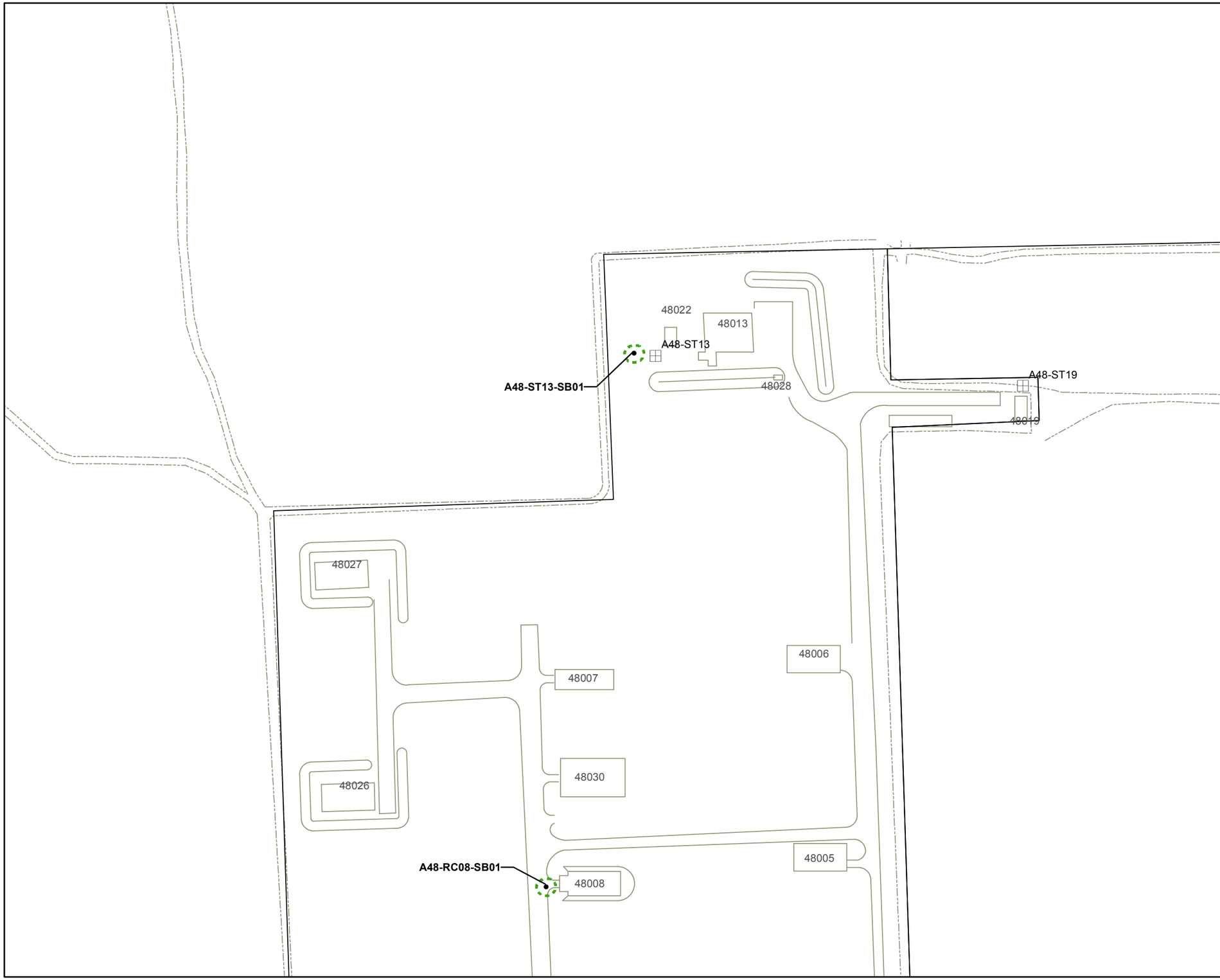
0 150 300

AEROJET

Environmental Remediation

Figure 8.5-7

Potential Risk to Groundwater Contours Non-Volatile Organic Compounds in Shallow and Deep Soil - Chemical Plant 2 Area



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 200 '

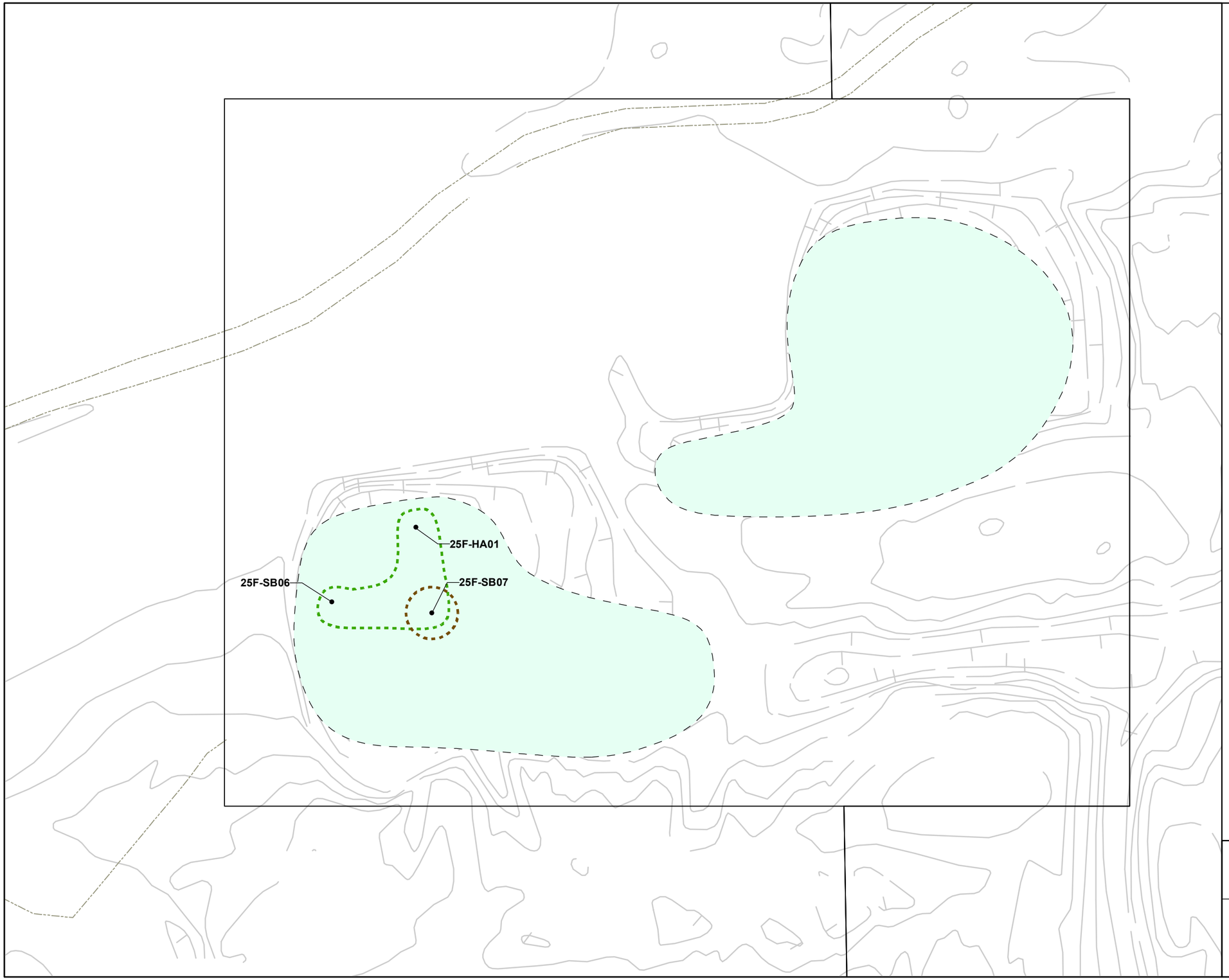
0 200 400

AEROJET

Environmental Remediation

Figure 8.5-8

Potential Risk to Groundwater Contours Non-Volatile Organic Compounds in Shallow and Deep Soil - Magazine Area



Low Risk to Groundwater Contour (Shallow)

High Risk to Groundwater Contour (Shallow)

Low Risk to Groundwater Contour (Deep)

High Risk to Groundwater Contour (Deep)

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

N

1 " = 75 '

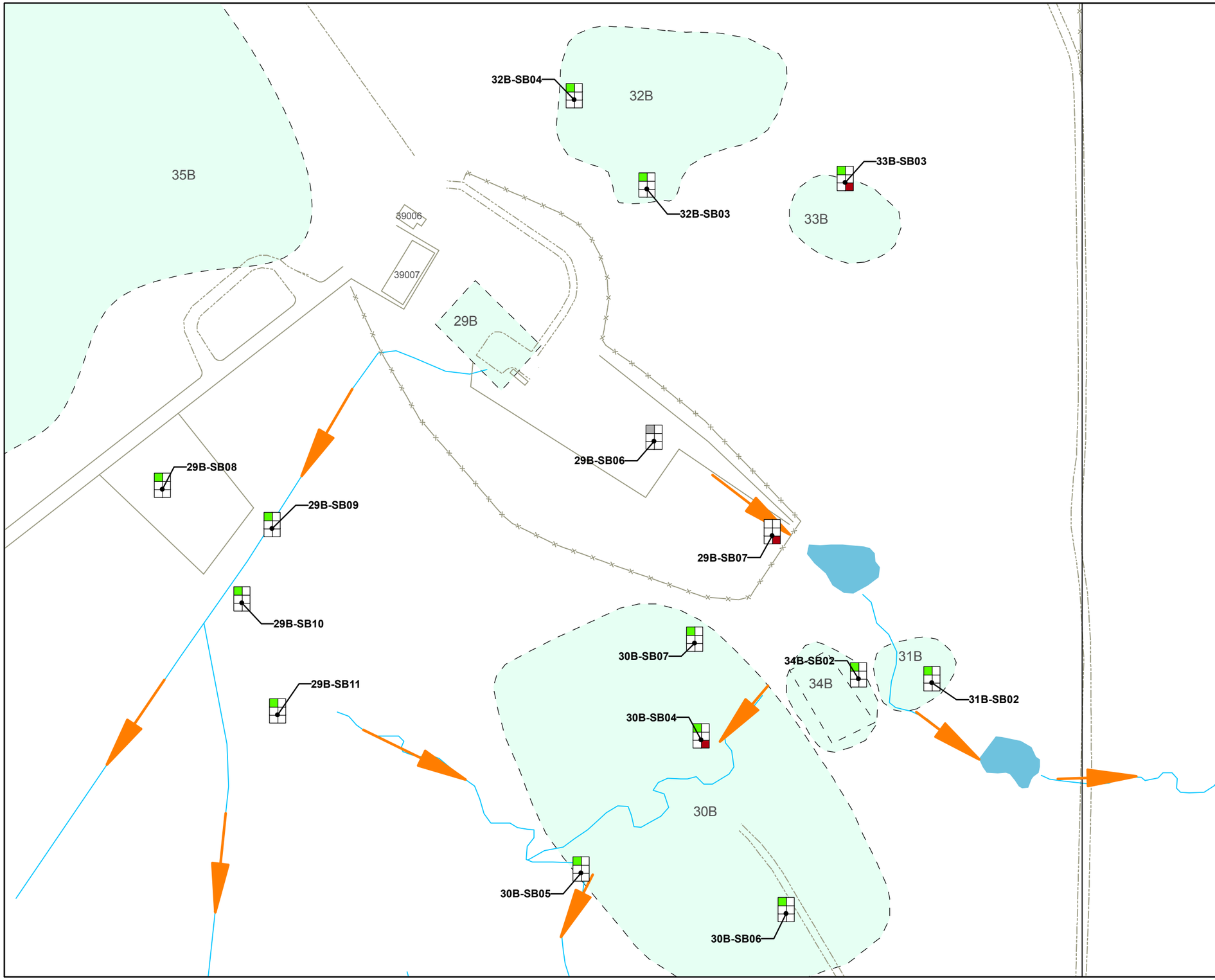
0 75 150

AEROJET

Environmental Remediation

Figure 8.5-9

Potential Risk to Groundwater Contours Non-Volatile Organic Compounds in Shallow and Deep Soil - Dredge Pit and Eastern Basin



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

Surface Water Flow Direction

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

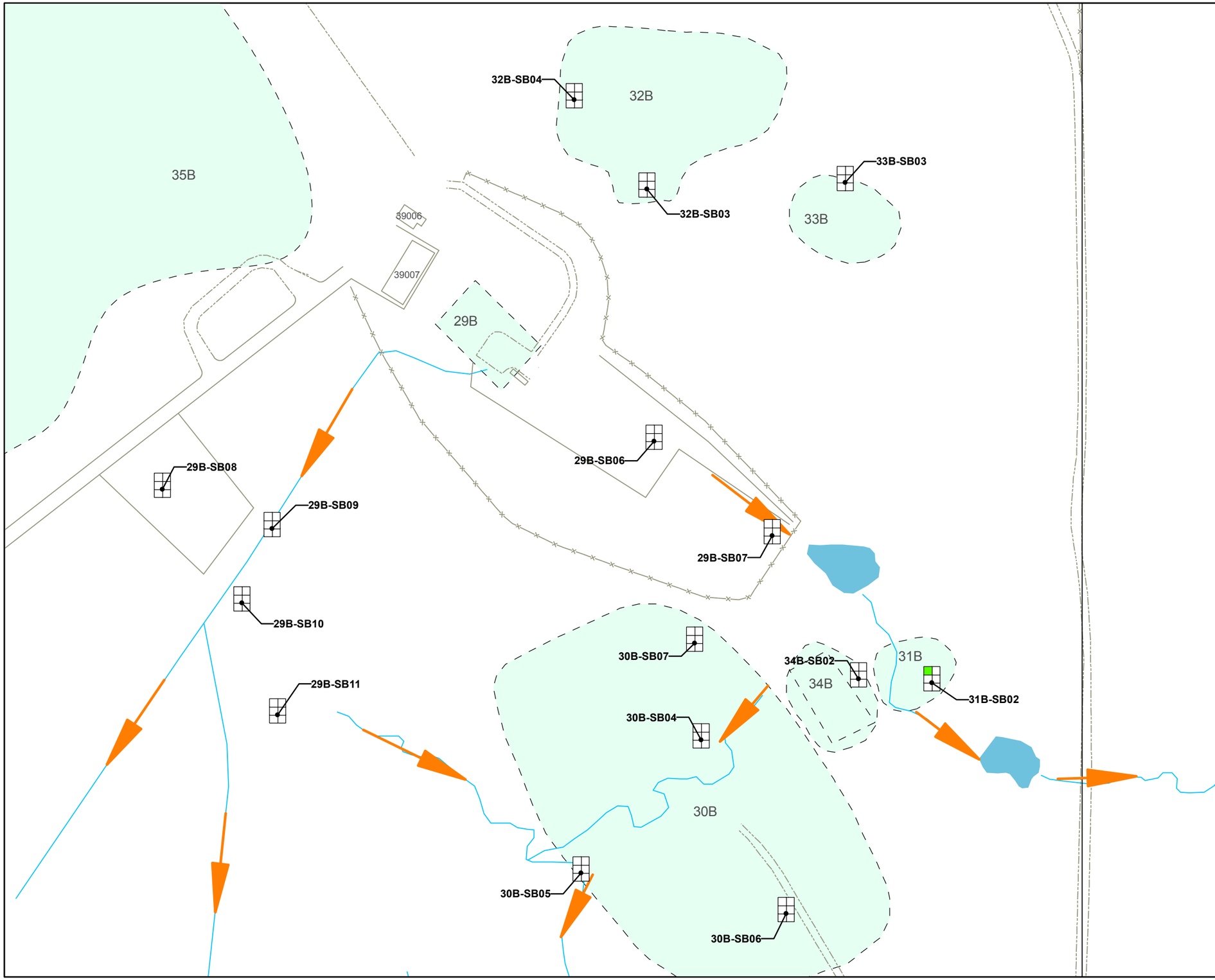
1 " = 200 '

0 200 400

AEROJET
Environmental Remediation

Figure 8.6-1

Potential Risk to Groundwater Non-Volatile Organic Compounds in Shallow Soil Area 39



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

Surface Water Flow Direction

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

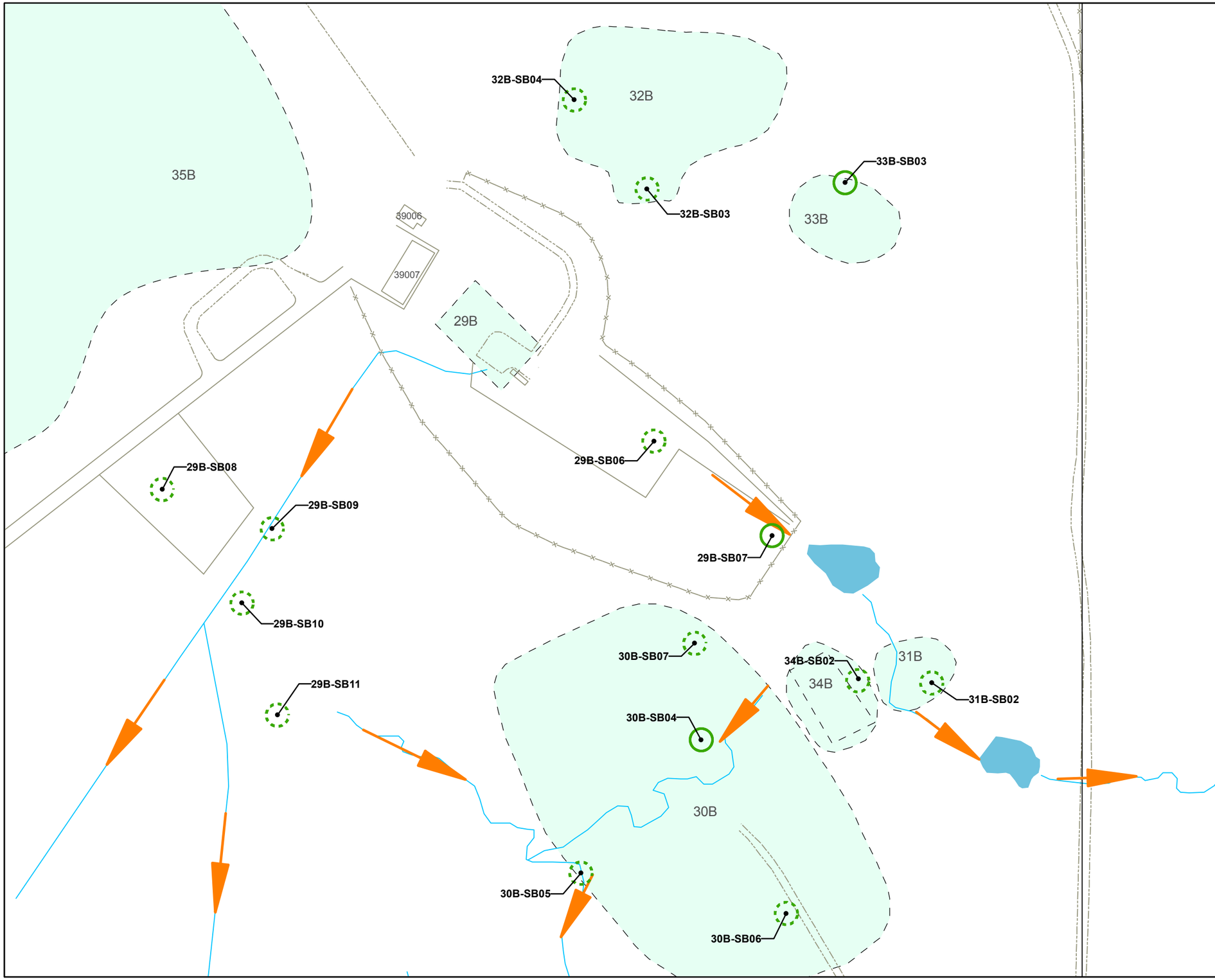
1 " = 200 '

0 200 400

AEROJET
Environmental Remediation

Figure 8.6-2

Potential Risk to Groundwater Non-Volatile Organic Compounds in Deep Soil Area 39



< PGW SSL or Not analyzed

Negligible Risk to Groundwater

Low Risk to Groundwater

Medium Risk to Groundwater

High Risk to Groundwater

Metals
NDMA
PCBs

SVOCs
TPH
Perchlorate

Source Area

Boundary Operable Unit (BOU)

Consent Decree Boundary

Surface Water Flow Direction

PGW SSL = Protection of Groundwater Soil Screening Level

NDMA = N-Nitrosodimethylamine

PCBs = Polychlorinated Biphenyls

SVOCs = Semi-Volatile Organic Compounds

N

1 " = 200 '

0 200 400

AEROJET
Environmental Remediation

Figure 8.6-3

Potential Risk to Groundwater Contours
Non-Volatile Organic Compounds in Shallow and Deep Soil - Area 39

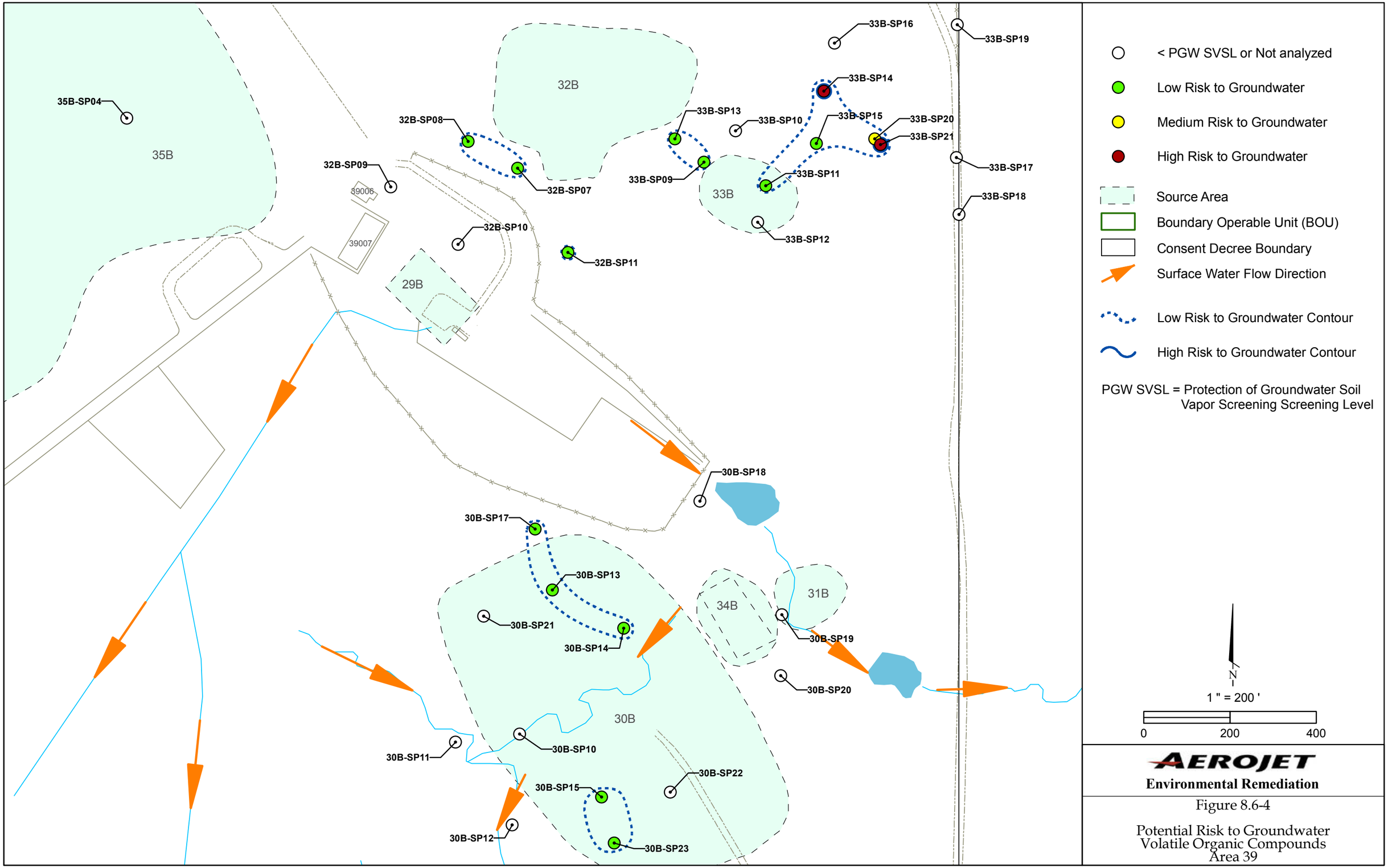


Figure 8.6-4

Potential Risk to Groundwater
Volatile Organic Compounds
Area 39

Table 8.2-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Conc.	Units	PGW SSL	Sample Depth (ft bgs)	Depth to FWBZ Groundwater (ft)	Depth of Deepest Detection (ft)	Number of NDs[1] Below Deepest Detection	Delineated above water table?	Groundwater Impacted?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
3D-SNS34	SVOC	Benzo(a)anthracene	42	µg/kg	29	0.25	22	0.25	0	Yes*	?*	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
	SVOC	Benzo(a)pyrene	38	µg/kg	2.9	0.25	22	0.25	0	Yes*	?	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
	SVOC	Benzo(b&k)fluoranthene	88	µg/kg	29	0.25	22	0.25	0	Yes*	?	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
	METAL	Cadmium	3.5	mg/kg	1.2	0.25	22	0.25	0	Yes*	?	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
	METAL	Lead	110	mg/kg	23	0.25	22	0.25	0	Yes*	?	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
	PCB	Aroclor 1254	420	µg/kg	34	0.25	22	0.25	0	Yes*	?	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
	PCB	Aroclor 1260	1,500	µg/kg	34	0.25	22	0.25	0	Yes*	?	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
3D-SNS35	METAL	Cadmium	1.4	mg/kg	1.2	0.25	22	0.25	0	Yes*	?	NA	Sample collected in a lined culvert.	3	3	6	Negligible*
3D-SB10	TPH	TPH-D	170	mg/kg	100	15	34	15	0	No	Yes	262		3	6	9	High
3D-SB11	PCB	Aroclor 1254	37	µg/kg	34	1	37	1	1	Yes	No	03D-SB12		1	0	1	Negligible
	TPH	TPH-D	120	mg/kg	100	1	37	1	2	Yes	Yes	03D-SB12	The high risk associated with the detection in groundwater was realized at boring 03D-SB12.	0	6	6	Moderate*
	TPH	TPH-Mo	620	mg/kg	500	1	37	1	2	Yes	Yes	03D-SB12	The high risk associated with the detection in groundwater was realized at boring 03D-SB12.	0	6	6	Moderate*
3D-SB12	SVOC	Benzo(a)anthracene	45	µg/kg	29	11	37	11	2	Yes	No	03D-SB12		0	0	0	Negligible
	TPH	TPH-D	180	mg/kg	100	5	37	35	0	No	Yes	03D-SB12		5	6	11	High
	TPH	TPH-Mo	1,100	mg/kg	500	5	37	35	0	No	Yes	03D-SB12		5	6	11	High
	TPH	TPH-D	350	mg/kg	100	11	37	35	0	No	Yes	03D-SB12		5	6	11	High
	TPH	TPH-Mo	2,100	mg/kg	500	11	37	35	0	No	Yes	03D-SB12		5	6	11	High
	TPH	TPH-D	970	mg/kg	100	35	37	35	0	No	Yes	03D-SB12		5	6	11	High
	TPH	TPH-Mo	750	mg/kg	500	35	37	35	0	No	Yes	03D-SB12		5	6	11	High
3D-SB17	SVOC	Benzo(a)anthracene	130	µg/kg	29	1	35	1	1	Yes	No	273		1	0	1	Negligible
	TPH	TPH-D	850 J	mg/kg	100	1	35	11	0	No	Yes*	273	GW impact may be from upgradient.	3	3	6	Moderate
	TPH	TPH-Mo	4,300 J	mg/kg	500	1	35	11	0	No	Yes*	273	GW impact may be from upgradient.	3	3	6	Moderate
3D-SB18	TPH	TPH-Mo	500	mg/kg	500	11	36	11	2	Yes	Yes*	03D-SB18	GW impact appears to be from upgradient source.	0	3	3	Low
3D-SB20	PCB	Aroclor 1254	430	µg/kg	34	11	37	11	0	No	No	263		3	0	3	Low
	TPH	TPH-D	6,000	mg/kg	100	11	37	11	0	No	Yes*	263	41J µg/L TPH-D reported. Possibly from upgradient.	3	3	6	Moderate
	TPH	TPH-Mo	1,000	mg/kg	500	11	37	11	0	No	No	263		3	0	3	Low
3D-SB22	PCB	Aroclor 1248	260	µg/kg	34	7.75	30	7.75	1	Yes	?	NA		1	3	4	Low
3D-SB25	TPH	TPH-D	120	mg/kg	100	1	31	11	0	No	?	NA		3	3	6	Moderate
	TPH	TPH-Mo	520	mg/kg	500	1	31	11	0	No	?	NA		3	3	6	Moderate
3D-SB27	SVOC	Benzo(a)pyrene	6.1	µg/kg	2.9	1	32	1	1	Yes	Yes	03D-SB30	Boring 03D-SB30 had 0.31J µg/L B(a)P reported. Possibly from upgradient	1	3	4	Low
	TPH	TPH-D	170	mg/kg	100	1	31	11	0	No	?	03D-SB30	Unable to assess location's contribution to already impacted groundwater.	3	3	6	Moderate
	TPH	TPH-Mo	600	mg/kg	500	1	31	11	0	No	?	03D-SB30	Unable to assess location's contribution to already impacted groundwater.	3	3	6	Moderate
3D-SB33	PCB	Aroclor 1254	47,000	µg/kg	34	5	35	35	0	No	No	03D-SB33		5	0	5	Moderate
	PCB	Aroclor 1254	98	µg/kg	34	11	35	35	0	No	No	03D-SB33		5	0	5	Moderate
3D-SB35	NDMA	NDMA	3.2	µg/kg	0.03	5	28	5	3	Yes	No	03D-SB35		0	0	0	Negligible
3D-SB36	SVOC	Benzo(a)anthracene	42	µg/kg	29	1	31	1	2	Yes	Yes	03D-SB37	Boring 03D-SB37 had 0.23 µg/L B(a)A reported. Possibly from upgradient	0	3	3	Low
	TPH	TPH-D	120	mg/kg	100	11	30	11	0	No	Yes*	03D-SB37	Higher concentrations upgradient (03D-SB35).	3	3	6	Moderate
3D-SB37	PCB	Aroclor 1254	140	µg/kg	34	5	30	5	3	Yes	No	03D-SB37		0	0	0	Negligible
3D-SB43	PCB	Aroclor 1254	110	µg/kg	34	5	34	11	2	Yes	Yes	03D-SB43	Boring 03D-SB43 had 0.61 µg/L Aroclor 1254 reported.	0	6	6	Moderate
	PCB	Aroclor 1254	37	µg/kg	34	11	34	11	2	Yes	Yes	03D-SB43		0	6	6	Moderate
3D-SB45	SVOC	Naphthalene	280	µg/kg	140	5	34	5	0	No	No	881		3	0	3	Low
3D-SB46	SVOC	Naphthalene	1,900	µg/kg	140	5	34	11	0	No	No	881		3	0	3	Low
	PCB	Aroclor 1254	11,000	µg/kg	34	11	34	15	0	No	Yes	881		3	6	9	High
	TPH	TPH-D	9,100	mg/kg	100	11	34	15	0	No	Yes	881		3	6	9	High
	TPH	TPH-Mo	12,000	mg/kg	500	11	34	15	0	No	Yes	881		3	6	9	High

Table 8.2-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Conc.	Units	PGW SSL	Sample Depth (ft bgs)	Depth to FWBZ Groundwater (ft)	Depth of Deepest Detection (ft)	Number of NDs[1] Below Deepest Detection	Delineated above water table?	Groundwater Impacted?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
3D-SB50	PCB	Aroclor 1260	65	µg/kg	34	1	33	1	2	Yes	?	NA		0	3	3	Low
3D-SB52	PCB	Aroclor 1254	48	µg/kg	34	1	33	1	1	Yes	No	3679		1	1	2	Negligible
	METAL	Lead	23	mg/kg	23	1	33	1	2	Yes	Yes*	3679	0.048J µg/L Pb at Well 3679 (Pb PHG = 2 µg/L).	0	1	1	Negligible[2]
	TPH	TPH-D	110	mg/kg	100	5	33	5	0	No	No	3679		3	1	4	Low
	TPH	TPH-Mo	660	mg/kg	500	5	33	5	0	No	No	3679		3	1	4	Low
3D-SB63	PCB	Aroclor 1254	46	µg/kg	34	10	35	15	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	63	µg/kg	34	15	35	15	0	No	?	NA		3	3	6	Moderate
3D-SB64	PCB	Aroclor 1254	50	µg/kg	34	1	35	10	1	Yes	No	03D-SB33		1	1	2	Negligible
	PCB	Aroclor 1254	47	µg/kg	34	5	35	10	1	Yes	No	03D-SB33		1	1	2	Negligible
3D-SB65	PCB	Aroclor 1254	55	µg/kg	34	12	35	17	0	No	No	03D-SB33		5	1	6	Moderate
3D-SB66	PCB	Aroclor 1254	51	µg/kg	34	10	35	15	0	No	No	03D-SB57		3	1	4	Low
	PCB	Aroclor 1254	100	µg/kg	34	15	35	15	0	No	No	03D-SB57		3	1	4	Low
3D-SB67	PCB	Aroclor 1254	510	µg/kg	34	1	34	15	0	No	Yes	881		3	6	9	High
	PCB	Aroclor 1254	140	µg/kg	34	10	34	15	0	No	Yes	881		3	6	9	High
	PCB	Aroclor 1254	8,700	µg/kg	34	15	34	15	0	No	Yes	881		3	6	9	High
3D-SB68	PCB	Aroclor 1254	1,700	µg/kg	34	1	34	15	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	86	µg/kg	34	5	34	15	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	320	µg/kg	34	10	34	15	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	78	µg/kg	34	15	34	15	0	No	?	NA		3	3	6	Moderate
3D-SB69	PCB	Aroclor 1254	370	µg/kg	34	1	34	15	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	16,000	µg/kg	34	15	34	15	0	No	?	NA		3	3	6	Moderate
11D-SNS12	SVOC	Lead	36	mg/kg	23	0.5	28	2.5	0	No	No	A20-RC29-SB01		3	0	3	Low[2]
	PCB	Aroclor 1254	160	µg/kg	34	0.5	28	2.5	0	No	No	A20-RC29-SB01		3	0	3	Low
	PCB	Aroclor 1260	330	µg/kg	34	0.5	28	2.5	0	No	No	A20-RC29-SB01		3	0	3	Low
11D-SNS13	PCB	Aroclor 1254	120	µg/kg	34	0.5	28	0.5	1	Yes	No	A20-RC29-SB01		1	0	1	Negligible
	PCB	Aroclor 1260	310	µg/kg	34	0.5	28	0.5	1	Yes	No	A20-RC29-SB01		1	0	1	Negligible
11D-SNS14	SVOC	Benzo(a)pyrene	7	µg/kg	2.9	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Cadmium	1.4	mg/kg	1.2	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low[2]
	PCB	Aroclor 1254	150	µg/kg	34	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low
11D-SNS15	SVOC	Benzo(a)pyrene	10	µg/kg	2.9	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	30	µg/kg	29	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Cadmium	2.7	mg/kg	1.2	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Lead	150	mg/kg	23	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low
	PCB	Aroclor 1254	10,000	µg/kg	34	0.5	28	2.5	0	No	?	NA		3	3	6	Moderate
11D-SNS16	METAL	Cadmium	2	mg/kg	1.2	0.5	28	2.5	0	No	?	NA		3	3	6	Low[2]
	PCB	Aroclor 1260	1,100	µg/kg	34	0.5	28	2.5	0	No	?	NA		3	3	6	Moderate
11D-SNS17	SVOC	Benzo(a)pyrene	41	µg/kg	2.9	0.5	28	0.5	1	Yes	?	NA	Boring 11D-SB04 is about 80 ft upgradient and did not have PAHs detected.	1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	64	µg/kg	29	0.5	28	0.5	1	Yes	?	NA		1	3	4	Low
	PCB	Aroclor 1260	150	µg/kg	34	0.5	28	2.5	0	No	?	NA	Boring 11D-SB04 is about 80 ft upgradient and did not have PCBs detected.	3	3	6	Moderate
11D-SNS18	PCB	Aroclor 1260	42	µg/kg	34	0.5	23	2.5	0	No	?	NA		3	3	6	Moderate
11D-SNS22	SVOC	Benzo(a)pyrene	9	µg/kg	2.9	0.5	27	2.5	0	No	No	3682		3	0	3	Low
	METAL	Cadmium	3.7	mg/kg	1.2	0.5	27	0.5	1	Yes	Yes*	3682	0.031J µg/L Cd reported at Well 3682 (Cd PHG = 0.04 µg/L).	1	1	2	Negligible[2]
	METAL	Lead	23	mg/kg	23	0.5	27	0.5	1	Yes	No	3682		1	0	1	Negligible[2]
	PCB	Aroclor 1260	1,300	µg/kg	34	0.5	27	0.5	1	Yes	?	3682	Well 3682 not analyzed for PCBs.	1	3	4	Low
11D-SB04	TPH	TPH-D	140	mg/kg	100	1	28	5	5	Yes	Yes*	11D-SB04	Detected upgradient at comparable concentrations.	0	3	3	Low
11D-SB05	SVOC	Benzo(a)pyrene	6.2	µg/kg	2.9	1	27	1	1	Yes	No	11D-SB04	Nearby sample 11D-SP29 was analyzed for VOCs only.	1	1	2	Negligible
	TPH	TPH-D	1,400	mg/kg	100	1	25	1	2	Yes	Yes*	11D-SB04	Detected upgradient at comparable concentrations.	0	3	3	Low
	TPH	TPH-Mo	4,200	mg/kg	500	1	25	11	0	No	Yes*	11D-SB04	Detected upgradient at comparable concentrations.	3	3	6	Moderate

Table 8.2-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Conc.	Units	PGW SSL	Sample Depth (ft bgs)	Depth to FWBZ Groundwater (ft)	Depth of Deepest Detection (ft)	Number of NDs[1] Below Deepest Detection	Delineated above water table?	Groundwater Impacted?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
11D-SB06	PCB	Aroclor 1260	1,600	µg/kg	34	1	27	1	2	Yes	?	NA		0	3	3	Low
51D-SB05	SVOC	Naphthalene	170	µg/kg	140	17	34	17	0	No	No	262		5	1	6	Moderate
	TPH	TPH-D	440	mg/kg	100	17	34	17	0	No	Yes	262		5	4	9	High
51D-SB06	METAL	Cadmium	2.2	mg/kg	1.2	9	36	9	2	Yes	No	262		0	1	1	Negligible[2]
51D-SB08	SVOC	Naphthalene	220	µg/kg	140	13	33	13	1	Yes	?	NA		2	3	5	Moderate
51D-SB09	SVOC	Naphthalene	1,800	µg/kg	140	13	34	17	0	No	No	3694		5	1	6	Moderate
	SVOC	Naphthalene	5,300	µg/kg	140	17	34	17	0	No	No	3694		5	1	6	Moderate
	SVOC	2,4-Dinitrotoluene	380	µg/kg	220	17	34	17	0	No	No	3694		5	1	6	Moderate
	TPH	TPH-D	5,300	mg/kg	100	13	34	17	0	No	No	3695		5	1	6	Moderate
	TPH	TPH-Mo	3,600	mg/kg	500	13	34	17	0	No	No	3696		5	1	6	Moderate
	TPH	TPH-D	8,100	mg/kg	100	17	34	17	0	No	No	3694		5	1	6	Moderate
	TPH	TPH-Mo	5,500	mg/kg	500	17	34	17	0	No	No	3694		5	1	6	Moderate
51D-SB10	TPH	TPH-D	1,200	mg/kg	100	13	34	17	0	No	No	3694		5	0	5	Moderate
	TPH	TPH-Mo	790	mg/kg	500	13	34	17	0	No	No	3694		5	0	5	Moderate
	TPH	TPH-D	6,500	mg/kg	100	17	34	17	0	No	No	3694		5	0	5	Moderate
	TPH	TPH-Mo	3,600	mg/kg	500	17	34	17	0	No	No	3694		5	0	5	Moderate
A20-RB37-SB01	SVOC	Benzo(a)pyrene	16	µg/kg	2.9	1	28	1	1	Yes	No	275	Nearby grab sample A20-RB37-SP01 was analyzed for VOCs only.	1	1	2	Negligible
	METAL	Cadmium	1.6	mg/kg	1.2	1	30	1	2	Yes	No	275		0	1	1	Negligible[2]
	METAL	Lead	210	mg/kg	23	1	30	1	2	Yes	No	275		0	1	1	Negligible
	PCB	Aroclor 1254	3,100	µg/kg	34	1	28	1	2	Yes	No	03D-SB44	Well 275 was not analyzed for PCBs.	0	1	1	Negligible
	TPH	TPH-D	270	mg/kg	100	1	28	11	0	No	No	275		3	1	4	Low
A20-RB37-SB02	PCB	Aroclor 1254	2,000	µg/kg	34	1	27	1	1	Yes	No	03D-SB44		1	1	2	Negligible
A20-RB37-SB03	PCB	Aroclor 1254	210	µg/kg	34	1	27	1	1	Yes	No	03D-SB44		1	1	2	Negligible
A20-RC29-SB01	PCB	Aroclor 1254	59	µg/kg	34	1	27	1	6	Yes	No	A20-RC29-SB01		0	0	0	Negligible
	TPH	TPH-Mo	620	mg/kg	500	5	27	33	0	No	No	A20-RC29-SB01		5	0	5	Moderate
A20-RX73-SB03	SVOC	Benzo(a)pyrene	7.4	µg/kg	2.9	1	29	1	1	Yes	?	NA		1	3	4	Low
	TPH	TPH-D	250	mg/kg	100	1	29	5	1	Yes	?	NA		1	3	4	Low
	TPH	TPH-Mo	940	mg/kg	500	1	29	11	0	No	?	NA		3	3	6	Moderate
A20-ST01-SB03	PCB	Aroclor 1254	130	µg/kg	34	1	38	1	1	Yes	?	NA	Well 3655 in area, but not sampled for PCBs.	1	3	4	Low

Key:
(1) Nondetects or metals within range of background.
(2) Outside range of statistical background, but suspected to be naturally occurring.
? = Wells or borings with compound concentration data were not available.
bgs = Below ground surface
ft = Feet
FWBZ = First water-bearing zone
GW = Groundwater
µg/kg = Micrograms per kilogram
µg/L = Micrograms per liter
mg/kg = Milligrams per kilogram
NA = Not applicable
NDMA = N-nitrosodimethylamine
PAH = Polycyclic aromatic hydrocarbon
PCB = Polychlorinated biphenyl
PGW = Protection of groundwater
PHG = Public health goal
SSL = Soil screening level
SVOC = Semivolatile organic compound
TPH = Total petroleum hydrocarbons
TPH-D = Total petroleum hydrocarbons as diesel
TPH-Mo = Total petroleum hydrocarbons as motor oil
VOC = Volatile organic compound
* = See comments column.

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
3D-SP84	15	PCE	57	77	30	0	0	TRUE	No	Low	
	25	PCE	57	71	30	0	0	TRUE	No	Low	
	15	Vinyl Chloride	235	420	30	13	2,210	FALSE	No	Low	
3D-SP85	25	1,1-DCA	1,282	2,600	30	0	0	TRUE	No	Low	
	30	Benzene	35	66	30	0	0	TRUE	No	Low	
	25	cis-1,2-DCE	1,641	74,000	30	0.7	37	TRUE	No	Moderate	
	25	PCE	57	70,000	30	0	0	TRUE	No	Low	
	30	PCE	57	140	30	0	0	TRUE	No	Low	
	25	TCE	527	10,000	30	0	0	TRUE	No	Low	
	25	Vinyl Chloride	235	170,000	30	10	1,700	TRUE	No	Moderate	
3D-SP88	10	PCE	57	580	30	5	650	FALSE	No	Low	
	20	PCE	57	590	30	5	650	FALSE	No	Low	
3D-SP89	10	PCE	57	33,000	30	8.5	1,105	TRUE	No	Moderate	
3D-SP90	10	PCE	57	270	30	8	1,040	FALSE	No	Low	
	20	PCE	57	270	30	8	1,040	FALSE	No	Low	
	10	TCE	527	560	30	10	1,238	FALSE	No	Low	
	10	Vinyl Chloride	235	250	30	10	1,700	FALSE	No	Low	
3D-SP91	20	PCE	57	190	30	20	2,600	FALSE	No	Low	
3D-SP92	10	PCE	57	140	30	50	6,500	FALSE	?	Low	
	20	PCE	57	1,000	30	50	6,500	FALSE	?	Low	
	20	TCE	527	660	30	50	6,188	FALSE	No	Low	
	20	Vinyl Chloride	235	300	30	50	8,500	FALSE	?	Low	
3D-SP93	15	Benzene	35	210	30	0	0	TRUE	No	Low	
	15	PCE	57	290	30	100	13,000	FALSE	?	Low	
3D-SP94	15	PCE	57	7,100	30	22	2,860	TRUE	No	Moderate	
	25	PCE	57	3,300	30	22	2,860	TRUE	No	Moderate	
3D-SP95	10	PCE	57	150,000	30	75	9,750	TRUE	?	Moderate	
	18	PCE	57	130,000	30	75	9,750	TRUE	?	Moderate	
	10	TCE	527	5,700	30	75	9,281	FALSE	No	Low	
	18	TCE	527	7,700	30	75	9,281	FALSE	No	Low	
	10	Vinyl Chloride	235	1,500	30	50	8,500	FALSE	?	Low	
	18	Vinyl Chloride	235	2,200	30	50	8,500	FALSE	?	Low	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
3D-SP96	10	Benzene	35	36	30	0	0	TRUE	No	Low	
	10	PCE	57	95	30	0.5	65	FALSE	No	Low	
	17	PCE	57	68	30	0.5	65	FALSE	No	Low	
3D-SP99	10	PCE	57	280,000	30	50	6,500	TRUE	No	Moderate	
	10	TCE	527	940	30	25	3,094	FALSE	No	Low	
3D-SP100	10	PCE	57	430,000	30	2200	286,000	TRUE	?	Moderate	
	20	PCE	57	41,000	30	2200	286,000	FALSE	?	Low	
	10	TCE	527	580	30	16	1,980	FALSE	No	Low	
3D-SP102	10	PCE	57	30,000,000	30	140000	18,200,000	TRUE	Yes	High	
	28	PCE	57	5,900,000	30	140000	18,200,000	FALSE	Yes	Low	
	28	TCE	527	12,000	30	7300	903,375	FALSE	Yes	Low	
3D-SP103	10	PCE	57	830,000	30	50	6,500	TRUE	No	Moderate	
	20	PCE	57	130,000	30	50	6,500	TRUE	No	Moderate	
	10	TCE	527	1,700	30	20	2,475	FALSE	No	Low	
3D-SP104	10	PCE	57	640,000	30	360	46,800	TRUE	No	Moderate	
	20	PCE	57	1,600,000	30	360	46,800	TRUE	No	Moderate	
	10	TCE	527	14,000	30	200	24,750	FALSE	No	Low	
	20	TCE	527	57,000	30	200	24,750	TRUE	No	Moderate	
3D-SP105	10	cis-1,2-DCE	1,641	2,000	30	940	49,538	FALSE	No	Low	
	10	PCE	57	580,000	30	360	46,800	TRUE	No	Moderate	
	10	TCE	527	16,000	30	200	24,750	FALSE	No	Low	
3D-SP106	25	1,1-DCA	1,282	120,000	30	16	1,136	TRUE	No	Moderate	
	30	1,1-DCA	1,282	1,500	30	16	1,136	FALSE	No	Low	
	25	1,1-DCE	18,180	120,000	30	0.5	170	TRUE	NE	Moderate	
	30	cis-1,2-DCE	1,641	11,000	30	10	527	TRUE	No	Moderate	
	15	PCE	57	7,200	30	5	650	TRUE	No	Moderate	
	25	PCE	57	540,000	30	5	650	TRUE	No	Moderate	
	30	PCE	57	270,000	30	5	650	TRUE	No	Moderate	
	25	TCE	527	190,000	30	20	2,475	TRUE	No	Moderate	
	30	TCE	527	140,000	30	20	2,475	TRUE	No	Moderate	
	15	Vinyl Chloride	235	250	30	0	0	TRUE	No	Low	
	25	Vinyl Chloride	235	120,000	30	0	0	TRUE	No	Low	
	30	Vinyl Chloride	235	8,400	30	0	0	TRUE	No	Low	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
3D-SP107	10	PCE	57	98,000	30	17	2,210	TRUE	Yes	High	Used Well 3730
	20	PCE	57	13,000	30	17	2,210	TRUE	Yes	High	Used Well 3730
	29	PCE	57	340,000	30	17	2,210	TRUE	Yes	High	Used Well 3730
	10	TCE	527	86,000	30	190	23,513	TRUE	Yes	High	Used Well 3730
	20	TCE	527	12,000	30	190	23,513	FALSE	Yes	Low	Used Well 3730
	29	TCE	527	260,000	30	190	23,513	TRUE	Yes	High	Used Well 3730
3D-SP108	10	PCE	57	9,500	30	8.7	1,131	TRUE	No	Moderate	
3D-SP109	20	1,1-DCE	18,180	54,000	30	19	6,464	TRUE	NE	Moderate	
	10	PCE	57	18,000	30	460	59,800	FALSE	No	Low	
	20	PCE	57	530,000	30	460	59,800	TRUE	No	Moderate	
	30	PCE	57	2,400	30	460	59,800	FALSE	No	Low	
	10	TCE	527	2,300	30	100	12,375	FALSE	No	Low	
	20	TCE	527	110,000	30	100	12,375	TRUE	No	Moderate	
	10	Vinyl Chloride	235	550	30	17	2,890	FALSE	No	Low	
	20	Vinyl Chloride	235	26,000	30	17	2,890	TRUE	No	Moderate	
3D-SP110	10	PCE	57	11,000	30	1400	182,000	FALSE	Yes	Low	
	20	PCE	57	2,900	30	1400	182,000	FALSE	Yes	Low	
	10	TCE	527	930	30	240	29,700	FALSE	No	Low	
3D-SP111	10	PCE	57	56,000	30	60	7,800	TRUE	No	Moderate	
	20	PCE	57	1,300	30	60	7,800	FALSE	No	Low	
3D-SP112	10	PCE	57	240	30	30	3,900	FALSE	No	Low	
	20	PCE	57	190	30	30	3,900	FALSE	No	Low	
3D-SP113	10	PCE	57	270	30	4	520	FALSE	No	Low	
	20	PCE	57	2,500	30	4	520	TRUE	No	Moderate	
	20	Vinyl Chloride	235	940	30	0.5	85	TRUE	No	Moderate	
3D-SP115	10	PCE	57	650	30	1.4	182	TRUE	No	Moderate	
3D-SP116	10	PCE	57	150	30	1	130	FALSE	No	Low	
3D-SP117	10	PCE	57	1,000	30	10	1,300	FALSE	No	Low	
3D-SP118	20	Benzene	35	110	30	0	0	TRUE	No	Low	
	10	PCE	57	14,000	30	50	6,500	TRUE	No	Moderate	
	20	PCE	57	4,500	30	50	6,500	FALSE	No	Low	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
3D-SP119	20	Benzene	35	46	30	0	0	TRUE	No	Low	
	20	cis-1,2-DCE	1,641	9,100	30	60	3,162	TRUE	No	Moderate	
	29	cis-1,2-DCE	1,641	5,700	30	60	3,162	TRUE	No	Moderate	
	29	Methylene Chloride	903	23,000	30	0	0	TRUE	No	Low	
	10	PCE	57	10,000	30	7	910	TRUE	No	Moderate	
	20	PCE	57	10,000	30	7	910	TRUE	No	Moderate	
	29	PCE	57	310,000	30	7	910	TRUE	No	Moderate	
	10	TCE	527	6,400	30	70	8,663	FALSE	No	Low	
	20	TCE	527	46,000	30	70	8,663	TRUE	No	Moderate	
	29	TCE	527	170,000	30	70	8,663	TRUE	No	Moderate	
	20	trans-1,2-DCE	7,882	16,000	30	0	0	TRUE	No	Low	
3D-SP120	20	Benzene	35	200	30	0	0	TRUE	No	Low	
	10	PCE	57	180	30	60	7,800	FALSE	No	Low	
	20	PCE	57	160	30	60	7,800	FALSE	No	Low	
3D-SP121	15	cis-1,2-DCE	1,641	2,300	30	4.8	253	TRUE	No	Moderate	
	15	PCE	57	320,000	30	140	18,200	TRUE	No	Moderate	
	25	PCE	57	89,000	30	140	18,200	TRUE	No	Moderate	
	15	TCE	527	10,000	30	11	1,361	TRUE	No	Moderate	
	15	Vinyl Chloride	235	2,500	30	0.5	85	TRUE	No	Moderate	
3D-SP122	20	1,1-DCA	1,282	8,100	30	17	1,207	TRUE	No	Moderate	
	30	1,1-DCA	1,282	9,800	30	17	1,207	TRUE	No	Moderate	
	20	1,1-DCE	18,180	19,000	30	3.1	1,055	FALSE	No	Low	
	30	1,1-DCE	18,180	31,000	30	3.1	1,055	TRUE	NE	Moderate	
	20	cis-1,2-DCE	1,641	2,800	30	160	8,432	FALSE	No	Low	
	30	cis-1,2-DCE	1,641	2,200	30	160	8,432	FALSE	No	Low	
	10	PCE	57	10,000	30	0.5	65	TRUE	No	Moderate	
	20	PCE	57	8,200	30	0.5	65	TRUE	No	Moderate	
	20	TCE	527	1,700	30	450	55,688	FALSE	Yes	Low	
	30	TCE	527	7,400	30	450	55,688	FALSE	Yes	Low	
	20	Vinyl Chloride	235	1,600	30	0	0	TRUE	No	Low	
3D-SP123	10	PCE	57	180	30	0	0	TRUE	No	Low	
	20	PCE	57	190	30	0	0	TRUE	No	Low	
3D-SP124	20	PCE	57	58	30	0.5	65	FALSE	No	Low	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
3D-SP125	10	Benzene	35	57	30	0	0	TRUE	No	Low	
	20	Benzene	35	51	30	0	0	TRUE	No	Low	
	20	Benzene	35	45	30	0	0	TRUE	No	Low	
	20	PCE	57	150	30	0	0	TRUE	No	Low	
	20	TCE	527	15,000	30	50	6,188	TRUE	No	Moderate	
3D-SP126	10	PCE	57	59	30	0	0	TRUE	No	Low	
3D-SP127	10	PCE	57	190	30	0	0	TRUE	No	Low	
	20	PCE	57	170	30	0	0	TRUE	No	Low	
3D-SP128	30	1,1-DCA	1,282	1,400	30	20	1,420	FALSE	No	Low	
	30	1,2-DCA	21	54	30	0.73	11	TRUE	NE	Moderate	
	30	cis-1,2-DCE	1,641	18,000	30	270	14,229	TRUE	No	Moderate	
	20	PCE	57	99	30	0	0	TRUE	No	Low	
	30	PCE	57	170	30	0	0	TRUE	No	Low	
	20	TCE	527	60,000	30	67	8,291	TRUE	No	Moderate	
	30	TCE	527	210,000	30	67	8,291	TRUE	No	Moderate	
3D-SP129	25	cis-1,2-DCE	1,641	8,600	30	75	3,953	TRUE	No	Moderate	
	25	PCE	57	710	30	0	0	TRUE	No	Low	
	25	TCE	527	620,000	30	60	7,425	TRUE	No	Moderate	
3D-SP131	10	PCE	57	350	30	0	0	TRUE	No	Low	
	20	PCE	57	160	30	0	0	TRUE	No	Low	
3D-SP132	10	PCE	57	170	30	0	0	TRUE	No	Low	
	30	PCE	57	160	30	0	0	TRUE	No	Low	
3D-SP134	20	Benzene	35	400	30	0	0	TRUE	No	Low	
3D-SP135	10	PCE	57	8,600	30	1.5	195	TRUE	No	Moderate	
	20	PCE	57	950	30	1.5	195	TRUE	No	Moderate	
	20	Vinyl Chloride	235	22,000	30	10	1,700	TRUE	No	Moderate	
3D-SP137	10	PCE	57	740	30	5	650	TRUE	No	Moderate	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
3D-SP138	30	Benzene	35	61	30	0	0	TRUE	No	Low	
	10	PCE	57	60	30	0.5	65	FALSE	No	Low	
	19	PCE	57	140	30	0.5	65	TRUE	No	Moderate	
	30	PCE	57	15,000	30	0.5	65	TRUE	No	Moderate	
	10	TCE	527	3,400	30	100	12,375	FALSE	No	Low	
	19	TCE	527	16,000	30	100	12,375	TRUE	No	Moderate	
	30	TCE	527	9,700	30	100	12,375	FALSE	No	Low	
3D-SP139	20	PCE	57	80	30	0	0	TRUE	No	Low	
	28	PCE	57	860	30	0	0	TRUE	No	Low	
	28	TCE	527	660	30	27	3,341	FALSE	?	Low	
3D-SP141	20	Benzene	35	57	30	0	0	TRUE	No	Low	
3D-SP142	20	Benzene	35	49	30	0	0	TRUE	No	Low	
	30	cis-1,2-DCE	1,641	1,700	30	130	6,851	FALSE	No	Low	
	10	PCE	57	790	30	4.2	546	TRUE	No	Moderate	
	20	PCE	57	510	30	4.2	546	FALSE	No	Low	
	30	PCE	57	4,100	30	4.2	546	TRUE	No	Moderate	
	30	TCE	527	37,000	30	150	18,563	TRUE	No	Moderate	
3D-SP143	10	PCE	57	1,000	30	7	910	TRUE	No	Moderate	
	20	PCE	57	720	30	7	910	FALSE	No	Low	
	30	PCE	57	1,100	30	7	910	TRUE	No	Moderate	
	30	TCE	527	1,300	30	17	2,104	FALSE	No	Low	
3D-SP144	30	1,1-DCA	1,282	4,500	30	0	0	TRUE	No	Low	
	30	Benzene	35	41	30	0	0	TRUE	No	Low	
	10	PCE	57	1,100	30	0	0	TRUE	No	Low	
	20	PCE	57	1,600	30	0	0	TRUE	No	Low	
	30	PCE	57	1,500	30	0	0	TRUE	No	Low	
	30	Vinyl Chloride	235	14,000	30	0	0	TRUE	No	Low	
3D-SP145	10	PCE	57	98	30	1.7	221	FALSE	No	Low	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
3D-SP146	10	PCE	57	6,400	30	1	130	TRUE	No	Moderate	
	20	PCE	57	4,800	30	1	130	TRUE	No	Moderate	
	27	PCE	57	2,300	30	1	130	TRUE	No	Moderate	
	10	TCE	527	4,100	30	60	7,425	FALSE	No	Low	
	20	TCE	527	5,800	30	60	7,425	FALSE	No	Low	
	27	TCE	527	18,000	30	60	7,425	TRUE	No	Moderate	
3D-SP147	27	cis-1,2-DCE	1,641	3,700	30	300	15,810	FALSE	No	Low	
	10	PCE	57	1,300	30	0	0	TRUE	No	Low	
	20	PCE	57	120	30	0	0	TRUE	No	Low	
	27	PCE	57	760	30	0	0	TRUE	No	Low	
	10	TCE	527	140,000	30	100	12,375	TRUE	No	Moderate	
	20	TCE	527	10,000	30	100	12,375	FALSE	No	Low	
	27	TCE	527	230,000	30	100	12,375	TRUE	No	Moderate	
3D-SP149	20	Benzene	35	93	30	0	0	TRUE	No	Low	
11D-SP27	10	PCE	57	130	30	0.67	87	FALSE	No	Low	
50D-SP01	10	PCE	57	140	30	2	260	FALSE	No	Low	
51D-SP04	10	PCE	57	110	30	0	0	TRUE	No	Low	
A20-B34-SP01	10	PCE	57	63	30	0.5	65	FALSE	No	Low	
	10	PCE	57	63	30	0.5	65	FALSE	No	Low	
A20-B34-SP03	20	Benzene	35	44	30	0	0	TRUE	No	Low	
	10	PCE	57	870	30	0	0	TRUE	No	Low	
	20	PCE	57	860	30	0	0	TRUE	No	Low	
	29	PCE	57	1,000	30	0	0	TRUE	No	Low	
A20-RB37-SP01	10	PCE	57	69,000	30	56	7,280	TRUE	Yes	High	
	20	PCE	57	73,000	30	56	7,280	TRUE	Yes	High	
	30	PCE	57	4,000	30	56	7,280	FALSE	Yes	Low	
	10	TCE	527	6,300	30	9.6	1,188	TRUE	No	Moderate	
	20	TCE	527	6,500	30	9.6	1,188	TRUE	No	Moderate	
	30	TCE	527	1,500	30	9.6	1,188	FALSE	No	Low	
A20-RB37-SP02	10	PCE	57	7,100	30	0.77	100	TRUE	No	Moderate	
	20	PCE	57	160	30	0.77	100	TRUE	No	Moderate	
	10	TCE	527	930	30	2.6	322	TRUE	No	Moderate	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area East
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
A20-RC29-SP01	10	PCE	57	270	30	0.5	65	TRUE	Yes	High	
	20	PCE	57	350	30	0.5	65	TRUE	Yes	High	
	20	PCE	57	350	30	0.5	65	TRUE	Yes	High	
A20-RX73-SP01	10	PCE	57	100	30	0.5	65	FALSE	No	Low	
	20	PCE	57	170	30	0.5	65	TRUE	No	Moderate	
A20-ST01-2-SP01	20	Benzene	35	41	30	0	0	TRUE	No	Low	
	10	PCE	57	380	30	6	780	FALSE	No	Low	
	20	PCE	57	95	30	6	780	FALSE	No	Low	
A20-ST01-3-SP01	20	Benzene	35	77	30	0	0	TRUE	No	Low	
	10	PCE	57	64	30	2	260	FALSE	No	Low	
	20	PCE	57	71	30	2	260	FALSE	No	Low	
A20-ST01-SP01	10	PCE	57	200	30	0.7	91	TRUE	No	Moderate	
A20-ST02-SP01	20	Benzene	35	160	30	0	0	TRUE	No	Low	
	30	PCE	57	62	30	0.35	46	FALSE	No	Low	
A20-ST02-SP02	30	Benzene	35	57	30	0	0	TRUE	No	Low	
	10	PCE	57	76	30	1	130	FALSE	No	Low	
	20	PCE	57	75	30	1	130	FALSE	No	Low	
A20-ST02-SP04	30	Benzene	35	41	30	0	0	TRUE	No	Low	
A20-ST05-SP01	20	1,1-DCA	1,282	2,900	30	15	1,065	TRUE	No	Moderate	
	30	1,1-DCA	1,282	4,500	30	15	1,065	TRUE	No	Moderate	
	30	1,2-DCA	21	100	30	0.58	9	TRUE	NE	Moderate	
	20	cis-1,2-DCE	1,641	27,000	30	180	9,486	TRUE	No	Moderate	
	30	cis-1,2-DCE	1,641	37,000	30	180	9,486	TRUE	No	Moderate	
	20	PCE	57	470	30	0.25	33	TRUE	No	Moderate	
	30	PCE	57	190	30	0.25	33	TRUE	No	Moderate	
	20	TCE	527	700,000	30	190	23,513	TRUE	Yes	High	
	30	TCE	527	34,000	30	190	23,513	TRUE	Yes	High	
A20-ST05-SP02	10	PCE	57	120	30	0	0	TRUE	No	Low	
	20	PCE	57	170	30	0	0	TRUE	No	Low	
A20-ST05-SP03	10	PCE	57	320	30	0	0	TRUE	No	Low	
A20-ST06-SP01	10	PCE	57	900	30	1.5	195	TRUE	No	Moderate	
	20	PCE	57	850	30	1.5	195	TRUE	No	Moderate	

Table 8.2-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
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Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW EquilibriumConc. ($\mu g/m^3$)	Is SV-GWeq >PGW SSL?	Do GW Contours indicate a potential source?	Risk Level	Comments
A20-ST14-SP01	10	PCE	57	840	30	0.5	65	TRUE	No	Moderate	
	20	PCE	57	150	30	0.5	65	TRUE	No	Moderate	
A20-ST14-SP02	10	PCE	57	760	30	0	0	TRUE	No	Low	
	20	PCE	57	1,100	30	0	0	TRUE	No	Low	

Key:
PGW SSL = Protection of groundwater soil vapor screening level
SV = Soil vapor
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
ft bgs = Feet below ground surface
GW = Groundwater
SV GW Equilibrium Conc = The modeled soil vapor concentration at 10 ft bgs that would be in equilibrium with and derived from the groundwater.
SV - GWeq = Measured soil vapor concentration minus the SV GW equilibrium concentration.
? = Unable to assess whether the sample location was near a source of VOCs to groundwater.

1,1-DCA = 1,1-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCA = 1,2-Dichloroethane
cis-1,2-DCE = cis-1,2-Dichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
VOC = Volatile organic compound

Sample Location	Compound Class	Compound	Conc.	Units	PGW SSL	Sample Depth (ft bgs)	Depth to FWBZ Groundwater (ft)	Depth of Deepest Detection (ft)	Number of NDs[1] below deepest detection	Delineated above water table?	Groundwater Impacted?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
5D-SNS08	METAL	Cadmium	1.5	mg/kg	1.2	0.5	48	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Cadmium	1.5	mg/kg	1.2	2.5	48	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Lead	70	mg/kg	23	0.5	48	2.5	0	No	?	NA		3	3	6	Moderate
	METAL	Lead	67	mg/kg	23	2.5	48	2.5	0	No	?	NA		3	3	6	Moderate
5D-SNS09	SVOC	Benzo(a)pyrene	89	µg/kg	2.9	0.5	47	0.5	1	Yes	?	NA	52D-HP01 is nearby, but was not analyzed for SVOCs or metals.	1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	230	µg/kg	29	0.5	47	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(a)anthracene	68	µg/kg	29	0.5	47	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Cadmium	1.6	mg/kg	1.2	0.5	47	0.5	1	Yes	?	NA		1	3	4	Low[2]
	SVOC	Dibenz(a,h)anthracene	6.8	µg/kg	2.9	0.5	47	0.5	1	Yes	?	NA		1	3	4	Low
5D-SNS10	METAL	Cadmium	5.8	mg/kg	1.2	0.5	47	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Lead	100	mg/kg	23	0.5	47	0.5	1	Yes	?	NA		1	3	4	Low
5D-SNS11	METAL	Cadmium	3.9	mg/kg	1.2	0.5	47	2.5	0	No	No	3684		3	0	3	Low[2]
	METAL	Cadmium	6.4	mg/kg	1.2	2.5	47	2.5	0	No	No	3684		3	0	3	Low
5D-SNS12	METAL	Cadmium	42	mg/kg	1.2	0.5	45	2.5	2	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Cadmium	4.1	mg/kg	1.2	2.5	45	2.5	2	Yes	No	06D-SB02		0	0	0	Negligible[2]
	METAL	Chromium	960	mg/kg	500	2.5	45	2.5	2	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Lead	34	mg/kg	23	0.5	45	2.5	2	Yes	No	06D-SB02		0	0	0	Negligible[2]
	METAL	Lead	76	mg/kg	23	2.5	45	2.5	2	Yes	No	06D-SB02		0	0	0	Negligible
5D-SNS13	SVOC	Benzo(a)pyrene	26	µg/kg	2.9	0.5	43	0.5	1	Yes	No	06D-SB02	Well 3686 is nearby, but was not sampled.	1	1	2	Negligible
	SVOC	Benzo(b&k)fluoranthene	97	µg/kg	29	0.5	43	2.5	0	No	No	06D-SB02		3	1	4	Low
	METAL	Cadmium	54	mg/kg	1.2	0.5	43	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Cadmium	15	mg/kg	1.2	2.5	43	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Cadmium	4.7	mg/kg	1.2	10	43	10	0	No	No	06D-SB02		3	1	4	Low[2]
	METAL	Chromium	1,800	mg/kg	500	0.5	43	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Lead	140	mg/kg	23	0.5	43	2.5	2	Yes	No	06D-SB02		0	1	1	Negligible
	METAL	Lead	29	mg/kg	23	2.5	43	2.5	2	Yes	No	06D-SB02		0	1	1	Negligible[2]
5D-SNS14	SVOC	Benzo(a)pyrene	32	µg/kg	2.9	0.5	43	0.5	1	Yes	No	06D-SB02	Well 3704 is nearby, but was not sampled.	1	1	2	Negligible
	SVOC	Benzo(b&k)fluoranthene	96	µg/kg	29	0.5	43	0.5	1	Yes	No	06D-SB02		1	1	2	Negligible
	METAL	Cadmium	2.5	mg/kg	1.2	0.5	43	10	0	No	No	06D-SB02		3	1	4	Low[2]
	METAL	Cadmium	9.4	mg/kg	1.2	2.5	43	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Cadmium	4.7	mg/kg	1.2	10	43	10	0	No	No	06D-SB02		3	1	4	Low[2]
	METAL	Chromium	1,800	mg/kg	500	2.5	43	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Lead	50	mg/kg	23	0.5	43	2.5	2	Yes	No	06D-SB02		0	1	1	Negligible[2]
	METAL	Lead	120	mg/kg	23	2.5	43	2.5	2	Yes	No	06D-SB02		0	1	1	Negligible
	TPH	TPH-D	230	mg/kg	100	2.5	43	2.5	0	No	Yes*	06D-SB02	There are higher concentrations upgradient.	3	3	6	Moderate
	TPH	TPH-Mo	640	mg/kg	500	2.5	43	2.5	0	No	Yes*	06D-SB02	There are higher concentrations upgradient.	3	3	6	Moderate
5D-SNS15	SVOC	Benzo(a)pyrene	41	µg/kg	2.9	0.5	44	0.5	1	Yes	No	06D-SB02	Well 3704 is nearby, but was not sampled.	1	1	2	Negligible
	SVOC	Benzo(b&k)fluoranthene	160	µg/kg	29	0.5	44	0.5	1	Yes	No	06D-SB02		1	1	2	Negligible
	SVOC	Benzo (b) fluoranthene	130	µg/kg	29	0.5	44	0.5	1	Yes	No	06D-SB02		1	1	2	Negligible
	METAL	Cadmium	16	mg/kg	1.2	0.5	44	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Cadmium	6.3	mg/kg	1.2	2.5	44	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Cadmium	4	mg/kg	1.2	5	44	10	0	No	No	06D-SB02		3	1	4	Low[2]
	METAL	Cadmium	6.5	mg/kg	1.2	10	44	10	0	No	No	06D-SB02		3	1	4	Low
	METAL	Chromium	2,300	mg/kg	500	0.5	44	2.5	2	Yes	No	06D-SB02		0	1	1	Negligible
	METAL	Lead	260	mg/kg	23	0.5	44	2.5	2	Yes	No	06D-SB02		0	1	1	Negligible
	METAL	Lead	110	mg/kg	23	2.5	44	2.5	2	Yes	No	06D-SB02		0	1	1	Negligible
5D-SNS16	SVOC	Benzo(b&k)fluoranthene	260	µg/kg	29	0.5	41	2.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(b&k)fluoranthene	30	µg/kg	29	2.5	41	2.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)anthracene	47	µg/kg	29	0.5	41	2.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	7	µg/kg	2.9	2.5	41	2.5	0	No	?	NA		3	3	6	Moderate
	METAL	Cadmium	4.6	mg/kg	1.2	0.5	41	5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Cadmium	3.9	mg/kg	1.2	2.5	41	5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Cadmium	2	mg/kg	1.2	5	41	5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Lead	65	mg/kg	23	0.5	41	2.5	2	Yes	?	NA		0	3	3	Low
	METAL	Lead	76	mg/kg	23	2.5	41	2.5	2	Yes	?	NA		0	3	3	Low
	TPH	TPH-D	250	mg/kg	100	0.5	41	2.5	0	No	?	NA		3	3	6	Moderate
	TPH	TPH-Mo	850	mg/kg	500	0.5	41	2.5	0	No	?	NA		3	3	6	Moderate

Sample Location	Compound Class	Compound	Conc.	Units	PGW SSL	Sample Depth (ft bgs)	Depth to FWBZ Groundwater (ft)	Depth of Deepest Detection (ft)	Number of NDs[1] below deepest detection	Delineated above water table?	Groundwater Impacted?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
5D-SNS17	METAL	Cadmium	5.6	mg/kg	1.2	0.5	38	2.5	0	No	?	NA	Wells 3398 and 3703 are nearby, but were not sampled.	3	3	6	Moderate
	METAL	Cadmium	2.3	mg/kg	1.2	2.5	38	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Lead	130	mg/kg	23	0.5	38	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Lead	48	mg/kg	23	2.5	38	0.5	1	Yes	?	NA		1	3	4	Low[2]
5D-SNS18	PCB	Aroclor 1260	100	µg/kg	34	0.5	37	2.5	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1260	65	µg/kg	34	2.5	37	2.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	14	µg/kg	2.9	0.5	37	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	38	µg/kg	29	0.5	37	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Cadmium	1.7	mg/kg	1.2	0.5	37	0.5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Lead	48	mg/kg	23	0.5	37	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Lead	62	mg/kg	23	2.5	37	2.5	0	No	?	NA		3	3	6	Moderate
5D-SNS19	METAL	Lead	41	mg/kg	23	0.5	36	0.5	1	Yes	?	NA		1	3	4	Low[2]
5D-SNS20	METAL	Cadmium	1.8	mg/kg	1.2	0.5	47	0.5	3	Yes	?	NA	Well 3688 is nearby, but was not sampled. Grab sample 52D-HP01 was not analyzed for metals.	0	3	3	Low[2]
	METAL	Lead	150	mg/kg	23	0.5	47	0.5	3	Yes	?	NA		0	3	3	Low
5D-SB01	PCB	Aroclor 1254	76	µg/kg	34	1	47	1	5	Yes	?	NA	Well 3688 is nearby, but was not sampled.	0	3	3	Low
5D-SB02	METAL	Cadmium	25	mg/kg	1.2	5	46	5	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Chromium	1,100	mg/kg	500	5	46	5	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Lead	74	mg/kg	23	5	46	5	4	Yes	No	06D-SB02		0	0	0	Negligible
5D-SB03	METAL	Cadmium	190	mg/kg	1.2	1	46	1	1	Yes	No	06D-SB02		1	0	1	Negligible
	METAL	Chromium	5,300	mg/kg	500	1	46	1	1	Yes	No	06D-SB02		1	0	1	Negligible
	METAL	Lead	330	mg/kg	23	1	46	1	1	Yes	No	06D-SB02		1	0	1	Negligible
5D-SB04	METAL	Cadmium	1.7	mg/kg	1.2	1	46	1	1	Yes	No	06D-SB02		1	0	1	Negligible[2]
5D-SB06	PCB	Aroclor 1254	2,500	µg/kg	34	1	40	1	0	No	?	NA		3	3	6	Moderate
	METAL	Cadmium	9.6	mg/kg	1.2	1	40	1	0	No	?	NA		3	3	6	Moderate
	METAL	Chromium	670	mg/kg	500	1	40	1	0	No	?	NA		3	3	6	Moderate
	METAL	Lead	30.1	mg/kg	23	1	40	1	0	No	?	NA		3	3	6	Low[2]
5D-SB07	PCB	Aroclor 1260	800	µg/kg	34	1	44	1	0	No	?	NA		3	3	6	Moderate
	METAL	Cadmium	2.6	mg/kg	1.2	1	44	1	0	No	?	NA		3	3	6	Low[2]
5D-SB09	PCB	Aroclor 1254	610	µg/kg	34	1	46	1	0	No	?	NA		3	3	6	Moderate
5D-SB10	PCB	Aroclor 1254	46	µg/kg	34	1	48	1	0	No	?	NA		3	3	6	Moderate
6D-SNS06	METAL	Antimony	7.5	mg/kg	6	0.5	45	0.5	1	Yes	No	06D-SB02		1	0	1	Negligible[2]
	METAL	Cadmium	12	mg/kg	1.2	0.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low
	METAL	Cadmium	3	mg/kg	1.2	2.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low[2]
	METAL	Chromium	19,000	mg/kg	500	0.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low
	METAL	Chromium	4,500	mg/kg	500	2.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low
	METAL	Lead	100	mg/kg	23	0.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low
	METAL	Lead	32	mg/kg	23	2.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low[2]
6D-SNS07	METAL	Antimony	49	mg/kg	6	0.5	45	0.5	5	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Cadmium	33	mg/kg	1.2	0.5	45	2.5	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Cadmium	3.7	mg/kg	1.2	2.5	45	2.5	4	Yes	No	06D-SB02		0	0	0	Negligible[2]
	METAL	Chromium	43,000	mg/kg	500	0.5	45	2.5	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Chromium	5,700	mg/kg	500	2.5	45	2.5	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Lead	640	mg/kg	23	0.5	45	2.5	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Lead	57	mg/kg	23	2.5	45	2.5	4	Yes	No	06D-SB02		0	0	0	Negligible
6D-SNS08	METAL	Cadmium	16	mg/kg	1.2	0.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low
	METAL	Cadmium	1.4	mg/kg	1.2	2.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low[2]
	METAL	Chromium	27,000	mg/kg	500	0.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low
	METAL	Chromium	1,000	mg/kg	500	2.5	45	2.5	0	No	No	06D-SB02		3	0	3	Low
	METAL	Lead	300	mg/kg	23	0.5	45	0.5	1	Yes	No	06D-SB02		1	0	1	Negligible
6D-SNS09	PERCHLORATE	Perchlorate	1,300	µg/kg	60	2.5	45	2.5	0	No	Yes*	06D-SB02	Upgradient source suspected.	3	3	6	Moderate
6D-SNS10	PERCHLORATE	Perchlorate	530	µg/kg	60	2.5	45	2.5	0	No	Yes*	06D-SB02	Upgradient source suspected.	3	3	6	Moderate
6D-SNS11	PERCHLORATE	Perchlorate	1,900	µg/kg	60	2.5	45	2.5	0	No	Yes*	06D-SB02	Upgradient source suspected.	3	3	6	Moderate
6D-SB02	METAL	Chromium	820	mg/kg	500	5	45	11	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Chromium	730	mg/kg	500	11	45	11	4	Yes	No	06D-SB02		0	0	0	Negligible
	METAL	Hexavalent Chromium	430	mg/kg	21	5	45	11	4	Yes	?	06D-SB02	Grab groundwater sample not analyzed for Hexavalent Chromium.	0	3	3	Low
	METAL	Hexavalent Chromium	630	mg/kg	21	11	45	11	4	Yes	?	06D-SB02		0	3	3	Low

Table 8.3-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Administration Area West
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Conc.	Units	PGW SSL	Sample Depth (ft bgs)	Depth to FWBZ Groundwater (ft)	Depth of Deepest Detection (ft)	Number of NDs[1] below deepest detection	Delineated above water table?	Groundwater Impacted?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
6D-SB05	METAL	Cadmium	15	mg/kg	1.2	1.5	46	1.5	2	Yes	?	NA		0	3	3	Low
	METAL	Lead	80	mg/kg	23	1.5	46	1.5	2	Yes	?	NA		0	3	3	Low
6D-SB06	METAL	Cadmium	3.3	mg/kg	1.2	1	45	1	2	Yes	No	06D-SB02		0	0	0	Negligible[2]
	METAL	Lead	26	mg/kg	23	1	45	1	2	Yes	No	06D-SB02		0	0	0	Negligible[2]
8D-SB02	PCB	Aroclor 1254	270	µg/kg	34	0.5	35	5	3	Yes	?	NA	Well 3523 was not analyzed for PCBs. Boring 08D-HP01 was analyzed for VOCs only.	0	3	3	Low
	SVOC	Benzo(a)pyrene	20	µg/kg	2.9	0.5	35	5	0	No	No	3523		3	1	4	Low
	SVOC	Benzo(a)pyrene	8.5	µg/kg	2.9	5	35	5	0	No	No	3523		3	1	4	Low
	SVOC	Benzo(b&k)fluoranthene	31	µg/kg	29	0.5	35	5	0	No	No	3523		3	1	4	Low
8D-SB03	PERCHLORATE	Perchlorate	99	µg/kg	60	0.5	35	0.5	2	Yes	Yes*	3523	Upgradient source suspected.	0	3	3	Low
8D-SB06	PERCHLORATE	Perchlorate	78	µg/kg	60	1	34	1	2	Yes	Yes*	3523	Upgradient source suspected.	0	3	3	Low
9D-SNS05	METAL	Cadmium	2.5	mg/kg	1.2	0.5	37	2.5	0	No	?	NA	Downgradient wells 3398 and 3703 were not sampled.	3	3	6	Low[2]
	METAL	Cadmium	1.7	mg/kg	1.2	2.5	37	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Lead	24	mg/kg	23	0.5	37	0.5	1	Yes	?	NA		1	3	4	Low[2]
12D-SNS08	METAL	Cadmium	1.7	mg/kg	1.2	2.5	34	2.5	0	No	?	NA		3	3	6	Low[2]
52D-SNS01	METAL	Cadmium	2	mg/kg	1.2	0.5	47	0.5	1	Yes	?	NA	52D-HP01 was not analyzed for metals.	1	3	4	Low[2]
	METAL	Lead	130	mg/kg	23	0.5	47	0.5	1	Yes	?	NA		1	3	4	Low
52D-SNS02	METAL	Cadmium	3.6	mg/kg	1.2	0.5	45	0.5	1	Yes	No	3684		1	0	1	Negligible[2]
	METAL	Lead	36	mg/kg	23	0.5	45	0.5	1	Yes	Yes*	3684	0.26J µg/L Pb at Well 3684 (the Pb PHG is 2 µg/L).	1	1	2	Negligible[2]
52D-SNS03	TPH	TPH-D	130	mg/kg	100	0.5	47	0.5	1	Yes	Yes	3684	Possibly from upgradient	1	3	4	Low
52D-SB07	SVOC	Benzo(a)anthracene	330	µg/kg	29	5	45	5	3	Yes	?	NA	Well 3688 is downgradient, but was not analyzed.	0	3	3	Low
	SVOC	Benzo(a)pyrene	340	µg/kg	2.9	5	45	5	3	Yes	?	NA		0	3	3	Low
	SVOC	Benzo(b&k)fluoranthene	450	µg/kg	29	5	45	5	3	Yes	?	NA		0	3	3	Low
	SVOC	Indeno(1,2,3-cd)pyrene	59	µg/kg	29	5	45	5	3	Yes	?	NA		0	3	3	Low
	TPH	TPH-D	220	mg/kg	100	5	45	35	0	No	Yes*	52D-HP04	The impact to groundwater may be from upgradient.	5	3	8	High
	TPH	TPH-Mo	530	mg/kg	500	5	45	23.5	1	Yes	Yes*	52D-HP04	The impact to groundwater may be from upgradient.	3	3	6	Moderate
52D-SB10	METAL	Chromium	550	mg/kg	500	11	45	11	3	Yes	Yes*	3684	5.4 µg/L Cr at Well 3684 (CA MCL = 50 µg/L).	0	1	1	Negligible
	METAL	Hexavalent Chromium	720	mg/kg	21	11	45	11	3	Yes	No	3684		0	0	0	Negligible
52D-SB11	METAL	Lead	37	mg/kg	23	1	47	1	2	Yes	?	NA	52D-HP01 was not analyzed for metals.	0	3	3	Low[2]
052D-SB18	PCB	Aroclor 1260	120	µg/kg	34	16	40	26	2	Yes	Yes	52D-SB18		3	6	9	High
	PCB	Aroclor 1260	800	µg/kg	34	21	40	26	2	Yes	Yes	52D-SB18		3	6	9	High
	PCB	Aroclor 1260	180	µg/kg	34	26	40	26	2	Yes	Yes	52D-SB18		3	6	9	High
D(b)-SD01	PCB	Aroclor 1260	170	µg/kg	34	0	40	0	0	No	Yes	52D-SB18	Collected from a lined culvert.	3	6	9	Negligible
	SVOC	Benzo(a)pyrene	21	µg/kg	2.9	0	40	0	0	No	?	NA	Collected from a lined culvert.	3	3	6	Negligible
	SVOC	Benzo(b&k)fluoranthene	75	µg/kg	29	0	40	0	0	No	?	NA	Collected from a lined culvert.	3	3	6	Negligible
	METAL	Cadmium	9.3	mg/kg	1.2	0	40	0	0	No	?	NA	Collected from a lined culvert.	3	3	6	Negligible
	METAL	Lead	29	mg/kg	23	0	40	0	0	No	?	NA	Collected from a lined culvert.	3	3	6	Negligible
D(b)-SB03	TPH	TPH-D	240	mg/kg	100	1	40	1	0	No	Yes	52D-SB18		3	6	9	High
	TPH	TPH-Mo	730	mg/kg	500	1	40	1	0	No	Yes	52D-SB18		3	6	9	High
D(b)-SB04	SVOC	Benzo(a)pyrene	59	µg/kg	2.9	1	40	5	3	Yes	No	D(b)-SB04	Collected from a lined culvert.	0	0	0	Negligible
	SVOC	Benzo(a)pyrene	7.2	µg/kg	2.9	5	40	5	3	Yes	No	D(b)-SB04	Collected from a lined culvert.	0	0	0	Negligible
	SVOC	Benzo(b&k)fluoranthene	120	µg/kg	29	1	40	5	3	Yes	No	D(b)-SB04	Collected from a lined culvert.	0	0	0	Negligible
	SVOC	Benzo(a)anthracene	49	µg/kg	29	1	40	5	3	Yes	No	D(b)-SB04	Collected from a lined culvert.	0	0	0	Negligible
D(c)-SB05	SVOC	Benzo(a)anthracene	77	µg/kg	29	1	33	1	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(a)pyrene	100	µg/kg	2.9	1	33	1	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	200	µg/kg	29	1	33	1	1	Yes	?	NA		1	3	4	Low
	SVOC	Dibenz(a,h)anthracene	18	µg/kg	2.9	1	33	1	1	Yes	?	NA		1	3	4	Low
	SVOC	Indeno(1,2,3-cd)pyrene	59	µg/kg	29	1	33	1	1	Yes	?	NA		1	3	4	Low
D(d)-SD01	METAL	Lead	120	mg/kg	23	0.25	36	0.25	0	No	No	3399	Collected from a drop inlet.	3	1	4	Negligible
	TPH	TPH-D	130	mg/kg	100	0.25	36	0.25	0	No	No	3399	Collected from a drop inlet.	3	1	4	Negligible

Key:
(1) Nondetects or metals within range of background.
(2) Outside range of statistical background, but suspected to be naturally occurring.
? = Wells or borings with compound concentration data were not available.
bgs = Below ground surface
CA MCL = California maximum contamination level
ft = Feet
FWBZ = First water-bearing zone
GW = Groundwater
µg/kg = Micrograms per kilogram
µg/L = Micrograms per liter
mg/kg = Milligrams per kilogram
NA = Not applicable
PCB = Polychlorinated biphenyl
PGW = Protection of groundwater
PHG = Public health goal
SSL = Soil screening level
SVOC = Semivolatile organic compound
TPH = Total petroleum hydrocarbons
TPH-D = Total petroleum hydrocarbons as diesel
TPH-Mo = Total petroleum hydrocarbons as motor oil
VOC = Volatile organic compound
* = See comments column.

Table 8.3-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Administration Area West
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Concentration ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Conc. ($\mu g/L$)	SV GW Equilibrium Conc. ($\mu g/m^3$)	Is SV - GWeq > PGW SSL?	Do GW Contours indicate a potential source?	Risk Level
52D-SP24	10	PCE	57	130	30	5.3	689	FALSE	No	Low
52D-SP24	10	TCE	527	1,800	30	170	21037.5	FALSE	No	Low
52D-SP25	30	PCE	57	98	30	5	650	FALSE	No	Low
52D-SP25	10	TCE	527	1,200	30	170	21037.5	FALSE	No	Low
52D-SP25	20	TCE	527	960	30	170	21037.5	FALSE	No	Low
52D-SP25	30	TCE	527	1,800	30	170	21037.5	FALSE	No	Low
52D-SP26	10	PCE	57	79	30	5.3	689	FALSE	No	Low
52D-SP26	10	TCE	527	1,100	30	170	21037.5	FALSE	No	Low
52D-SP29	10	Benzene	35	81	30	0	0	TRUE	No	Low
52D-SP29	10	PCE	57	65	30	5	650	FALSE	No	Low
52D-SP29	10	TCE	527	2,600	30	170	21037.5	FALSE	No	Low
52D-SP29	20	TCE	527	620	30	170	21037.5	FALSE	No	Low
52D-SP30	20	TCE	527	1,200	30	170	21037.5	FALSE	No	Low
52D-SP32	10	PCE	57	98	30	1	130	FALSE	No	Low
52D-SP32	10	TCE	527	780	30	50	6187.5	FALSE	No	Low
52D-SP33	10	PCE	57	92	30	1	130	FALSE	No	Low
52D-SP34	10	PCE	57	59	30	0	0	TRUE	No	Low
52D-SP35	10	PCE	57	97	30	1.2	156	FALSE	No	Low
52D-SP35	20	PCE	57	110	30	1.2	156	FALSE	No	Low
52D-SP35	30	PCE	57	220	30	1.2	156	TRUE	No	Moderate
52D-SP36	10	PCE	57	76	30	0.5	65	FALSE	No	Low
52D-SP36	20	PCE	57	99	30	0.5	65	FALSE	No	Low
52D-SP36	30	PCE	57	60	30	0.5	65	FALSE	No	Low
52D-SP38	10	PCE	57	61	30	0	0	TRUE	No	Low
52D-SP41	10	PCE	57	87	30	0	0	TRUE	No	Low
52D-SP42	10	PCE	57	68	30	0.5	65	FALSE	No	Low
52D-SP42	30	PCE	57	590	30	0.5	65	TRUE	No	Moderate
52D-SP42	30	TCE	527	8,300	30	3.8	470.25	TRUE	No	Moderate
52D-SP43	10	PCE	57	120	30	0	0	TRUE	No	Low
52D-SP43	20	PCE	57	99	30	0	0	TRUE	No	Low
52D-SP44	30	Benzene	35	68	30	0	0	TRUE	No	Low
52D-SP44	44	Benzene	35	62	30	0	0	TRUE	No	Low
8D-SP07	20	Benzene	35	39	30	0	0	TRUE	No	Low
8D-SP08	10	Benzene	35	66	30	0	0	TRUE	No	Low
8D-SP08	10	PCE	57	71	30	0.5	65	FALSE	No	Low
AW-8D-SP10	10	Benzene	35	57	30	0	0	TRUE	No	Low
AW-8D-SP10	20	Benzene	35	46	30	0	0	TRUE	No	Low
D(b)-SP03	10	PCE	57	130	30	0	0	TRUE	No	Low
D(b)-SP03	10	TCE	527	1100	30	5	618.75	FALSE	No	Low
D(b)-SP04	10	PCE	57	120	30	0	0	TRUE	No	Low
D(b)-SP06	10	PCE	57	68	30	0	0	TRUE	No	Low
D(b)-SP06	20	PCE	57	200	30	0	0	TRUE	No	Low
D(c)-SP05	10	Benzene	35	49	30	0	0	TRUE	No	Low
D(c)-SP05	30	TCE	527	1300	30	2	247.5	TRUE	No	Moderate
D(c)-SP06	10	TCE	527	690	30	2	247.5	FALSE	No	Low
D(c)-SP11	10	Benzene	35	35	30	0	0	FALSE	No	Low
D(c)-SP12	10	PCE	57	69	30	0	0	TRUE	No	Low
D(c)-SP12	20	PCE	57	100	30	0	0	TRUE	No	Low

Key:

PGW SSL = Protection of groundwater soil vapor screening level
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
ft bgs = Feet below ground surface
GW = Groundwater
derived from the groundwater.
SV - GWeq = Measured soil vapor concentration minus the SV GW equilibrium concentration.

PCE = Tetrachloroethene
TCE = Trichloroethene
VOC = Volatile organic compound

Table 8.4-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Line 02, Line 05, Westlakes, and Buffalo Creek
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND[1] below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
LINE 02																	
28E-SB01	METAL	Manganese	1,300	mg/kg	1,100	35	50	47	0	No	?	NA	Did not exceed PGW SSL in the upper 23 of soil; only the deeper soils.	5	3	8	Low[2]
	METAL	Manganese	1,500	mg/kg	1,100	47	50	47	0	No	?	NA	None of the grab samples collected in this area (e.g., 28E-SB04) were analyzed for metals; nor was well 3692.	5	3	8	Low[2]
	METAL	Nickel	130	mg/kg	120	11.5	50	11.5	4	Yes	?	NA		0	3	3	Low[2]
	PERCHLORATE	Perchlorate	510	µg/kg	60	23	50	47	0	No	Yes*	28E-SB07	Perchlorate was detected at comparable concentrations upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	1,700	µg/kg	60	35	50	47	0	No	Yes*	28E-SB08	Detected at comparable concentrations upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	610	µg/kg	60	47	50	47	0	No	Yes*	28E-SB09		5	3	8	High
	METAL	Thallium	3.2	mg/kg	2.5	11.5	50	47	0	No	?	NA		5	3	8	Low[2]
	METAL	Thallium	2.8	mg/kg	2.5	47	50	47	0	No	?	NA		5	3	8	Low[2]
28E-SB02	METAL	Aluminum	53,000	mg/kg	43,000	35	50	35	1	Yes	?	NA	None of the grab samples collected in this area (e.g., 28E-SB04) were analyzed for metals; nor were wells 688 or 3692.	3	3	6	Low[2]
	METAL	Manganese	1,800	mg/kg	1,100	35	50	35	1	Yes	?	NA	Not detected above PGW SSL in upper 23 ft of soil (i.e., only in the 35 ft sample).	3	3	6	Low[2]
	METAL	Manganese	1,500	mg/kg	1,100	59	50	35	1	Yes	?	NA		3	3	6	Low[2]
		NDMA	1.3	µg/kg	0.03	35	50	35	1	Yes*	?	NA	Not detected above PGW SSL in upper 23 ft of soil (i.e., only in the 35 ft sample).	3	3	6	Moderate
	PERCHLORATE	Perchlorate	1,400	µg/kg	60	11	50	47	0	No	Yes*	28E-SB07	Detected at comparable concentrations upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	3,700	µg/kg	60	23	50	47	0	No	Yes*	28E-SB07		5	3	8	High
	PERCHLORATE	Perchlorate	2,100	µg/kg	60	35	50	47	0	No	Yes*	28E-SB07		5	3	8	High
	PERCHLORATE	Perchlorate	170	µg/kg	60	47	50	47	0	No	Yes*	28E-SB07		5	3	8	High
	METAL	Thallium	5.1[2]	mg/kg	2.5	35	50	35	1	Yes	?	NA	Not detected above PGW SSL in upper 23 ft of soil (i.e., only in the 35 ft sample).	3	3	6	Low[2]
28E-SB03	PERCHLORATE	Perchlorate	69	µg/kg	60	11	50	11	0	No	Yes*	28E-SB06	Detected at comparable concentrations upgradient.	3	3	6	Moderate
	PERCHLORATE	Perchlorate	83	µg/kg	60	20	50	46	0	No	Yes*	28E-SB04	Detected at comparable concentrations upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	81	µg/kg	60	30	50	46	0	No	Yes*	28E-SB04		5	3	8	High
	PERCHLORATE	Perchlorate	94	µg/kg	60	40	50	46	0	No	Yes*	28E-SB04		5	3	8	High
	PERCHLORATE	Perchlorate	340	µg/kg	60	46	50	46	0	No	Yes*	28E-SB04		5	3	8	High
28E-SB05	PERCHLORATE	Perchlorate	670	µg/kg	60	1	50	50	0	No	Yes*	28E-SB05	Detected at comparable concentrations upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	69	µg/kg	60	10	50	50	0	No	Yes*	28E-SB05		5	3	8	High
	PERCHLORATE	Perchlorate	500	µg/kg	60	20	50	50	0	No	Yes*	28E-SB05		5	3	8	High
	PERCHLORATE	Perchlorate	220	µg/kg	60	30	50	50	0	No	Yes*	28E-SB05		5	3	8	High
	PERCHLORATE	Perchlorate	480	µg/kg	60	40	50	50	0	No	Yes*	28E-SB05		5	3	8	High
	PERCHLORATE	Perchlorate	1,100	µg/kg	60	50	50	50	0	No	Yes*	28E-SB05		5	3	8	High
28E-SB06	PERCHLORATE	Perchlorate	110	µg/kg	60	1	50	50	0	No	Yes*	28E-SB06	Detected at comparable concentrations upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	5,100	µg/kg	60	5	50	50	0	No	Yes*	28E-SB06		5	3	8	High
	PERCHLORATE	Perchlorate	4,300	µg/kg	60	10	50	50	0	No	Yes*	28E-SB06		5	3	8	High
	PERCHLORATE	Perchlorate	480	µg/kg	60	20	50	50	0	No	Yes*	28E-SB06		5	3	8	High
	PERCHLORATE	Perchlorate	270	µg/kg	60	30	50	50	0	No	Yes*	28E-SB06		5	3	8	High
	PERCHLORATE	Perchlorate	630	µg/kg	60	40	50	50	0	No	Yes*	28E-SB06		5	3	8	High
	PERCHLORATE	Perchlorate	1,600	µg/kg	60	50	50	50	0	No	Yes*	28E-SB06		5	3	8	High
28E-SB07	PERCHLORATE	Perchlorate	380	µg/kg	60	20	50	50	0	No	Yes*	28E-SB07	Detected at comparable concentrations upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	3,400	µg/kg	60	30	50	50	0	No	Yes*	28E-SB07		5	3	8	High
	PERCHLORATE	Perchlorate	10,000	µg/kg	60	40	50	50	0	No	Yes*	28E-SB07		5	3	8	High
	PERCHLORATE	Perchlorate	140	µg/kg	60	50	50	50	0	No	Yes*	28E-SB07		5	3	8	High
29E-SD01	METAL	Cadmium	1.6	mg/kg	1.2	0.25	44	0.25	0	No	?	NA		3	3	6	Low[2]
	METAL	Lead	37.9	mg/kg	23	0.25	44	0.25	0	No	?	NA		3	3	6	Low[2]
29E-SB03	METAL	Aluminum	50,000	mg/kg	43,000	23	48	23	1	Yes	No	29E-SB03	Al in 23 ft soil sample only.	2	0	2	Negligible[2]

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND[1] below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
	METAL	Thallium	2.7[2]	mg/kg	2.5	45	48	45	0	No	No	29E-SB03	In 45 ft soil sample only; not above.	5	0	5	Low[2]
29E-SB05	SVOC	Benzo(b&k)fluoranthene	31	µg/kg	29	2	48	2	0	No	?	NA		3	3	6	Moderate
	METAL	Cadmium	1.2	mg/kg	0.72	2	48	6	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Cadmium	1.2	mg/kg	0.72	6	48	6	1	Yes	?	NA		1	3	4	Low[2]
	SVOC	Indeno(1,2,3-cd)pyrene	33	µg/kg	29	2	48	2	0	No	?	NA		3	3	6	Moderate
29E-SB09	METAL	Aluminum	47,000	mg/kg	43,000	1	48	5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Aluminum	45,000	mg/kg	43,000	5	48	5	1	Yes	?	NA		1	3	4	Low[2]
29E-SB10	METAL	Cadmium	1.2	mg/kg	0.72	1	46	1	0	No	?	NA		3	3	6	Low[2]
59E-SD01	PCB	Aroclor 1254	73	µg/kg	34	0.25	45	0.25	2	Yes	?	NA	Nearby Well 3697 not analyzed for PCBs.	0	3	3	Low
59E-SD02	PCB	Aroclor 1254	91	µg/kg	34	1.5	50	0.25	1	Yes	?	NA		1	3	4	Low
	METAL	Lead	25	mg/kg	23	0.25	50	0.25	1	Yes	?	NA		1	3	4	Low[2]
59E-SD03	PCB	Aroclor 1254	210	µg/kg	34	0.25	47	0.25	0	No	?	NA		3	3	6	Moderate
	METAL	Lead	45.5	mg/kg	23	0.25	47	0.25	0	No	?	NA		3	3	6	Low[2]
59E-SD04	PCB	Aroclor 1254	200	µg/kg	34	0.25	50	0.25	0	No	?	NA		3	3	6	Moderate
59E-SB02	METAL	Aluminum	48,000	mg/kg	43,000	10.5	44	10.5	2	Yes	?	NA		0	3	3	Low[2]
	METAL	Manganese	1,400	mg/kg	1,100	35	44	35	0	No	?	NA	In 35 ft sample only.	5	3	8	Low[2]
	NDMA	NDMA	0.21	µg/kg	0.03	23	44	23	1	Yes	?	NA		3	3	6	Moderate
	PERCHLORATE	Perchlorate	85	µg/kg	60	35	44	35	0	No	?	NA		5	3	8	High
59E-SB03	METAL	Aluminum	79,000	mg/kg	43,000	11	47	11	0	No	?	NA		3	3	6	Low[2]
	METAL	Nickel	130	mg/kg	120	11	47	11	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	3.4[2]	mg/kg	2.5	11	47	2.5	2	Yes	?	NA		0	3	3	Low[2]
59E-SB04	METAL	Aluminum	48,000	mg/kg	43,000	2.5	50	2.5	2	Yes	?	NA		0	3	3	Low[2]
	METAL	Manganese	1,500	mg/kg	1,100	2.5	50	2.5	2	Yes	?	NA		0	3	3	Low[2]
	METAL	Nickel	210	mg/kg	120	11	50	11	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	2.8[2]	mg/kg	2.5	11	50	11	0	No	?	NA		3	3	6	Low[2]
59E-SB05	METAL	Lead	57	mg/kg	23	1	47	1	0	No	?	NA		3	3	6	Low[2]
DSA-SB01	METAL	Aluminum	65,000	mg/kg	43,000	20	46	33	1	Yes	No	DSA-SB01		3	0	3	Low[2]
	METAL	Aluminum	51,000	mg/kg	43,000	33	46	33	1	Yes	No	DSA-SB01		3	0	3	Low[2]
	METAL	Manganese	1,300	mg/kg	1,100	20	46	43	0	No	Yes	DSA-SB01	670 µg/L Mn.	5	6	11	Low[2]
	METAL	Manganese	2,100	mg/kg	1,100	33	46	43	0	No	Yes	DSA-SB01	670 µg/L Mn.	5	6	11	Low[2]
	METAL	Manganese	5,000	mg/kg	1,100	43	46	43	0	No	Yes	DSA-SB01	670 µg/L Mn.	5	6	11	Low[2]
	PERCHLORATE	Perchlorate	800	µg/kg	60	20	46	43	0	No	Yes	DSA-SB01		5	6	11	High
	PERCHLORATE	Perchlorate	620	µg/kg	60	33	46	43	0	No	Yes	DSA-SB01		5	6	11	High
	PERCHLORATE	Perchlorate	650	µg/kg	60	43	46	43	0	No	Yes	DSA-SB01		5	6	11	High
DSA-SB04	METAL	Thallium	3[2]	mg/kg	2.5	5	45	11	0	No	?	NA	DSA-SP04 was analyzed for VOCs only.	3	3	6	Low[2]
E(d)-SNS01	SVOC	Benzo(a)pyrene	36	µg/kg	2.9	0.5	45	0.5	1	Yes	No	E(e)-SB02		1	1	2	Negligible
	SVOC	Benzo(b&k)fluoranthene	88	µg/kg	29	0.5	45	0.5	1	Yes	No	E(e)-SB02		1	1	2	Negligible
	SVOC	Indeno(1,2,3-cd)pyrene	31	µg/kg	29	0.5	45	0.5	1	Yes	No	E(e)-SB02		1	1	2	Negligible
E(d)-SNS03	PERCHLORATE	Perchlorate	210	µg/kg	60	0.5	45	40	0	No	Yes*	E(d)-SNS03	Comparable detections upgradient.	5	3	8	High
	PERCHLORATE	Perchlorate	160	µg/kg	60	2.5	45	40	0	No	Yes*	E(d)-SNS03		5	3	8	High
	PERCHLORATE	Perchlorate	68	µg/kg	60	10	45	40	0	No	Yes*	E(d)-SNS03		5	3	8	High
	PERCHLORATE	Perchlorate	500	µg/kg	60	20	45	40	0	No	Yes*	E(d)-SNS03		5	3	8	High
	PERCHLORATE	Perchlorate	1,000	µg/kg	60	30	45	40	0	No	Yes*	E(d)-SNS03		5	3	8	High
	PERCHLORATE	Perchlorate	330	µg/kg	60	40	45	40	0	No	Yes*	E(d)-SNS03		5	3	8	High
	TPH	TPH-D	250	mg/kg	100	0.5	45	2.5	0	No	?	NA		3	3	6	Moderate
	TPH	TPH-D	280	mg/kg	100	2.5	45	2.5	0	No	?	NA		3	3	6	Moderate
	TPH	TPH-Mo	760	mg/kg	500	0.5	45	2.5	0	No	?	NA		3	3	6	Moderate
	TPH	TPH-Mo	710	mg/kg	500	2.5	45	2.5	0	No	?	NA		3	3	6	Moderate
E(e)-SB02	METAL	Aluminum	51,000	mg/kg	43,000	22	45	22	1	Yes	Yes	E(e)-SB02	1,700 µg/L Al in grab sample E(e)-SB02 (PHG for Al is 600 µg/L).	3	6	9	Low[2]
	METAL	Manganese	4,900	mg/kg	1,100	22	45	44	0	No	Yes	E(e)-SB02	240 µg/L Mn.	5	6	11	Low[2]
	METAL	Manganese	1,300	mg/kg	1,100	42	45	44	0	No	Yes	E(e)-SB02	240 µg/L Mn.	5	6	11	Low[2]
	METAL	Thallium	4.6[2]	mg/kg	2.5	11	45	42	0	No	No	E(e)-SB02		5	0	5	Low[2]
	METAL	Thallium	5.1[2]	mg/kg	2.5	22	45	42	0	No	No	E(e)-SB02		5	0	5	Low[2]
	METAL	Thallium	4.2[2]	mg/kg	2.5	42	45	42	0	No	No	E(e)-SB02		5	0	5	Low[2]
	PERCHLORATE	Perchlorate	290	µg/kg	60	11	45	42	0	No	Yes	E(e)-SB02		5	6	11	High

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND[1] below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
	PERCHLORATE	Perchlorate	420	µg/kg	60	22	45	42	0	No	Yes	E(e)-SB02		5	6	11	High
	PERCHLORATE	Perchlorate	170	µg/kg	60	42	45	42	0	No	Yes	E(e)-SB02		5	6	11	High
E(e)-SB03	PERCHLORATE	Perchlorate	140	µg/kg	60	1	45	50	0	No	Yes	E(e)-SB03		5	6	11	High
	PERCHLORATE	Perchlorate	140	µg/kg	60	5	45	50	0	No	Yes	E(e)-SB03		5	6	11	High
	PERCHLORATE	Perchlorate	1,700	µg/kg	60	20	45	50	0	No	Yes	E(e)-SB03		5	6	11	High
	PERCHLORATE	Perchlorate	770	µg/kg	60	30	45	50	0	No	Yes	E(e)-SB03		5	6	11	High
	PERCHLORATE	Perchlorate	870	µg/kg	60	40	45	50	0	No	Yes	E(e)-SB03		5	6	11	High
	PERCHLORATE	Perchlorate	120	µg/kg	60	50	45	50	0	No	Yes	E(e)-SB03		5	6	11	High
E(e)-SNS01	PERCHLORATE	Perchlorate	140	µg/kg	60	0.5	43	2.5	0	No	Yes	E(e)-SB02		4	6	10	High
	PERCHLORATE	Perchlorate	74	µg/kg	60	2.5	43	2.5	0	No	Yes	E(e)-SB02		4	6	10	High
	TPH	TPH-D	110	mg/kg	100	0.5	43	2.5	0	No	?	NA	E(e)-SB02 not analyzed for TPH.	3	3	6	Moderate
E(n)-SD01	METAL	Cadmium	0.74	mg/kg	0.72	0.25	43	1.5	1	Yes	?	NA	E(n)-SP05 not analyzed for metals.	1	3	4	Low[2]
	METAL	Cadmium	0.79	mg/kg	0.72	1.5	43	1.5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Manganese	1,700	mg/kg	1,100	1.5	43	1.5	1	Yes	?	NA		1	3	4	Low[2]
E(n)-SNS01	METAL	Cadmium	3.3	mg/kg	0.72	0.5	45	0.5	1	Yes	No	29E-SB03		1	1	2	Negligible[2]
E(n)-SNS03	PERCHLORATE	Perchlorate	550	µg/kg	60	0.5	41	2.5	0	No	Yes	E(e)-SB02	Perchlorate may be from upgradient	3	3	6	Moderate
	PERCHLORATE	Perchlorate	250	µg/kg	60	2.5	41	2.5	0	No	Yes			3	3	6	Moderate
E(n)-SB01	METAL	Cadmium	0.85	mg/kg	0.72	1	43	1	2	Yes	?	NA	E(n)-SP05 not analyzed for metals.	0	3	3	Low[2]
	METAL	Thallium	2.9[2]	mg/kg	2.5	1	43	1	2	Yes	?	NA		0	3	3	Low[2]
E(n)-SB03	METAL	Thallium	3.1[2]	mg/kg	2.5	43	44	43	0	No	?	NA	Only in the 43 ft sample. Not in shallower samples.	5	3	8	Low[2]
L2-ST24-SB01	METAL	Aluminum	45,000	mg/kg	43,000	11.5	45	11.5	0	No	No	L2-ST26-SB01		3	0	3	Low[2]
	METAL	Manganese	1,200	mg/kg	1,100	2	45	2	2	Yes	Yes	L2-ST26-SB01	130 µg/L Mn (NSDWR for Mn = 50 µg/L).	0	6	6	Low[2]
	TPH	TPH-D	370	mg/kg	100	2	45	11.5	0	No	?	NA		3	3	6	Moderate
	TPH	TPH-Mo	1,200	mg/kg	500	2	45	11.5	0	No	?	NA		3	3	6	Moderate
L2-ST26-SNS02	SVOC	Benzo(a)pyrene	55	µg/kg	2.9	0.5	46	0.5	1	Yes	?	NA		1	3	4	Low
L2-ST26-SB01	SVOC	Benzo(a)anthracene	410	µg/kg	29	2	45	2	4	Yes	No	L2-ST26-SB01		0	0	0	Negligible
	SVOC	Benzo(a)pyrene	320	µg/kg	2.9	2	45	2	4	Yes	No	L2-ST26-SB01		0	0	0	Negligible
	SVOC	Benzo(b&k)fluoranthene	740	µg/kg	29	2	45	2	4	Yes	No	L2-ST26-SB01		0	0	0	Negligible
	SVOC	Dibenz(a,h)anthracene	31	µg/kg	2.9	2	45	2	4	Yes	No	L2-ST26-SB01		0	0	0	Negligible
	SVOC	Indeno(1,2,3-cd)pyrene	85	µg/kg	29	2	45	2	4	Yes	No	L2-ST26-SB01		0	0	0	Negligible
L2-ST26-SB04	METAL	Thallium	2.8[2]	mg/kg	2.5	1	45	1	2	Yes	?	NA		0	3	3	Low[2]
L2-ST28-90-SB01	PERCHLORATE	Perchlorate	140	µg/kg	60	4.5	45	4.5	0	No	Yes	DSA-SB01		3	4	7	High
	PERCHLORATE	Perchlorate	75	µg/kg	60	2.5	45	4.5	0	No	Yes	DSA-SB01		3	4	7	High
LINE 05 NORTH																	
52E-SNS01	SVOC	Benzo(a)anthracene	88	µg/kg	29	0.5	65	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	130	µg/kg	2.9	0.5	65	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(b&k)fluoranthene	350	µg/kg	29	0.5	65	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Dibenz(a,h)anthracene	14	µg/kg	2.9	0.5	65	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Indeno(1,2,3-cd)pyrene	57	µg/kg	29	0.5	65	0.5	0	No	?	NA		3	3	6	Moderate
	METAL	Cadmium	4.8	mg/kg	1.2	0.5	65	0.5	2	Yes	?	NA		0	3	3	Low[2]
	METAL	Lead	170	mg/kg	23	0.5	65	0.5	2	Yes	?	NA		0	3	3	Low
	TPH	TPH-D	180	mg/kg	100	0.5	65	5	1	Yes	?	NA		1	3	4	Low
	TPH	TPH-Mo	550	mg/kg	500	0.5	65	11	0	No	?	NA		3	3	6	Moderate
52E-SB04	SVOC	Benzo(b&k)fluoranthene	180	µg/kg	29	1	69	1	0	No	No	51E-SB04		3	0	3	Low
52E-SB05	METAL	Cadmium	1.8	mg/kg	1.2	1.5	70	1.5	1	Yes	Yes	51E-SB04	0.059J µg/L Cd (PHG for Cd is 0.04 µg/L).	1	6	7	Low[2]
	METAL	Lead	52	mg/kg	23	1.5	70	1.5	1	Yes	Yes*	51E-SB04	0.12J µg/L Pb (PHG for Pb is 2 µg/L).	1	1	2	Negligible[2]
	PERCHLORATE	Perchlorate	260	µg/kg	60	1.5	70	5	1	Yes	Yes*	51E-SB04	Higher concentrations upgradient.	1	3	4	Low
	TPH	TPH-D	2,200	mg/kg	100	1.5	70	5	1	Yes	?	NA	Boring 51E-SB04 not analyzed for TPH.	1	3	4	Low
	TPH	TPH-Mo	5,700	mg/kg	500	1.5	70	5	1	Yes	?	NA		1	3	4	Low
52E-SB06	TPH	TPH-D	230	mg/kg	100	1.5	70	5	0	No	?	NA	Boring 51E-SB04 not analyzed for TPH.	3	3	6	Moderate
	TPH	TPH-Mo	580	mg/kg	500	1.5	70	1.5	1	Yes	?	NA		1	3	4	Low
52E-SB07	PERCHLORATE	Perchlorate	77	µg/kg	60	1	70	1	2	Yes	Yes*	51E-SB04	Higher concentrations upgradient.	0	3	3	Low
52E-SB12	METAL	Cadmium	4	mg/kg	1.2	1	69	1	1	Yes	Yes	51E-SB04	0.059J µg/L Cd (PHG for Cd is 0.04 µg/L).	1	4	5	Low[2]
	METAL	Lead	39	mg/kg	23	1	69	1	1	Yes	Yes*	51E-SB04	0.12J µg/L Pb (PHG for Pb is 2 µg/L).	1	1	2	Negligible[2]
	PERCHLORATE	Perchlorate	65	µg/kg	60	1	69	5	0	No	Yes*	51E-SB04	Higher concentrations upgradient.	3	3	6	Moderate
52E-SB14	PERCHLORATE	Perchlorate	86	µg/kg	60	1.5	68	11.5	0	No	?	NA		4	3	7	High
	PERCHLORATE	Perchlorate	520	µg/kg	60	5	68	11.5	0	No	?	NA		4	3	7	High

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND[1] below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
	PERCHLORATE	Perchlorate	240	µg/kg	60	11.5	68	11.5	0	No	?	NA		4	3	7	High
E(l)-SB01	PERCHLORATE	Perchlorate	86	µg/kg	60	0.25	68	0.25	4	Yes	?	NA		0	3	3	Low
	TPH	TPH-D	150	mg/kg	100	0.25	68	62	0	No	?	NA		5	3	8	High
WESTLAKES																	
WL-SD04	PCB	Aroclor 1260	37 J	µg/kg	34	0.5	63	0.5	1	Yes	?	NA		1	3	4	Low
WL-SD06	PCB	Aroclor 1260	38 J	µg/kg	34	1.5	63	1.5	0	No	?	NA		3	3	6	Moderate
WL-SD07	PCB	Aroclor 1260	35 J	µg/kg	34	0.5	63	0.5	1	Yes	?	NA		1	3	4	Low
WL-SD08	SVOC	Benzo(a)pyrene	9.2	µg/kg	2.9	0.5	63	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	29	µg/kg	29	0.5	63	0.5	1	Yes	?	NA		1	3	4	Low
WL-SB01	PERCHLORATE	Perchlorate	9,000	µg/kg	60	5	73	5	1	Yes	?	NA		1	3	4	Low
BUFFALO CREEK AND WESTERN MAIN ADMINISTRATION AREA DITCH																	
BC-SD01	PCB	Aroclor 1254	740	µg/kg	34	0.25	49	0.25	0	No	?	NA		3	3	6	Moderate
	METAL	Cadmium	27.9	mg/kg	1.2	0.25	49	0.25	0	No	?	NA		3	3	6	Moderate
	METAL	Lead	72.1	mg/kg	23	0.25	49	0.25	0	No	?	NA		3	3	6	Moderate
BC-SD02	PCB	Aroclor 1254	1,100	µg/kg	34	0.25	53	0.25	0	No	?	NA	Nearby Well 3674 not analyzed for PCBs.	3	3	6	Moderate
	METAL	Lead	29.9	mg/kg	23	0.25	53	0.25	0	No	Yes*	3674	0.048J Pb detected in Well 3674 (PHG for Pb is 2 µg/L).	3	1	4	Low[2]
WL-SD02	PCB	Aroclor 1254	240	µg/kg	34	0.25	75	1.5	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	250	µg/kg	34	1.5	75	1.5	0	No	?	NA		3	3	6	Moderate
	METAL	Lead	38	mg/kg	23	0.25	75	0.25	1	Yes	?	NA		1	3	4	Low[2]
WL-SD09	PCB	Aroclor 1254	79	µg/kg	34	0.5	46	1.5	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	360	µg/kg	34	1.5	46	1.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	6.9	µg/kg	2.9	0.5	46	0.5	1	Yes	?	NA		1	3	4	Low
WL-SD11	PCB	Aroclor 1254	430	µg/kg	34	0.5	63	1.5	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	160	µg/kg	34	1.5	63	1.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(b&k)fluoranthene	110	µg/kg	29	0.5	63	1.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(b&k)fluoranthene	46	µg/kg	29	1.5	63	1.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	45	µg/kg	2.9	0.5	63	1.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	21	µg/kg	2.9	1.5	63	1.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Dibenz(a,h)anthracene	8.2	µg/kg	2.9	0.5	63	0.5	1	Yes	?	NA		1	3	4	Low
WL-SD12	PCB	Aroclor 1254	98	µg/kg	34	0.5	63	1.5	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	110	µg/kg	34	1.5	63	1.5	0	No	?	NA		3	3	6	Moderate
WL-SD13	METAL	Lead	33	mg/kg	23	0.25	70	0.25	1	Yes	?	NA		1	3	4	Low[2]
WL-SD16	METAL	Lead	25.7	mg/kg	23	0.25	78	0.25	0	No	?	NA		3	3	6	Low[2]

Key:
(1) Nondetects or metals within range of background.
(2) Outside range of statistical background, but suspected to be naturally occurring.
? = Wells or borings with compound concentration data were not available.
bgs = Below ground surface
ft = Feet
FWBZ = First water-bearing zone
GW = Groundwater
µg/kg = Micrograms per kilogram
µg/L = Micrograms per liter
mg/kg = Milligrams per kilogram
NA = Not applicable
NDMA = N-nitrosodimethylamine
NSDWR = National Secondary Drinking Water Regulations
PCB = Polychlorinated biphenyl
PGW = Protection of groundwater
PHG = Public health goal
SSL = Soil screening level
SVOC = Semivolatile organic compound
TPH = Total petroleum hydrocarbons
TPH-D = Total petroleum hydrocarbons as diesel
TPH-Mo = Total petroleum hydrocarbons as motor oil
VOC = Volatile organic compound
* = See comments column.

Table 8.4-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
WLLO Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	GW TCE Concentration ($\mu g/L$)	SV GW Equilibrium Conc. ($\mu g/m^3$)	Is SV-GWeq > PGW SSL?	Do the GW contours indicate a potential source?	Risk Level	Comments
LINE 02											
28E-SP16	10	TCE	527	10,000,000	45	1100	93060	TRUE	Yes	High	
	20	TCE	527	3,200,000	45	1100	93060	TRUE	Yes	High	
	30	TCE	527	430,000	45	1100	93060	TRUE	Yes	High	
	40	TCE	527	430,000	45	1100	93060	TRUE	Yes	High	
29E-SP07	20	TCE	527	8,900	45	70	5922	TRUE	?	Moderate	
29E-SP08	20	TCE	527	62,000	45	70	5922	TRUE	?	Moderate	
	30	TCE	527	44,000	45	70	5922	TRUE	?	Moderate	
	40	TCE	527	46,000	45	70	5922	TRUE	?	Moderate	
29E-SP09	10	TCE	527	18,000	45	33	2791.8	TRUE	?	Moderate	
	20	TCE	527	64,000	45	33	2791.8	TRUE	?	Moderate	
	30	TCE	527	23,000	45	33	2791.8	TRUE	?	Moderate	
	40	TCE	527	18,000	45	33	2791.8	TRUE	?	Moderate	
29E-SP10	20	TCE	527	780	45	70	5922	FALSE	?	Low	
29E-SP11	20	TCE	527	15,000	45	70	5922	TRUE	?	Moderate	
59E-SP09	10	TCE	527	5,900	45	500	42300	FALSE	No	Low	
DSA-SP04	10	TCE	527	2,700	45	990	83754	FALSE	Yes	Low	
	20	TCE	527	98,000	45	990	83754	TRUE	Yes	High	
	30	TCE	527	160,000	45	990	83754	TRUE	Yes	High	
	40	TCE	527	130,000	45	990	83754	TRUE	Yes	High	
DSA-SP05	10	TCE	527	6,700	45	1000	84600	FALSE	No	Low	
	20	TCE	527	4,700	45	1000	84600	FALSE	No	Low	
DSA-SP06	10	TCE	527	780	45	1100	93060	FALSE	No	Low	
DSA-SP07	10	TCE	527	2,200	45	990	83754	FALSE	No	Low	
DSA-SP08	20	TCE	527	820	45	1100	93060	FALSE	No	Low	
DSA-SP09	20	TCE	527	2,100	45	500	42300	FALSE	No	Low	
DSA-SP10	20	TCE	527	2,000	45	2.6	219.96	TRUE	No	Moderate	
	30	TCE	527	7,700	45	2.6	219.96	TRUE	No	Moderate	
	40	TCE	527	2,900	45	2.6	219.96	TRUE	No	Moderate	
DSA-SP12	20	TCE	527	540	45	65	5499	FALSE	No	Low	
DSA-SP16	10	TCE	527	840	45	57	4822.2	FALSE	No	Low	
	20	TCE	527	2,300	45	57	4822.2	FALSE	No	Low	
	30	TCE	527	1,900	45	57	4822.2	FALSE	No	Low	
	40	TCE	527	3,500	45	57	4822.2	FALSE	No	Low	

Table 8.4-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
WLLO Area
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	GW TCE Concentration ($\mu g/L$)	SV GW Equilibrium Conc. ($\mu g/m^3$)	Is SV-GWeq > PGW SSL?	Do the GW contours indicate a potential source?	Risk Level	Comments
DSA-SP17	10	TCE	527	2,400	45	1.8	152.28	TRUE	No	Moderate	
	20	TCE	527	1,300	45	1.8	152.28	TRUE	No	Moderate	
	30	TCE	527	910	45	1.8	152.28	TRUE	No	Moderate	
DSA-SP20	10	TCE	527	3,000	45	1.4	118.44	TRUE	No	Moderate	
	20	TCE	527	24,000	45	1.4	118.44	TRUE	No	Moderate	
DSA-SP23	30	TCE	527	1,200	45	50	4230	FALSE	No	Low	
DSA-SP24	30	TCE	527	1,700	45	60	5076	FALSE	No	Low	
DSA-SP27	10	TCE	527	540	45	50	4230	FALSE	No	Low	
	20	TCE	527	2,300	45	50	4230	FALSE	No	Low	
E(m)-SP10	20	TCE	527	1,100	45	50	4230	FALSE	No	Low	
E(n)-SP05	20	TCE	527	1,700	45	2.2	186.12	TRUE	No	Moderate	
	40	TCE	527	2,600	45	2.2	186.12	TRUE	No	Moderate	
L2-ST26-SP04	20	TCE	527	690	45	2.2	186.12	FALSE	No	Low	
LINE 05 NORTH											
51E-SP11	20	TCE	527	7,800	65	13	772	TRUE	Yes*	High	Impact to perched GW
52E-SP07	20	TCE	527	27,000	65	9.8	582	TRUE	Yes*	High	Impact to perched GW
52E-SP22	10	TCE	527	1,600	65	50	2971	FALSE	No	Low	

Key:
PGW SSL = Protection of groundwater soil vapor screening level
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
ft bgs = Feet below ground surface
GW = Groundwater
equilibrium with and derived from the groundwater.
SV - GWeq = Measured soil vapor concentration minus the SV GW equilibrium concentration.

TCE = Trichloroethene
VOC = Volatile organic compound

* = See comments column

Table 8.5-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Chemical Plant 2
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND[1] below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
CHEMICAL PLANT 2																	
59F-SD01	METAL	Aluminum	52,000	mg/kg	43,000	1.5	82	1.5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Lead	140	mg/kg	23	0.25	82	0.25	2	Yes	?	NA		0	3	3	Low
	PCB	Aroclor 1248	16,000 J	µg/kg	34	0.25	82	0.25	2	Yes	?	NA		0	3	3	Low
59F-SD02	METAL	Aluminum	51,000	mg/kg	43,000	0.25	85	1.5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Aluminum	64,000	mg/kg	43,000	1.5	85	1.5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Arsenic	15	mg/kg	11	1.5	85	1.5	1	Yes	?	NA		1	3	4	Low
	PCB	Aroclor 1248	540 J	µg/kg	34	0.25	85	0.25	2	Yes	?	NA		0	3	3	Low
	PCB	Aroclor 1254	320 J	µg/kg	34	1.5	85	5	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	440	µg/kg	34	5	85	5	0	No	?	NA		3	3	6	Moderate
59F-SNS01	METAL	Arsenic	17	mg/kg	11	2.5	87	2.5	0	No	?	NA	Well 7 was dry.	3	3	6	Moderate
	METAL	Cadmium	0.82	mg/kg	0.72	0.5	87	0.5	1	Yes	?	NA		1	3	4	Low[2]
	SVOC	Benzo(a)pyrene	19	µg/kg	2.9	0.5	87	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	48	µg/kg	29	0.5	87	0.5	1	Yes	?	NA		1	3	4	Low
59F-SNS02	METAL	Cadmium	0.96	mg/kg	0.72	0.5	82	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Cadmium	0.8	mg/kg	0.72	2.5	82	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	2.8	mg/kg	2.5	2.5	82	2.5	0	No	?	NA		3	3	6	Low[2]
59F-SNS03	SVOC	Benzo(a)pyrene	6.8	µg/kg	2.9	0.5	85	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Cadmium	0.83	mg/kg	0.72	2.5	85	2.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	3.2	mg/kg	2.5	2.5	85	2.5	0	No	?	NA		3	3	6	Low[2]
59F-SNS04	METAL	Thallium	3.2	mg/kg	2.5	0.5	83	0.5	5*	Yes	?	NA	From adjacent boring 59F-SB14.	0	3	3	Low[2]
59F-SB11	PERCHLORATE	Perchlorate	95	µg/kg	60	5	87	5	2	Yes	Yes*	3656	Detected upgradient at higher concentrations.	0	3	3	Low
	METAL	Thallium	3.6	mg/kg	2.5	5	87	5	2	Yes	?	3656	Well 3656 was not analyzed for metals.	0	3	3	Low[2]
59F-SB12	SVOC	Benzo(a)pyrene	14	µg/kg	2.9	1	87	1	3	Yes	?	3656	Wells 3656 and 3657 were not analyzed for SVOCs.	0	3	3	Low
	SVOC	Benzo(b&k)fluoranthene	38	µg/kg	29	1	87	1	3	Yes	?	3656	Well 98.	0	3	3	Low
	METAL	Thallium	3.2	mg/kg	2.5	1	87	5	2	Yes	?	3656	Wells 3656 and 3657 were not analyzed for metals.	0	3	3	Low[2]
	METAL	Thallium	2.9	mg/kg	2.5	5	87	5	2	Yes	?	3656		0	3	3	Low[2]
59F-SB13	METAL	Cadmium	0.84	mg/kg	0.72	5	80	5	1	Yes	?	NA		1	3	4	Low[2]
59F-SB15	SVOC	Benzo(a)pyrene	13	µg/kg	2.9	5	87	5	4	Yes	?	3656	Wells 3656 and 3657 were not analyzed for SVOCs.	0	3	3	Low
59F-SB15	SVOC	Benzo(b&k)fluoranthene	41	µg/kg	29	5	87	5	4	Yes	?	3656		0	3	3	Low
59F-SB22	PESTICIDE	4,4'-DDD	2,300 J	µg/kg	280	1	85	1	3	Yes	?	NA	Well 7 was dry.	0	3	3	Low
	PESTICIDE	4,4'-DDT	1,200 J	µg/kg	200	1	85	15.5	0	No	?	NA		3	3	6	Moderate
	METAL	Aluminum	44,000	mg/kg	43,000	1	85	1	3	Yes	?	NA		0	3	3	Low[2]
	SVOC	Benzo(a)anthracene	51	µg/kg	29	1	85	1	3	Yes	?	NA		0	3	3	Low
	SVOC	Benzo(a)pyrene	39	µg/kg	2.9	1	85	1	3	Yes	?	NA		0	3	3	Low
	SVOC	Benzo(b&k)fluoranthene	84	µg/kg	29	1	85	1	3	Yes	?	NA		0	3	3	Low
59F-SB26	PCB	Aroclor 1254	1,100	µg/kg	34	1	85	1	0	No	?	NA	Well 3656 is downgradient but not analyzed for PCBs.	3	3	6	Moderate
	SVOC	Benzo(a)anthracene	170	µg/kg	29	1	85	1	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	150 J	µg/kg	2.9	1	85	1	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(b)fluoranthene	230 J	µg/kg	29	1	85	1	0	No	?	NA		3	3	6	Moderate
	SVOC	Indeno(1,2,3-cd)pyrene	100 J	µg/kg	29	1	85	1	0	No	?	NA		3	3	6	Moderate
59F-SB27	PCB	Aroclor 1254	350	µg/kg	34	1	82	1	0	No	?	NA		3	3	6	Moderate
59F-SB28	PCB	Aroclor 1254	2,800	µg/kg	34	1	80	1	0	No	?	NA		3	3	6	Moderate
	PESTICIDE	Dieldrin	5.4	µg/kg	4.2	1	80	1	0	No	?	NA		3	3	6	Moderate
60F-SNS01	SVOC	Benzo(a)pyrene	14	µg/kg	2.9	0.5	108	0.5	0	No	No	61F-SB03		3	1	4	Low
	SVOC	Benzo(b&k)fluoranthene	58	µg/kg	29	0.5	108	0.5	0	No	No	61F-SB03		3	1	4	Low
61F-SNS01	SVOC	Benzo(a)pyrene	33 J	µg/kg	2.9	0.5	110	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(b&k)fluoranthene	130 J	µg/kg	29	0.5	110	0.5	0	No	?	NA		3	3	6	Moderate
	METAL	Cadmium	1.6	mg/kg	0.72	0.5	110	0.5	0	No	?	NA		3	3	6	Low[2]
	SVOC	Pentachlorophenol	2,800	µg/kg	400	0.5	110	0.5	0	No	?	NA		3	3	6	Moderate
61F-SNS02	METAL	Cadmium	1	mg/kg	0.72	0.5	105	0.5	0	No	?	NA	Well 3244 was dry.	3	3	6	Low[2]
61F-SB04	PESTICIDE	Heptachlor epoxide	41	µg/kg	6	1	108	1	0	No	?	NA		3	3	6	Moderate
62F-SNS01	SVOC	Benzo(a)pyrene	7	µg/kg	2.9	0.5	100	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	29	µg/kg	29	0.5	100	0.5	1	Yes	?	NA		1	3	4	Low
62F-SNS02	SVOC	Benzo(b&k)fluoranthene	39	µg/kg	29	0.5	100	0.5	0	No	?	NA		3	3	6	Moderate
62F-SB06	SVOC	Benzo(a)pyrene	7.5	µg/kg	2.9	2	100	2	2	Yes	?	NA	Well 3244 was dry.	0	3	3	Low
	PESTICIDE	Heptachlor epoxide	33	µg/kg	6	2	100	2	2	Yes	?	NA		0	3	3	Low
62F-SB07	SVOC	Benzo(a)pyrene	8.1	µg/kg	2.9	5	100	5	4	Yes	?	NA	Well 3244 was dry.	0	3	3	Low

Table 8.5-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Chemical Plant 2
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND[1] below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
62F-SB10	METAL	Arsenic	35	mg/kg	11	1	100	1	2	Yes	?	NA	Well 3244 was dry.	0	3	3	Low
F(c)-SNS01	SVOC	Benzo(a)pyrene	8	µg/kg	2.9	0.5	98	0.5	0	No	No	CP2-08-HP03		3	0	3	Low
	METAL	Cadmium	0.75	mg/kg	0.72	0.5	98	0.5	0	No	?			3	3	6	Low[2]
F(c)-SNS02	PCB	Aroclor 1254	200 J	µg/kg	34	0.5	98	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	14	µg/kg	2.9	0.5	98	0.5	0	No	No	CP2-08-HP03		3	0	3	Low
	SVOC	Benzo(b&k)fluoranthene	33	µg/kg	29	0.5	98	0.5	0	No	No	CP2-08-HP03		3	0	3	Low
F(c)-SNS03	PCB	Aroclor 1254	230	µg/kg	34	0.5	95	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(a)pyrene	12	µg/kg	2.9	0.5	95	0.5	0	No	?	NA		3	3	6	Moderate
	SVOC	Benzo(b&k)fluoranthene	30	µg/kg	29	0.5	95	0.5	0	No	?	NA		3	3	6	Moderate
F(c)-SB02	PCB	Aroclor 1254	77	µg/kg	34	1	100	1	0	No	?	CP2-08-HP03		3	3	6	Moderate
F(c)-SB04	PCB	Aroclor 1248	120,000	µg/kg	34	1	100	5	1	Yes	?	CP2-08-HP03		1	3	4	Low
CP2-07-SB02	METAL	Thallium	2.6	mg/kg	2.5	55	105	55*	1	Yes	?	3656	In the 55 ft soil sample only. Not detected at crossgradient Well 3292.	3	3	6	Low[2]
CP2-07-SB03	METAL	Thallium	2.8	mg/kg	2.5	11	105	11	0	No	?	3656	Not detected at crossgradient Well 3292.	3	3	6	Low[2]
CP2-07-SB05	METAL	Thallium	2.9	mg/kg	2.5	71	100	71	0	No	?	3656	In the 71 ft sample only. Well 3656 not analyzed for metals.	5	3	8	Low[2]
CP2-07-SB11	METAL	Thallium	2.8	mg/kg	2.5	1	103	5	1	Yes	?	3656	Not detected at crossgradient Well 3292.	1	3	4	Low[2]
	METAL	Thallium	3.1	mg/kg	2.5	5	103	5	1	Yes	?			1	3	4	Low[2]
CP2-08-SB10	PCB	Aroclor 1248	230 J	µg/kg	34	2	98	2	2	Yes	?	CP2-08-HP03		0	3	3	Low
CP2-08-SB11	METAL	Cadmium	0.79	mg/kg	0.72	80	95	80	0	No	?	CP2-08-HP03	In the 80 ft soil sample only.	5	3	8	Low[2]
CP2-08-SB12	PCB	Aroclor 1254	1,900	µg/kg	34	1	98	1	1	Yes	?			1	3	4	Low
	SVOC	Benzo(a)pyrene	11	µg/kg	2.9	1	98	1	0	No	No	CP2-08-HP03		3	0	3	Low
	METAL	Thallium	2.8	mg/kg	2.5	1	98	1	2	Yes	?			0	3	3	Low[2]
CP2-08-SB13	PCB	Aroclor 1254	68	µg/kg	34	1	98	1	4	Yes	?	CP2-08-HP03		0	3	3	Low
CP2-08-SB15	METAL	Thallium	2.8	mg/kg	2.5	11	95	11	0	No	?	NA		3	3	6	Low[2]
CP2-08-SNS01	PCB	Aroclor 1254	68	µg/kg	34	0.5	92	0.5	1	Yes	?	NA	Well 7 was dry.	1	3	4	Low
CP2-08-SNS02	PCB	Aroclor 1254	120	µg/kg	34	0.5	90	0.5	1	Yes	?	NA	Well 7 was dry.	1	3	4	Low
	SVOC	Benzo(a)pyrene	7.2	µg/kg	2.9	0.5	90	0.5	1	Yes	?	NA		1	3	4	Low
CP2-08-SNS03	PCB	Aroclor 1254	75	µg/kg	34	0.5	87	2.5	0	No	?	NA		3	3	6	Moderate
	PCB	Aroclor 1254	45	µg/kg	34	2.5	87	2.5	0	No	?	NA		3	3	6	Moderate
CP2-08-SNS04	PESTICIDE	Aldrin	7.4	µg/kg	4	0.5	85	0.5	1	Yes	?	NA	Well 7 was dry.	1	3	4	Low
	PCB	Aroclor 1254	480	µg/kg	34	0.5	85	0.5	1	Yes	?	NA		1	3	4	Low
	METAL	Cadmium	1	mg/kg	0.72	0.5	85	0.5	1	Yes	?	NA		1	3	4	Low[2]
	SVOC	Benzo(a)anthracene	120 J	µg/kg	29	0. 5	85	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(a)pyrene	94 J	µg/kg	2.9	0. 5	85	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Benzo(b&k)fluoranthene	220 J	µg/kg	29	0. 5	85	0.5	1	Yes	?	NA		1	3	4	Low
	SVOC	Dibenz(a,h)anthracene	8.4	µg/kg	2.9	0. 5	85	0.5	1	Yes	?	NA		1	3	4	Low
CP2-RE05-SB03	PESTICIDE	Heptachlor epoxide	8.2	µg/kg	6	1	110	1	0	No	No	61F-SB03		3	1	4	Low
CP2-RE05-SB04	METAL	Cadmium	1	mg/kg	0.72	11	110	11	0	No	Yes*	61F-SB03	0.37J µg/L Cd in a grab sample. Cd PHG = 0.04 µg/L.	3	4	7	Low[2]
MAGAZINE AREA / OPEN SPACE AREA 3																	
A48-RC08-SB01	METAL	Thallium	4.5	mg/kg	2.5	11.5	75	11.5	0	No	?	NA		3	3	6	Low[2]
A48-ST13-SB01	PERCHLORATE	Perchlorate	330	µg/kg	60	6	80	11.5	0	No	?	NA		3	3	6	Moderate
	PERCHLORATE	Perchlorate	64	µg/kg	60	11.5	80	11.5	0	No	?	NA		3	3	6	Moderate
DREDGE PIT AND EASTERN BASIN																	
25F-AH01	SVOC	Benzo(a)pyrene	10 J	µg/kg	2.9	1	60	1	2	Yes	?	685	Well 685 was not sampled	0	3	3	Low
25F-SB06	SVOC	Benzo(a)pyrene	14 J	µg/kg	2.9	0.5	60	5	6	Yes	?	685	Well 685 was not sampled.	0	3	3	Low
	SVOC	Benzo(a)pyrene	20	µg/kg	2.9	5	60	5	6	Yes	?	685		0	3	3	Low
	SVOC	Benzo(b&k)fluoranthene	36	µg/kg	29	0.5	60	5	6	Yes	?	685		0	3	3	Low
	SVOC	Benzo(b&k)fluoranthene	40	µg/kg	29	5	60	5	6	Yes	?	685		0	3	3	Low
25F-SB07	METAL	Mercury	34	mg/kg	5.7	1	60	11	4	Yes	?	685	Well 685 was not sampled.	0	3	3	Low
	METAL	Mercury	14	mg/kg	5.7	11	60	11	4	Yes	?	685		0	3	3	Low
	METAL	Thallium	4	mg/kg	3.3	5	60	41*	1	Yes	?	685	In 5 and 41ft samples, unusual distribution suggests it's naturally occurring.	3	3	6	Low[2]
	METAL	Thallium	3.6	mg/kg	3.3	41	60	41*	1	Yes	?	685		3	3	6	Low[2]

Table 8.5-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Chemical Plant 2
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND(1) below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
OPEN SPACE AREA 1																	
OS1-F2-SB03	PCB	Aroclor 1254	61	µg/kg	34	1	93	1	0	No	?	NA		3	3	6	Moderate
OS1-F2-SB04	PCB	Aroclor 1254	93	µg/kg	34	1	90	1	0	No	?	NA		3	3	6	Moderate
OS1-F2-SNS02	PESTICIDE	Dieldrin	8.3	µg/kg	4.2	0.5	92	0.5	1	Yes	?	NA		1	3	4	Low
	PESTICIDE	Heptachlor epoxide	28	µg/kg	6	0.5	92	2.5	0	No	?	NA		3	3	6	Moderate
OS1-F2-SNS03	SVOC	Benzo(a)pyrene	12	µg/kg	2.9	0.5	92	0.5	1	Yes	?	NA		1	3	4	Low
	PESTICIDE	Dieldrin	5.1	µg/kg	4.2	0.5	92	0.5	1	Yes	?	NA		1	3	4	Low
OS1-F3-SD01	PCB	Aroclor 1254	160	µg/kg	34	0.25	75	0.25	0	No	?	3264	Well 3264 was not sampled.	3	3	6	Moderate

Key:
(1) Nondetects or metals within range of background.
(2) Outside range of statistical background, but suspected to be naturally occurring.
? = Wells or borings with compound concentration data were not available.
bgs = Below ground surface
ft = Feet
FWBZ = First water-bearing zone
GW = Groundwater
µg/kg = Micrograms per kilogram
µg/L = Micrograms per liter
mg/kg = Milligrams per kilogram
NA = Not applicable
PCB = Polychlorinated biphenyl
PGW = Protection of groundwater
PHG = Public health goal
SSL = Soil screening level
SVOC = Semivolatile organic compound
VOC = Volatile organic compound
* = See comments column.

Table 8.6-1
Results of Protection of Groundwater Evaluation for Constituents in Soil
Area 39
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Compound Class	Compound	Concentration	Units	PGW SSL	Sample Depth (ft bgs)	Depth to groundwater (ft)	Depth of deepest detection (ft)	Number of ND[1] below deepest detection	Delineated above water table?	Detected in Groundwater?	Well or boring used to evaluate GW impact	Comments	Vertical Definition Rank	GW Impact Rank	Score	Risk Level
29B-SB06	METAL	Cadmium	0.74	mg/kg	0.72	5	85	5	1	Yes	No	Perched Well 1577		1	0	1	Negligible[2]
	METAL	Thallium	4.6	mg/kg	2.5	5	85	5	1	Yes	No			1	0	1	Negligible[2]
29B-SB07	PERCHLORATE	Perchlorate	77	µg/kg	60	4.5	77	5	0	No	Yes	Downgradient perched Well 31019	Perchlorate is detected both up- and downgradient in Perched Groundwater.	4	4	8	High
29B-SB08	METAL	Thallium	3.5	mg/kg	2.5	5	105	5	1	Yes	?	NA		1	3	4	Low[2]
29B-SB09	METAL	Cadmium	1.5	mg/kg	0.72	5	107	5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Thallium	6.3	mg/kg	2.5	5	107	5	1	Yes	?	NA		1	3	4	Low[2]
29B-SB10	METAL	Thallium	4.1	mg/kg	2.5	5	107	5	1	Yes	?	NA		1	3	4	Low[2]
29B-SB11	METAL	Thallium	3.1	mg/kg	2.5	5	107	5	1	Yes	?	NA	Perched Well 795 was not sampled.	1	3	4	Low[2]
30B-SB04	PERCHLORATE	Perchlorate	230	µg/kg	60	5	80	11	0	No	Yes	Perched Well 1578		4	6	10	High
	PERCHLORATE	Perchlorate	110	µg/kg	60	11	80	11	0	No	Yes			4	6	10	High
	PERCHLORATE	Perchlorate	491	µg/kg	60	1	80	11	0	No	Yes			4	6	10	High
	METAL	Thallium	4.6	mg/kg	2.5	1	80	11	0	No	No			3	0	3	Low[2]
	METAL	Thallium	4.5	mg/kg	2.5	5	80	11	0	No	No			3	0	3	Low[2]
	METAL	Thallium	2.9	mg/kg	2.5	11	80	11	0	No	No			3	0	3	Low[2]
30B-SB05	METAL	Cadmium	0.75	mg/kg	0.72	5	85	5	0	No	No	Perched Well 796		3	0	3	Low[2]
	METAL	Thallium	3.3	mg/kg	2.5	5	85	5	0	No	No			3	0	3	Low[2]
30B-SB06	METAL	Cadmium	0.84	mg/kg	0.72	5	67	5	1	Yes	?	NA		1	3	4	Low[2]
	METAL	Thallium	2.9	mg/kg	2.5	5	67	11	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	4.4	mg/kg	2.5	11	67	11	0	No	?	NA		3	3	6	Low[2]
30B-SB07	METAL	Thallium	3.8	mg/kg	2.5	5	85	11	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	3	mg/kg	2.5	11	85	11	0	No	?	NA		3	3	6	Low[2]
31B-SB02	METAL	Thallium	3.1	mg/kg	2.5	1.5	50	11	0	No	No	Perched Well 31019		3	0	3	Low[2]
	METAL	Thallium	2.6	mg/kg	2.5	5	50	11	0	No	No			3	0	3	Low[2]
	METAL	Thallium	3.2	mg/kg	2.5	11	50	11	0	No	No			3	0	3	Low[2]
	METAL	Cadmium	0.76	mg/kg	0.72	11	50	11	0	No	No			3	0	3	Low[2]
	METAL	Cadmium	0.73	mg/kg	0.72	21	50	11	0	No	No			3	0	3	Low[2]
32B-SB03	METAL	Thallium	4.5	mg/kg	2.5	5	85	5	1	Yes	?	Perched 32B-SB02		1	3	4	Low[2]
32B-SB04	METAL	Aluminum	69,000	mg/kg	43,000	5	85	5	1	Yes	?	32B-SB02	The grab sample of perched groundwater from boring 32B-SB02 was analyzed for perchlorate only.	1	3	4	Low [2]
	METAL	Cadmium	0.81	mg/kg	0.72	5	85	11.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Cadmium	0.77	mg/kg	0.72	11.5	85	11.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	6.6	mg/kg	2.5	5	85	11.5	0	No	?	NA		3	3	6	Low[2]
	METAL	Thallium	6	mg/kg	2.5	11.5	85	11.5	0	No	?	NA		3	3	6	Low[2]
33B-SB03	PERCHLORATE	Perchlorate	750	µg/kg	60	5	80	11	0	No	Yes	Perched Well 1576 and FWBZ Well 31012		4	6	10	High
	PERCHLORATE	Perchlorate	1,600	µg/kg	60	11	80	11	0	No	Yes			4	6	10	High
	METAL	Cadmium	3.9	mg/kg	0.72	1.5	80	1.5	2	Yes	Yes	1576	0.31J µg/L Cd at Well 1576 (Cd PHG = 0.04 µg/L).	0	6	6	Low[2]
	METAL	Thallium	3.4	mg/kg	2.5	5	80	5	1	Yes	No	1576		1	0	1	Negligible[2]
34B-SB02	METAL	Thallium	3.8	mg/kg	2.5	11	57	11	0	No	No	Perched Well 31019 and FWBZ 31011		3	0	3	Low[2]

Key:

(1) Nondetects or metals within range of background.
(2) Outside range of statistical background, but suspected to be naturally occurring.
? = Wells or borings with compound concentration data were not available.
bgs = Below ground surface
ft = Feet
FWBZ = First water-bearing zone
GW = Groundwater
µg/kg = Micrograms per kilogram
µg/L = Micrograms per liter
mg/kg = Milligrams per kilogram
NA = Not applicable
ND = Nondetect
PGW = Protection of groundwater
PHG = Public health goal
SSL = Soil screening level
* = See comments column.

Table 8.6-2 Results of Protection of Groundwater Evaluation for Constituents in Soil Vapor
Area 39
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento County, California

Sample Location	Depth (ft bgs)	VOC	PGW SSL ($\mu g/m^3$)	SV Conc. ($\mu g/m^3$)	Average Depth to Water (ft bgs)	Estimated GW Concentration ($\mu g/L$)	SV GW Equilibrium Conc. ($\mu g/m^3$)	Is SV-GWeq > PGW SSL?	Do the GW contours indicate a potential source?	Risk Level
30B-SP13	20	Benzene	35	52	30	0	0	TRUE	No	Low
	20	TCE	527	2,500	30	0	0	TRUE	No	Low
30B-SP14	20	Carbon Tet	195	1,700	30	0	0	TRUE	No	Low
	20	PCE	57	530	30	0	0	TRUE	No	Low
	20	TCE	527	24,000	30	0	0	TRUE	No	Low
30B-SP15	16	Benzene	35	320	30	0	0	TRUE	No	Low
	10	Carbon Tet	195	4,700	30	0	0	TRUE	No	Low
	16	Carbon Tet	195	280	30	0	0	TRUE	No	Low
30B-SP17	20	Benzene	35	48	30	0	0	TRUE	No	Low
30B-SP23	20	Carbon Tet	195	360	30	0	0	TRUE	No	Low
32B-SP07	10	Benzene	35	100	30	0	0	TRUE	No	Low
32B-SP08	20	Benzene	35	90	30	0	0	TRUE	No	Low
32B-SP11	10	PCE	57	77	30	0	0	TRUE	No	Low
	10	TCE	527	95,000	30	0	0	TRUE	No	Low
	20	TCE	527	130,000	30	0	0	TRUE	No	Low
33B-SP09	20	TCE	527	1,300	30	27	3341.25	FALSE	No	Low
33B-SP11	10	TCE	527	1,200	30	370	45787.5	FALSE	?	Low
	20	TCE	527	15,000	30	370	45787.5	FALSE	?	Low
33B-SP13	20	Benzene	35	57	30	0	0	TRUE	No	Low
33B-SP14	10	1,1-DCE	18,180	27,000	30	31	10546.2	FALSE	Yes	Low
	20	1,1-DCE	18,180	28,000	30	31	10546.2	FALSE	Yes	Low
	10	PCE	57	24,000	30	1.1	143	TRUE	Yes	High
	10	TCE	527	1,200,000	30	4600	569250	TRUE	Yes	High
	20	TCE	527	1,200,000	30	4600	569250	TRUE	Yes	High
33B-SP15	20	TCE	527	4,300	30	480	59400	FALSE	?	Low
33B-SP20	10	Benzene	35	48	30	0	0	TRUE	No	Low
	20	Benzene	35	62	30	0	0	TRUE	No	Low
	10	TCE	527	16,000	30	40	4950	TRUE	No	Moderate
	20	TCE	527	3,700	30	40	4950	FALSE	No	Low
33B-SP21	10	1,1-DCE	18,180	43,000	30	1	340.2	TRUE	Yes	High
	20	1,1-DCE	18,180	60,000	30	1	340.2	TRUE	Yes	High
	10	TCE	527	1,700,000	30	40	4950	TRUE	Yes	High
	20	TCE	527	1,700,000	30	40	4950	TRUE	Yes	High

Key:

PGW SSL = Protection of groundwater soil vapor screening level
$\mu g/m^3$ = Micrograms per cubic meter
$\mu g/L$ = Micrograms per liter
ft bgs = Feet below ground surface
GW = Groundwater
SV GW Equilibrium Conc = The modeled soil vapor concentration at 10 ft bgs that would be in equilibrium with and derived from the groundwater.
SV - GWeq = Measured soil vapor concentration minus the SV GW equilibrium concentration.
? = Unable to assess whether the sample location was near a source of VOCs to groundwater.

1,1-DCE = 1,1-Dichloroethene
Carbon Tet = Carbon tetrachloride
PCE = Tetrachloroethene
TCE = Trichloroethene
VOC = Volatile organic compound

9.0 GRAPHICAL SUMMARY OF HUMAN HEALTH, ECOLOGICAL, AND PROTECTION OF GROUNDWATER RISK ASSESSMENTS

This section presents figures that provide a graphical summary where risks posed by chemicals in soil and/or soil vapor may potentially exceed acceptable levels as presented in HHRA (Section 5), SLERA (Section 6), and PGW (Section 8) of this HHERA. This perspective will be essential in understanding the development of the remedial alternatives presented in the FS (Volume III of the RI/FS). The FS will provide further evaluation of these risk areas to determine if remedial action is necessary.

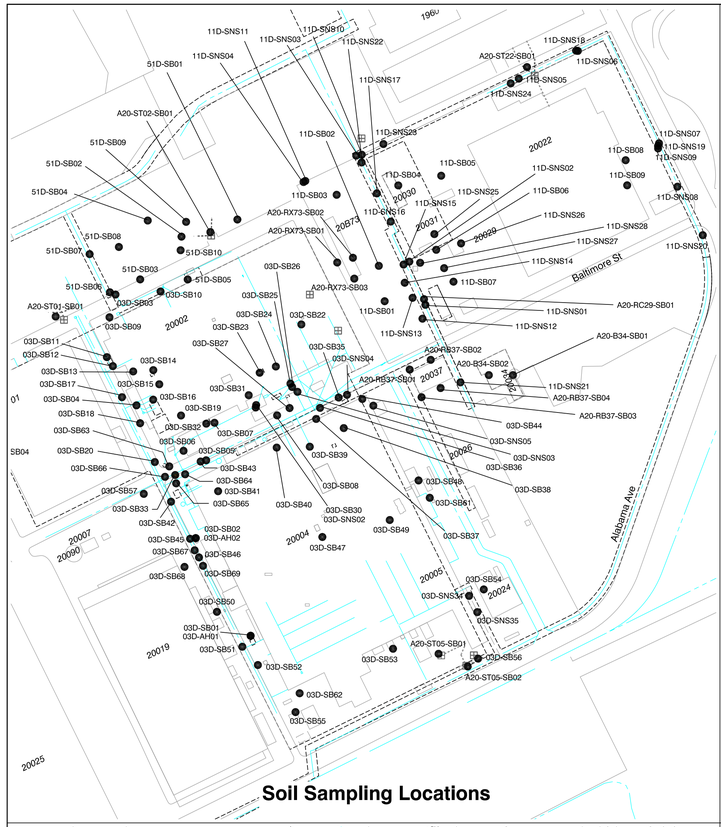
Separate figures (Figure 9.0-1 through 9.0-9) were developed for the following MAs:

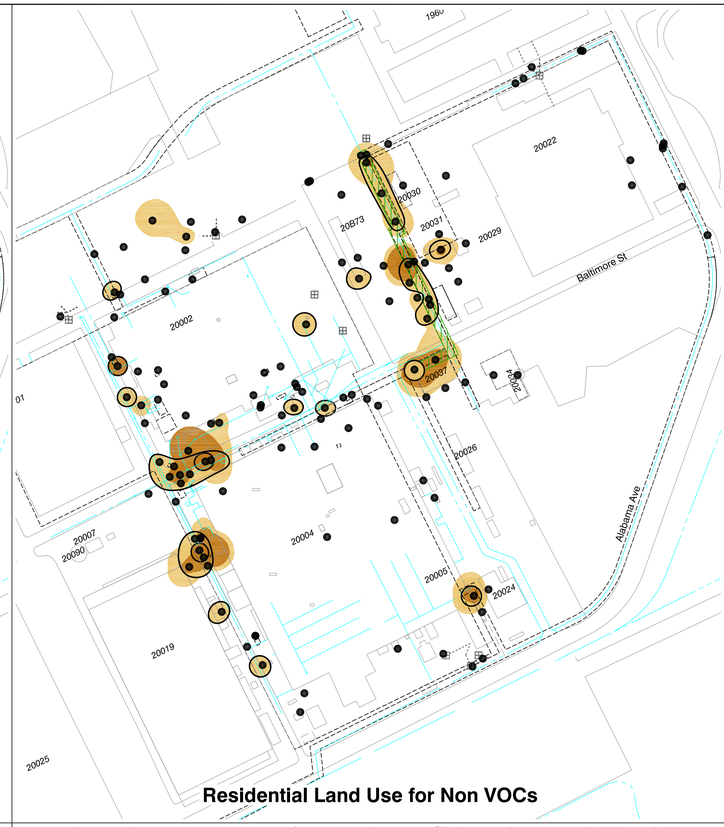
- Administration Area East (Figure 9.0-1);
- Administration Area West (Figure 9.0-2);
- WLLO Area Line 02 (Figure 9.0-3);
- WLLO Area Line 05 North (Figure 9.0-4);
- Buffalo Creek (Figure 9.0-5);
- Chemical Plant 2 Area (North and South) (Figure 9.0-6);
- Magazine Area and Open Space 4 (Figure 9.0-7);
- Dredge Pit and Eastern Basin (Figure 9.0-8); and
- Area 39 (Figure 9.0-9).

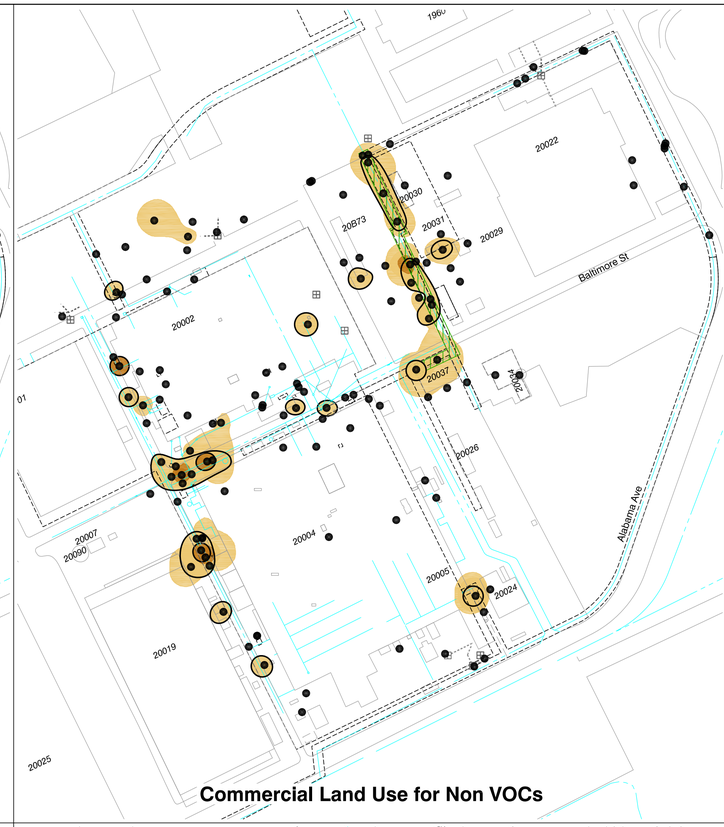
For soil, the summary figures in this section only include the combinations of risk associated with the upper 12 feet of material. For soil below a depth of 12 feet bgs, the only risk evaluated is the PGW. The risk contours associated with PGW risks for non-VOCs in deep soil is presented in Section 8 and not reproduced in this section. A description of the data presented in each frame in the figure is presented on the following page.

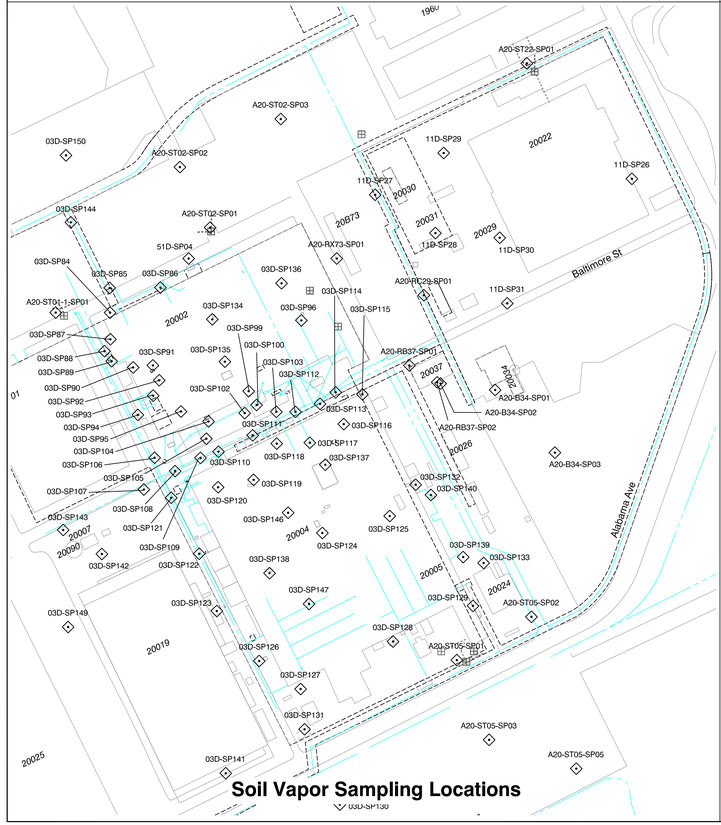
RISKS FROM CHEMICALS IN SOIL	RISKS FROM CHEMICALS IN SOIL VAPOR
Soil Sampling Locations Shows all soil sampling locations, including sample identifications, in the featured MA.	**Soil Vapor Sampling Locations** Shows all soil vapor sampling locations, including sample identifications, in the featured MA.
Residential Land Use Non-VOC[1] This figure presents the following: • Soil sampling locations (no labels). **High Risk Contour** • 10^{-4} Cancer risk contour. • HI >1 Non-cancer risk and lead above 10 µg/dL contour. • High risk to groundwater contour for non-VOCs in shallow[2] soil. **Low Risk Contour** • 10^{-6} Cancer risk contour. • Low risk to groundwater contour for non-VOCs in shallow[2] soil. **Ecological Risk Contour** • Areas of potential ecological risk.	**Residential Land Use VOC[1]** This figure presents the following: • Soil vapor sampling locations (no labels). **High Risk Contour** • 10^{-4} Cancer risk contour. • HI >1 Non-cancer risk. • High risk to groundwater contour for VOCs in soil vapor. **Low Risk Contour** • 10-6 Cancer risk contour. • Low risk to groundwater contour for VOCs in soil vapor.
Commercial Land Use Non-VOC[3] This figure presents the following: • Soil sampling locations (no labels). **High Risk Contour** • 10^{-4} Cancer risk contour. • HI >1 Non-cancer risk and lead above 10 µg/dL contour. • High risk to groundwater contour for non-VOCs in shallow[2] soil. **Low Risk Contour** • 10^{-6} Cancer risk contour. • Low risk to groundwater contour for non-VOCs in shallow[2] soil. **Ecological Risk Contour** • Areas of potential ecological risk.	**Commercial Land Use VOC[3]** This figure presents the following: • Soil vapor sampling locations (no labels). **High Risk Contour** • 10^{-4} Cancer risk contour. • HI >1 Non-cancer risk. • High risk to groundwater contour for VOCs in soil vapor. **Low Risk Contour** • 10^{-6} Cancer risk contour. • Low risk to groundwater contour for VOCs in soil vapor.

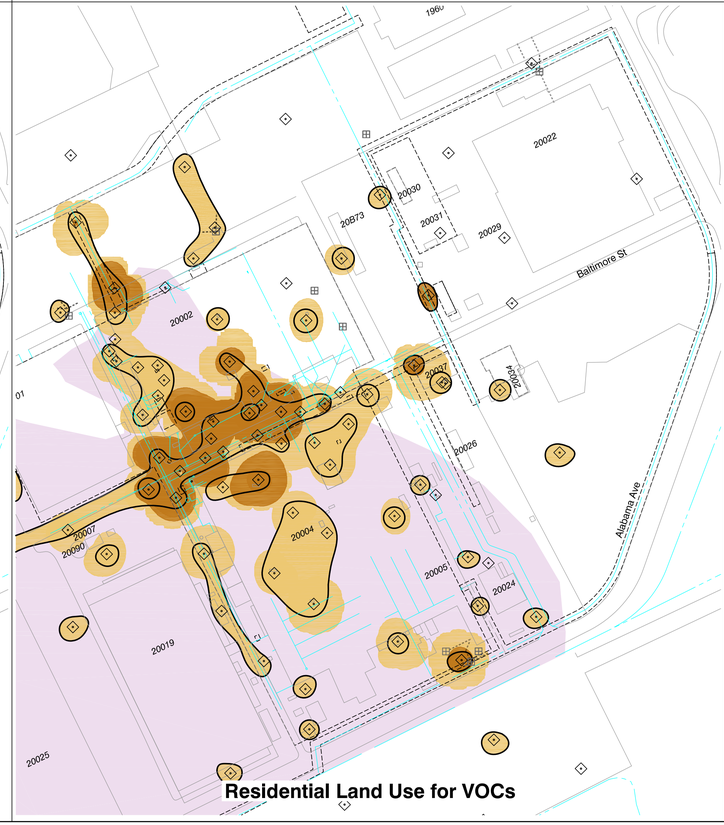
Notes:
µg/dL = Micrograms per deciliter
1 = The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2 = Shallow soil is between surface and 12 feet below ground surface (bgs).
3 = The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.

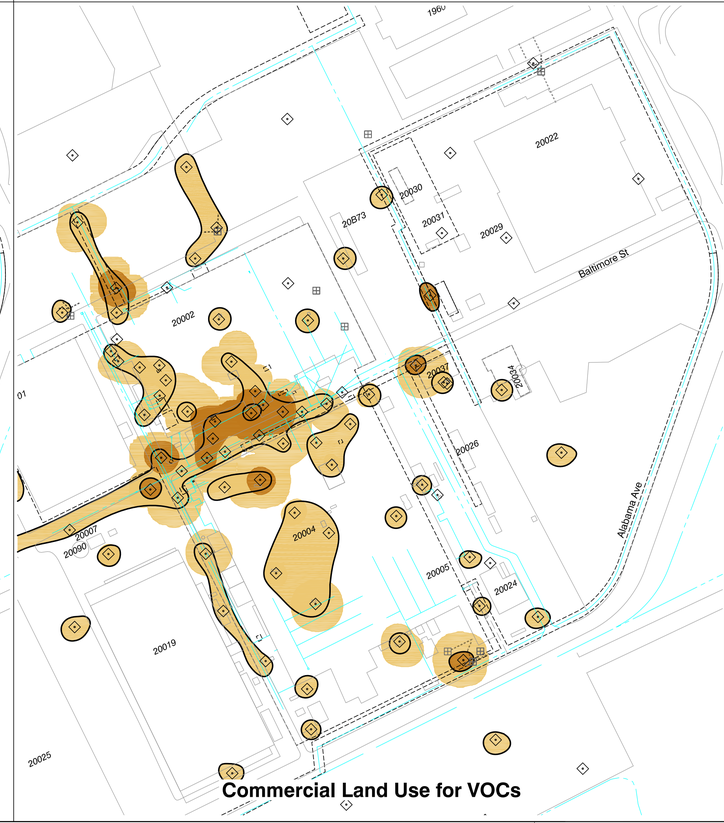












LEGEND

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- 51d-SB01 Soil Boring Location
- 03D-SP139 Soil Vapor Location
- Residential Risk Due to Modeled VOC Migration from Groundwater
- Potential Ecological Concern
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Administration Area does not include groundwater concentrations that exceed commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter

N

Scale: 1" = 200'

0 100 200

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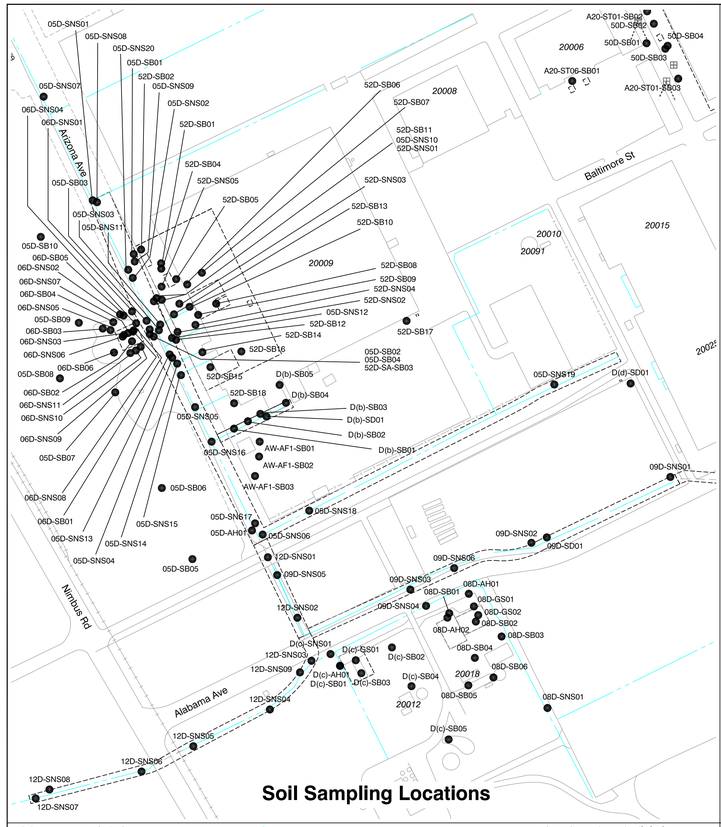
Environmental Remediation

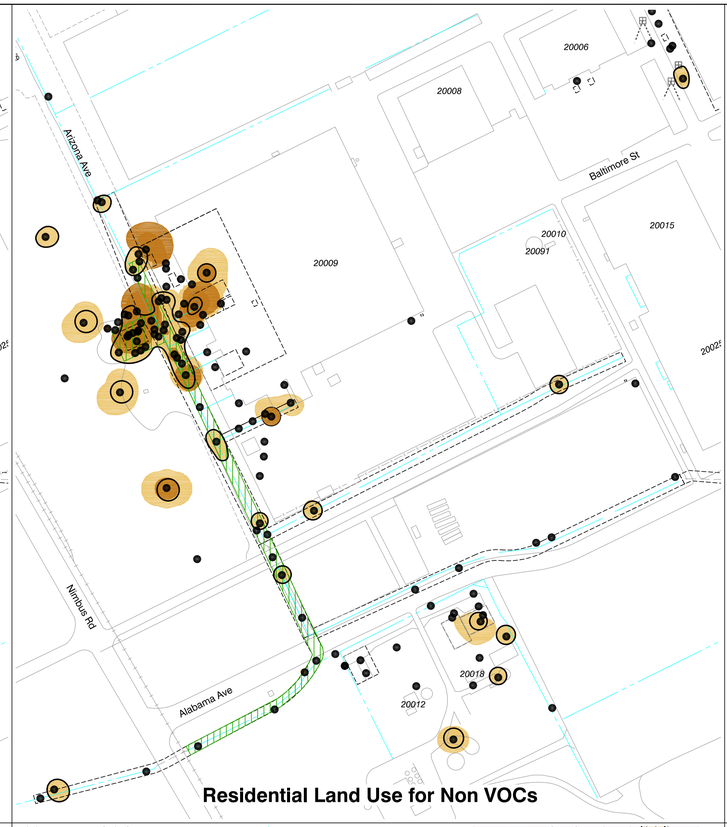
FIGURE 9.0-1
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Administration Area East

FIGURE 9.01 10/16/10 Carmelita Tolledo

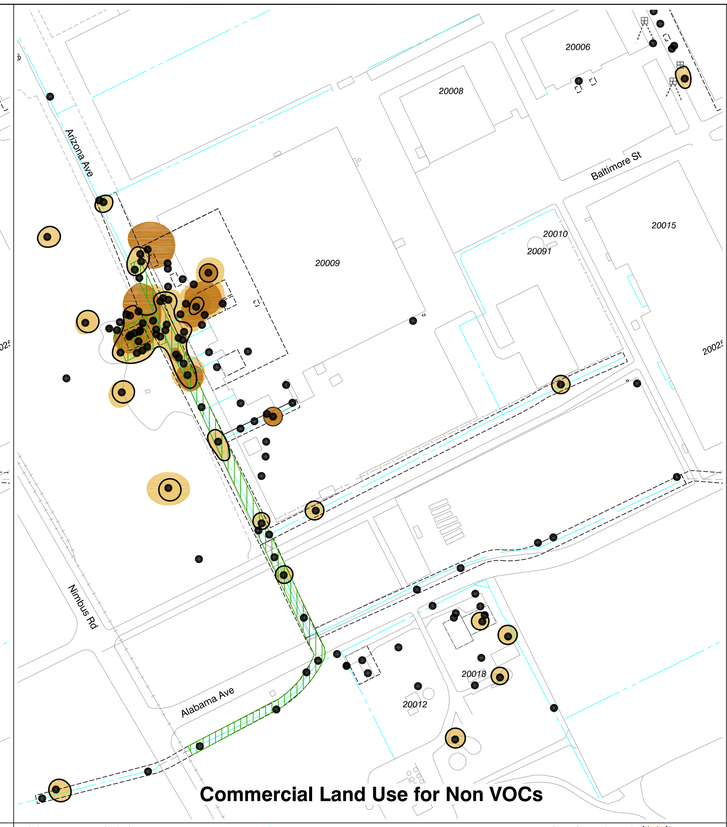
SR1013017.2



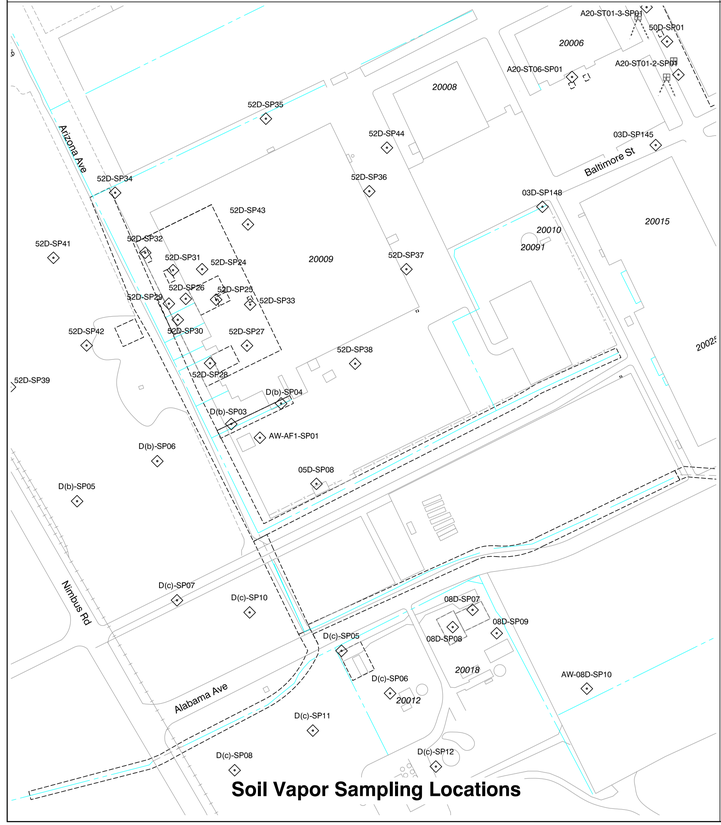
Soil Sampling Locations



Residential Land Use for Non VOCs



Commercial Land Use for Non VOCs



Soil Vapor Sampling Locations

Residential Land Use for VOCs

Commercial Land Use for VOCs

LEGEND

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- Soil Boring Location
- Soil Vapor Location
- Residential Risk Due to Modeled VOC Migration from Groundwater
- Potential Ecological Concern
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Administration Area does not include groundwater concentrations that exceed commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter

Scale: 1" = 200'
0 100 200

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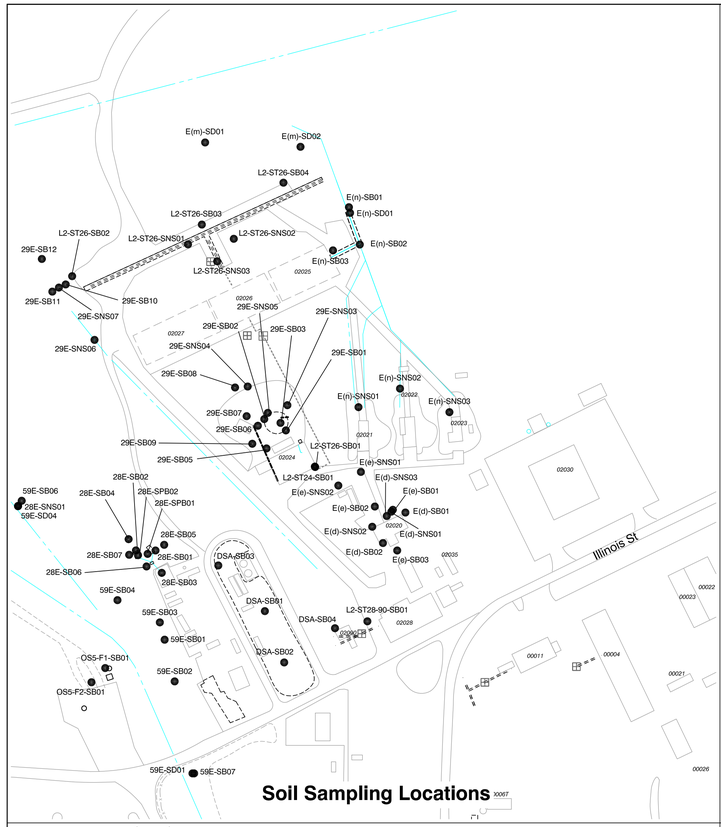
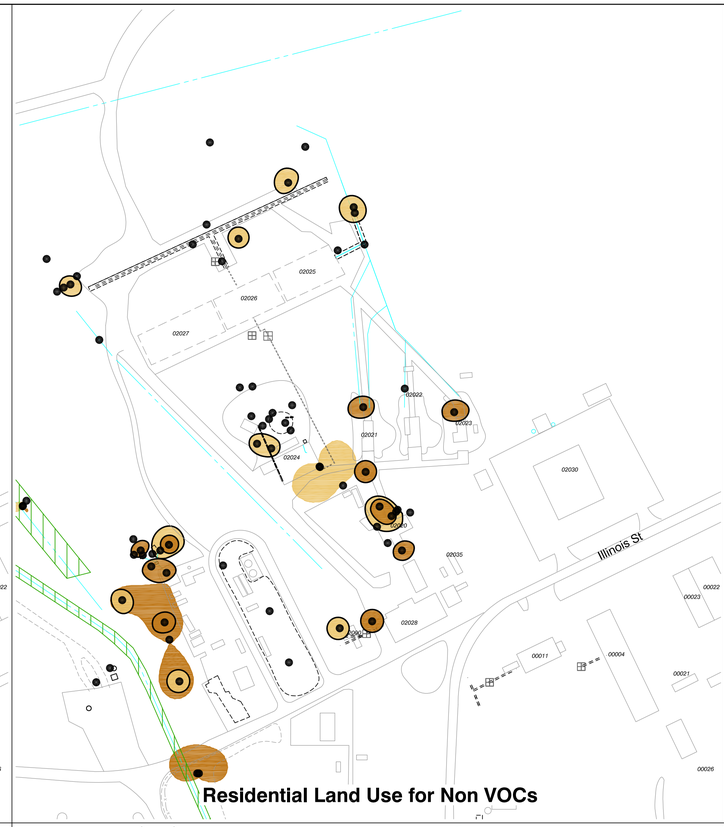
Environmental Remediation

FIGURE 9.0-2
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Administration Area West

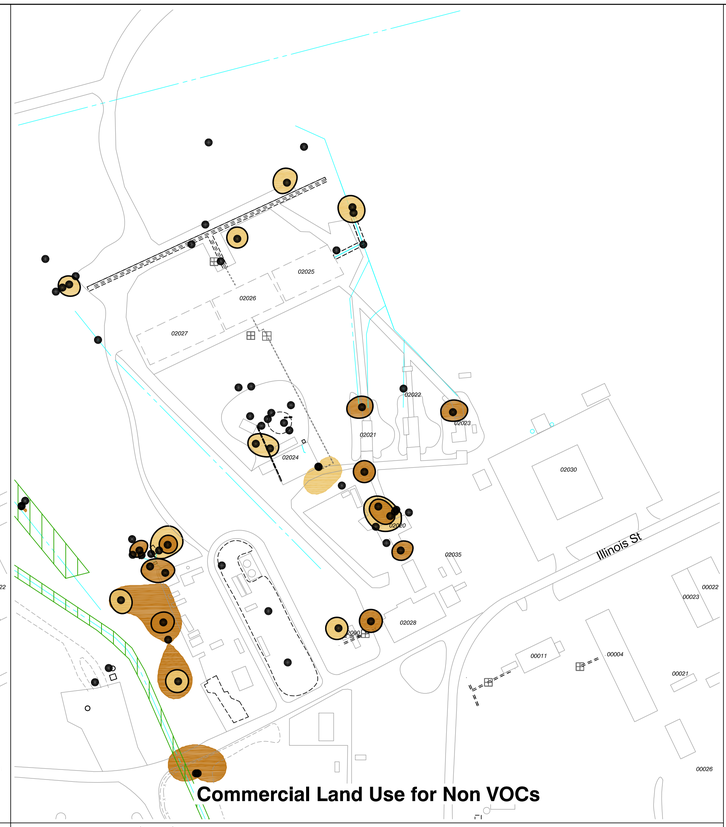
5R1013013 FIGURE 9.0-2 10/16/10 Carmelita Tolledo



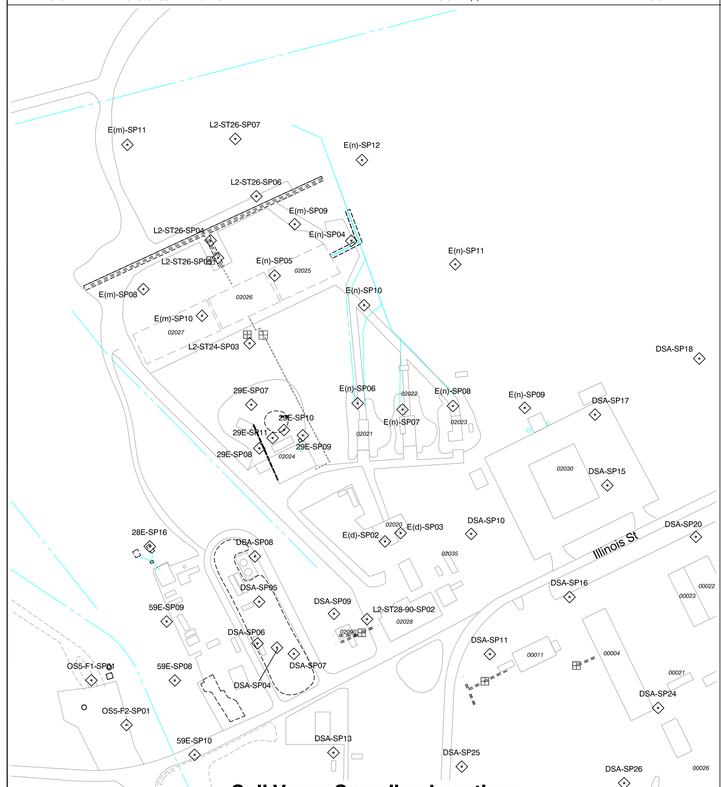
Soil Sampling Locations



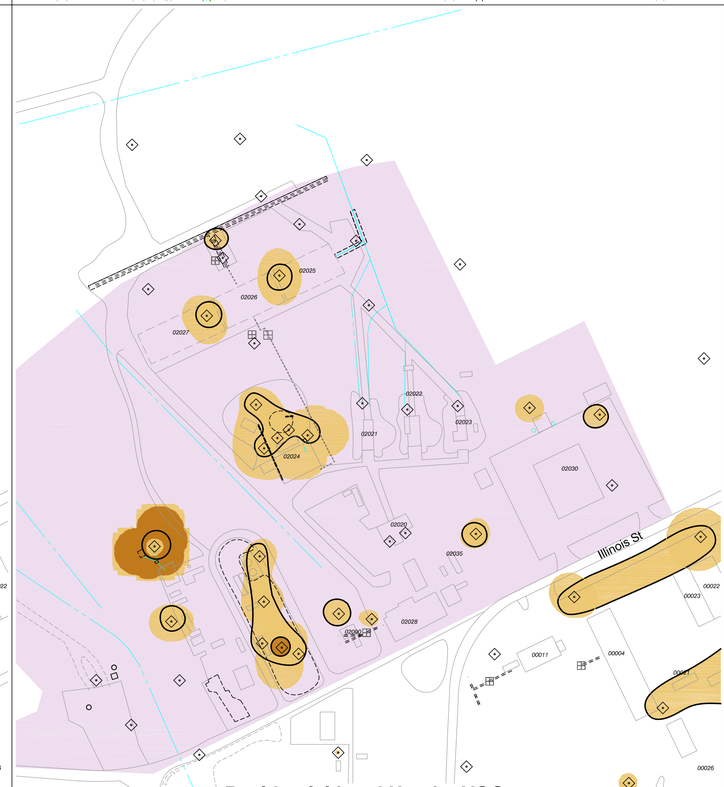
Residential Land Use for Non VOCs



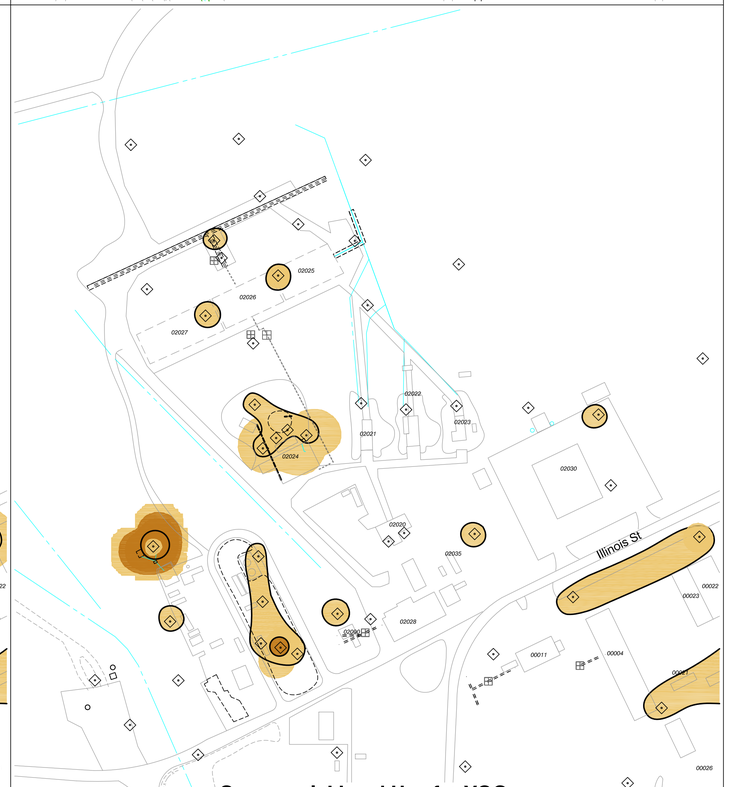
Commercial Land Use for Non VOCs



Soil Vapor Sampling Locations



Residential Land Use for VOCs



Commercial Land Use for VOCs

LEGEND

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- DSB-SB01 Soil Boring Location
- GSD-SP139 Soil Vapor Location
- Residential Risk Due to Modeled VOC Migration from Groundwater
- Potential Ecological Concern
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Line 02 Area does not include groundwater concentrations that exceed commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter

N

Scale: 1" = 150'

0 75 150

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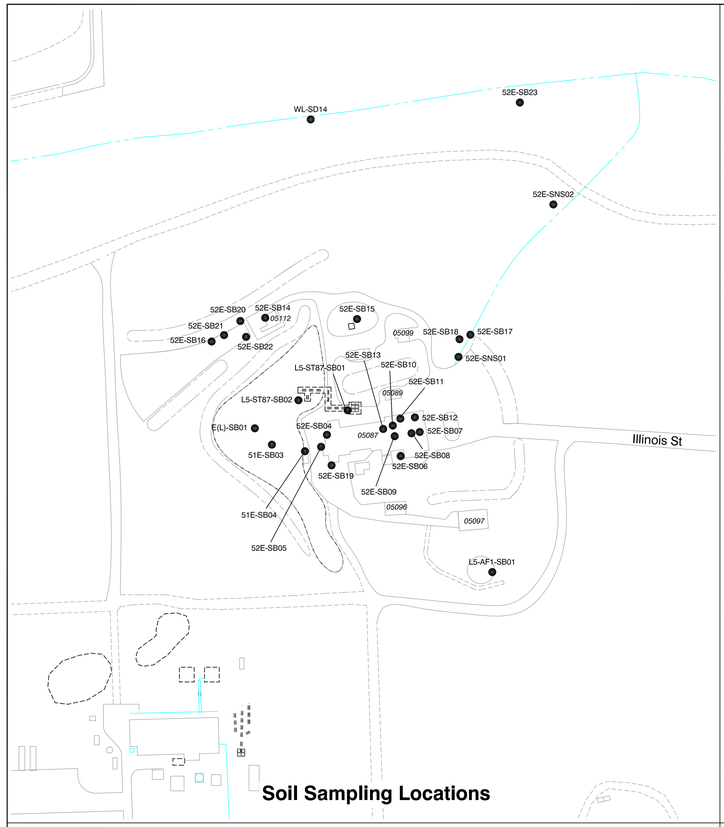
Environmental Remediation

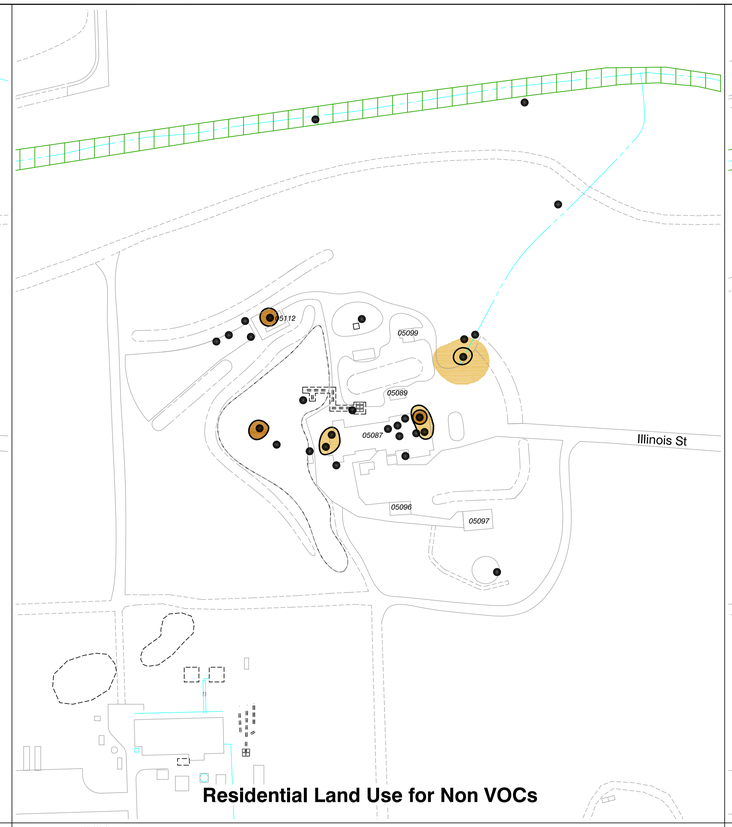
FIGURE 9.0-3
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Line 02

FIGURE 9.0-3 10/16/10 Cornelius Tolbert

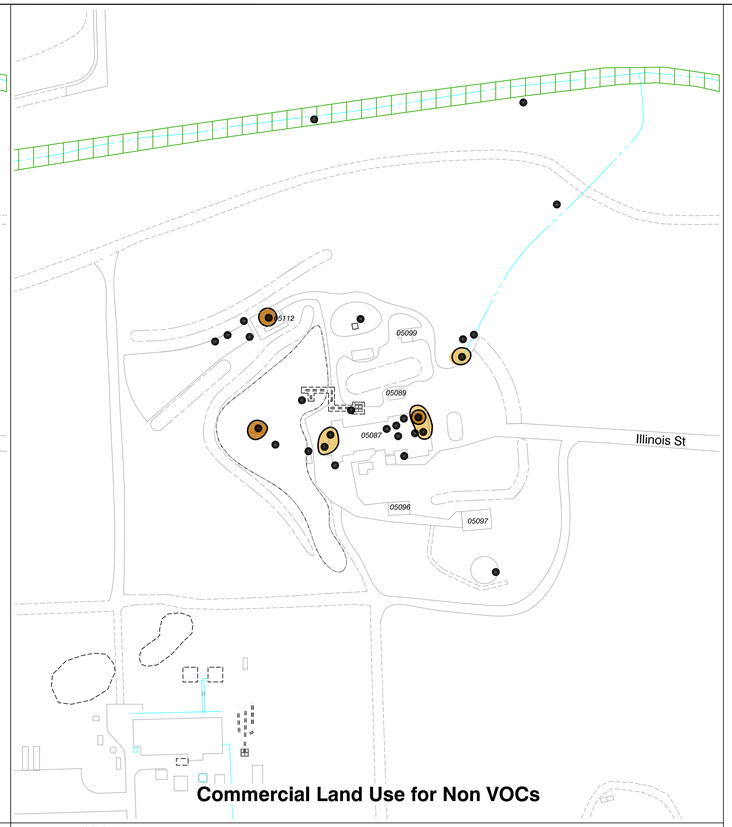
SR101301174



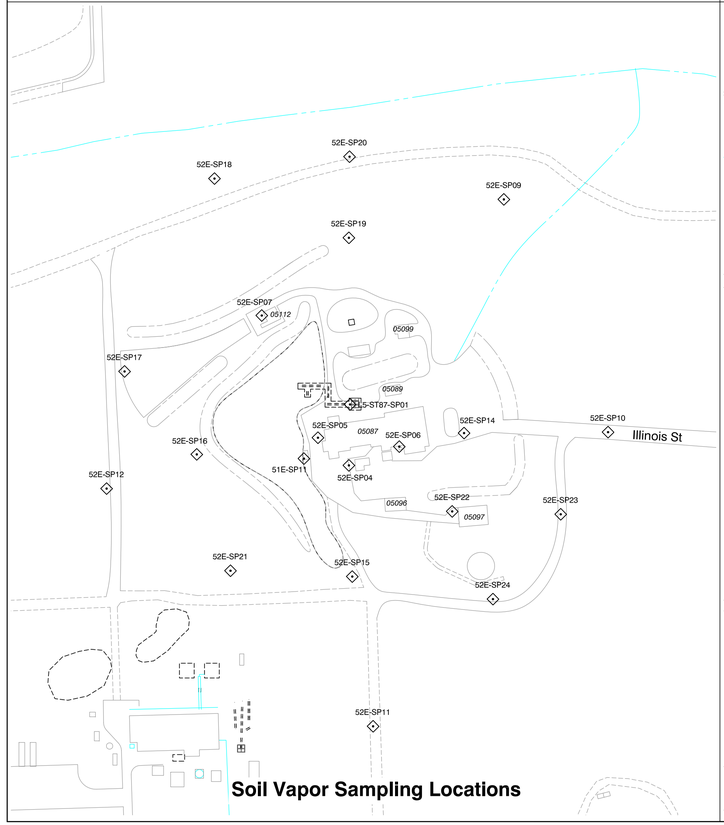
Soil Sampling Locations



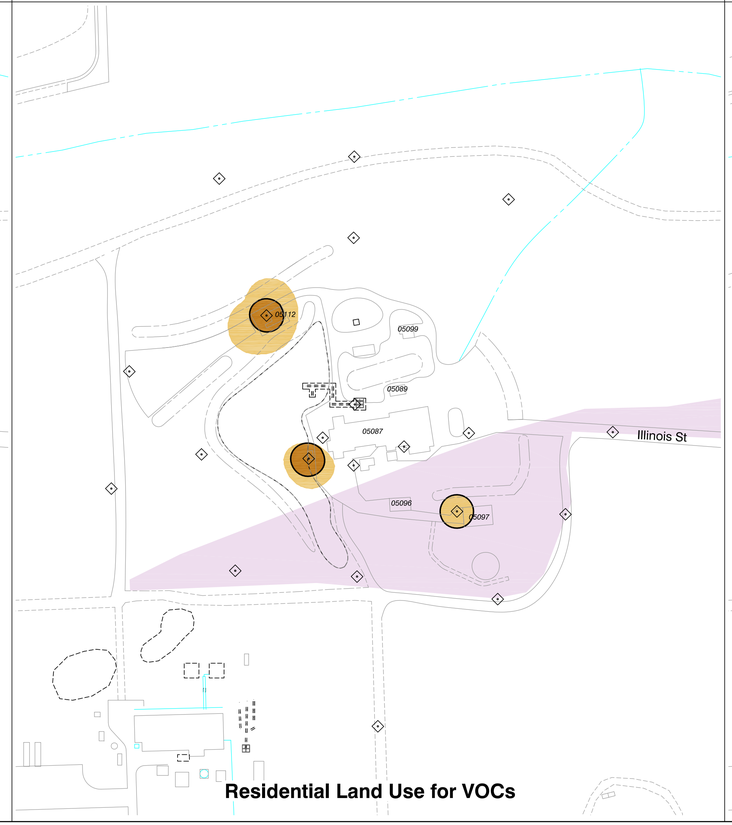
Residential Land Use for Non VOCs



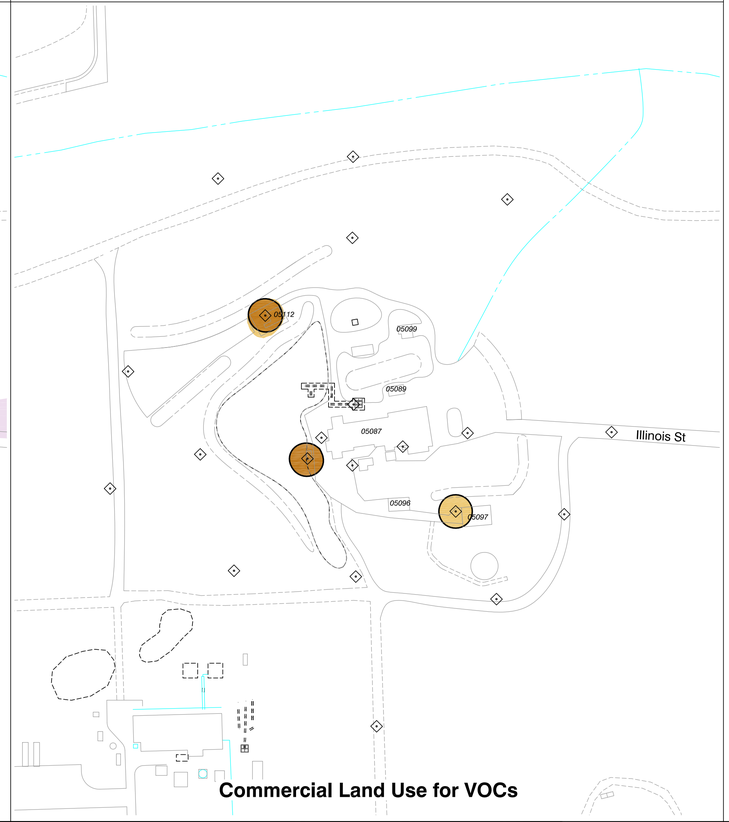
Commercial Land Use for Non VOCs



Soil Vapor Sampling Locations



Residential Land Use for VOCs



Commercial Land Use for VOCs

LEGEND

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- 51E-SB03 Soil Boring Location
- 52E-SP18 Soil Vapor Location
- Residential Risk Due to Modeled VOC Migration from Groundwater
- Potential Ecological Concern
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Line 05 Area does not include groundwater concentrations that exceed commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter

N

Scale: 1" = 120'

0 60 120

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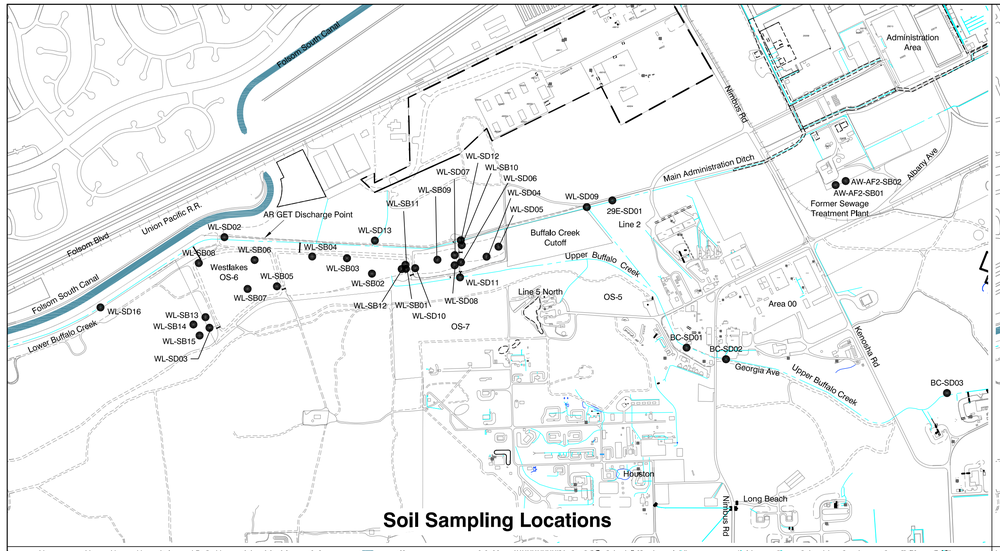
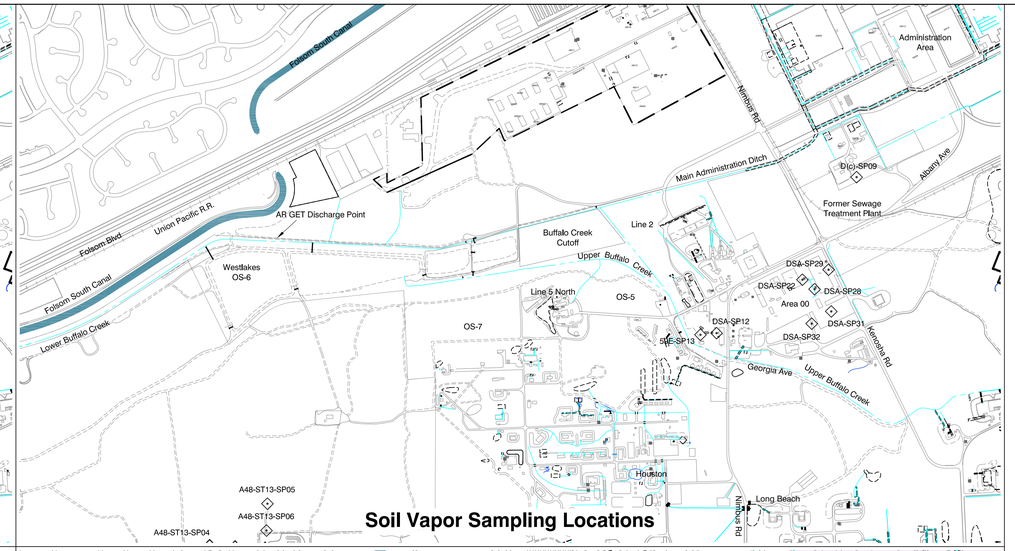
Environmental Remediation

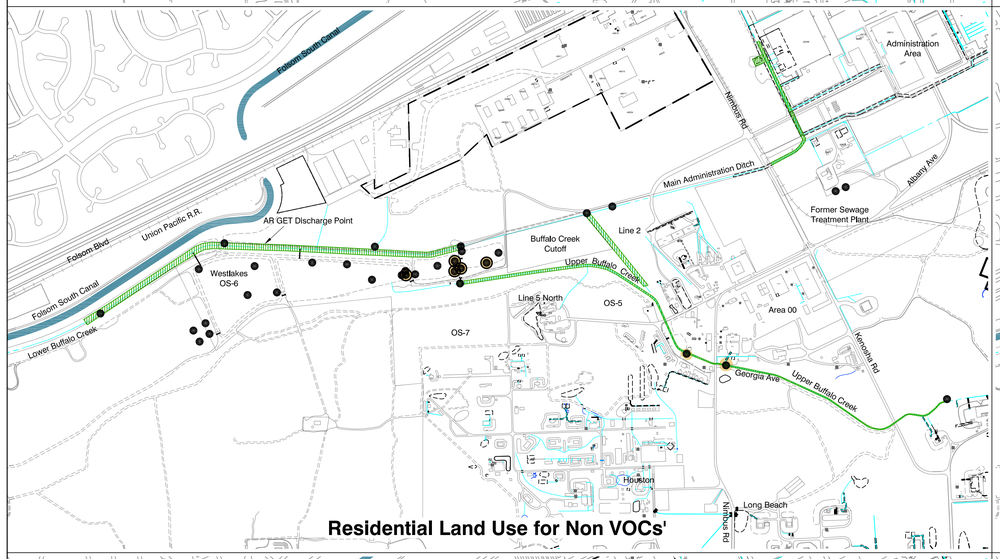
FIGURE 9.0-4
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Line 05

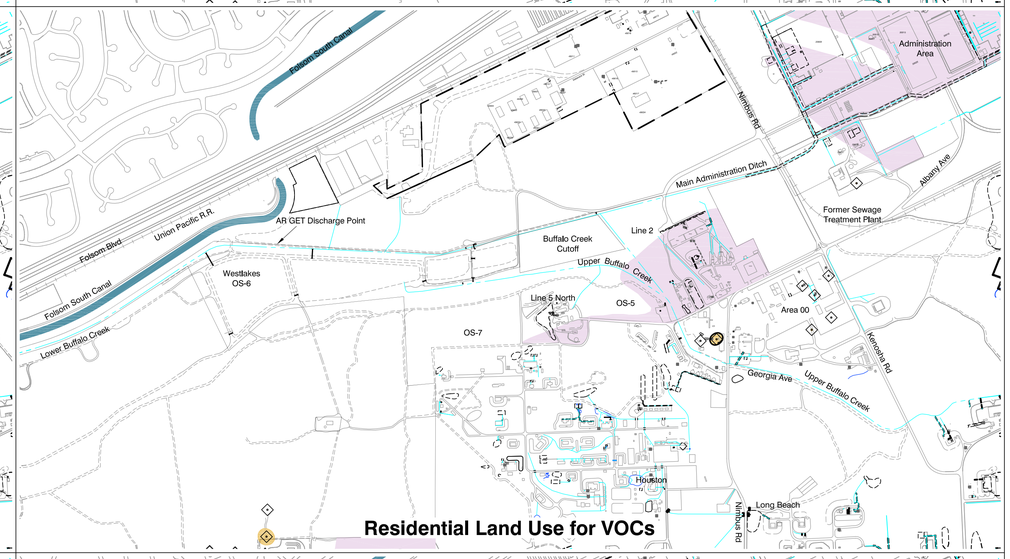
FIGURE 9.0-4 10/16/10 Carmelita Tolosa

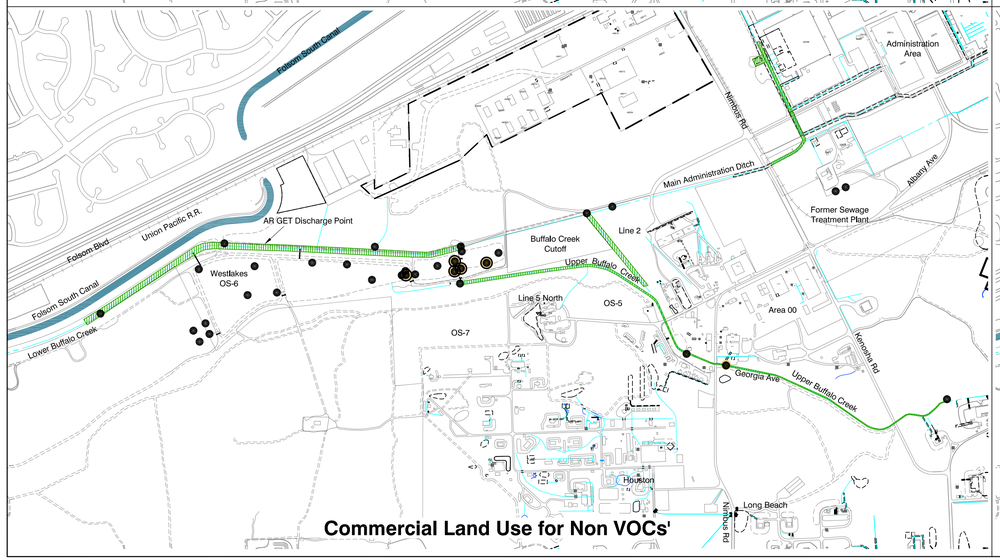
SR1013017S

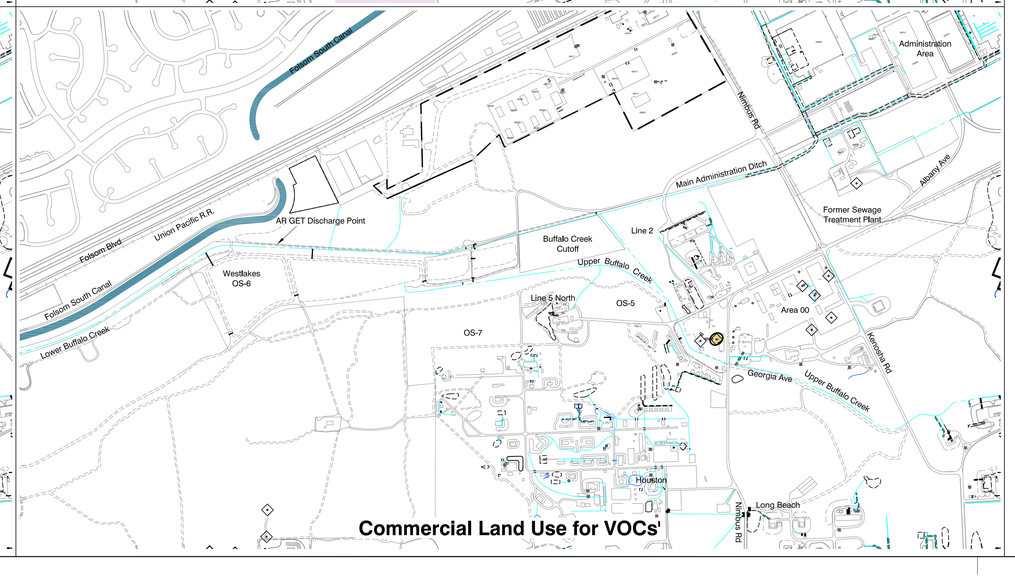












LEGEND

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- DSB-SB03 Soil Boring Location
- DSD-SP130 Soil Vapor Location
- Residential Risk Due to Modeled VOC Migration from Groundwater
- Potential Ecological Concern
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Buffalo Creek Area does not include groundwater concentrations that exceed commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter

N

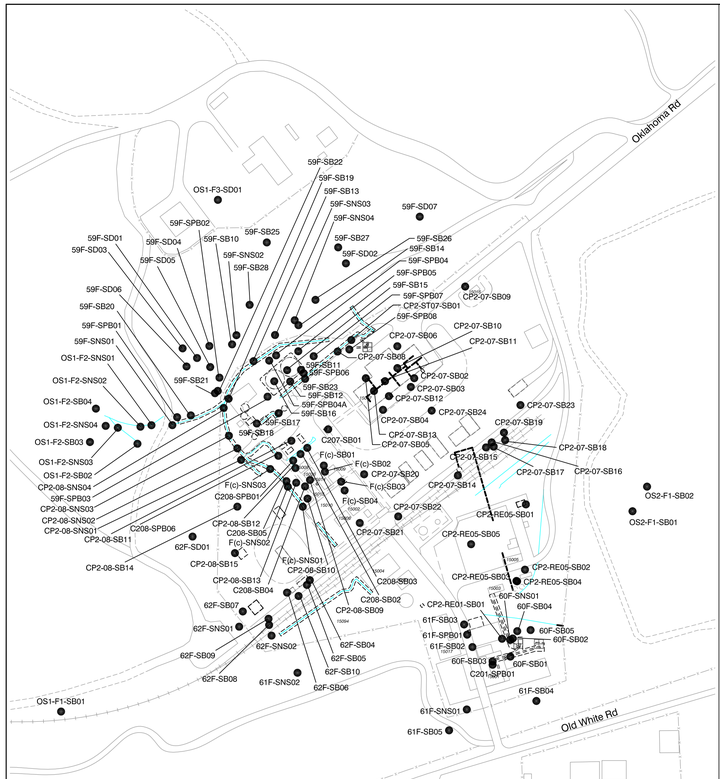
Scale: 1" = 800'

0 400 800

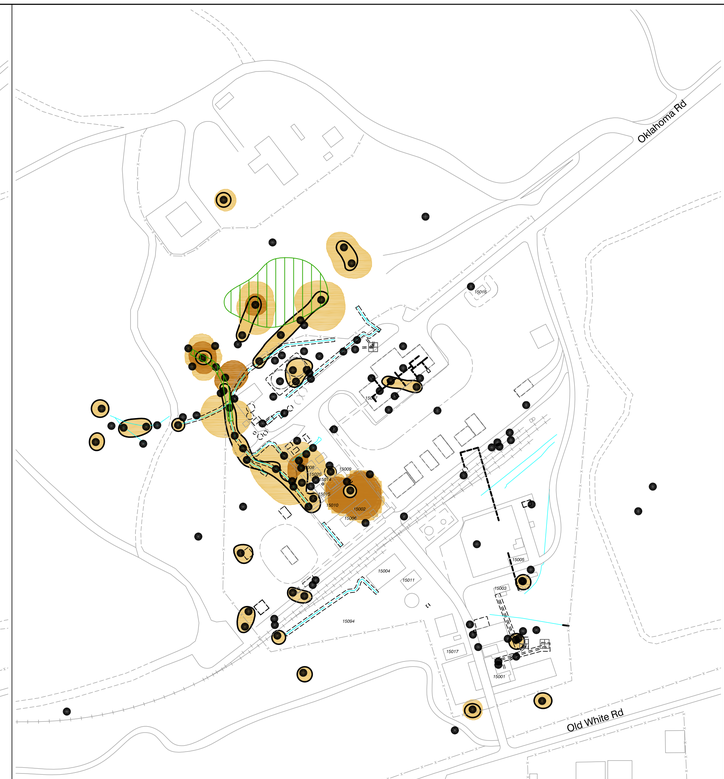
AEROJET
Environmental Remediation

FIGURE 9.0-5
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Buffalo Creek

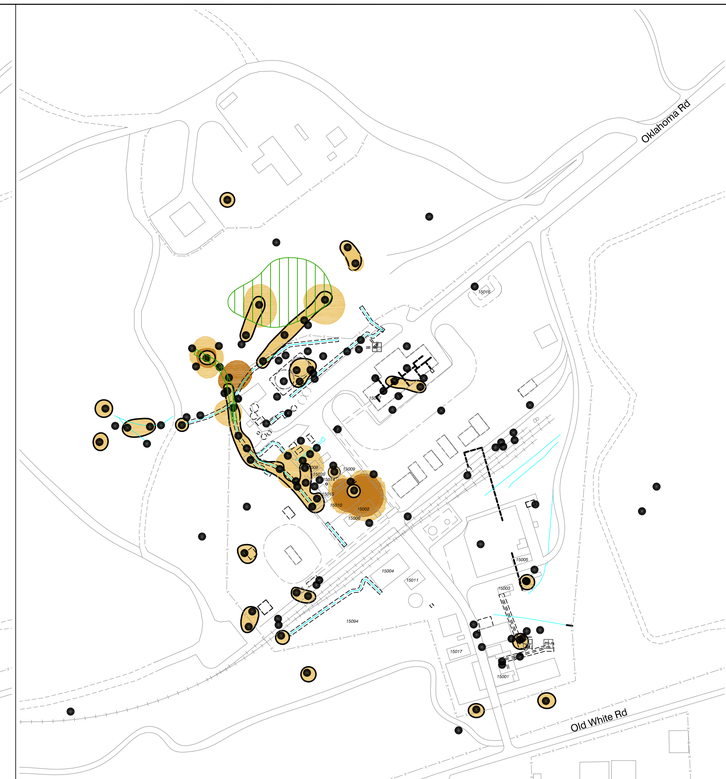
SR10130178 **FIGURE 9.0-5** 10/16/10 Carmelita Tallada



Soil Sampling Locations



Residential Land Use for Non VOCs



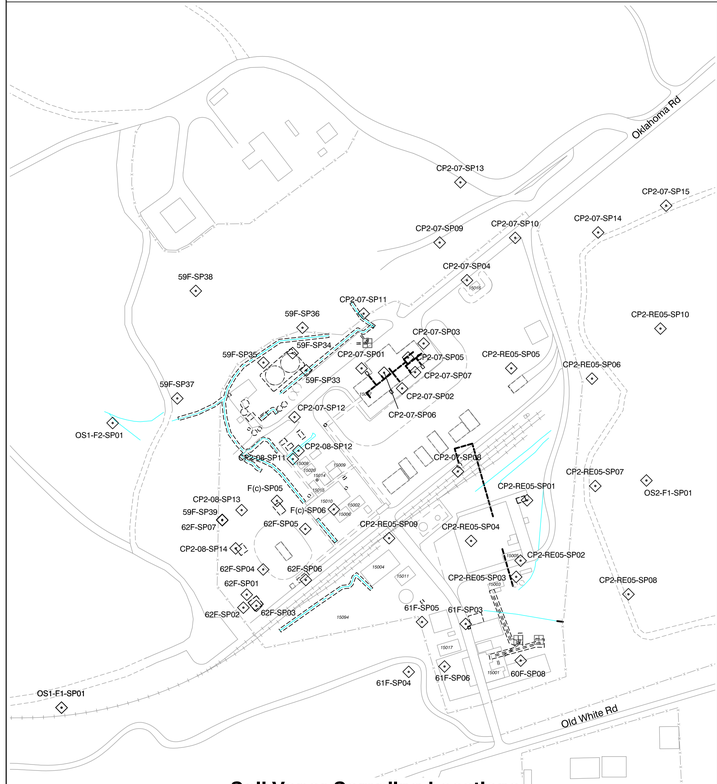
Commercial Land Use for Non VOCs

LEGEND

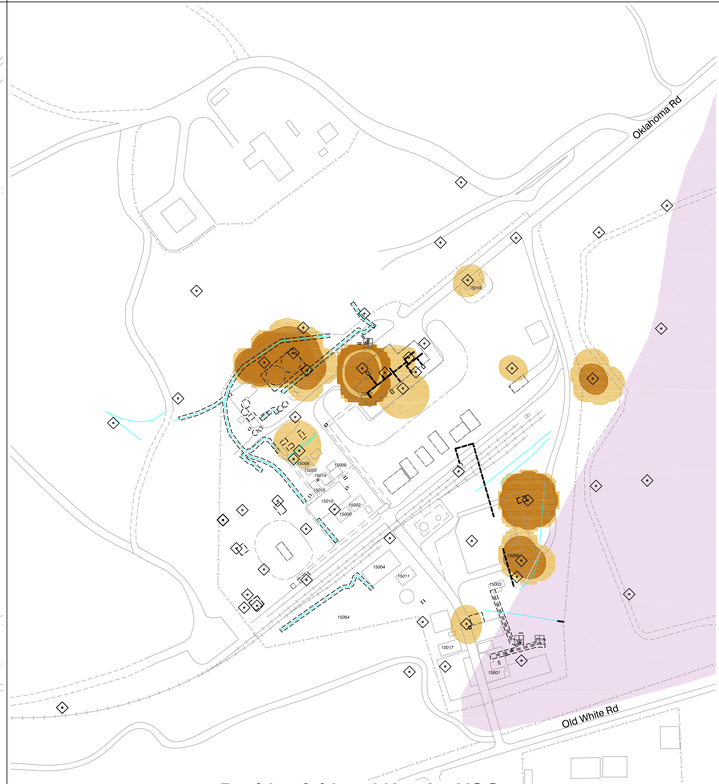
- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- CV2-SB01 Soil Boring Location
- 600-SP139 Soil Vapor Location
- Residential Risk Due to Modeled VOC Migration from Groundwater
- Potential Ecological Concern
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

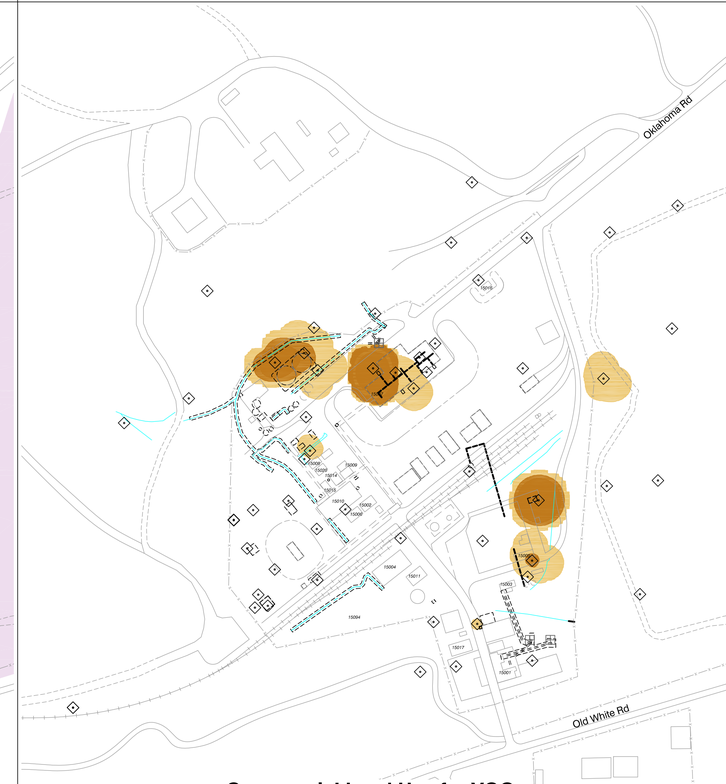
1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Chemical Plant 2 Area does not include groundwater concentrations that exceed commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter



Soil Vapor Sampling Locations



Residential Land Use for VOCs



Commercial Land Use for VOCs

Scale: 1" = 200'
0 100 200

AEROJET
Environmental Remediation

FIGURE 9.0-6
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Chemical Plant 2

FIGURE 9.0-6 10/16/10 Carmelita Tallada

SR10130176

Soil Sampling Locations

Residential Land Use for Non VOCs'

Commercial Land Use for Non VOCs'

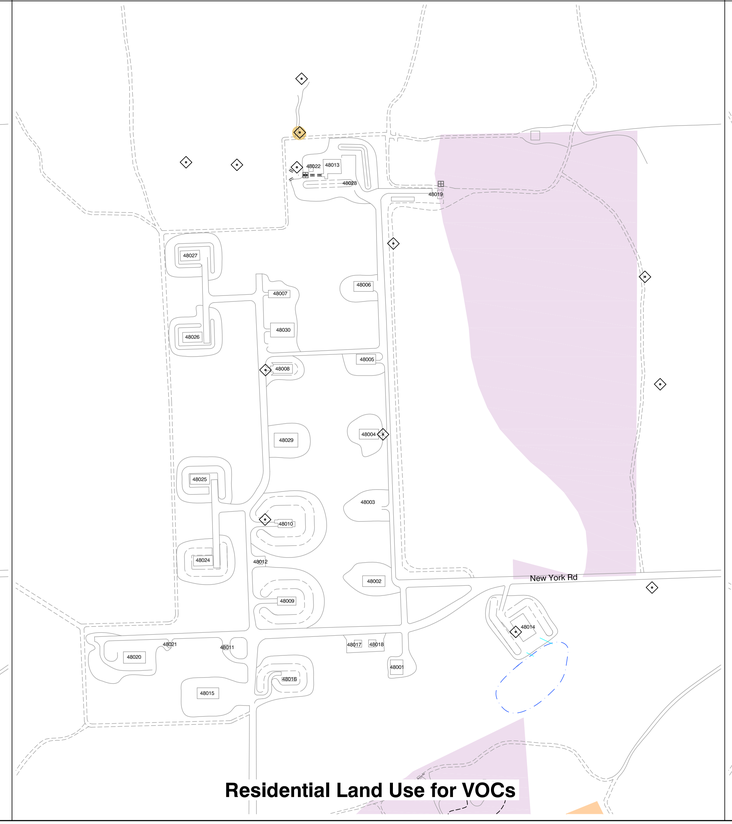
LEGEND

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- Building (20009)
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- Soil Boring Location (OS3-SB01)
- Soil Vapor Location (OS3-SP126)
- Residential Risk Due to Modeled VOC Migration from Groundwater
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Magazine Area does not include groundwater concentrations that exceed commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter

Soil Vapor Sampling Locations



Residential Land Use for VOCs

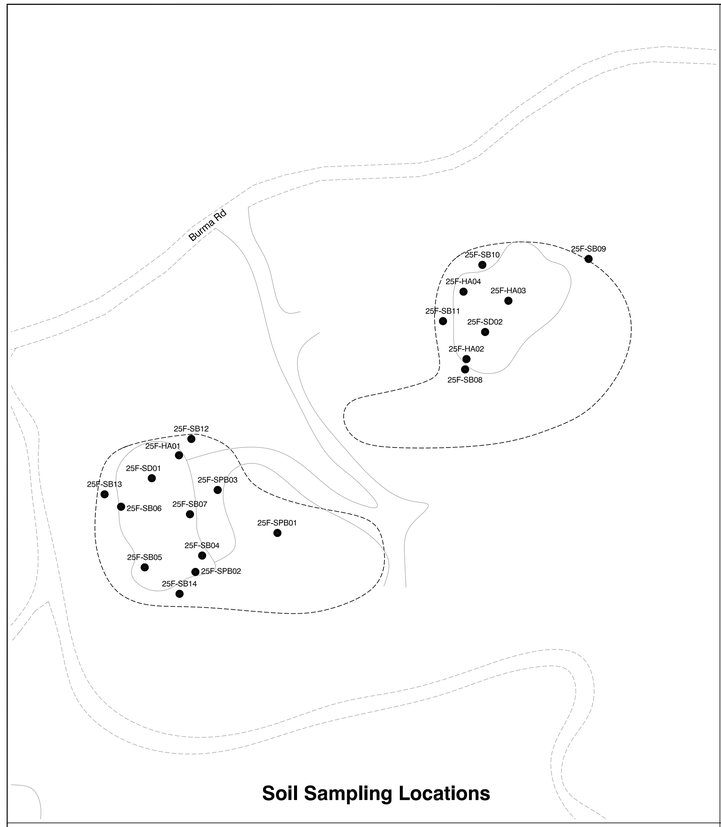
Commercial Land Use for VOCs'

Scale: 1" = 400'
0 200 400

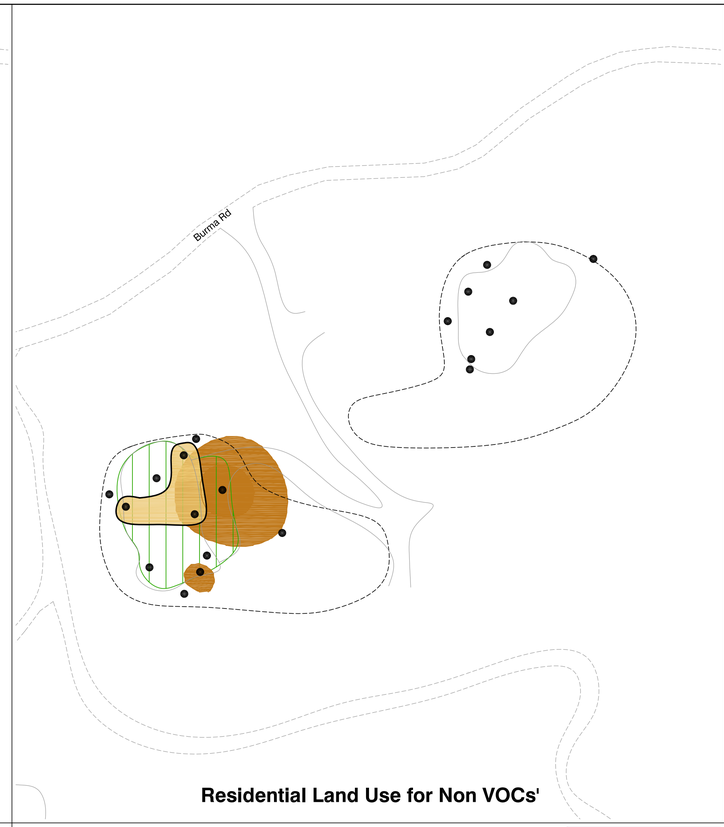
AEROJET
Environmental Remediation

FIGURE 9.0-7
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments Magazine Area, Open Space 3, and Open Space 4

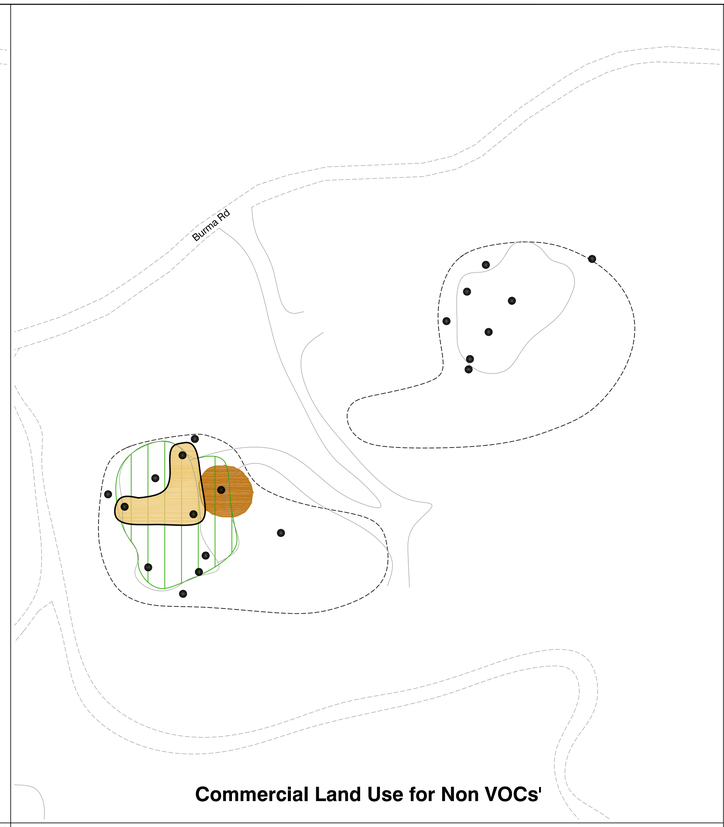
SR101301/79 FIGURE 9.0-7 10/16/10 Carmelita Tolluda



Soil Sampling Locations



Residential Land Use for Non VOCs'



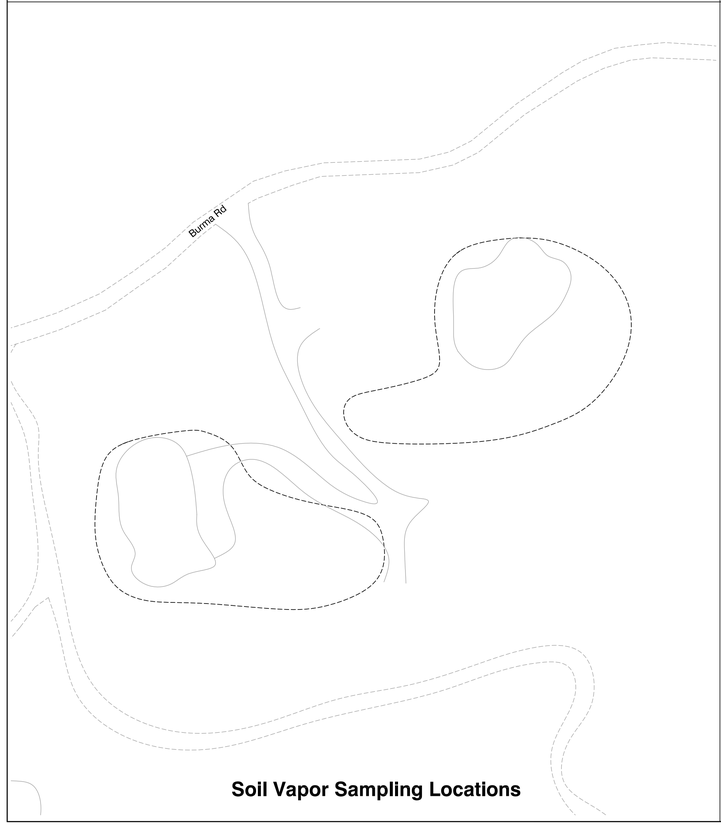
Commercial Land Use for Non VOCs'

LEGEND

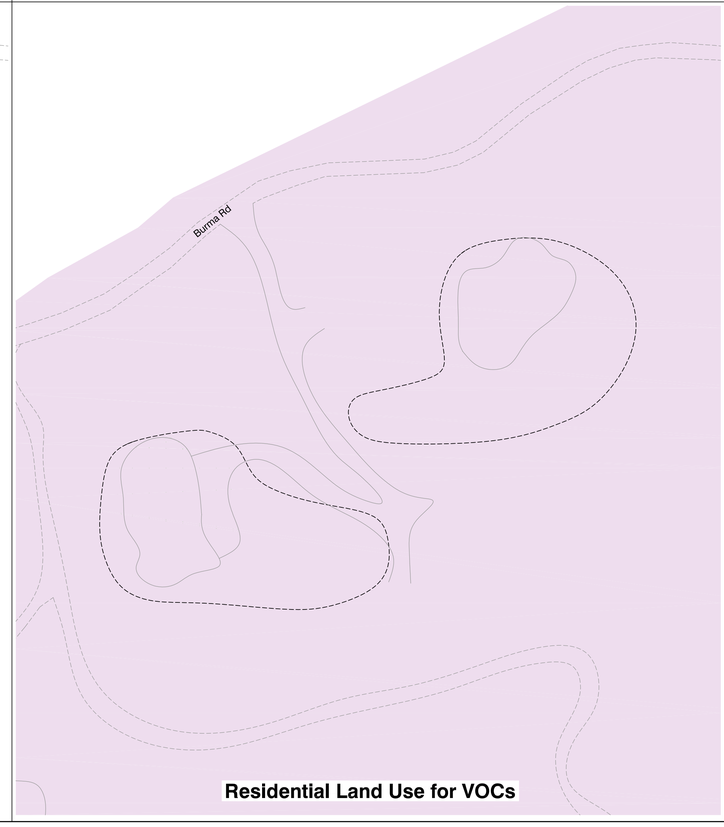
- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- 20009 Building
- Former Structure
- Above Ground Storage Tank
- Surface Drainage
- Septic Tank and Leach Line
- DX6-B09 Soil Boring Location
- 650-SP106 Soil Vapor Location
- Residential Risk Due to Modeled VOC Migration from Groundwater
- Residential and Commercial Risk Due to Modeled VOC Migration from Groundwater
- Potential Ecological Concern
- High Risk Contour - 10^{-4} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and High risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

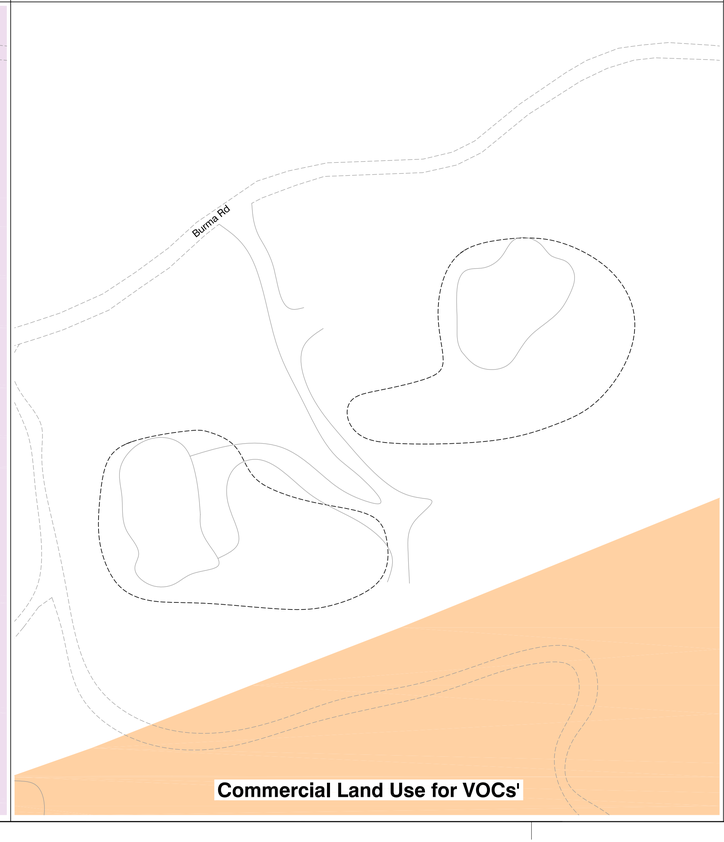
1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. µg/dL = Micrograms per deciliter



Soil Vapor Sampling Locations



Residential Land Use for VOCs



Commercial Land Use for VOCs'

N

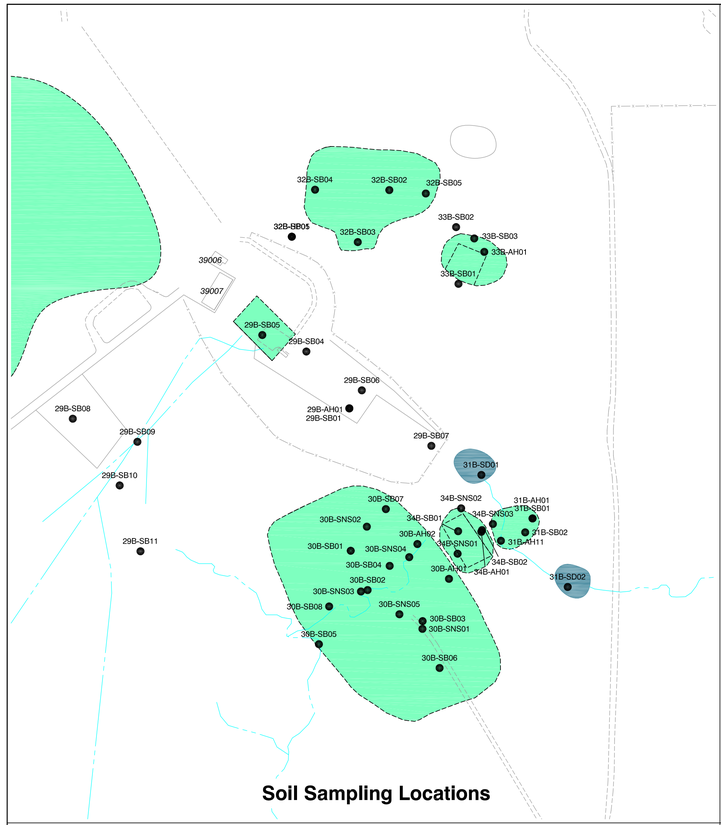
Scale: 1" = 80'

0 40 80

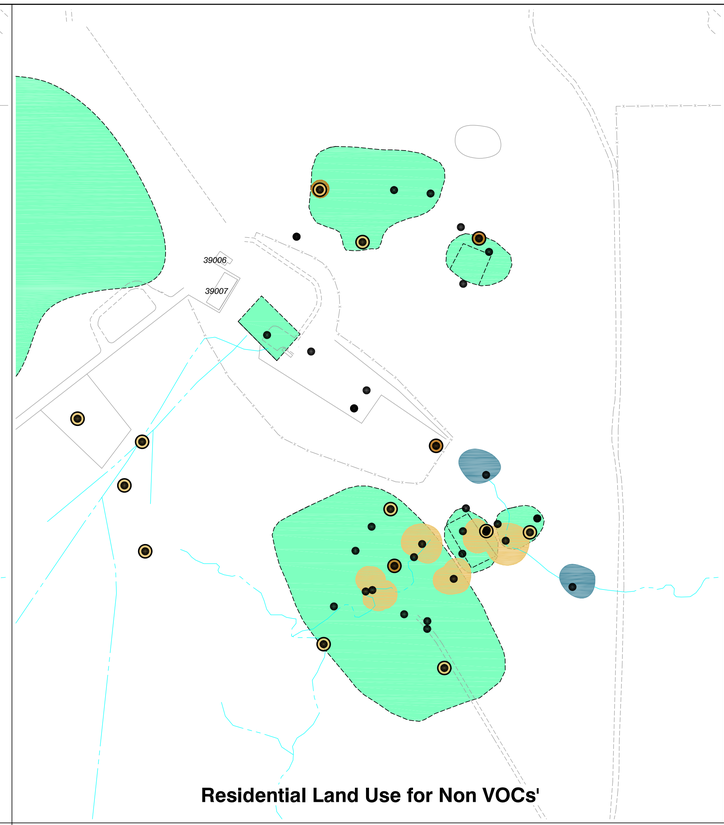
AEROJET
Environmental Remediation

FIGURE 9.0-8
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Dredge Pit and Eastern Basin

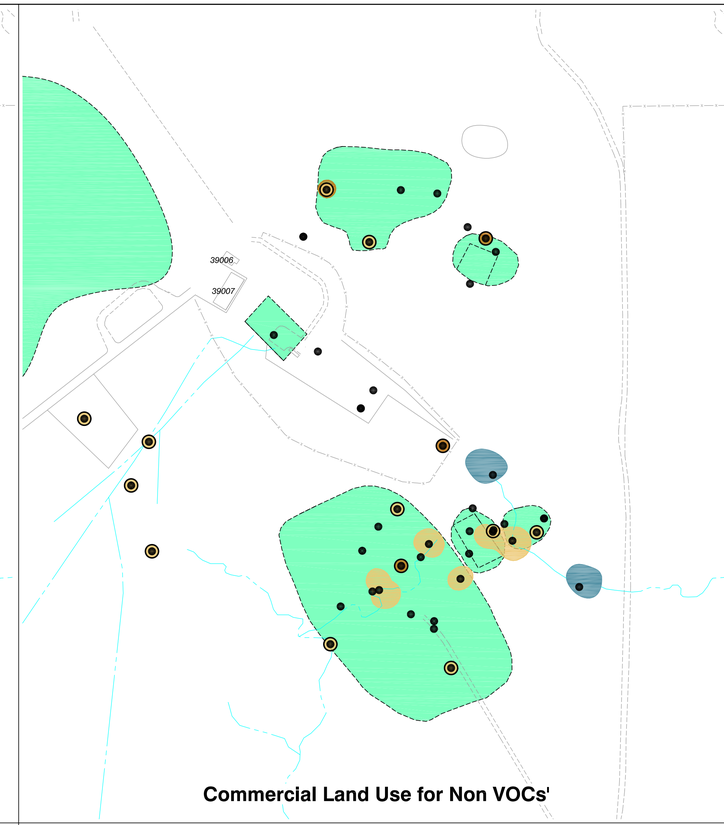
5R1013018O **FIGURE 9.0-8** 10/16/10 Carmelita Tolosa



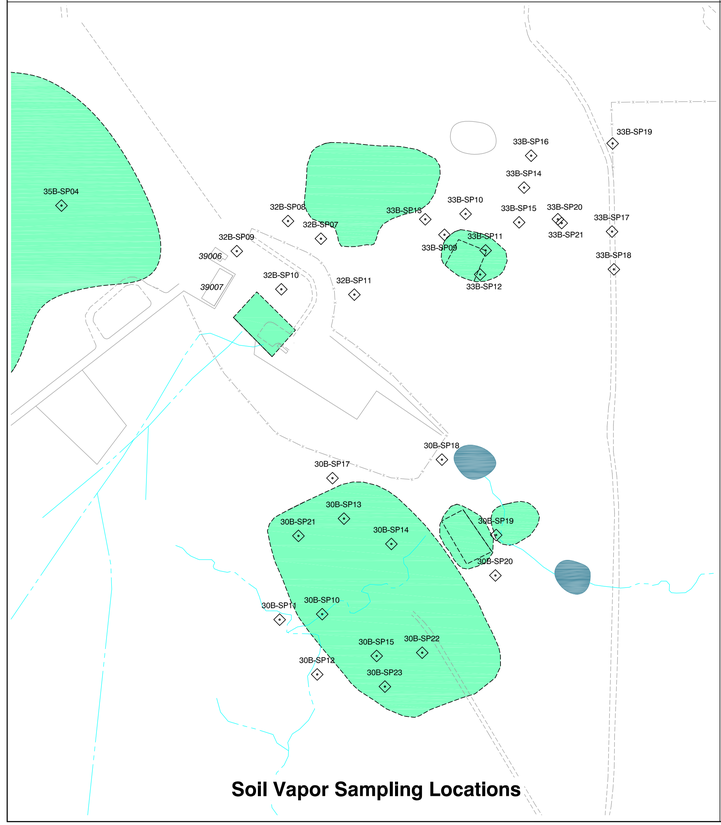
Soil Sampling Locations



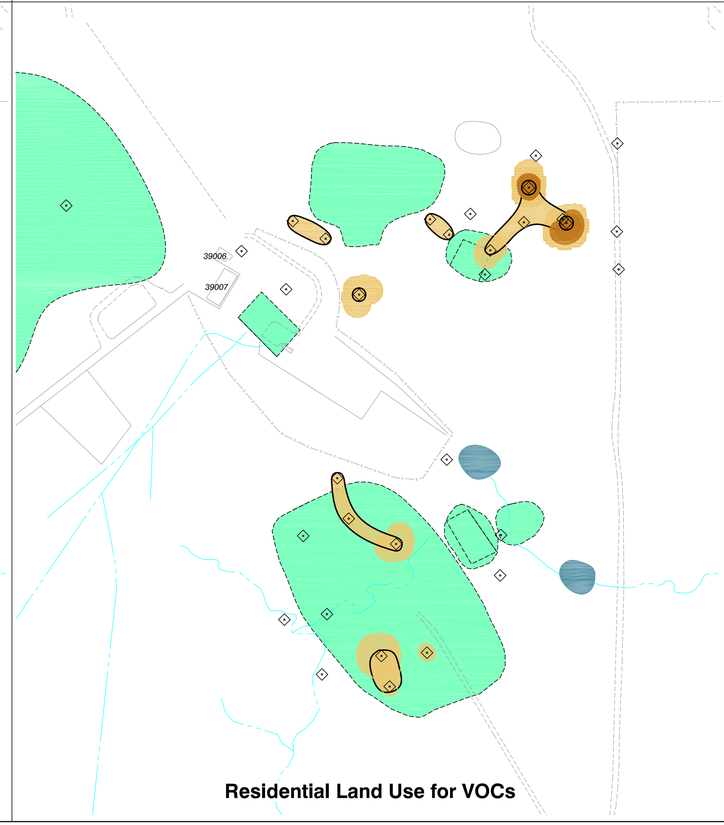
Residential Land Use for Non VOCs'



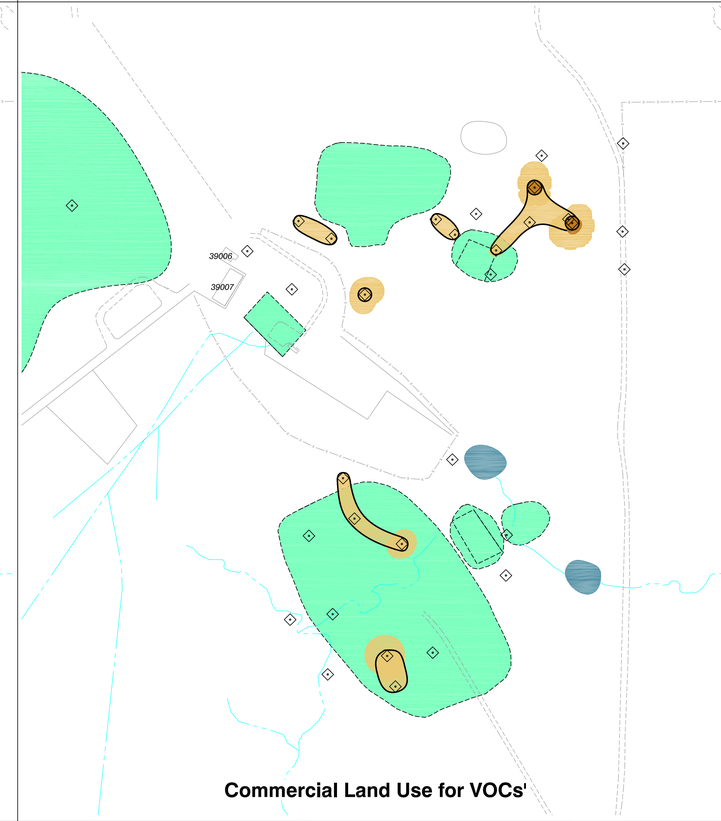
Commercial Land Use for Non VOCs'



Soil Vapor Sampling Locations



Residential Land Use for VOCs



Commercial Land Use for VOCs'

LEGEND

- Source Area
- Boundary Operable Unit (BOU)
- Consent Decree Boundary
- Drainage Culvert
- Fence
- Underground Culvert
- Road
- Railroad
- Building (20009)
- Former Structure
- Above Ground Storage Tank
- Pond
- Surface Drainage
- Septic Tank and Leach Line
- Soil Boring Location (D2B-B006)
- Soil Vapor Location (D2B-SP136)
- High Risk Contour - 10^{-6} Cancer Risk, HI>1 Non-Cancer risk, lead > 10 µg/dL; and high risk to groundwater
- Low Risk Contour - 10^{-6} Cancer Risk and low risk to groundwater
- Risk to Groundwater

Notes

1. The residential land use contours from the HHRA include risk associated with both residential and construction worker scenarios.
2. The commercial land use contours from the HHRA include risk associated with both commercial and construction worker scenarios.
3. Shallow soil is between surface and 12 feet below ground surface (bgs).
4. The Area 39 does not include groundwater concentrations that exceed residential or commercial risk due to modeled VOC concentrations.
5. µg/dL = Micrograms per deciliter

N

Scale: 1" = 250'

0 125 250

AEROJET
Environmental Remediation

FIGURE 9.0-9
Summary of Human Health, Ecological, and Protection of Groundwater Risk Assessments
Area 39

5R1013017.7 FIGURE 9.0-9 10/16/10 Carmelita Tolosa

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Table 7.3-17 Summary of COPECs Initially without ESLs, and Recommended ESLs Used in Refined Evaluation
Boundary Operable Unit Risk Assessment
Aerojet Superfund Site
Sacramento, California

COPEC	Media	Area(s)	MDC	MDC Sample Location	Recommended ESL	ESL Basis	Exceedance?	If Yes, Do Other COPECs in this sample have exceedances?
Iron	Soil	Admin West	45200 mg/kg	08D-SNS02-0.01	pH < 5	EcoSSL	No, avg pH=7.3	--
Strontium	Soil	Admin West	200 mg/kg	06D-SNS08-0.5	96 mg/kg	LANL	Yes	Yes (Inorganics)
	Soil	Area 39	220 mg/kg	30B-SB07-1	96 mg/kg	LANL	Yes	**No**
Cyanide	Soil	Admin West	25 mg/kg	06D-SNS06-0.5	0.1 mg/kg	LANL	Yes	Yes (Inorganics)
	Ditch Soil	Admin West	1.3 mg/kg	05D-SNS13-0.5	0.1 mg/kg	LANL	Yes	Yes (Inorganics)
Aluminum	Soil	Line 02	48000 mg/kg	59E-SB04-2.5	pH < 5.5	EcoSSL	No, avg pH=6.8	--
	Soil	Chem Plant 2	64000 mg/kg	59F-SD02-1.5	pH < 5.5	EcoSSL	No, avg pH=7.6	--
	Soil	Dredge Pit	41000 mg/kg	25F-SD01-5	pH < 5.5	EcoSSL	No, see CP2	--
	Soil	Eastern Basis	45000 mg/kg	25F-SD02-0.25	pH < 5.5	EcoSSL	No, see CP2	--
	SED	Chem Plant 2	51000 mg/kg	59F-SD02-0.25	58000 mg/kg	LANL	No	--
	SED	Eastern Basis	45000 mg/kg	25F-SD02-0.25	58000 mg/kg	LANL	No	--
Beryllium	SED	Westlakes	1.2 mg/kg	WL-SB05-0.5	NA	--	--	--
	SED	Chem Plant 2	1.1 mg/kg	59F-SD02-0.25	NA	--	--	--
Boron	SED	Westlakes	29 mg/kg	WL-SD08-0.5	None	Not toxic [a]	No	--
	SED	Chem Plant 2	22 mg/kg	59F-SD02-0.25	None	Not toxic [a]	No	--
Chromium VI	SED	Westlakes	0.85 mg/kg	WL-SB10-0.5	8 mg/kg	LANL	No	--
	SED	Buffalo Creek	2.2 mg/kg	WL-SD13-0.25	8 mg/kg	LANL	No	--
Molybdenum	SED	Westlakes	0.67 mg/kg	WL-SB05-0.5	45 mg/kg	Soil LOEL with UF [b]	No	--
	SED	Buffalo Creek	0.71 mg/kg	WL-SD13-0.25	45 mg/kg	Soil LOEL with UF [b]	No	--
	SED	Chem Plant 2	0.73 mg/kg	59F-SD02-0.25	45 mg/kg	Soil LOEL with UF [b]	No	--
	SED	Dredge Pit	130 mg/kg	25F-HA01-1	45 mg/kg	Soil LOEL with UF [b]	Yes	Yes (Inorganics, Pesticides)
	SED	Eastern Basis	1.1 mg/kg	25F-SD02-0.25	45 mg/kg	Soil LOEL with UF [b]	No	--
Thallium	SED	Westlakes	3.2 mg/kg	WL-SD06-0.5	36 mg/kg	Assumed ≈ Pb [c]	No	--
	SED	Eastern Basis	2.6 mg/kg	25F-HA02-1	36 mg/kg	Assumed ≈ Pb [c]	No	--

COPEC	Media	Area(s)	MDC	MDC Sample Location	Recommended ESL	ESL Basis	Exceedance?	If Yes, Do Other COPECs in this sample have exceedances?
Alpha-chlordane	Soil	Buffalo Creek	0.016 J	BC-SD02-0.25	0.27 mg/kg	LANL	No	--
	SED	Buffalo Creek	0.016 mg/kg	BC-SD02-0.25	0.0005 mg/kg	LANL	Yes	Yes (Inorganics, PCBs)
Cobalt	SED	Buffalo Creek	33 mg/kg	WL-SD12-0.5	50 mg/kg	Buchman	No	--
	SED	Chem Plant 2	26 mg/kg	59F-SD02-0.25	50 mg/kg	Buchman	No	--
4,4'-DDD	SED	Chem Plant 2	0.0035 mg/kg	59F-SB25-1	0.00448 mg/kg	MacDonald	No	--
Nitrate	SW	Buffalo Creek	2400 µg/L	WL-SW01-1	100 µg/L	Region 3 BTAG [d]	Yes	Yes (Inorganics)
Titanium	SW	Buffalo Creek	91 µg/L	WL-SW07-1.5	2000 µg/L	Buchman	No	--
Barium	SED	Chem Plant 2	490 mg/kg	59F-SNS02-0.5	48 mg/kg	LANL	Yes	Yes (Inorganics)
Lithium	SED	Chem Plant 2	24 mg/kg	59F-SD02-0.25	NA	--	--	--
Vanadium	SED	Chem Plant 2	130 mg/kg	59F-SD02-0.25	57 mg/kg	Buchman	Yes	Yes (Inorganics, PCBs)

[a] Boron assumed to be essentially nontoxic to aquatic life, as it is an essential nutrient (Loewengart, 2001).

[b] Molybdenum sediment toxicity estimated using lowest observed effect level (LOEL) (446 mg/kg for soil) from Pargee et al. (2008) and uncertainty factor of 10.

[c] Thallium sediment toxicity assumed similar to lead, as stated by Borgmann et al., 1998.

[d] Nitrite used as surrogate for nitrate (surface water).

Notes:

The COPECs listed herein include those from Tables 7.3-1 through 7.3-13 that were above background, are potentially collocated, and have a a frequency of detection greater than 5%, taking into consideration the information in Table 7.3-16.

Dredge Pit and Eastern Basin part of Chem Plant 02 area, for purposes of soil pH data.

EcoSSL = USEPA Ecological Soil Screening Level (2011)
LANL = Los Alamos National Laboratory Ecological Screening Levels (2010)
Buchman = Buchman (2008) NOAA Screening Quick Reference Tables (SQuiRT).
MacDonald = MacDonald et al (2000).
Region 3 BTAG = USEPA Region 3 Biological Technical Assistance Group (2011), Freshwater Ecological Screening Levels for surface water.
MDC = maximum detected concentration.
NA = not available.

COPEC	Media	Area(s)	MDC	MDC Sample Location	Recommended ESL	ESL Basis	Exceedance?	If Yes, Do Other COPECs in this sample have exceedances?

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